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Western Sydney: An Economic Profile

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by

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SUMMARY

This paper identifies key economic facts and figures for Western Sydney, one of NSW's most significant economic, social and political regions. These facts and figures are contextualised by demographic statistics, research on projections for the NSW economy and relevant NSW, Commonwealth and Local Government policies.

Defining Western Sydney

Defining Western Sydney for the purposes of this paper involved a choice between two definitions: the NSW Government definition; and the Australian Bureau of Statistics (ABS) definition, as limited by their labour force regions. The ABS definition was chosen in order to provide the most up-to-date employment data. Consequently, Western Sydney in this paper consists of 12 Local Government Areas (LGAs): Auburn; Blacktown; Blue Mountains; Camden; Campbelltown; Fairfield; Hawkesbury; Holroyd; Liverpool; Parramatta; Penrith; and Wollondilly. These 12 LGAs are grouped into four labour force regions by the ABS: Central Western Sydney; Fairfield-Liverpool; North Western Sydney; and Outer South Western Sydney. Two LGAs included in the definition of Western Sydney by the NSW Government are therefore excluded from this paper's working definition - Bankstown and The Hills. **[2.1 to 2.2]**

NSW electorates in Western Sydney

Twenty-three NSW electorates lie at least partially within Western Sydney, with 16 located wholly within the region. **[2.3]**

Key economic features of Western Sydney

Many of Sydney's strategic centres are located in Western Sydney, including all three of Sydney's regional cities - Liverpool, Parramatta and Penrith - three major centres and two specialised centres. The NSW Government also plans to add further strategic centres in Western Sydney. **[2.4]**

Demographic facts and figures

According to census figures, the population of Western Sydney was 1,571,475 in 2011. This is equivalent to 22.7% of the State's total population. The population of Western Sydney grew by 112,384 people, or 7.7%, between 2006 and 2011. In contrast, the total population of NSW increased by 5.6%. Three of the State's top five fastest growing LGAs between 2010 and 2011 were located in Western Sydney: Camden (2nd); Parramatta (3rd); and Auburn (4th). Three of the State's LGAs which experienced the largest growth were also located in Western Sydney: Blacktown (1st); Parramatta (2nd); and Liverpool (4th). The population of Western Sydney is expected to reach almost 2.5 million by 2036. This represents a 51% increase in population between 2011 and 2036. The LGAs expected to experience the most growth are Camden (182,600 persons), Blacktown (181,900 persons) and Liverpool (138,100 persons). **[3.0]**

Gross Regional Product

In 2010-11, Western Sydney's Gross Regional Product (GRP) was $78.2 billion. This is equivalent to 26.35% of the total GRP for the Greater Metropolitan Sydney region and 17.83% of NSW's total GSP. Western Sydney's share of Sydney's total GRP declined marginally between 2009-10 and 2010-11, from 26.63% to 26.35%. The LGA with the largest GRP in 2010-11 was Parramatta ($16.3 billion), with approximately 21% of Western Sydney's total GRP. Over half of Western Sydney's GRP is concentrated in four LGAs: Auburn, Blacktown, Holroyd and Parramatta. Western Sydney ($128,547) had a value-add per employed person lower than the Sydney average ($143,404). The three industries that contributed the most to Western Sydney's GRP were "manufacturing", "financial & insurance services" and "transport, postal & warehousing", contributing 13.5%, 8.7% and 6.8% respectively.

Macroeconomic trends in Western Sydney between 2008-09 and 2010-11 generally reflect recent trends in the NSW economy. The manufacturing sector lost part of its output share, falling by 1.9 percentage points to 16.0%. The services sector increased its share of total Western Sydney industry output from 70.1% to 70.6%. **[4.1]**

Employment and unemployment

In May 2012, 762,371 Western Sydney residents were in employment, an increase of 149,620 since 2006. Total employment fell by 1,391, or 0.2%, between May 2011 and May 2012. Western Sydney had a participation rate of 63.0%, which is lower than the participation rates for Sydney (66.0%) and for NSW (63.6%). In May 2012, almost 26% of employed persons in Western Sydney were working in part-time employment. This was lower than the NSW rate of just over 29%.

In May 2012, the unemployment rate for Western Sydney was 5.5%, 0.5 percentage points above the NSW rate. The unemployment rate varied substantially across Western Sydney. The Fairfield-Liverpool labour force region had the highest unemployment rate of 9.2%, while the North Western Sydney labour force region had the lowest, at 4.2%. Western Sydney had a youth unemployment rate of 17.9%, slightly higher than the NSW rate of 15.3%. Youth unemployment rates also varied substantially across Western Sydney. The Outer South Western Sydney labour force region had the highest rate of 22.4%, while the North Western Sydney labour force region had the lowest, at 15.2%. All Western Sydney labour force regions had youth participation rates lower than the NSW rate of 50.0%. Central Western Sydney had the lowest youth participation rate of 37.8%. Western Sydney had a long-term unemployment rate of 1.42%, compared to the NSW rate of 1.11%. **[4.2]**

Employment by industry

In May 2012, the four largest industry employers in Western Sydney were "health care & social assistance" (90,752 persons), "manufacturing" (87,300 persons), "retail trade" (80,356 persons) and "construction" (66,679 persons). Three industries had almost one-third of their total NSW workforce located in

Western Sydney: "manufacturing"; "transport, postal & warehousing"; and "wholesale trade". **[4.3.1]** "Health care & social assistance" was the largest employing industry in the Central Western Sydney and North Western Sydney labour force regions. "Manufacturing" was the largest employer in the Fairfield-Liverpool and Outer South Western Sydney labour force regions. **[4.3.2]**

Between 2006 and May 2012, the biggest increases in employment by industry took place in "health care & social assistance" (31,168 persons), "transport, postal & warehousing" (15,058 persons) and "professional, scientific & technical services" (14,835 persons). Only one industry lost jobs - "manufacturing" lost 1,132 jobs, or 1.3%. The fastest growing industries in terms of employment were "health care & social assistance" (52.3%), "other services" (50.9%) and "mining" (48.9%). **[4.3.1]**

Between May 2011 and May 2012, 11 industries recorded declines in employment. The three industries which lost the most jobs were "retail trade" (6,704 jobs), "electricity, gas, water & waste services" (5,280 jobs) and "rental, hiring & real estate services" (3,755). In contrast, three industries experienced large increases in employment: "health care & social assistance" (10,152 persons); "financial & insurance services" (6,356 persons); and "other services" (5,327 persons). **[4.3.3]**

Economic diversity of the Western Sydney economy

According to an economic diversity index, in May 2012 the three most important industries for Western Sydney relative to the Australian economy were: "transport, postal & warehousing"; "wholesale trade"; and "manufacturing". As a whole, the Western Sydney economy had a relatively diverse economy in comparison with the Australian economy. **[4.4]**

Employers' recruitment experiences

The Commonwealth Department of Education, Employment and Workplace Relations (DEEWR) conducts an annual survey of employers' recruitment experiences. Two of the twenty priority employment areas recently surveyed by DEEWR cover all of Western Sydney, as it is defined in this paper. **[4.5]**

Four trends can be identified from two surveys conducted in the Sydney West and Blue Mountains Priority Employment Area in August 2009 and October 2011. First, recruitment activity in the region was relatively low in comparison with other surveyed regions. Second, the proportion of employers who recruited in order to expand their business by increasing staff numbers increased between 2009 and 2011. Third, recruitment difficulties increased between 2009 and 2011. Fourth, employer recruitment expectations rose between 2009 and 2011. **[4.5.1]**

Survey findings for the Canterbury-Bankstown and South Western Sydney Priority Employment Area were generally worse than those for the Sydney West and Blue Mountains Priority Employment Area. Recruitment activity declined in the Canterbury-Bankstown and South Western Sydney Priority Employment Area between 2010 and 2012. With regard to recruitment expectations, employer confidence fell between March 2010 and March 2012. **[4.5.2]**

Business numbers

In 2011, there were a total of 121,070 businesses operating in Western Sydney. The largest proportions were in "construction" (21.5%), "transport, postal & warehousing" (11.5%) and "professional, scientific & technical services" (9.3%). Four industries recorded a decline in business numbers between 2009 and 2011: "agriculture, forestry & fishing" (-5 businesses); "mining" (-24 businesses); "manufacturing" (-166 businesses); and "public administration & safety" (-40 businesses). The three industries to have recorded the largest increases in business numbers, excluding the "unclassified" businesses (964 businesses), between 2009 and 2011 were: "professional, scientific & technical services" (890 businesses); "transport, postal & warehousing" (722 businesses); and "financial & insurance services" (675 businesses). In total, there were 6,392 more businesses in Western Sydney in 2011 than in 2009.

In 2011, small businesses comprised 96.6% of all businesses located in Western Sydney. This is equivalent to a total of 116,968 - 6,351 more than were present in 2009. Small business trends reflected overall business trends. **[4.6]**

Employment lands

Employment lands include land that is zoned for industry and/or warehouse uses. As of January 2011, Western Sydney had 9,573.5 hectares of zoned employment lands. This represents 61% of the total zoned employment lands in Sydney. Of the Western Sydney total, 6,508.1 hectares have been developed. 200.6 hectares of zoned employment lands were added to the Western Sydney total between January 2010 and January 2011. The Western Sydney Employment Area is a key employment lands initiative in Western Sydney. It incorporates several zoned employment lands and, as of January 2011, totalled 2061 hectares. Between January 2008 and January 2011, 376.6 hectares of zoned employment lands in Western Sydney were taken-up by industrial development. Almost 50% of this growth took place in the North Western Sydney labour force region. **[4.7]**

Industrial building activity

In 2009-10, industrial building activity approved in Western Sydney was valued at $293 million. This was equivalent to 73% of the total industrial building activity in Sydney. The majority of industrial building activity expenditure approved in Western Sydney was to be spent on warehouses ($230 million). Almost 47% ($137 million) of all approved Western Sydney industrial building activity was located in the Fairfield-Liverpool labour force region. **[4.8]**

Manufacturing in Western Sydney

Manufacturing is one of the most significant industries in Western Sydney. In 2010-11, manufacturing was the largest contributor to Western Sydney's Gross Regional Product, worth $10.6 billion. In May 2012, manufacturing was the second largest employer in Western Sydney, employing 87,300 people. However, manufacturing trends identified in Chapter 4 appear to support the argument that manufacturing in Australia is in decline, with GRP, employment and business numbers having all recently declined. **[5.1.1]**

Manufacturing: key findings

	Key findings
Gross Regional Product (2010-11)	
Total ($million)	$10,585
Change in share of Western Sydney GRP (08-09 to 10-11)	-1.67
Growth since 2009-10 ($million) (%)	-$191.4 (-1.4%)
% of Sydney's total manufacturing industry	48.1%
Employment	
Total (May 2012)	87,300
Change since 2006 (% annual growth)	-1,132 (-0.2%)
Change since May 2011 (%)	-2,943 (-3.3%)
% of NSW manufacturing jobs in Western Sydney	31.1%
Business numbers	
Total (2011)	6,734
% change between 2009 and 2011	-2.4%

Other selected industries: key findings

	Financial & insurance services	Transport, postal & warehousing	Health care & social assistance
Gross Regional Product (2009-10)			
Total ($million)	$6,795	$5,350	$5,209
Change in share of Western Sydney GRP (2008-09 to 2010-11)	-0.59	+0.28	+0.52
Employment			
Total (May 2012)	38,078	57,678	90,752
Change since 2006 (% annual growth)	7,981 (4.4%)	15,058 (5.9%)	31,168 (8.7%)

	Construction	Wholesale trade	Retail trade
Gross Regional Product (2009-10)			
Total ($million)	$4,940	$4,843	$3,505
Change in share of Western Sydney GRP (2008-09 to 2010-11)	+0.69	-0.79	0.04
Employment			
Total (May 2012)	66,679	39,056	80,356
Change since 2006 (% annual growth)	14,201 (4.5%)	2,259 (1.0%)	10,096 (2.4%)

NSW Government policies

The O'Farrell Government has four policy areas of particular relevance for the Western Sydney economy. First, final NSW 2021 regional action plans are due for release in mid 2012, including two that cover Western Sydney. **[6.1.1]** Second, the NSW Government has established industry-led taskforces to develop Industry Action Plans for six industries: Creative Industries; Digital Economy; International Education & Research; Manufacturing; Professional Services; and Tourism & Events. **[6.1.2]** Third, the O'Farrell Government plans to release a new Metropolitan Strategy for Sydney by the end of 2012. The Government intends to develop the Strategy so that it is strongly aligned with two other 20-year strategies: the State Infrastructure Strategy; and the Long Term Transport Master Plan. **[6.1.3]** Finally, the NSW Employment Lands Development Program manages the supply of employment lands for the Sydney Region. **[6.1.4]**

Commonwealth Government policies

The Commonwealth Government has two economic programs of particular relevance to the Western Sydney economy. First, two of twenty priority employment areas together cover all of Western Sydney. Local employment coordinators, appointed for each area, work with relevant stakeholders in developing and implementing local solutions to labour market issues. **[6.2.1]** The second relevant program is Regional Development Australia (RDA). The RDA Sydney committee has two initiatives of particular relevance for the Western Sydney economy: a *Regional Plan for Sydney*, released in 2011; and an *Employment Lands Policy Position*, released in August 2012. **[6.2.2]**

Local Government policies

In August 2012, the Western Sydney Regional Organisation of Councils (WSROC) released its *Future Directions Strategy*. The Strategy recommends several courses of action, including the development of a Western Sydney Regional Integrated Planning Strategy and the establishment of a Western Sydney development agency. **[6.3]**

Employment targets and forecasts

The NSW Government *Metropolitan Plan for Sydney 2036*, released by the Keneally Government in 2010, set employment capacity targets for every LGA in Sydney. The Plan aimed to increase the number of jobs in Western Sydney by 384,000 between 2006 and 2036, an increase of 53%. Two recent reports have critiqued the capacity targets set in the Plan. The first, released by the Urban Taskforce Australia, identifies a current jobs deficit in Western Sydney of 200,000, and argues that this will increase to 319,000 by 2031 should the Plan's employment capacity targets be realised. The second, released by RDA Sydney, argues that the targets will not be achieved without additional private and public sector stimulus. In particular, RDA Sydney argues that the NSW Government needs to release significant areas of employment lands in order to meet the employment capacity targets. **[7.0]**

1.0 INTRODUCTION

Western Sydney is one of NSW's most significant economic, social and political regions. Western Sydney is Australia's third largest economy behind Sydney and Melbourne. The region is also NSW's fastest population growth region. A total of 23 NSW electorates lie at least partially within Western Sydney. In recognition of the size and significance of Western Sydney, Premier Barry O'Farrell is the current Minister for Western Sydney. The Premier's upcoming State of the Region address on 17 August 2012 will set out the NSW Government's plans for Western Sydney.

This paper begins by defining Western Sydney for the purposes of this paper and identifying the region's key features. A summary of demographic facts and figures follows, including current and projected population figures for Western Sydney and each of its subregions. The largest part of this paper outlines key economic facts and figures, including topics such as: Gross Regional Product; employment and unemployment; employment by industry; business numbers; employment lands; and employment capacity targets. By reference to several recent studies, the key findings by industry are drawn out in the subsequent chapter. The paper ends with a summary of government policies and recent reports that relate to the Western Sydney economy.

2.0 DEFINITION OF WESTERN SYDNEY AND KEY FEATURES

This chapter sets out how Western Sydney has been defined for the purpose of this paper.[1] Western Sydney has been defined in such a way as to make best use of the most recent ABS employment by industry data. Consequently, two LGAs included by the NSW Government in their definition of Western Sydney have been excluded from this paper's definition - Bankstown and The Hills. Western Sydney is made up of four ABS labour force regions and twelve LGAs:

Central Western Sydney: Auburn, Holroyd and Parramatta LGAs

Fairfield-Liverpool: Fairfield and Liverpool LGAs

North Western Sydney: Blacktown, Blue Mountains, Hawkesbury and Penrith LGAs

Outer South Western Sydney: Camden, Campbelltown and Wollondilly LGAs.

2.1 NSW Government

The NSW Department of Premier and Cabinet (DPC) defines Western Sydney as consisting of 14 LGAs (see Figure 1). This definition is consistent with other NSW Government definitions of Western Sydney.[2] It is also consistent with NSW Government divisions of Sydney into smaller subregions. For example, the Metropolitan Plan for Sydney 2036 divides Sydney into 10 subregions, three of which together are equivalent to Western Sydney as defined by DPC.[3]

The NSW Premier, Barry O'Farrell, is also Minister for Western Sydney. The Department of Premier and Cabinet (DPC) contains a regional office for the Greater Western Sydney Region: DPC Greater Western Sydney Regional Coordination. This is one of several DPC regional offices, each of which works "closely with NSW Government agencies to coordinate activities and resources and ensure the Government's priorities are met at a regional level."[4] DPC Greater Western Sydney Regional Coordination defines Western Sydney as consisting of the 14 LGAs identified in Figure 1.

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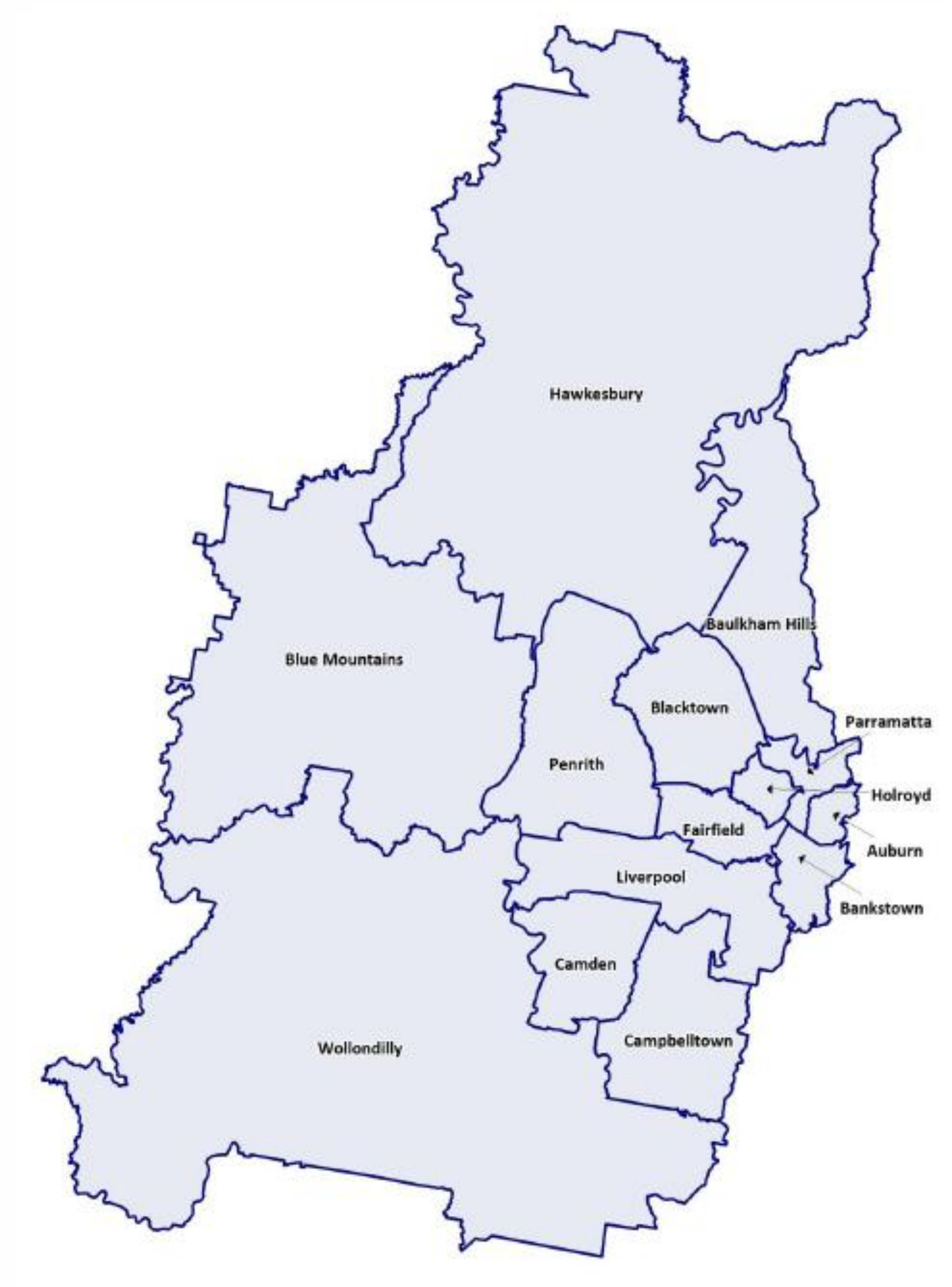
[1] See Appendix 1 for further background material on how Western Sydney was defined for the purposes of this paper and on how different government bodies define Western Sydney.

[2] See for example, Department of Trade & Investment, Regional Infrastructure and Services, *Western Sydney*, 2012 [online - accessed 24/04/2012]

[3] The three subregions are: North West; South West; and West Central.

[4] Department of Premier & Cabinet, Western Sydney, *DPC Greater Western Sydney Regional Coordination*, 2012 [online - accessed 24/04/2012]

Figure 1: Western Sydney as defined by the NSW Government[5]



5 Note that Baulkham Hills LGA is now called The Hills Shire. Source: B Beard, *Who works where and how do they get there? GWS Journey to Work 2006*, WESTIR Ltd, Occasional Paper No. 6 - March 2011, 2011, p.12

2.1 Australian Bureau of Statistics

The Australian Bureau of Statistics (ABS) currently uses the Australian Standard Geographical Classification (ASGC) for collecting and disseminating geographically classified statistics.[6] The ABS uses *statistical regions* for the purpose of publishing labour force data and standard statistical outputs from the Censuses, otherwise known as labour force regions.[7] Greater Metropolitan Sydney is divided into 13 statistical regions (see Figure 2).

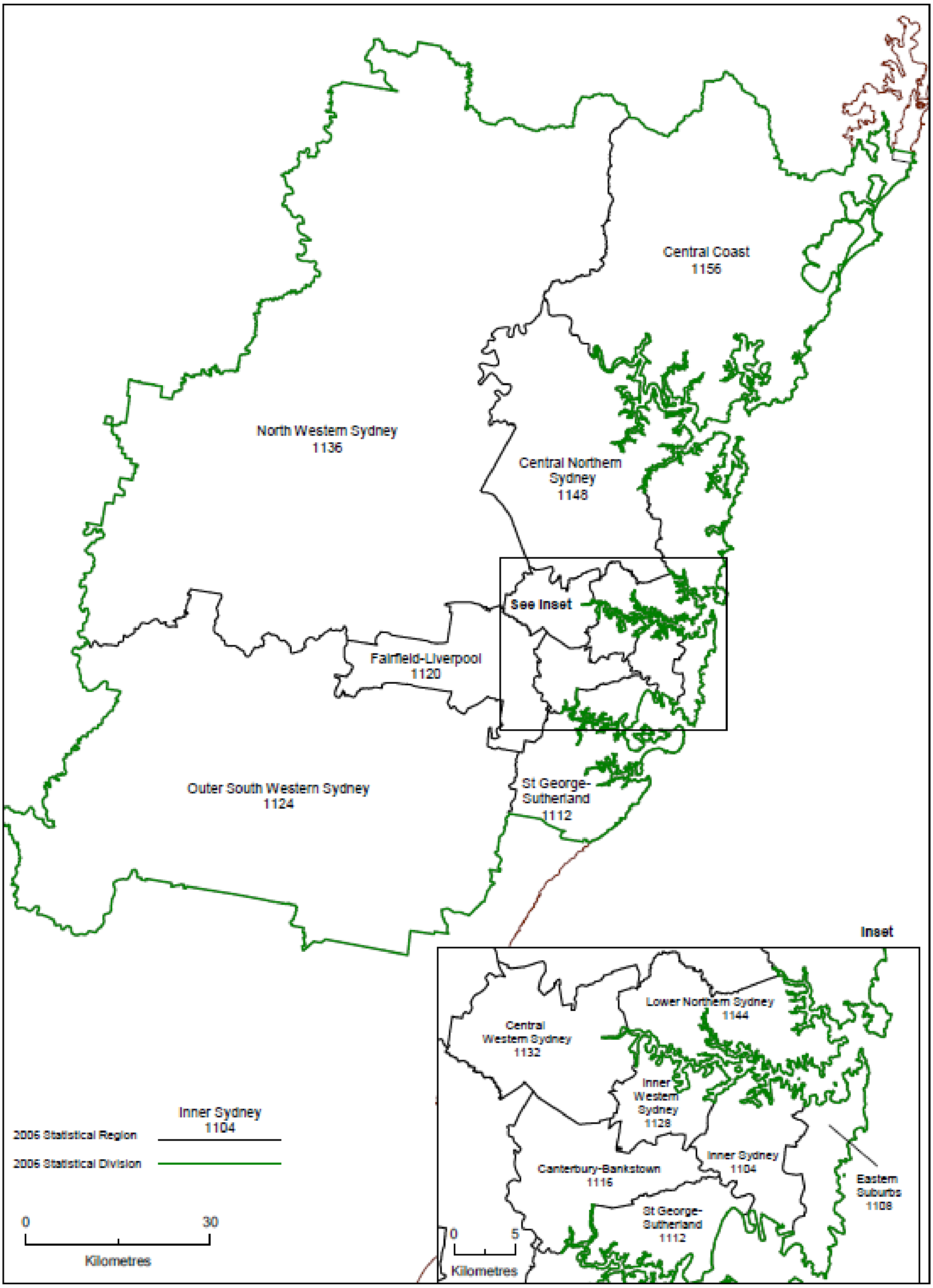
In order to utilise ABS labour force survey data, Western Sydney is defined according to labour force region boundaries. This can be contrasted with the NSW Government's definition of Western Sydney, which includes four labour force regions in total and two in part. The four included in total are: Central Western Sydney; Fairfield-Liverpool; North Western Sydney; and Outer South Western Sydney. The two included in part are: Central Northern Sydney; and Canterbury-Bankstown. These final two labour force regions were excluded from the working definition of Western Sydney employed in this paper. This is because the ABS has grouped these LGAs - Bankstown and The Hills - into labour force regions that, for geographical and socio-economic reasons, could not be justifiably included in a working definition of "Western Sydney".[8]

[6] This statistical geography will be progressively replaced by the Australian Statistical Geography Standard (ASGS) from July 2012.

[7] ABS, *Australian Standard Geographical Classification (ASGC)*, July 2011.

[8] The Central Northern labour force region is made up of The Hills, Hornsby and Ku-ring-gai LGAs. The Canterbury-Bankstown labour force region is made up of the Bankstown and Canterbury LGAs.

Figure 2: Sydney Statistical Division and Statistical Regions (2006)[9]



[9] ABS, pers. comm., 24/04/2012

2.3 NSW electorates in Western Sydney

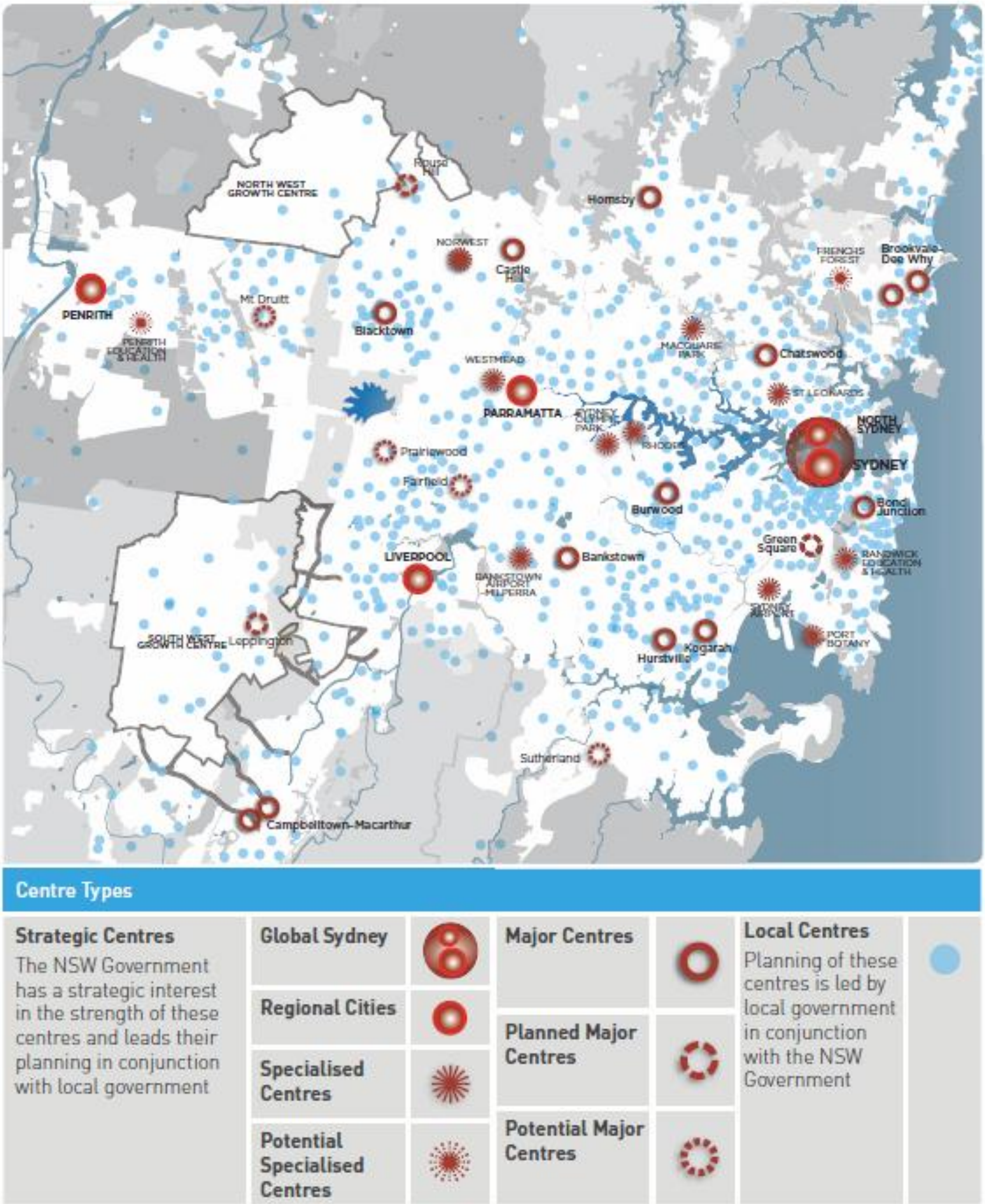
Twenty-three NSW electorates lie wholly or partially within Western Sydney, as it is defined in this paper. Sixteen NSW electorates lie wholly within Western Sydney: Blacktown; Blue Mountains; Cabramatta; Camden; Campbelltown; Granville; Liverpool; Londonderry; Macquarie Fields; Mount Druitt; Mulgoa; Penrith; Riverstone; Smithfield; Toongabbie; and Wollondilly. Seven NSW electorates lie partially within Western Sydney: Auburn; Baulkham Hills; Fairfield; Hawkesbury; Heathcote; Menai; and Parramatta. Of these seven, the Heathcote electorate lies least within Western Sydney, as it includes only a small portion of the Wollondilly LGA within its boundaries.

2.4 Key Features

The O'Farrell Government discussion paper - *Sydney over the next 20 years* - is the first step in the development of a new Metropolitan Strategy for Sydney. This discussion paper identifies what the Government considers to be Sydney's strategic centres (see Figure 3). Many of these centres are located in Western Sydney, including:

- All three of Sydney's regional cities: Penrith; Parramatta; and Liverpool;
- Three of thirteen major centres: Blacktown; and Campbelltown-Macarthur;
- Two of ten specialised centres: Westmead; and Sydney Olympic Park;
- One of three planned major centres: Leppington;
- Three of four potential major centres: Mt Druitt; Prairiewood; and Fairfield; and
- One of two potential specialised centres: Penrith Education & Health.

Figure 3: Centres in Sydney[10]

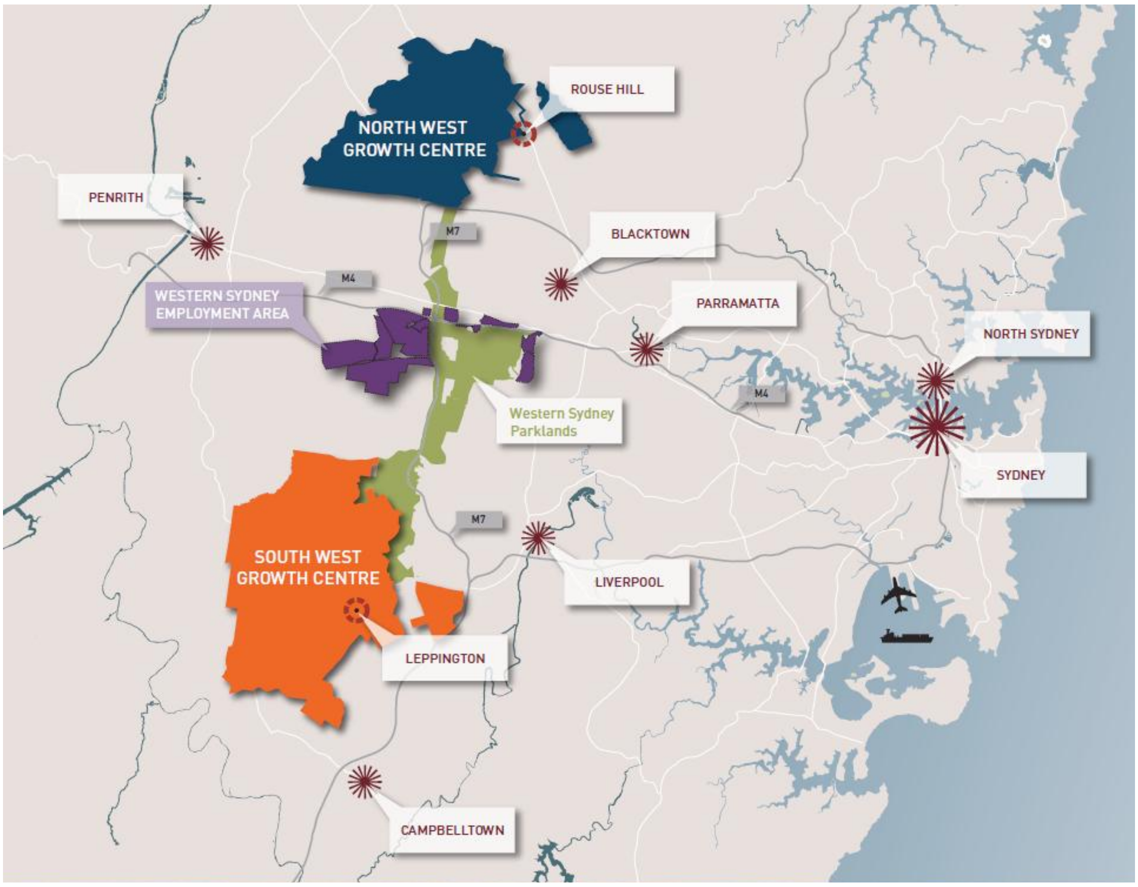


The NSW Government is also planning to situate two growth centres in Western Sydney: the North West Growth Centre; and the South West Growth Centre (see Figure 4). The North West Growth Centre is located within the boundaries of three LGAs: Blacktown; Hawkesbury; and The Hills. The South West Growth Centre is located within the boundaries of three LGAs: Camden; Campbelltown; and Liverpool. These growth centres will be accompanied by the Western

[10] NSW Government, *Sydney over the next 20 years: A discussion paper*, May 2012, p.16

Sydney Employment Area, one of many employment zones in Western Sydney (see section 4.7 of this paper). The Western Sydney Employment Area is expected to support up to 40,000 jobs.

Figure 4: Western Sydney Employment Area[11]



[11] NSW Government, *Guide to Western Sydney Employment Area*, August 2009.

3.0 DEMOGRAPHIC FACTS AND FIGURES

According to census figures, the population of Western Sydney in 2011 was 1,571,475 (see Table 1). In 2011, the three largest LGAs in Western Sydney by population were Blacktown (301,099 people), Fairfield (187,766 people) and Liverpool (180,143 people). The least populous LGA was Wollondilly, with a population of 43,259. While Table 1 provides a population density figure for each LGA, it is important to note that this figure is misleading for LGAs such as the Blue Mountains, much of which is made up of National Park lands. The LGAs with the highest population density in 2011 were Parramatta, Holroyd and Auburn. In 2011, Indigenous people made up 1.9% of the Western Sydney population, compared to 2.5% of the total NSW population. The LGAs with the highest proportion of Indigenous residents were Campbelltown (3.2%), Penrith (3.0%) and Blacktown (2.7%).

Table 1: Selected demographic facts (2011)[12]

Area	Population	Area (ha)	Population density (persons/ha)	ATSI population (% 2011)
Local Government Area				
Auburn	73738	32.5	2,269	0.6
Blacktown	301,099	240.1	1,254	2.7
Blue Mountains	75,942	1,431.7	53	1.7
Camden	56,720	201.3	282	2.0
Campbelltown	145,967	312.3	467	3.2
Fairfield	187,766	101.6	1,848	0.7
Hawkesbury	62,353	2,775.8	22	2.6
Holroyd	99,163	40.2	2,467	0.8
Liverpool	180,143	305.5	590	1.5
Parramatta	166,858	61.4	2,718	0.8
Penrith	178,467	404.9	441	3.0
Wollondilly	43,259	2,556.6	17	2.4
Labour force region				
Central Western Sydney	339,759	134	2,534	0.8
Fairfield-Liverpool	367,909	407	904	1.1
North Western Sydney	617,861	4,853	127	2.7
Outer South Western Sydney	245,946	3,070	80	2.8
Western Sydney	1,571,475	8,463.9	186	1.9

[12] Sources: Department of Premier & Cabinet, Division of Local Government, *Snapshot of Local Government: Comparative Information on NSW Local Government Councils 2009/10*, 2011; ABS, *2011 Census Quickstats*, June 2012.

As of June 2011, 22.7% of the total NSW population resided in Western Sydney (see Table 2). The Western Sydney population increased by 112,384 people between 2006 and 2011, equivalent to 7.7%. In comparison, the total population of NSW increased by 5.6%.

Table 2: Population by local government area and labour force region (2011)[13]

Area	Population	Change since 2006		% of Western Sydney	% of NSW
		Number	%		
Local Government Area					
Auburn	73738	8,777	13.5	4.7	1.1
Blacktown	301,099	29,386	10.8	19.2	4.4
Blue Mountains	75,942	1,877	2.5	4.8	1.1
Camden	56,720	7,074	14.2	3.6	0.8
Campbelltown	145,967	2,891	2.0	9.3	2.1
Fairfield	187,766	7,873	4.4	11.9	2.7
Hawkesbury	62,353	1,795	3.0	4.0	0.9
Holroyd	99,163	9,398	10.5	6.3	1.4
Liverpool	180,143	15,541	9.4	11.5	2.6
Parramatta	166,858	18,533	12.5	10.6	2.4
Penrith	178,467	6,325	3.7	11.4	2.6
Wollondilly	43,259	2,914	7.2	2.8	0.6
Labour Force Region					
Central Western Sydney	339,759	36,708	12.1	21.6	4.9
Fairfield-Liverpool	367,909	23,414	6.8	23.4	5.3
North Western Sydney	617,861	39,383	6.8	39.3	8.9
Outer South Western Sydney	245,946	12,879	5.5	15.7	3.6
Western Sydney	1,571,475	112,384	7.7	100	22.7

Population growth rates in Western Sydney vary considerably between LGAs. The largest growth since 2006 took place in Blacktown, which grew by 29,386 people. In contrast, the population of the Hawkesbury LGA only grew by 1,795 people. The fastest growth took place in Camden, which grew by 14.2%, whereas the population of the Campbelltown LGA grew the slowest, at 2.0% since 2006.

According to the ABS, three of the State's top five fastest growing LGAs between 2010 and 2011 were located in Western Sydney: Camden (2nd); Parramatta (3rd); and Auburn (4th). Three of the State's LGAs which experienced the largest growth between 2010 and 2011 were also located in Western

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[13] Source: ABS, *2011 Census Quickstats*, June 2012.

Sydney: Blacktown (1st); Parramatta (2nd); and Liverpool (4th).[14]

According to NSW Department of Planning projections published in 2010, the population of Western Sydney is expected to reach almost 2.5 million by 2036 (see Table 3). This represents a 51% increase in population between 2011 and 2036. The LGAs expected to experience the most growth are Camden (182,600 persons), Blacktown (181,900 persons) and Liverpool (138,100 persons). Camden LGA is expected to grow by 272% between 2011 and 2036. The LGA expected to experience the least growth is the Blue Mountains LGA (13,800 persons).

Table 3: Projected population growth by local government area and labour force region (2011 to 2036)[15]

Area	2011	2016	2026	2036	% growth (2011-36)
Local Government Area					
Auburn	83,100	95,500	104,600	115,600	39.1
Blacktown	299,500	330,600	409,300	481,400	60.7
Blue Mountains	77,300	77,700	84,300	91,100	17.9
Camden	67,200	96,300	172,300	249,800	271.7
Campbelltown	154,400	167,500	201,600	233,800	51.4
Fairfield	191,600	196,200	207,300	227,000	18.5
Hawkesbury	64,600	67,200	77,900	90,100	39.5
Holroyd	104,400	112,900	120,100	127,600	22.2
Liverpool	186,400	201,900	259,300	324,500	74.1
Parramatta	166,100	176,500	188,700	201,400	21.3
Penrith	182,100	196,500	215,200	234,300	28.7
Wollondilly	45,000	48,300	57,500	66,900	48.7
Labour force region					
Central Western Sydney	353,600	384,900	413,400	444,600	25.7
Fairfield-Liverpool	378,000	398,100	466,600	551,500	45.9
North Western Sydney	623,500	672,000	786,700	896,900	43.8
Outer South Western Sydney	266,600	312,100	431,400	550,500	106.5
Western Sydney	1,621,700	1,767,100	2,098,100	2,443,500	50.7

[14] ABS, *Regional Population Growth, Australia, 2010-11*, ABS Cat. No. 3218.0, 30 March 2012

[15] Source: NSW Department of Planning, *New South Wales Statistical Local Area Population Projections, 2006-2036*, March 2010.

4.0 KEY ECONOMIC FACTS AND FIGURES

This chapter draws together key economic facts and figures for Western Sydney and, in some cases, for its labour force regions and LGAs. Appendices provide more detailed information for several facts and figures. The chapter has the following structure:

- Gross Regional Product;
- Employment and unemployment;
- Employment by industry;
- Economic diversity indicators;
- Surveys of employer recruitment experiences;
- Business numbers;
- Employment lands;
- Employment capacity targets; and
- Industrial building activity.

In part, at least, the macroeconomic trends in the Western Sydney economy reflect recent NSW trends. Manufacturing lost part of its output share, falling from 17.9% to 16.0% between 2008-09 and 2010-11. The services sector increased its share from 70.1% to 70.6%. Against the Statewide trend, the sector that increased its share of the Western Sydney economy the most was construction, rising from 6.6% to 7.5%.

4.1 Gross Regional Product

4.1.1 Gross Regional Product by area

In 2010-11, the Gross Regional Product (GRP) for Western Sydney was $78.2 billion (see Table 4).[16] This is equivalent to 26.35% of the total Greater Metropolitan Sydney GRP, which in 2010-11 was $296.8 billion. Western Sydney's share of Sydney's total GRP declined between 2009-10 and 2010-11 from 26.63% to 26.35%. The GRP for Western Sydney was also equivalent to 17.83% of NSW's total GSP, an increase from 16.97% in 2009-10.

The LGA with the largest GRP in 2010-11 was Parramatta ($16.3 billion), with approximately 21% of Western Sydney's total GRP. Of all Western Sydney LGA's, Parramatta's share of Western Sydney's GRP declined the most between 2008-09 and 2010-11, from 21.68% to 20.80%.[17] In contrast, Penrith

[16] Appendix 2 contains a series of tables that break GRP down by industry for each area.

[17] Because the source material reported GRP in terms of current prices only, the author was unable to calculate changes in GRP over time for each area [RDA Sydney, Sydney Metropolitan Region Economic Baseline Assessments, 2010, 2011 & 2012]. However, changes in each industry's share of GRP could be calculated from the source data. Further, while the 2012 Sydney Metropolitan Region Economic Baseline Assessment provided figures showing growth in GRP by industry for Western Sydney, RDA Sydney use a definition of Western Sydney different to that used in this paper i.e. they include the Bankstown and The Hills LGAs. Their findings on growth in GRP by industry for Western Sydney are included in Appendix 3, and are drawn upon where relevant in Chapter 5 of this paper.

increased its share of Western Sydney's GRP the most between 2008-09 and 2010-11, from 9.39% to 9.98%. In 2010-11, the Camden LGA had the smallest GRP - $2.1 billion. Over half of Western Sydney's GRP is concentrated in four LGAs: Auburn, Holroyd and Parramatta (which together constitute the Central Western Sydney labour force region) and Blacktown.

Table 4: Gross Regional Product by area (2010-11)[18]

Area	GRP (2010-11) ($m)	% of Western Sydney	Value-add per employed person ($)
Local Government Area			
Auburn	6,891.0	8.8	132,826
Blacktown	12,497.9	16.0	123,080
Blue Mountains	2,282.4	2.9	107,847
Camden	2,133.3	2.7	125,572
Campbelltown	5,606.2	7.2	123,870
Fairfield	7,017.3	9.0	127,878
Hawkesbury	3,120.7	4.0	114,128
Holroyd	4,906.0	6.3	122,845
Liverpool	7,530.2	9.6	129,488
Parramatta	16,265.5	20.8	144,789
Penrith	7,804.1	10.0	114,503
Wollondilly	2,138.8	2.7	200,846
Labour force region			
Central Western Sydney	28,062.5	35.9	137,457
Fairfield-Liverpool	14,547.5	18.6	128,707
North Western Sydney	25,705.1	32.9	117,802
Outer South Western Sydney	9,878.3	12.6	135,512
Western Sydney	78,193.4	100	128,547
Sydney	293,865.6	n/a	143,404

Note: Labour force figures used in the calculation of GRP per employed person are March 2011 figures. AEC*group* derived them from ABS and DEEWR labour force estimates for the RDA Sydney publication, *RDA Sydney Metropolitan Region Economic Baseline Assessment - Update* (2011).

[18] Current prices. Source: RDA Sydney, *RDA Sydney Metropolitan Region Economic Baseline Assessment - Update*, Final, June 2012, p.90. This publication was written by a consulting firm, AEC*group*, who used ABS data together with their GRP Model to calculate each LGA's GRP. Note also that the definition of "Sydney" employed by RDA Sydney excludes the Central Coast, a region normally considered to be part of the Greater Metropolitan Sydney region. It is excluded because the Central Coast has its own Regional Development Australia committee.

Value-add per employed person by area was calculated in order to provide a means of comparing productivity between the LGAs and labour force regions of Western Sydney (see Table 4). Western Sydney ($128,547) as a whole had a value-add per employed person lower than the Sydney average ($143,404). Only two Western Sydney LGAs had a value-add per employed person higher than the Sydney average: Parramatta ($144,789); and Wollondilly ($200,846). All four labour force regions had figures lower than the Sydney average.

Wollondilly LGA ($200,846) had the highest value-add per employed person and the Blue Mountains LGA ($107,847) had the lowest value-add per employed person. The significant difference between Wollondilly's value-add per employed person and the figures for all other areas is partly explained by the significance of mining for the Wollondilly LGA. Mining makes up 43.2% of Wollondilly LGA's industry value-add and employed 13.6% of the people who work in the Wollondilly LGA. Upon exclusion of mining from the calculation, Wollondilly LGA had a value-add per employed person of $132,135.

4.1.2 Gross Regional Product by industry

Table 5 identifies the top three industries by contribution to GRP for each area. Manufacturing was the most important industry in Western Sydney. In 2010-11, manufacturing contributed 13.5% to Western Sydney's GRP ($10.6 billion). In 2008-09, manufacturing's share of Western Sydney's GRP was slightly higher, at 15.8%.[19] The other key industries for Western Sydney were "financial & insurance services" ($6.8 billion) and "transport, postal & warehousing" ($5.4 billion).

At the labour force region level, manufacturing was one of the most significant industries. It was ranked first for each labour force region except Central Western Sydney, where "financial & insurance services" was the most significant industry in terms of contribution to GRP. Manufacturing was most important for the Fairfield-Liverpool labour force region, contributing to 17.3% of its GRP. This is a decline from its share in 2008-09 of 20.3%.[20]

Manufacturing was also the most important industry for 8 of the 12 LGAs in Western Sydney. The exceptions were the Blue Mountains (health care & social assistance), Camden (construction), Parramatta (financial & insurance services) and Wollondilly (mining) LGAs. In the case of the Camden and Wollondilly LGAs, manufacturing was the second most important industry. Manufacturing was most important for the Holroyd LGA, contributing to 25.6% of its GRP, a decline from 27.9% in 2008-09.

[19] See Appendix 2

[20] See Appendix 4.

Table 5: Ranking industries by contribution to Gross Regional Product by area (2010-11)[21]

Area	Rank (% of total)		
	1	2	3
Local Government Area			
Auburn	Manufacturing (16.2)	Wholesale trade (13.0)	Transport, postal & warehousing (9.5)
Blacktown	Manufacturing (14.8)	Transport, postal & warehousing (9.4)	Wholesale trade (7.6)
Blue Mountains	Health care & social assistance (11.3)	Education & training (8.3)	Professional, scientific & technical services (7.0)
Camden	Construction (9.7)	Manufacturing (8.3)	Transport, postal & warehousing (7.9)
Campbelltown	Manufacturing (16.1)	Education & training (8.1)	Health care & social assistance (7.2)
Fairfield	Manufacturing (20.7)	Wholesale trade (8.7)	Transport, postal & warehousing (6.9)
Hawkesbury	Manufacturing (11.3)	Public administration & safety (10.0)	Construction (8.8)
Holroyd	Manufacturing (25.6)	Transport, postal & warehousing (10.9)	Wholesale trade (10.3)
Liverpool	Manufacturing (14.2)	Health care & social assistance (8.8)	Transport, postal & warehousing (7.6)
Parramatta	Financial & insurance services (22.7)	Health care & social assistance (8.9)	Manufacturing (8.2)
Penrith	Manufacturing (11.1)	Health care & social assistance (8.4)	Construction (7.4)
Wollondilly	Mining (36.4)	Manufacturing (7.5)	Construction (6.5)
Labour force region			
Central Western Sydney	Financial & insurance services (15.4)	Manufacturing (13.2)	Wholesale trade (7.5)
Fairfield-Liverpool	Manufacturing (17.3)	Transport, postal & warehousing (7.3)	Health care & social assistance (7.2)
North Western Sydney	Manufacturing (12.2)	Construction (7.4)	Transport, postal & warehousing (7.1)
Outer South Western Sydney	Manufacturing (12.5)	Mining (9.2)	Education & training (6.9)
Western Sydney	Manufacturing (13.5)	Financial & insurance services (8.7)	Transport, postal & warehousing (6.8)
Sydney	Financial & insurance services (17.6)	Professional, scientific & technical services (8.3)	Manufacturing (7.4)

[21] Current prices. Source: RDA Sydney, *RDA Sydney Metropolitan Region Economic Baseline Assessment - Update*, Final, June 2012, p.90.

The significance of other industries for the LGAs of Western Sydney varied considerably. After manufacturing, "transport, postal & warehousing" was the industry that featured most frequently (6 times) at the LGA-level in the top three industries by contribution to GRP (see Table 5). Other significant industries by contribution to GRP include "wholesale trade" and "health care & social assistance".

Aggregation of Western Sydney industries into five broad sectoral groups provides a means of examining macroeconomic trends in Western Sydney between 2008-09 and 2010-11 (see Table 6). Of the five industry sectors in Table 6, only manufacturing lost output share of the Western Sydney economy, down by 1.9% between 2008-09 and 2010-11. The services sector increased its share of the Western Sydney economy by 0.5% between 2008-09 and 2010-11. It now accounts for 70.6% of the Western Sydney economy, considerably less than its share of the total NSW economy (75.6%). While the construction sector lost part of its share of the NSW economy, falling by 0.7%, it increased its share of the Western Sydney by 0.9%, the largest increase of any sector.

Table 6: Western Sydney industry composition (2008-09 to 2010-11)[22]

Industry sector	Western Sydney		NSW	
	Industry share (2010-11)	Change in industry share (2008-09 to 2010-11)(1)	Industry share (2010-11)	Change in industry share (2008-09 to 2010-11)(1)
Agriculture and mining	2.7%	0.0%	5.8%	0.3%
Construction	7.5%	0.9%	6.0%	-0.7%
Manufacturing	16.0%	-1.9%	9.7%	-0.6%
Utilities	3.1%	0.6%	2.9%	0.3%
Services	70.6%	0.5%	75.7%	0.6%

Notes: Current prices. "Ownership of dwellings" has been excluded from the total.
(1) Percentage point change.

4.2 Employment and unemployment

According to ABS Labour Force Survey figures, in May 2012 a total of 762,371 Western Sydney residents were employed and 44,700 were unemployed (see Table 7). This is equivalent to a participation rate of 63.0%, which is lower than the participation rates for Sydney (66.0%) and for NSW (63.6%). The participation rate is defined as the labour force (persons employed and unemployed) expressed as a percentage of the population. In May 2012, the unemployment rate for Western Sydney was 5.5%, 0.5 points above the NSW rate. The unemployment rate varied substantially within Western Sydney. The Fairfield-Liverpool labour force region had an unemployment rate of 9.2%, 4.2

[22] Sources: RDA Sydney, *Sydney Metropolitan Region Economic Baseline Assessment*, Final, July 2010; RDA Sydney, *RDA Sydney Metropolitan Region Economic Baseline Assessment - Update*, Final, June 2012; ABS, *Australian National Accounts: State Accounts, 2010-11*, Catalogue No. 5220.0, November 2011.

points higher than the unemployment rate of NSW. In contrast, the North Western Sydney labour force region had an unemployment rate of 4.2%, lower than both the Sydney and NSW figures.

Table 7: Employment, unemployment and participation rates by area (May 2012)[23]

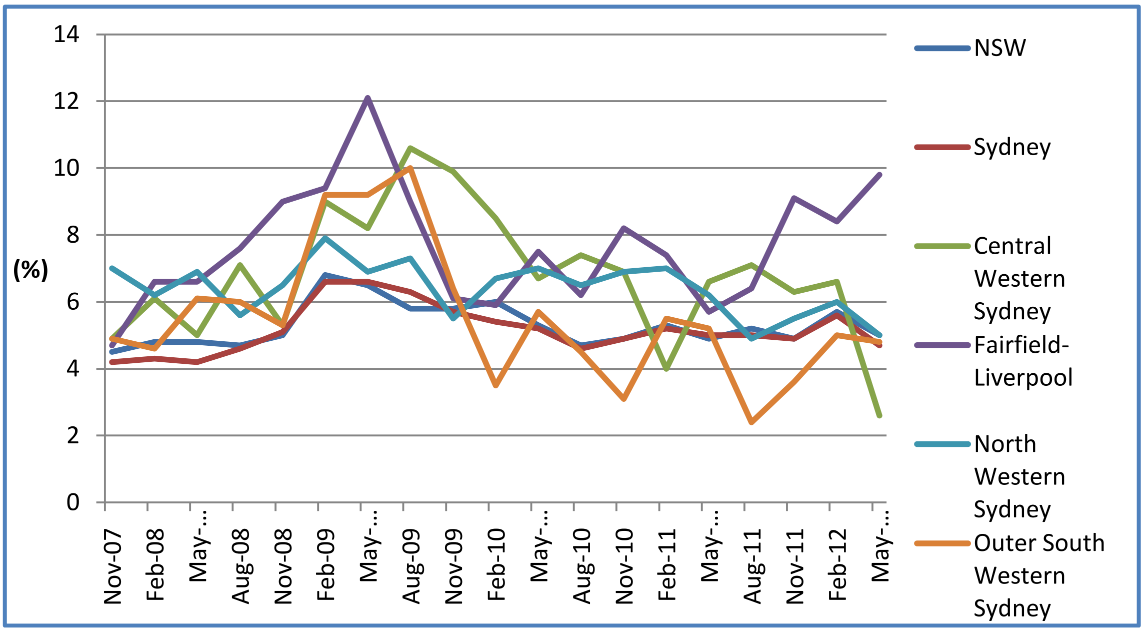
Area	Employment[1] (persons) (change since May 2011)	Unemployment[2] (persons)	Unemployment rate[2] (%)	Participation rate (15+)[2] (%)
Central Western Sydney	160,940 (+2.5%)	8,000	4.6	61.9
Fairfield-Liverpool	158,761 (+0.8%)	16,400	9.2	59.1
North Western Sydney	314,358 (-1.7%)	13,800	4.2	65.3
Outer South Western Sydney	128,312 (-0.9%)	6,500	5.1	64.5
Western Sydney	762,371 (-0.2%)	44,700	5.5	63.0
Sydney	2,350,121 (+1.0%)	123,000	4.9	66.0
NSW	3,593,540 (+0.4%)	189,500	5.0	63.6

Notes: (1) The number of persons employed is based on three month average original data to May 2012.
(2) The unemployment and participation rate figures are seasonally adjusted May 2012 data.

Unemployment rates for the four labour force regions of Western Sydney have fluctuated over the past four years (see Figure 5). On average, unemployment has been greatest in the Fairfield-Liverpool labour force region. In this region, unemployment reached its highest rate of 12.1% in May 2009 and its lowest rate of 4.7% in November 2007. The Outer South Western Sydney labour force region had the lowest average unemployment rate over this period. This region reached its highest rate of 10.0% in August 2009 and its lowest rate of 2.4% in August 2011.

23 Sources: DEEWR, *Labour Market Information Portal*, May 2012 [online - accessed 11/07/2012]; ABS, *Labour Force, Australia, Detailed - Electronic Delivery, May 2012*, Catalogue No. 6291.0.55.001, June 2012; ABS, *Labour Force, Australia, Detailed, Quarterly, May 2012*, Catalogue No. 6291.0.55.003, June 2012.

Figure 5: Unemployment rate by area: November 2007 to May 2012[24]



In May 2012, almost 26% of employed persons in Western Sydney were working in part-time employment. This is equivalent to 197,000 persons (see Table 8). This was lower than the NSW rate of almost 29.5%. In May 2012, 31,200 people in Western Sydney were seeking full-time employment and 13,500 people were seeking part-time employment.

Table 8: Full-time and part-time employment and unemployment (May 2012)[25]

Area	Employed (persons)		Unemployed (persons)	
	Full-time	Part-time	Full-time	Part-time
Central Western Sydney	119,100	45,300	6,700	1,300
Fairfield-Liverpool	119,100	43,100	11,800	4,600
North Western Sydney	230,000	83,700	8,200	5,600
Outer South Western Sydney	97,500	24,900	4,500	2,000
Western Sydney	565,700	197,000	31,200	13,500
Sydney	1,703,100	670,400	81,100	41,900
NSW	2,549,200	1,065,000	128,900	60,600

[24] Source: ABS, *Labour Force, Australia, Detailed - Electronic Delivery, May 2012*, Catalogue No. 6291.0.55.001, June 2012.

[25] Sources: DEEWR, *Labour Market Information Portal*, May 2012 [online - accessed 11/07/2012]; ABS, *Labour Force, Australia, Detailed - Electronic Delivery, May 2012*, Catalogue No. 6291.0.55.001, June 2012; ABS, *Labour Force, Australia, Detailed, Quarterly, May 2012*, Catalogue No. 6291.0.55.003, June 2012.

Youth unemployment and participation rates vary substantially across Western Sydney (see Table 9). In May 2012, Western Sydney had a youth unemployment rate of 17.9%, slightly higher than the NSW rate of 15.3%. At the labour force level, three of the labour force regions had youth unemployment levels higher than the NSW rate (15.3%): Outer South Western Sydney (22.4%); Central Western Sydney (21.8%); and Fairfield-Liverpool (17.6%). Youth unemployment rose by 1.9% in Western Sydney between May 2011 and May 2012, whereas the NSW rate fell by 1.9%. Youth unemployment levels fluctuated more dramatically within particular labour force regions. For example, youth unemployment in Outer South Western Sydney rose by 12% between May 2011 and May 2012.

Table 9: Youth unemployment and participation rates (May 2012)[26]

Area	Unemployment rate (15-19)		Participation rate	
	May 2012	% change since May 2011(1)	May 2012	% change since May 2011(1)
Central Western Sydney	21.8	+6.4	37.8	-3.0
Fairfield-Liverpool	17.6	-6.7	38.8	6.0
North Western Sydney	15.2	-0.1	46.7	-13.7
Outer South Western Sydney	22.4	+12.0	45.2	-4.1
Western Sydney	17.9	+1.9	-	-
Sydney	16.2	-0.3	46.6	-0.1
NSW	15.3	-1.9	50.0	-0.8

Notes: All figures are based on 12-month averages.
(1) Percentage point change.

In May 2012, youth participation rates for each labour force region in Western Sydney were lower than the NSW rate of 50.0% (see Table 9). Central Western Sydney had the lowest rate of 37.8%. Across Western Sydney, with the exception of the Fairfield-Liverpool labour force region, youth participation rates declined between May 2011 and May 2012. The North Western Sydney labour force region experienced the largest fall, from 60.4% to 46.7%.

The long-term unemployment rate refers to the proportion of the labour force who are continuously unemployed for 52 weeks or more. In May 2012, long-term unemployment rates in Western Sydney generally exceeded the Sydney and NSW rates (see Table 10). While Outer South Western Sydney (0.88%), which had the lowest figure of the four labour force regions in Western Sydney, was roughly equivalent to the Sydney rate, the long-term unemployment rate in Fairfield-Liverpool (2.01%) was approximately double the Sydney rate.

[26] ABS, *Labour Force, Australia, Detailed - Electronic Delivery, May 2012*, Catalogue No. 6291.0.55.001, June 2012.

Table 10: Long-term unemployment (May 2012)[27]

Area	Long-term unemployed[1] (persons)	Long-term unemployment rate[2] (%)	Long-term unemployment ratio[2] (%)
Central Western Sydney	2,157	1.25	27.0
Fairfield-Liverpool	3,581	2.01	21.8
North Western Sydney	4,611	1.41	33.4
Outer South Western Sydney	1,130	0.88	17.4
Western Sydney	11,480	1.42	25.7
Sydney	24,569	0.98	20.0
NSW	42,291	1.11	22.3

Notes: (1) A person is long-term unemployed if they were continuously unemployed for 52 weeks or more. The long-term unemployed data are 12 month average original data to May 2012. (2) These are ABS definitions: ABS, *Australian Social Trends, Sep 2011*, Catalogue No. 4102.0, 2011.

The long-term unemployment ratio refers to the proportion of the unemployed population who were long-term unemployed. In this case, Western Sydney figures again generally exceeded the Sydney and NSW figures (see Table 10). The Outer South Western Sydney labour force region had the lowest long-term unemployment ratio (17.4%), while North Western Sydney had the highest long-term unemployment ratio (33.4%).

4.3 Employment by industry

This section examines employment by industry in Western Sydney. It first sets out the total number of people employed by industry in Western Sydney as of May 2012. This data is compared with Census 2006 data in order to explore trends in employment by industry. Key figures for employment by industry for each labour force region in Western Sydney are also provided [Appendix 5 contains detailed information for each labour force region]. This section finishes with an examination of changes in employment by industry in Western Sydney between May 2011 and May 2012. These figures give a very different picture of employment trends to the earlier 2006-May 2012 comparison.

The data has been sourced from the ABS Labour Force publications. 19 industry categories are employed following the Australian and New Zealand Standard Industrial Classification (ANZSIC) 2006. The figures relate to the *residential population* of each region. Consequently, the figures presented here do not provide as accurate a picture of the Western Sydney economy as would be the case were they based on the *working population* of Western Sydney. According to the 2006 census, over one third of Western Sydney's residential population worked outside of Western Sydney.[28] Working population figures

[27] ABS, *Labour Force, Australia, Detailed - Electronic Delivery, May 2012*, Catalogue No. 6291.0.55.001, June 2012.

[28] B Beard, *Who works where and how do they get there? GWS Journey to Work 2006*,

have not been used here because the most recent available figures are from the 2006 census.[29]

For most industries, employment was relatively evenly distributed across Western Sydney. In May 2012, the industries for which employment was most variably distributed across Western Sydney were: "electricity, gas, water & waste services"; "information media & telecommunications"; "mining"; and "agriculture, forestry & fishing" (see Appendix 6). In other words, some labour force regions had higher or lower than may be expected concentrations of employment in some industries. For example, the Outer South Western Sydney labour force region had a higher than expected concentration of employment in the "electricity, gas, water & waste services" industry. The industries for which employment was least variably distributed across Western Sydney were: "construction"; "other services"; and "health care & social assistance".

4.3.1 Western Sydney: 2006 to May 2012

In May 2012, 762,371 residents of Western Sydney were in employment, an increase of 149,620 since 2006 (see Table 11). This is equivalent to an increase of 24.4% in the number of people in Western Sydney who were employed. The largest proportion of these people were employed in "health care & social assistance" (90,752 persons), while the smallest proportion were employed in "mining" (2,009 persons). Other significant employers included "manufacturing" (87,300 persons), "retail trade" (80,356 persons) and "construction" (66,679 persons).

The biggest increases in employment between 2006 and May 2012 took place in "health care & social assistance" (31,168 persons), "transport, postal & warehousing" (15,058 persons) and "professional, scientific & technical services" (14,835 persons). A total of 1,132 jobs were lost in "manufacturing" between 2006 and May 2012.

In terms of percentage change, the fastest areas of growth in employment between 2006 and May 2012 took place in the following industries: "health care & social assistance" (52.3%); "other services" (50.9%); and "mining" (48.9%). Only "manufacturing" (-1.3%) experienced a decrease in employment between 2006 and February 2012.

The *LQ* value provided in the final column of Table 11 provides a measure of the difference between Western Sydney and NSW in employment shares by industry.[30] According to the *LQ* values, the three most important industries in

WESTIR Ltd, Occasional Paper No. 6 - March 2011, 2011. See Appendix 7.

[29] Appendix 7 qualifies the employment by industry data presented in this section. The data contained in the Appendix, sourced from the 2006 Census, reveals where the residents of each area in Western Sydney work.

[30] The *LQ* values provided here are based on a comparison with the *NSW economy*. The LQ values in section 4.4 of this paper are based on a comparison with the *Australian economy*, this being the preferred use of *LQ* values such that a regional economy is compared with the most diverse economy available for comparison. Table 11 includes *LQ* values based on a

Western Sydney, relative to their importance to the NSW economy, were: "manufacturing"; "transport, postal & warehousing"; and "wholesale trade". The least important industries were "agriculture, forestry & fishing" and "mining".

Table 11: Western Sydney: employment by industry (2006 to May 2012)[31]

Industry	Western Sydney				NSW	
	May 2012 (Persons)	Change since 2006 (Persons)	Change since 2006 (%)	% of total	% of total	*LQ* value
Agriculture, forestry & fishing	5,483	931	20.5	0.72	2.31	0.31
Mining	2,009	660	48.9	0.26	1.27	0.21
Manufacturing	87,300	-1,132	-1.3	11.45	7.82	1.46
Electricity, gas, water & waste services	6,618	252	4.0	0.87	1.03	0.84
Construction	66,679	14,201	27.1	8.75	8.34	1.05
Wholesale trade	39,056	2,259	6.1	5.12	3.75	1.37
Retail trade	80,356	10,096	14.4	10.54	10.69	0.99
Accommodation & food services	46,183	10,908	30.9	6.06	7.10	0.85
Transport, postal & warehousing	57,658	15,058	35.3	7.56	5.23	1.45
Information media & telecommunications	14,243	2,227	18.5	1.87	2.45	0.76
Financial & insurance services	38,078	7,981	26.5	4.99	5.01	1.00
Rental, hiring & real estate services	9,368	64	0.7	1.23	1.74	0.71
Professional, scientific & technical services	47,100	14,835	46.0	6.18	8.80	0.70
Administrative & support services	27,752	7,555	37.4	3.64	3.66	0.99
Public administration & safety	45,973	6,989	17.9	6.03	6.01	1.00
Education & training	49,238	9,447	23.7	6.46	7.20	0.90
Health care & social assistance	90,752	31,168	52.3	11.90	11.84	1.01
Arts & recreation services	10,214	3,206	45.7	1.34	1.64	0.82
Other services	38,311	12,915	50.9	5.03	4.11	1.22
Total	762,371	149,620	24.4	100	100	-

In May 2012, 21.2% of all employed people in NSW were living in Western Sydney (see Table 12). This is equivalent to 32.4% of all the employed people

comparison with the NSW economy in order to provide further explanatory information in this context i.e. the *LQ* value shows the relationship between column 4 and column 5 of Table 11 as a ratio.

[31] Sources: ABS, *2006 Census Community Profiles by Location*; ABS, *Labour Force, Australia, Detailed, Quarterly, May 2012*, Catalogue No. 6291.0.55.003, June 2012.

in Greater Metropolitan Sydney. The five industries that had the largest proportion of employees living in Western Sydney as a percentage of the NSW total were: "manufacturing"; "transport, postal & warehousing"; "wholesale trade"; "other services"; and "construction". In May 2012, 31.1% of all NSW manufacturing employees lived in Western Sydney. This was equivalent to 49.3% of the total Sydney manufacturing workforce.

Table 12: Employment by industry in Western Sydney as a percentage of the Sydney and NSW totals (May 2012)[32]

Industry	Employment in Western Sydney as a % of Sydney total	Employment in Western Sydney as a % of NSW total
Agriculture, forestry & fishing	53.8	6.6
Mining	30.5	4.4
Manufacturing	49.3	31.1
Electricity, gas, water & waste services	32.8	17.8
Construction	35.2	22.2
Wholesale trade	37.9	29.0
Retail trade	33.9	20.9
Accommodation & food services	28.6	18.1
Transport, postal & warehousing	43.4	30.7
Information media & telecommunications	18.9	16.2
Financial & insurance services	24.6	21.2
Rental, hiring & real estate services	21.4	15.0
Professional, scientific & technical services	18.4	14.9
Administrative & support services	29.9	21.1
Public administration & safety	37.4	21.3
Education & training	29.2	19.0
Health care & social assistance	34.0	21.3
Arts & recreation services	24.9	17.4
Other services	42.5	25.9
Total	32.4	21.2

32 Source: ABS, *Labour Force, Australia, Detailed, Quarterly, May 2012*, Catalogue No. 6291.0.55.003, June 2012.

4.3.2 Western Sydney labour force regions

Table 13 sets out the top employing industries in each of the four labour force regions of Western Sydney (see further Appendix 5). Two industries were amongst the top three employing industries for each labour force region: "health care & social assistance" and "retail trade". "Manufacturing" was also a top employing industry for every region except for Central Western Sydney.

Table 13: Top employing industries for each labour force region (May 2012)[33]

Region	Rank according to number of persons employed (% of total)		
	1	2	3
Central Western Sydney	Health care & social assistance (21,979) (13.7%)	Construction (14,176) (8.8%)	Retail trade (14,063) (8.7%)
Fairfield-Liverpool	Manufacturing (21,579) (13.6%)	Retail trade (19,854) (12.5%)	Health care & social assistance (17,478) (11.0%)
North Western Sydney	Health care & social assistance (37,202) (11.8%)	Manufacturing (36,911) (11.7%)	Retail trade (34,525) (11.0%)
Outer South Western Sydney	Manufacturing (14,906) (11.6%)	Health care & social assistance (14,093) (11.0%)	Retail trade (11,913) (9.3%)

Table 14 identifies the largest gains and losses in employment by industry for each of the four labour force regions of Western Sydney (see further Appendix 5). As of May 2012, employment had grown the most since 2006 in "health care & social assistance" for all four labour force regions. The largest decrease in employment took place in manufacturing for all of the regions except for North Western Sydney.

[33] Source: ABS, *Labour Force, Australia, Detailed, Quarterly, May 2012*, Catalogue No. 6291.0.55.003, June 2012.

Table 14: Largest gains/losses by industry for each labour force region between 2006 and May 2012[34]

Region	Rank according to number of jobs created/lost (% change)			
	1	2	18	19
Central Western Sydney	Health care & social assistance (9,256) (72.7%)	Construction (4,740) (50.2%)	Electricity, gas, water & waste services (-483) (-45.7%)	Manufacturing (-937) (-6.3%)
Fairfield-Liverpool	Health care & social assistance (6,698) (62.1%)	Accommodation & food services (5,859) (83.4%)	Information media & telecomm. (-917) (-39.0%)	Manufacturing (-2,372) (-9.9%)
North Western Sydney	Health care & social assistance (10,788) (40.8%)	Education & training (6,337) (33.9%)	Electricity, gas, water & waste services (-79) (-2.5%)	Wholesale trade (-1,224) (-8.0%)
Outer South Western Sydney	Health care & social assistance (4,426) (45.8%)	Wholesale trade (3,087) (56.4%)	Rental, hiring & real estate services (-488) (-26.8%)	Manufacturing (-498) (-3.2%)

4.3.3 Western Sydney: May 2011 to May 2012

In May 2012, 762,371 residents of Western Sydney were in employment, a decrease of 1,391 since May 2011 (see Table 15). This is equivalent to a decrease of 0.2% in the number of people employed in Western Sydney. In total, 11 industries recorded declines in employment between May 2011 and May 2012. These three industries which recorded the largest declines in employment were:

- Retail trade lost 6,704 jobs (-7.7%);
- Electricity, gas, water & waste lost 5,280 jobs (-44.4%); and
- Rental, hiring & real estate services lost 3,755 jobs (-28.6%).[35]

[34] Source: ABS, *Labour Force, Australia, Detailed, Quarterly, May 2012*, Catalogue No. 6291.0.55.003, June 2012.

[35] It is worth noting at this point that the Labour Force Survey is based on a sample of private dwellings (approximately 29,000 houses, flats etc) and non-private dwellings, such as hotels and motels. The sample covers about 0.33% of the Australian civilian population aged 15 years or over. The primary purpose of the survey is to provide labour force estimates for the nation and, secondarily, for each State and Territory. Consequently, regional-level data may be more likely to be subject to errors. For more information, see the explanatory notes of the ABS publication: ABS, *Labour Force, Australia*, Catalogue No. 6202.0.

The fastest areas of growth in employment between May 2011 and May 2012 took place in the following industries: "financial & insurance services" (20%); "other services" (16.1%); and "health care & social assistance" (12.6%). In terms of absolute numbers, the biggest increases in employment between May 2011 and May 2012 took place in "health care & social assistance" (10,152 persons), "financial & insurance services" (6,356 persons) and "other services" (5,327 persons).

Table 15: Western Sydney: employment by industry (May 2011 to May 2012)[36]

Industry	May 2012 (Persons)	Change since 2006 (Persons)	Change since May 2011	
			(Persons)	(%)
Agriculture, forestry & fishing	5,483	931	505	10.1
Mining	2,009	660	-756	-27.3
Manufacturing	87,300	-1,132	-2,943	-3.3
Electricity, gas, water & waste services	6,618	252	-5,280	-44.4
Construction	66,679	14,201	-3,674	-5.2
Wholesale trade	39,056	2,259	2,323	6.3
Retail trade	80,356	10,096	-6,704	-7.7
Accommodation & food services	46,183	10,908	-2,352	-4.8
Transport, postal & warehousing	57,658	15,058	-738	-1.3
Information media & telecommunications	14,243	2,227	-87	-0.6
Financial & insurance services	38,078	7,981	6,356	20.0
Rental, hiring & real estate services	9,368	64	-3,755	-28.6
Professional, scientific & technical services	47,100	14,835	1,435	3.1
Administrative & support services	27,752	7,555	844	3.1
Public administration & safety	45,973	6,989	-802	-1.7
Education & training	49,238	9,447	355	0.7
Health care & social assistance	90,752	31,168	10,152	12.6
Arts & recreation services	10,214	3,206	-1,597	-13.5
Other services	38,311	12,915	5,327	16.1
Total	762,371	149,620	-1,391	-0.2

The change in employment numbers between May 2011 and May 2012 differ between labour force regions (see Appendix 8). While employment grew in the Central Western Sydney (3,907 jobs) and Fairfield-Liverpool (1,324 jobs) labour force regions, it declined in the North Western Sydney (-5,471 jobs) and Outer South Western Sydney (-1,151 jobs) regions. Accordingly, only 5 industries in

[36] Sources: ABS, *2006 Census Community Profiles by Location*; ABS, *Labour Force, Australia, Detailed, Quarterly, May 2012*, Catalogue No. 6291.0.55.003, June 2012.

the Central Western Sydney labour force region recorded declines in employment, whereas between 9 and 10 industries in the other three labour force regions recorded declines in employment numbers.

The industries which experienced the largest increase or decrease at the regional level were both located in Central Western Sydney: "retail trade" lost 7,930 jobs; and "health care & social assistance" gained 4,507 jobs. Only one industry did not experience a decline in employment levels in at least one labour force region: "health care & social assistance".

4.4 Economic diversity

It is generally held that the economic diversity of a region is a significant contributor to its long-term economic development and sustainability.[37] Several measures of economic diversity exist in the literature, each with their own strengths and weaknesses (see Appendix 9). For the purpose of this paper, two measures were employed, both of which use employment by industry data:

- Location quotients (*LQ*) - a ratio demonstrating the relative significance of an industry for Western Sydney in comparison to the industry's importance to the Australian economy. An *LQ* of one indicates that the share of an industry in the Western Sydney economy and the Australian economy are the same; a value of the *LQ* greater (or smaller) than one means that the Western Sydney economy has a greater (or smaller) share of that industry in its economy than the Australian economy does.

- An index of economic diversity - a measure of the economic diversity of Western Sydney in comparison to the Australian economy. This measure is bounded between 0 and 1, where 1 means Western Sydney has exactly the same industrial structure as the Australian economy and 0 means that Western Sydney has a totally different industrial structure.

In May 2012, the most significant industry in Western Sydney in relative terms was "transport, postal & warehousing", with an *LQ* of 1.53 (see Table 16). In other words, this industry was 1.5 times as important for the Western Sydney economy as it was for the Australian economy. Other industries of relative significance for Western Sydney include "wholesale trade" and "manufacturing". The largest *LQ* value was for "wholesale trade" in Outer South Western Sydney. In this case, a value of 1.85 demonstrates that "wholesale trade" was close to twice as significant for the Outer South Western Sydney economy as it was for the Australian economy.

[37] See for example: Research and Economic Analysis Division, Department of Businesses, Economic Development and Tourism, State of Hawaii, *Measuring Economic Diversification in Hawaii*, February 2008; Hunter Valley Research Foundation, *Diversification of the Hunter Economy - Post BHP*, 2011

Table 16: Ranking industries by significance by labour force region (*LQ* values) and the index of economic diversity (May 2012)[38]

Region	Rank (*LQ* value: comparison with Australian economy)			Index of economic diversity
	1	2	3	
Central Western Sydney	Information media & telecommunications (1.71)	Wholesale trade (1.59)	Financial & insurance services (1.58)	0.893
Fairfield-Liverpool	Transport, postal & warehousing (1.79)	Manufacturing (1.63)	Other services (1.28)	0.869
North Western Sydney	Transport, postal & warehousing (1.54)	Manufacturing (1.40)	Financial & insurance services (1.35)	0.924
Outer South Western Sydney	Wholesale trade (1.85)	Transport, postal & warehousing (1.42)	Manufacturing (1.39)	0.907
Western Sydney	Transport, postal & warehousing (1.53)	Wholesale trade (1.42)	Manufacturing (1.37)	0.924

In May 2012, Western Sydney had a relatively diverse economy compared with the Australian economy, with an economic diversity index value of 0.924. The labour force region with the most diverse economy was North Western Sydney, with an economic diversity index value of 0.924. In contrast, Fairfield-Liverpool had the least diverse economy, with an economic diversity index value of 0.869.

4.5 Surveys of employers' recruitment experiences in Western Sydney

The Commonwealth Department of Education, Employment and Workplace Relations conducts an annual survey of employers' recruitment experiences to assess the extent of recruitment difficulty in particular regions and industries of Australia. The regions surveyed are defined by the Commonwealth Government as either employment service areas or priority employment areas (see also section 6.2.1 of this paper). Twenty priority employment areas exist in Australia, each chosen on the basis of approximately 70 indicators of labour market disadvantage. Two of the twenty priority employment areas are located in Western Sydney: the Canterbury-Bankstown and South Western Sydney Priority Employment Area; and the Sydney West and Blue Mountains Priority Employment Area. Together, these two priority employment areas cover all of Western Sydney, as defined in this paper. They are considered separately in the sections below because the surveys were conducted in slightly different time periods.

[38] Sources: Sources: ABS, *2006 Census Community Profiles by Location*; ABS, *Labour Force, Australia, Detailed, Quarterly, May 2012*, Catalogue No. 6291.0.55.003, June 2012.

4.5.1 Employer recruitment experiences in the Sydney West and Blue Mountains Priority Employment Area

The Sydney West and Blue Mountains Priority Employment Area covers two of the four labour force regions that make up Western Sydney:

- Central Western Sydney (Auburn, Holroyd and Parramatta LGAs); and
- North Western Sydney (Blacktown, Blue Mountains, Hawkesbury and Penrith LGAs).

324 employers were surveyed in the priority employment area in October 2011.[39] At the time the survey was conducted, the unemployment rate in the priority employment area was higher than the NSW average. Together with the survey findings, the high unemployment rate suggested that demand for labour in the region remained subdued. [However, note that in May 2012 the unemployment rate for both Central Western Sydney and North Western Sydney was lower than the State average - see section 4.2 of this paper]. The demand for labour was slightly lower in North Western Sydney than in Central Western Sydney. Difficulty for employers when recruiting staff was higher in North Western Sydney than in Central Western Sydney.

Three trends can be observed in the survey findings regarding employer recruitment experiences (see Table 17):

(1) Recruitment activity in the region is relatively low - the proportion of employers who recruited declined between August 2009 and October 2011 from 64% to 59%. The proportion of employers who recruited in the area was less than the average for all areas surveyed (68%). Further, although the recruitment rate (vacancies per 100 staff) increased between August 2009 and October 2011, it was still lower than the average for all regions surveyed by DEEWR;

(2) The proportion of employers who recruited in order to expand their business by increasing staff numbers increased between August 2009 and October 2011 from 53% to 58%; and

(3) Recruitment difficulties increased - the proportion of employers reporting recruitment difficulties rose from 46% to 52% between August 2009 and October 2011. The proportion of unfilled vacancies doubled between August 2009 and October 2011 from 3.0% to 6.0%. Nevertheless, rates of recruitment difficulty in the priority employment area were lower than the average for all regions.

[39] Commonwealth Department of Education, Employment and Workplace Relations, *Overview of the Sydney West and Blue Mountains Priority Employment Area: Survey of Employers' Recruitment Experiences - October 2011*, November 2011.

Table 17: Employer recruitment experiences and expectations in the Sydney West and Blue Mountains Priority Employment Area (2009 to 2011)[40]

	October 2011	June 2010	August 2009	All regions (12 months to Dec 2011)
Recruitment experiences in the 12 months preceding the survey				
Proportion of employers who recruited	59%	66%	64%	68%
- to increase staff	58%	53%	53%	52%
- to replace staff	77%	80%	76%	85%
Vacancies per 100 staff	15	17	8	20
Proportion of recruiting employers who experienced difficulty	52%	50%	46%	59%
Proportion of unfilled vacancies	6.0%	6.3%	3.0%	8.0%
Recruitment expectations				
Expected to recruit	51%	47%	41%	51%
Expected to increase staff numbers	33%	25%	25%	29%
Expected to reduce staff numbers	5%	3%	2%	4%
Expected difficulty recruiting	34%	32%	30%	46%
Uncertain about future recruitment	6%	17%	22%	10%

With regard to recruitment expectations, three findings indicate that employer confidence rose between August 2009 and October 2011:

(1) The proportion of employers expecting to recruit rose from 41% to 51%;

(2) The proportion of employers expecting to increase staff numbers rose from 25% to 33%; and

(3) The proportion of employers who were uncertain about future recruitment declined from 22% to 6%.

In contrast, the proportion of employers who expected difficulty recruiting rose slightly from 30% to 34%.

4.5.2 Employer recruitment experiences in the Canterbury-Bankstown and South Western Sydney Priority Employment Area

The Canterbury-Bankstown and South Western Sydney Priority Employment Area is made up of three labour force regions, two of which are located in

[40] Commonwealth Department of Education, Employment and Workplace Relations, *Survey of Employers' Recruitment Experiences Sydney West and Blue Mountains Priority Employment Area*, October 2011, pp 5 & 10

Western Sydney as defined in this paper:

- Canterbury-Bankstown (Canterbury and Bankstown LGAs);
- Fairfield-Liverpool (Fairfield and Liverpool LGAs); and
- Outer South Western Sydney (Camden, Campbelltown and Wollondilly LGAs).

In March 2012, 411 employers in the priority employment area were surveyed.[41] At the time the survey was conducted, the unemployment rate in the priority employment area was 6.9%, higher than the NSW rate of 5.2%. Together with the survey findings, the high unemployment rate suggested that demand for labour in the region remained subdued. [Note that in May 2012, the unemployment rates for Fairfield-Liverpool and Outer South Western Sydney were 9.2% and 5.1% respectively - see section 4.2 of this paper]. With regard to employer recruitment experiences, the survey findings for this priority employment area were worse than those for the Sydney West and Blue Mountains Priority Employment Area for all but two questions:

(1) This priority employment area had a slightly lower proportion of employers who experienced difficulty recruiting, 48% compared with 52%; and

(2) This priority employment area had a lower proportion of unfilled vacancies, 3.8% compared with 6.0%.

Three trends can be observed in the survey findings regarding employer recruitment experiences (see Table 18):

(1) Recruitment activity declined - the proportion of employers who recruited fell slightly between March 2010 and March 2012 from 60% to 56%. The recruitment rate (vacancies per 100 staff), while stable, was lower than the average for all the regions surveyed. Further, reasons for recruitment changed substantially: staff replacement became more important, rising from 76% to 83%, and business expansion became significantly less important, falling from 62% to 46%;

(2) The proportion of unfilled vacancies fell from 7.3% to 3.8% between 2010 and 2012; and

(3) The proportion of employers who experienced difficulty recruiting rose slightly from 45% to 48%.

[41] Commonwealth Department of Education, Employment and Workplace Relations, *Overview of the Canterbury-Bankstown and South West Sydney Priority Employment Area*, March 2012.

Table 18: Employer recruitment experiences and expectations in the Canterbury-Bankstown and South Western Sydney Priority Employment Area (2010 to 2012)[42]

	March 2012	March 2010	All regions (12 months to March 2012)
Recruitment experiences in the 12 months preceding the survey			
Proportion of employers who recruited	56%	60%	68%
- to increase staff	46%	62%	50%
- to replace staff	83%	76%	86%
Vacancies per 100 staff	10	10	20
Proportion of recruiting employers who experienced difficulty	48%	45%	59%
Proportion of unfilled vacancies	3.8%	7.3%	7.4%
Recruitment expectations			
Expected to recruit	40%	45 / 39%(1)	52%
Expected to increase staff numbers	22%	30 / 26%(1)	29%
Expected to reduce staff numbers	5%	2 / 4%(1)	4%
Expected difficulty recruiting	39%	37 / 32%(1)	46%

Note: (1) A figure for the whole priority employment area was unavailable. The first figure relates to the Canterbury-Bankstown and Fairfield-Liverpool labour force regions together. The second figure relates to the Outer South Western Sydney labour force region.

With regard to employer recruitment expectations, the survey findings for employers in the Canterbury-Bankstown and South Western Sydney Priority Employment Area were the same or worse than those for the Sydney West and Blue Mountains Priority Employment Area. All of the findings suggest that employer confidence in the Canterbury-Bankstown and South Western Sydney Priority Employment Area fell between March 2010 and March 2012 (see Table 18). Further, all of the findings were worse than the average for all the regions surveyed.

[42] Sources: Commonwealth Department of Education, Employment and Workplace Relations, *Overview of the Canterbury-Bankstown and South West Sydney Priority Employment Area*, March 2012; Commonwealth Department of Education, Employment and Workplace Relations, *Survey of Employers' Recruitment Experiences - Canterbury-Bankstown and South Western Sydney Priority Employment Area*, March 2010

4.6 Business numbers

The ABS annually publishes counts of Australian businesses, including entries and exits.[43] While business counts are available at a scale smaller than the State-level, data on business entries and exits is only available at the State level. Consequently, the data presented here does not present the full picture of business entries and exits as it only looks at total numbers by year and the change in business numbers between 2009 and 2011.

In 2011, there were a total of 121,070 businesses operating in Western Sydney (see Table 19). The largest proportions were in "construction" (21.5%), "transport, postal & warehousing" (11.5%) and "professional, scientific & technical services" (9.3%). Four industries recorded a decline in business numbers between 2009 and 2011: "agriculture, forestry & fishing" (-5 businesses); "mining" (-24 businesses); "manufacturing" (-166 businesses); and "public administration & safety" (-40 businesses). The three industries to have recorded the largest increases in business numbers, excluding "unclassified" businesses (964 businesses), between 2009 and 2011 were: "professional, scientific & technical services" (890 businesses); "transport, postal & warehousing" (722 businesses); and "financial & insurance services" (675 businesses). In total, there were 6,392 more businesses in Western Sydney in 2011 than in 2009.

Table 19 also includes small business counts by industry for Western Sydney. Small businesses are defined as those which employ between 0 and 19 people.[44] In 2011, small businesses comprised 96.6% of all businesses located in Western Sydney.[45] The proportion was highest for the following three industries, excluding "unclassified" (99.2%): "financial & insurance services" (98.9%); "rental, hiring & real estate services" (98.7%); and "construction" (98.4%). The proportion was the lowest for the following three industries: "accommodation & food services" (88.0%); "manufacturing" (89.7%); and "education & training (91.3%).

[43] The ABS provides business counts at the Statistical Area Level 2 (SAL2) scale. SAL2s are part of the ABS's new statistical geography, the Australian Statistical Geography Standard, and do not align with LGA boundaries. Business counts for Western Sydney were calculated by aggregating the counts for the SAL2s located in Western Sydney. The SAL2s chosen had at least 1/3 of their area located in an LGA contained within Western Sydney. Of 6 excluded SAL2s, three had less than 1% of their area located within Western Sydney. The other three were located partly within the Parramatta LGA: Carlingford (23%); Eastwood – Denistone (13%); and Epping – North Epping (28%). The majority of SAL2s that did not lie wholly within one relevant LGA also crossed into another LGA located in Western Sydney.

[44] This follows the definition employed by the Commonwealth Department of Innovation, Industry, Science & Research publication: DIISR, *Key Statistics: Australian Small Business*, 2011.

[45] For a list of large businesses in Western Sydney by LGA, see the following publication: Greater Western Sydney Economic Development Board, *Greater Western Sydney Regional Economic Profile*, 2009.

Table 19: Total business and small business numbers in Western Sydney (2009 to 2011)[46]

Industry	All businesses			Small businesses (0-19 employees)		
	Total	% of total	% change since 2009	Total	% of total	% change since 2009
Agriculture, forestry & fishing	2,691	2.2	-0.2	2,644	2.3	-0.6
Mining	96	0.1	-20.0	81	0.1	-27.0
Manufacturing	6,734	5.6	-2.4	6,042	5.2	-1.2
Electricity, gas, water & waste services	385	0.3	2.9	355	0.3	-1.1
Construction	25,982	21.5	2.0	25,558	21.9	2.2
Wholesale trade	5,770	4.8	3.2	5,281	4.5	4.0
Retail trade	8,893	7.3	7.5	8,497	7.3	6.9
Accommodation & food services	3,873	3.2	5.6	3,407	2.9	6.3
Transport, postal & warehousing	13,904	11.5	5.5	13,674	11.7	5.4
Information media & telecommunications	709	0.6	3.8	688	0.6	3.5
Financial & insurance services	5,845	4.8	13.1	5,779	4.9	13.0
Rental, hiring & real estate services	11,034	9.1	4.3	10,895	9.3	4.4
Professional, scientific & technical services	11,277	9.3	8.6	11,046	9.4	8.7
Administrative & support services	6,069	5.0	8.5	5,793	5.0	8.2
Public administration & safety	863	0.7	-4.4	788	0.7	-6.5
Education & training	1,406	1.2	12.8	1,283	1.1	10.9
Health care & social assistance	4,905	4.1	10.0	4,710	4.0	10.3
Arts & recreation services	1,256	1.0	4.4	1,198	1.0	5.6
Other services	6,219	5.1	3.9	6,114	5.2	4.6
Unclassified	3,159	2.6	43.9	3,135	2.7	43.2
Total	121,070	100	5.6	116,968	100	5.7

In 2011, there were a total of 116,968 small businesses in Western Sydney. This is 6,351 more than in 2009. Five industries recorded a decline in small business numbers between 2009 and 2011: "agriculture, forestry & fishing" (-16 businesses); "mining" (-30 businesses); "manufacturing" (-73 businesses); "electricity, gas, water & waste services" (-4 businesses); and "public

[46] Source: ABS, *Counts of Australian Businesses, including Entries and Exits, Jun 2007 to Jun 2011*, Catalogue No. 8165.0, January 2012.

administration & safety" (-55 businesses). The three industries to have recorded the largest increases in small business numbers, excluding "unclassified" businesses (946 businesses), between 2009 and 2011 were: "professional, scientific & technical services" (886 businesses); "transport, postal & warehousing" (704 businesses); and "financial & insurance services" (664 businesses).

4.7 Employment lands

The NSW Government's Employment Lands Development Program (ELDP) is the "Government's key program for managing the supply of employment lands for the Sydney Region and assisting associated infrastructure coordination."[47] The Department of Planning & Infrastructure publishes an annual report detailing the total stocks of employment lands for the Sydney Region. Employment lands are defined by the NSW Government as:

> Land that is zoned for industry and/or warehouse uses including manufacturing; transforming and warehousing; service and repair trades and industries; integrated enterprises with a mix of administration, production, warehousing, research and development; and urban services and utilities.[48]

There are three categories of Employment Lands:

- Developed;
- Undeveloped zoned land that is not serviced; and
- Undeveloped zoned land that is serviced.

According to the most recent report, Western Sydney had 9,573.5 hectares of zoned employment lands as of January 2011 (see Table 20). This represents 61% of the total zoned employment lands in Sydney. Of the Western Sydney total, 6,508.1 hectares have been developed, representing 68% of the total available employment lands. 200.6 hectares of zoned employment lands were added to the Western Sydney total between January 2010 and January 2011.

The Western Sydney Employment Area (WSEA) is a key employment lands initiative in Western Sydney (see Figure 4). It incorporates several zoned employment lands and, as of January 2011, totalled 2,061 hectares.[49] In 2009, the State Environmental Planning Policy (Western Sydney Employment Area) 2009 was introduced to create a consistent zoning system for new and existing employment lands and for environmental conservation.

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[47] NSW Department of Planning & Infrastructure, *NSW Government response to the Employment Lands Task Force Report*, May 2012, p.1

[48] NSW Department of Planning, *Employment Lands Development Program: 2010 Overview Report*, December 2010, p.21

[49] NSW Department of Planning & Infrastructure, *Employment Lands Development Program: 2011 Update Report*, 2011, Table 2

Table 20: Zoned Employment Lands Stock in Western Sydney by local government area and labour force region (ha) (January 2011)[50]

Area	January 2011 (ha)			% of Western Sydney
	Undeveloped	Developed	Total	
Local Government Area				
Auburn	31.2	495.3	526.5	5.5
Blacktown	1,215.8	1,256	2,471.8	25.8
Blue Mountains	37.8	62.1	99.9	1.0
Camden	155	150.7	305.7	3.2
Campbelltown	129.4	601.8	731.2	7.6
Fairfield	303.7	737.1	1,040.8	10.9
Hawkesbury	38.5	161.5	199.9	2.1
Holroyd	110.3	712.1	822.4	8.6
Liverpool	143.6	817.6	961.1	10.0
Parramatta	27.8	563.2	591	6.2
Penrith	779.3	839	1,618.2	16.9
Wollondilly	93.3	111.7	205	2.1
Labour force region				
Central Western Sydney	169.3	1,770.6	1,939.9	20.3
Fairfield-Liverpool	447.3	1,554.7	2,001.9	20.9
North Western Sydney	2,071.4	2,318.6	4,389.8	45.9
Outer South Western Sydney	377.7	864.2	1,241.9	13.0
Western Sydney	3,065.7	6,508.1	9,573.5	100

In January 2011, over 45% of all zoned employment lands in Western Sydney were located in the North Western Sydney labour force region (see Table 20). The LGAs with the largest amount of zoned employment lands were Blacktown (25.8% of the Western Sydney total) and Penrith (16.9% of the Western Sydney total). The Blacktown LGA was the only LGA to record a significant change in the amount of zoned employment lands available between January 2010 and January 2011 - an increase of 208.7 hectares.

The 2011 ELDP report identified the take-up of employment lands between January 2008 and January 2011 for the precincts which experienced take-up of 5 or more hectares in one or more of the selected years. Between January 2008 and January 2011, 376.6 hectares of zoned employment lands in Western Sydney were taken-up by industrial development. Almost 50% of this growth took place in the North Western Sydney labour force region (see Table 21). At the LGA level, the most growth between January 2008 and January 2011 was

[50] NSW Department of Planning & Infrastructure, *Employment Lands Development Program: 2011 Update Report*, 2011, Table 2.

experienced by the Blacktown (95.2 ha), Penrith (91.4 ha) and Liverpool LGAs (81.5 ha).

Table 21: Take-up of employment lands by key precincts by local government area and labour force region (ha) (January 2008 to January 2011)[51]

Area	Jan 2008 - Jan 2009	Jan 2009 - Jan 2010	Jan 2010 - Jan 2011	Total	% of Western Sydney
Local Government Area					
Auburn	8.8	1.4	1.2	11.4	3.0
Blacktown	50.3	33	12	95.2	25.3
Camden	19.6	3.3	9	31.9	8.5
Campbelltown	18.3	5.3	6.4	29.9	7.9
Fairfield	12.2	6.2	16.8	35.3	9.4
Liverpool	15.6	22.5	43.4	81.5	21.6
Penrith	29.2	57.8	4.3	91.4	24.3
Labour force region					
Central Western Sydney	8.8	1.4	1.2	11.4	3.0
Fairfield-Liverpool	27.8	28.7	60.2	116.8	31.0
North Western Sydney	79.5	90.8	16.3	186.6	49.6
Outer South Western Sydney	37.9	8.6	15.4	61.8	16.4
Western Sydney	154	129.5	93.1	376.6	100

The 2011 ELDP Report assessed the adequacy of employment lands supply for employment lands stock at different stages of the development pipeline for the whole of Sydney (see Table 22). "Strategy identified land" includes zoned and both types of undeveloped zoned employment lands. Take-up of employment lands in Sydney decreased between 2008 and 2010: 264 hectares were taken-up in 2008, 205 hectares in 2009 and 153 hectares in 2010. Were the 2010 rate to continue, six years supply of 'Undeveloped zoned land and serviced' would have been available as of January 2011. However, in February 2012, the Employment Lands Task Force identified the amount of 'Undeveloped zoned land and serviced' as an issue to be addressed by the Task Force because it fell below the supply standard, assuming a high take-up rate of 300 hectares per annum.

[51] NSW Department of Planning & Infrastructure, *Employment Lands Development Program: 2011 Update Report*, 2011, Table 6

Table 22: Assessment of Employment Lands Supply at January 2011[52]

Status of Employment Lands	Number of years estimated supply			Supply standards
	Jan-11 (ha)	High take-up (300 ha pa)	Low take-up (80 ha pa)	
Strategy identified land	7,880	26 yrs	99 yrs	15 yrs
Undeveloped zoned land not serviced	3,651	12 yrs	46 yrs	8-10 yrs
Undeveloped zoned land and serviced	892	3 yrs	11 yrs	5-7 yrs

Note: 'Undeveloped zoned land not serviced' and 'Undeveloped zoned land and serviced' are both subsets of 'Strategy identified land'.

4.8 Industrial building activity approvals

In 2009-10, there was a total of $400 million of industrial building activity approved in the Sydney Region. This is a decrease from the value of activity approved in 2008-09, which was $575 million. Of the 2009-10 total, 73.2% was located in Western Sydney, equivalent to $293 million (see Table 23). The majority of industrial building activity expenditure approved in Western Sydney was to be spent on warehouses ($230 million).

Almost 47% ($137 million) of all industrial building activity approved in 2009-10 was located in the Fairfield-Liverpool labour force region (see Table 23). This is because almost 43% ($125 million) of all industrial building activity approved in 2009-10 was located in the Liverpool LGA. The Blacktown and Penrith LGAs also had significant amounts of industrial building activity approved, $54 million and $40 million respectively. The smallest amounts of industrial building activity were located in the Blue Mountains ($230,000) and Wollondilly ($490,000) LGAs.

52 NSW Department of Planning & Infrastructure, *Employment Lands Development Program: 2011 Update Report*, 2011, Table 8

Table 23: Value ($) of industrial approvals for 2009-10 by local government area and labour force region in Western Sydney[53]

Area	Factories and other secondary production buildings	Warehouses (excluding produce storage)	Other Industry	Total Industry	% of Western Sydney
Local Government Area					
Auburn	3,195,000	4,574,969	1,300,000	9,069,969	3.1
Blacktown	7,940,147	45,951,360	0	53,891,507	18.4
Blue Mountains	50,000	180,000	0	230,000	0.1
Camden	4,733,000	0	600,000	5,333,000	1.8
Campbelltown	9,511,830	7,509,725	640,000	17,661,555	6.0
Fairfield	1,422,000	10,268,000	60,000	11,750,000	4.0
Hawkesbury	960,000	750,000	791,400	2,501,400	0.9
Holroyd	1,088,000	18,146,000	50,000	19,284,000	6.6
Liverpool	4,555,800	117,538,143	3,319,000	125,412,943	42.8
Parramatta	375,000	6,342,045	500,000	7,217,045	2.5
Penrith	18,170,000	19,120,000	2,660,000	39,950,000	13.6
Wollondilly	260,000	0	230,000	490,000	0.2
Labour force region					
Central Western Sydney	4,658,000	29,063,014	1,850,000	35,571,014	12.2
Fairfield-Liverpool	5,977,800	127,806,143	3,379,000	137,162,943	46.9
North Western Sydney	27,120,147	66,001,360	3,451,400	96,572,907	33.0
Outer South Western Sydney	14,504,830	7,509,725	1,470,000	23,484,555	8.0
Western Sydney	52,260,777	230,380,242	10,150,400	292,791,419	100

Note: The data is derived from ABS non-residential building approvals data and covers ‘warehouses’, ‘factories’ and ‘other industry’. This data includes new development, alterations and additions and is limited to DAs valued at over $50,000.

[53] NSW Department of Planning & Infrastructure, *Employment Lands Development Program: 2011 Update Report*, 2011, Table 5

5.0 ISSUES AND PROSPECTS FOR KEY INDUSTRIES

In 2010, Access Economics forecast that the NSW economy would grow by 30% between 2010 and 2020.[54] The shift to a service-oriented economy is expected to continue, with sectors such as finance and insurance, professional, scientific and technical services, and health care being key growth drivers. Despite this overall shift, the following service industries may account for a smaller share of the NSW economy by 2020: wholesale trade; transport, postal & warehousing; and retail trade. Manufacturing is also expected to have a smaller share of the NSW economy by 2020. According to Access Economics, the prospects of industries significant to the NSW economy will be shaped in large part by four mega-trends:

- National and global policy actions to address climate change;
- Demand and competition from emerging economies, especially China and India;
- The widespread adoption of new information technologies; and
- Demographic change, especially a growing and ageing population.

This chapter collates key findings from Chapter 4 for selected industries and identifies future prospects for each of these industries.[55] The industries included in this chapter were chosen because of the significance of their contribution to the Western Sydney economy in terms of GRP and/or employment. Additional in-depth analysis of manufacturing in Western Sydney is also included in this chapter given recent public commentary on the decline of manufacturing in Australia.

5.1 Manufacturing

5.1.1 Key findings

Manufacturing is one of the most significant industries in Western Sydney, being the largest contributor to Western Sydney's GRP in 2010-11, worth $10.6 billion (see Table 24). Manufacturing in Western Sydney was also a significant contributor to Sydney's total GRP - where Western Sydney contributed 26.3% of Sydney's total GRP, manufacturing in Western Sydney contributed 48.1% of Sydney's total manufacturing output. In May 2012, manufacturing was the second largest employer in Western Sydney, employing 87,300 people - almost

[54] Access Economics, *The NSW economy in 2020: a foresighting study*, August 2010

[55] There are several limitations worth noting when comparing the figures included in this Chapter. First, as discussed in section 4.3 of this paper, employment figures are based on Western Sydney's *residential population*, rather than on its *working population*. Hence, employment figures are only indicative of the exact nature of employment by industry in Western Sydney. Second, forecasts for several economic indicators included in this Chapter relate to the NSW economy, not the Western Sydney economy. They have been included for comparative purposes. Third, industry GRP growth figures are based on the NSW Government definition of Western Sydney i.e. a definition which includes the Bankstown and The Hills LGAs. These figures are therefore indicative of each Western Sydney industry's growth in GRP between 2009-10 and 2010-11.

one third of the total NSW manufacturing workforce. However, manufacturing trends identified in Chapter 4 appear to support the argument that manufacturing in Australia is in decline.[56] GRP, employment and business numbers have all recently declined:

- Manufacturing's share of Western Sydney's GRP fell by more than any other industry, from 15.21% in 2008-09 to 13.54% in 2010-11. Manufacturing also recorded negative growth between 2009-10 and 2010-11, falling by 1.4%;
- Between 2006 and May 2012, employment in manufacturing in Western Sydney declined by 1.3%, at an annual rate of -0.2%; and
- The number of manufacturing businesses has also declined, falling 2.4% between 2009 and 2011. In contrast, the total number of businesses in Western Sydney increased by 5.6% in the same period.

Table 24: Manufacturing in Western Sydney - key findings

	Key findings
Gross Regional Product (2010-11)	
Total ($million)	$10,585
% of Western Sydney total (rank)	13.5% (1)
Change in share of Western Sydney GRP (08-09 to 10-11)(1)	-1.67
Growth since 2009-10 ($million) (%)(2)	-$191.4 (-1.4%)
% of Sydney's total manufacturing industry	48.1%
Employment	
Total (May 2012)	87,300
% of Western Sydney total (rank)	11.5% (2)
Change since 2006 (% annual growth)	-1,132 (-0.2%)
Change since May 2011 (%)	-2,943 (-3.3%)
% of NSW manufacturing jobs in Western Sydney	31.1%
Business numbers	
Total (2011)	6,734
% of Western Sydney total (rank)	5.6% (6)
% change between 2009 and 2011	-2.4%

Notes: (1) Percentage point change.
(2) This applies to Western Sydney as defined by the NSW Government and RDA Sydney to include the Bankstown and The Hills LGAs.

[56] Dun & Bradstreet, *Manufacturing outlook grim*, 3 July 2012 [online - accessed 31/07/2012]; Australian Industry Group, *Performance of Manufacturing Index - Manufacturing Contraction Deepens in July*, July 2012; Future Manufacturing Industry Innovation Council, *Trends in manufacturing to 2020: A foresighting discussion paper*, Department of Innovation, Industry, Science & Research, September 2011; NSW Business Chamber, *Manufacturing futures*, A paper by the Australian Business Foundation for the NSW Business Chamber, April 2011.

5.1.2 Manufacturing sectors in Western Sydney: 2001 to 2006

An examination of employment trends in manufacturing sectors provides a more nuanced picture of what is happening to manufacturing in Western Sydney, for which census data is the most detailed data available. Unfortunately, the most recent census data available is 2006 [2011 census figures for employment by industry are due to be released at the end of 2012]. Table 25 shows the types of manufacturing in 2006 and changes in employment for each manufacturing sector in Western Sydney between 2001 and 2006. This Table uses the Australian and New Zealand Standard Industrial Classification (ANZSIC) 1993, which was replaced in 2006 by ANZSIC 2006.[57]

Table 25: Manufacturing sectors in Western Sydney: 2001 to 2006 (ANZSIC 1993)[58]

Sector	Employment in 2006		Change between 2001 and 2006	
	(number)	(% of total)	(number)	(%)
Food, Beverages & Tobacco	11,793	14.4	335	2.9
Textile, Clothing, Footwear & Leather	2,826	3.5	-1,156	-29.0
Wood & Paper Products	6,229	7.6	356	6.1
Printing, Publishing & Recorded Media	6,915	8.4	555	8.7
Petroleum, Coal, Chemical & Associated Products	11,041	13.5	-639	-5.5
Non-Metallic Mineral Products	5,382	6.6	20	0.4
Metal Products	11,444	14.0	-977	-7.9
Machinery and Equipment	14,894	18.2	-2,034	-12.0
Other(1)	4,498	5.5	-1,418	-24.0
Manufacturing, undefined	6,858	8.4	905	15.2
Total	81,880	100	-4,053	-4.7

Note: (1) 'Other' is defined in ANZSIC 1993 to consist of 'prefabricated building manufacturing', 'furniture manufacturing' and 'other manufacturing'.

In 2006, the most important manufacturing sectors in Western Sydney were "machinery and equipment" (14,894 jobs), "food, beverages & tobacco" (11,793 jobs) and "metal products" (11,444 jobs) (see Table 25). Between 2001 and

[57] ANZSIC 1993 classifications were used in order to investigate trends in employment between the 2001 and 2006 censuses.

[58] Source: ABS, *Census of Population and Housing*, 2001 and 2006. Note that these figures relate to the *working population* of Western Sydney, rather than the *residential population*. Therefore, the total figure of 81,880 jobs in manufacturing listed in this Table cannot be compared to the May 2012 total included in Table 11 of 87,300 jobs, because the Table 11 figures are based on Western Sydney's *residential population*.

2006, the manufacturing sectors which experienced the largest growth in employment were "manufacturing, undefined" (905 jobs), "printing, publishing & recorded media" (555 jobs) and "wood & paper products" (356 jobs) (see Table 25). The sectors which lost the most jobs between 2001 and 2006 were "machinery and equipment" (2,034 jobs), "other manufacturing" (1,418 jobs) and "textile, clothing, footwear & leather" (1,156 jobs). In total, manufacturing shed 4,053 jobs between 2001 and 2006.

Examination of employment in manufacturing at a finer level of detail revealed that, in 2006, the largest employing manufacturing subsector in Western Sydney was "polymer product manufacturing", with 6.53% of the total manufacturing workforce (see Table 26).

Table 26: Top five manufacturing subsectors in Western Sydney in 2006 (ANZSIC 2006)

Subsector	Employment (number)	Employment (% of total)
Polymer Product Manufacturing	5,200	6.53
Printing and Printing Support Services	3,942	4.95
Other Wood Product Manufacturing	3,394	4.26
Furniture Manufacturing	3,215	4.04
Meat and Meat Product Manufacturing	2,681	3.37

5.1.3 Future prospects for key manufacturing sectors in Western Sydney

In 2010-11, manufacturing was the second largest contributor to NSW's Gross State Product (GSP), contributing $34.6 billion, or 9.7%, of NSW's total industry gross value added. In 2010-11, NSW manufacturing exports were valued at $11 billion, 19.6% of total NSW merchandise and services exports.[59] The size and composition of the industry is undergoing significant change at the State and National levels. Between 1999-00 and 2009-10, the share of manufacturing in the NSW economy fell from 12.1% to 9.8%. This trend is expected to continue: while NSW manufacturing output is expected to increase by 18.7% between 2010 and 2020, manufacturing's share of NSW's total GSP is expected to decline further from 9.8% in 2010 to 8.3% in 2020 (see Table 27).[60] Manufacturing output is expected to increase despite a projected significant decrease in employment due to a high level of labour productivity growth (4.2%). Recent manufacturing trends are consistent with these projections. As recorded in Table 24, manufacturing's share of Western Sydney's GRP fell by 1.67% between 2008-09 and 2010-11. The decline was most significant in the Fairfield-Liverpool labour force region, where manufacturing's share of the region's economy fell by 2.08% between 2008-09 and 2010-11 (see Appendix 4).

[59] Department of Foreign Affairs and Trade, *Australia's Trade by State and Territory 2010-11*, January 2012

[60] Access Economics, *The NSW economy in 2020: a foresighting study*, August 2010

Table 27: Forecasts for manufacturing in NSW

	Forecasts
Gross State Product (2010 to 2020)	
Share of NSW total	Decline from 9.8% to 8.3%
Growth	18.7%
Employment	
2006-2036 change for Western Sydney (% annual growth) Source: *NSW Bureau of Transport Statistics (2009)*	+35,320 (1.2%)
2010-2020 change for NSW (% annual growth)	-83,000 (-3.1%)
Labour productivity growth	4.2%

Note: Unless stated in the Table, the source for all the projections in this Table is Access Economics, *The NSW economy in 2020: a foresighting study*, August 2010.

According to the NSW Government, the pressures facing manufacturing include:

- The high Australian dollar;
- The carbon tax;
- Increasing global competition;
- Access to capital;
- Higher costs, including input, freight and labour costs; and
- Skills shortages and an ageing manufacturing workforce.[61]

The pressures facing the manufacturing industry are largest for manufacturers of less complex goods where there is strong import competition, such as textiles, clothing and footwear. While manufacturing of labour intensive products is likely to decrease in the future, highly specialised and technologically advanced manufacturing is expected to increase over the next decade.[62] This forecast change is expected to have a significant impact on employment in manufacturing. In 2010, Access Economics predicted that the NSW manufacturing industry will shed 83,000 jobs between 2010 and 2020 (see Table 27). This represents a loss of jobs of 3.1% per annum. In contrast, in 2009 the NSW Bureau of Transport Statistics predicted that manufacturing jobs in Western Sydney would increase by 35,320, equivalent to an annual growth rate of 1.2% between 2006 and 2036.[63] Not enough is known about the assumptions utilised by either Access Economics or the NSW Bureau of Transport Studies to know which prediction for manufacturing jobs may be more likely. However, declining manufacturing employment levels in Western Sydney since 2006 suggests that Access Economics forecasts may be more accurate (see Table 24). The decline in manufacturing employment has been most dramatic between May 2011 and May 2012, with the loss of 2,943 jobs (-3.3%).

[61] NSW Government, *Manufacturing Industry Action Plan: Issues Paper*, 2011.
[62] Access Economics, *The NSW economy in 2020: a foresighting study*, August 2010.
[63] See Appendix 10 for a further detail on key employment growth projections for the Western Sydney labour force regions, Western Sydney and Sydney by industry sector.

Several reports have identified key manufacturing sectors and subsectors for NSW. The 2010 Access Economics study, *The NSW economy in 2020: a foresighting study*, forecast growth in NSW for selected manufacturing subsectors (see Table 28). In 2006, a substantial proportion of the Western Sydney total manufacturing workforce were employed in some of the key manufacturing sectors identified in the Access Economics study, including: "non metallic minerals" (6.8%); "processed food" (13.3%); and "iron and steel" (4.3%) (see Table 28). In 2006, 1,024 people were employed in Western Sydney in "other non-ferrous metals", the manufacturing sector forecast to experience the largest growth between 2010 and 2020. The following sectors were all expected to decline by approximately 3% in terms of value added: "petroleum"; "chemicals, rubber & plastics"; "motor vehicle parts"; and "electrical equipment".

Table 28: Forecast key manufacturing sectors in NSW: a comparison with the 2006 Western Sydney workforce in each sector[64]

Key sectors according to *The NSW economy in 2020*		**Employment in Western Sydney in 2006 (%)**
Subsector	Growth in value added 2010-2020 (%)	
Other non-ferrous metals	94.7	1,024 (1.3%)
Non metallic minerals	48.6	5,382 (6.8%)
Processed food	35.9	10,602 (13.3%)
Iron and steel	27.3	3,384 (4.3%)
Aluminium	12.2	679 (0.9%)
Key sectors according to the *NSW Manufacturing Industry Action Plan*		
Processed food & beverage manufacturing		12,158 (15.3%)
Metal manufacturing		11,172 (14.0%)
Machinery & equipment manufacturing		10,634 (13.4%)
Medical devices (medical & surgical equipment manufacturing)		360 (0.5%)
Aerospace (aircraft manufacturing and repair services)		386 (0.5%)
Pharmaceutical production (pharmaceutical & medicinal product manufacturing)		2,431 (3.1%)
Defence related manufacturing		-(1)
Computer technologies (Computer & electronic equipment manufacturing)		1,993 (2.5%)
Robotics (other machinery and equipment manufacturing)		1,713 (2.2%)
Custom (bespoke) manufacturing (jewellery & silverware manufacturing)		168 (0.2%)
Custom (bespoke) manufacturing (wooden structural fitting & component manufacturing)		2,640 (3.3%)
Custom (bespoke) manufacturing (other polymer product manufacturing)		425 (0.5%)

Notes: (1) It was unclear from the categorisation of manufacturing in ANZSIC 2006 which categories could be defined as "defence related manufacturing".

[64] Sources: Access Economics, *The NSW economy in 2020: a foresighting study*, August 2010, p.114; NSW Government, *NSW Manufacturing Industry Action Plan - draft for consultation*, prepared by the Manufacturing Industry Taskforce, 26 June 2012.

In June 2012, the NSW Government released its draft *NSW Manufacturing Industry Action Plan*. This Plan states that the following three manufacturing sectors are key manufacturing sectors in NSW because they each account for approximately 6% of total NSW exports: "processed food & beverage manufacturing"; "metal manufacturing"; and "machinery and equipment manufacturing". In 2006, 42.7% of Western Sydney's manufacturing workforce was employed in these three manufacturing sectors (see Table 28). The Plan also mentions several specific subsectors that it expects may be the focus of future growth in manufacturing as the industry shifts to advanced, higher-value and less labour intensive manufacturing fields. In 2006, Western Sydney had substantial proportions of people employed in several of these subsectors, including: "pharmaceutical production" (3.1%); "computer technologies" (2.5%); "robotics" (2.2%); and "custom (bespoke) manufacturing - wooden structural fitting & component manufacturing" (3.3%).

5.2 Financial & insurance services

In 2010-11, "financial & insurance services" was the second largest contributor to Western Sydney's GRP, worth $6.8 billion (see Table 29). Two findings suggest that its importance to the Western Sydney economy in terms of GRP has declined slightly in recent years. First, its share of Western Sydney's economy fell by 0.59% between 2008-09 and 2010-11. Second, the industry also recorded negative real GRP growth of -0.2% between 2009-20 and 2010-11. Compared to other Western Sydney industries, the "financial & insurance services" industry in Western Sydney is relatively less important for Sydney's total GRP. Where Western Sydney contributed 26.3% of Sydney's total GRP, "financial & insurance services" in Western Sydney contributed only 13.0% of Sydney's total "financial & insurance services" output.

In contrast to its contribution to GRP, the financial & insurance services industry in Western Sydney has recorded recent growth in employment and business numbers (see Table 29). While employment in financial & insurance services in Western Sydney was relatively small at 5.0% of total employment in May 2012, this industry experienced the largest increase in employment between May 2011 and May 2012 of all Western Sydney industries (6,356 jobs). The financial & insurance services industry also experienced one of the highest rates of growth in business numbers in Western Sydney between 2009 and 2011 (13.1%). In contrast, the total number of businesses in Western Sydney increased by 5.6% between 2009 and 2011.

Table 29: Financial & insurance services in Western Sydney - key findings

	Key findings
Gross Regional Product (2010-11)	
Total ($million)	$6,795
% of Western Sydney total (rank)	8.7% (2)
Change in share of Western Sydney GRP (08-09 to 10-11)(1)	-0.59
Growth since 2009-10 ($million) (%)(2)	-$17.7 (-0.2%)
% of Sydney's total financial & insurance services industry	13.0%
Employment	
Total (May 2012)	38,078
% of Western Sydney total (rank)	5.0% (12)
Change since 2006 (% annual growth)	7,981 (4.4%)
Change since May 2011 (%)	6,356 (20.0%)
% of NSW financial & insurance services jobs in Western Sydney	21.2%
Business numbers	
Total (2011)	5,845
% of Western Sydney total (rank)	4.8% (9)
% change between 2009 and 2011	13.1%

Notes: (1) Percentage point change.
(2) This applies to Western Sydney as defined by the NSW Government and RDA Sydney to include the Bankstown and The Hills LGAs.

According to the 2010 Access Economics study, the finance and insurance industry is expected to be the biggest growth driver in the NSW economy between 2010 and 2020, contributing 5.2% to total economic growth. This primarily reflects its current structural significance to the NSW economy, rather than its overall expected growth performance of 32.0% over the decade (see Table 30). Access Economics forecast a relatively small employment growth rate for the NSW industry between 2010 and 2020 (0.5% per annum), where total employment is expected to grow on average by 1.3% per annum. The NSW Bureau of Transport Statistics forecast a slightly higher rate of employment growth for the industry in Western Sydney of 1.6%. The observed employment growth rates recorded in Table 29 are both significantly higher than these projections.

Table 30: Forecasts for financial & insurance services in NSW

	Forecasts
Gross State Product (2010 to 2020)	
Share of NSW total	Remain the same (16.2%)
Growth	32.0%
Employment	
2006-2036 change for Western Sydney (% annual growth) Source: *NSW Bureau of Transport Statistics (2009)*	8,566 (1.6%)
2010-2020 change for NSW (% annual growth)	9,000 (0.5%)
Labour productivity growth	(2.3%)

Note: Unless stated in the Table, the source for all the projections in this Table is Access Economics, *The NSW economy in 2020: a foresighting study*, August 2010.

5.3 Transport, postal & warehousing

In 2010-11, the transport, postal & warehousing industry was the third largest contributor to Western Sydney's GRP, worth $5.4 billion (see Table 31). The industry recorded the largest absolute growth of any industry between 2009-10 and 2010-11 - $411.6 million. It also increased its share of the Western Sydney economy between 2008-09 and 2010-11 by 0.28 percentage points.

Table 31: Transport, postal & warehousing in Western Sydney - key findings

	Key findings
Gross Regional Product (2010-11)	
Total ($million)	$5,350
% of Western Sydney total (rank)	6.8% (3)
Change in share of Western Sydney GRP (08-09 to 10-11)(1)	+0.28
Growth since 2009-10 ($million) (%)(2)	$411.6 (6.9%)
% of Sydney's total transport, postal & warehousing industry	32.9%
Employment	
Total (May 2012)	57,678
% of Western Sydney total (rank)	7.6% (5)
Change since 2006 (% annual growth)	15,058 (5.9%)
Change since May 2011 (%)	-738 (-1.3%)
% of NSW transport, postal & warehousing jobs in Western Sydney	30.7%
Business numbers	
Total (2011)	13,904
% of Western Sydney total (rank)	11.5% (2)
% change between 2009 and 2011	5.5%

Notes: (1) Percentage point change.
(2) This applies to Western Sydney as defined by the NSW Government and RDA Sydney to include the Bankstown and The Hills LGAs.

The industry had the second highest number of businesses in Western Sydney (13,904 businesses), with 11.5% of all Western Sydney businesses (see Table 31). The transport, postal & warehousing industry was also the fifth largest employer in Western Sydney, employing 57,678 people in May 2012 - almost one third of the total NSW transport, postal & warehousing workforce. While employment in the industry grew faster than the average for Western Sydney between 2006 and 2012 at 5.9% per annum, employment declined in the last year. Between May 2011 and May 2012, the industry shed 738 jobs in Western Sydney.

According to the 2010 Access Economics study, the contribution of the transport, postal & warehousing industry to the NSW economy is expected to decline between 2010 and 2020 from 5.9% to 5.6% (see Table 32). Correspondingly, Access Economics have forecast that employment in the sector will only grow by 0.8% per annum. While the NSW Bureau of Transport Statistics forecast annual employment growth rate for Western Sydney of 1.9% is closer to the six-year average recorded in Table 31 of 5.9%, it is important to note that employment in this industry in Western Sydney declined by 1.3% over the last year.

Table 32: Forecasts for transport, postal & warehousing in NSW

	Forecasts
Gross State Product (2010 to 2020)	
Share of NSW total	Decline from 5.9% to 5.6%
Growth	24.8%
Employment	
2006-2036 change for Western Sydney (% annual growth) Source: *NSW Bureau of Transport Statistics (2009)*	20,921 (1.9%)
2010-2020 change for NSW (% annual growth)	15,000 (0.8%)
Labour productivity growth	1.3%

Note: Unless stated in the Table, the source for all the projections in this Table is Access Economics, *The NSW economy in 2020: a foresighting study*, August 2010.

5.4 Health care & social assistance

In 2010-11, health care & social assistance was the fourth largest contributor to Western Sydney's GRP, worth $5.2 billion (see Table 33). The industry increased its share of the Western Sydney GRP by 0.52 percentage points between 2008-09 and 2010-11. However, it recorded a slight fall in real GRP between 2009-10 and 2010-11 of $25.9 million (-0.4%).

Table 33: Health care & social assistance in Western Sydney - key findings

	Key findings
Gross Regional Product (2010-11)	
Total ($million)	$5,209
% of Western Sydney total (rank)	6.7% (4)
Change in share of Western Sydney GRP (08-09 to 10-11)(1)	+0.52
Growth since 2009-10 ($million) (%)(2)	$-25.9 (-0.4%)
% of Sydney's total health care & social assistance industry	32.4%
Employment	
Total (May 2012)	90,752
% of Western Sydney total (rank)	11.9% (1)
Change since 2006 (% annual growth)	31,168 (8.7%)
Change since May 2011 (%)	10,152 (12.6%)
% of NSW health care & social assistance jobs in Western Sydney	21.3%
Business numbers	
Total (2011)	4,905
% of Western Sydney total (rank)	4.1% (11)
% change between 2009 and 2011	10.0%

Notes: (1) Percentage point change.
(2) This applies to Western Sydney as defined by the NSW Government and RDA Sydney to include the Bankstown and The Hills LGAs.

"Health care & social assistance" was the most important industry with regards to employment in terms of total number employed as well as rates and amount of growth (see Table 33). 90,752 people were employed in the industry in May 2012, an increase of 31,168 people since 2006. This is equivalent to an annual growth rate of 8.7%. Health care & social assistance business numbers have also experienced significant growth, rising by 10% between 2009 and 2011.

According to the 2010 Access Economics study, the health care & social assistance industry is expected to make up a larger share of the NSW economy in 2020 than 2010, increasing by 0.6 percentage points to 7.5% (see Table 34). This growth is expected to be driven by demographic change and an ageing population. Projected population growth in Western Sydney will have a significant impact on the industry. The population of Western Sydney is expected to grow by 300,000 people between 2011 and 2021, with a further 522,000 expected in the fifteen years after 2021 (see Table 3). Both studies cited in Table 34 expect employment growth in the industry of roughly 2.6% per annum, a rate amongst the highest projected rates for any NSW industry yet much lower than the observed rate between 2006 and May 2012 of 8.7%.

Table 34: Forecasts for health care & social assistance in NSW

	Forecasts
Gross State Product (2010 to 2020)	
Share of NSW total	Increase from 6.9% to 7.5%
Growth	41.6%
Employment	
2006-2036 change for Western Sydney (% annual growth) Source: *NSW Bureau of Transport Statistics (2009)*	49,197 (2.6%)
2010-2020 change for NSW (% annual growth)	117,000 (2.7%)
Labour productivity growth	1.0%

Note: Unless stated in the Table, the source for all the projections in this Table is Access Economics, *The NSW economy in 2020: a foresighting study*, August 2010.

5.5 Construction

In 2010-11, the construction industry was the fifth largest contributor to Western Sydney's GRP, contributing $4.9 billion (see Table 35). The industry recorded real growth of $393.6 million between 2009-10 and 2010-11, equivalent to 6.8%. It also increased its share of the Western Sydney economy, from 5.62% in 2008-09 to 6.32% in 2010-11. The construction industry was also the fourth largest employer in Western Sydney in May 2012, employing 66,679 people.

Table 35: Construction in Western Sydney - key findings

	Key findings
Gross Regional Product (2010-11)	
Total ($million)	$4,940
% of Western Sydney total (rank)	6.3% (5)
Change in share of Western Sydney GRP (08-09 to 10-11)[(1)]	+0.69
Growth since 2009-10 ($million) (%)[(2)]	$393.6 (6.8%)
% of Sydney's total construction industry	35.1%
Employment	
Total (May 2012)	66,679
% of Western Sydney total (rank)	8.8% (4)
Change since 2006 (% annual growth)	14,201 (4.5%)
Change since May 2011 (%)	-3,674 (-5.2%)
% of NSW construction jobs in Western Sydney	22.2%
Business numbers	
Total (2011)	25,982
% of Western Sydney total (rank)	21.5% (1)
% change between 2009 and 2011	2.0%

Notes: (1) Percentage point change.
(2) This applies to Western Sydney as defined by the NSW Government and RDA Sydney to include the Bankstown and The Hills LGAs.

Construction businesses are the most common type of business in Western Sydney. In 2011, 21.5% of all businesses in Western Sydney were in the construction industry (see Table 35). Of the 25,982 construction businesses in Western Sydney in 2011, 98.4% were small businesses (employing between 0 and 19 employees). An overall trend for the construction industry is difficult to infer from the findings recorded in Table 35. On the one hand, growth in business numbers between 2009 and 2011 was less than the Western Sydney average and the industry shed jobs between May 2011 and May 2012. On the other hand, between 2009-10 and 2010-11, the industry recorded 6.8% growth in output, well above the industry average of 0.8%.

According to the 2010 Access Economics study, the construction industry is projected to grow by more than any other industry between 2010 and 2020, with an increase of 54.5% expected (see Table 36). This would take the construction industry's share of the NSW economy from 7.6% to 8.4%. Much of this growth will be driven by NSW's growing population, a key issue for Western Sydney with a projected population increase of over 820,000 between 2011 and 2036.[65] According to the NSW Bureau of Transport Statistics, employment growth for the industry in Western Sydney will be below the average rate of 1.8%. In contrast, Access Economics expect a growth rate of 2.2%, above an average expected employment growth rate of 1.3%. Both studies project an employment growth rate less than that observed between 2006 and May 2012 of 4.5%.

Table 36: Forecasts for construction in NSW

	Forecasts
Gross State Product (2010 to 2020)	
Share of NSW total	Increase from 7.6% to 8.4%
Growth	54.5%
Employment	
2006-2036 change for Western Sydney (% annual growth) Source: *NSW Bureau of Transport Statistics (2009)*	15,479 (1.3%)
2010-2020 change for NSW (% annual growth)	71,000 (2.2%)
Labour productivity growth	1.4%

Note: Unless stated in the Table, the source for all the projections in this Table is Access Economics, *The NSW economy in 2020: a foresighting study*, August 2010.

65 Source: NSW Department of Planning, *New South Wales Statistical Local Area Population Projections, 2006-2036*, March 2010.

5.6 Wholesale trade

In 2010-11, wholesale trade was the sixth most significant contributor to Western Sydney's GRP, worth $4.7 billion (see Table 37). In 2009-10, it was the third most important Western Sydney industry. Between 2008-09 and 2010-11, it lost 0.79 percentage points share of the Western Sydney economy, second only to manufacturing. Nevertheless, between 2009-10 and 2010-11, it recorded 3.9% real growth, above the Western Sydney average of 0.8%.

Table 37: Wholesale trade in Western Sydney - key findings

	Key findings
Gross Regional Product (2010-11)	
Total ($million)	$4,843
% of Western Sydney total (rank)	6.2% (6)
Change in share of Western Sydney GRP (08-09 to 10-11)(1)	-0.79
Growth since 2009-10 ($million) (%)(2)	$229.3 (3.9%)
% of Sydney's total wholesale trade industry	33.9%
Employment	
Total (May 2012)	39,056
% of Western Sydney total (rank)	5.1% (10)
Change since 2006 (% annual growth)	2,259 (1.0%)
Change since May 2011 (%)	2,323 (6.3%)
% of NSW wholesale trade jobs in Western Sydney	29.0%
Business numbers	
Total (2011)	5,770
% of Western Sydney total (rank)	4.8% (10)
% change between 2009 and 2011	3.2%

Notes: (1) Percentage point change.
(2) This applies to Western Sydney as defined by the NSW Government and RDA Sydney to include the Bankstown and The Hills LGAs.

While employment in the industry made up only a small proportion of the total Western Sydney workforce in May 2012 (5.1%), almost one third of NSW's total wholesale trade workforce were living in Western Sydney at this time (see Table 37). Since 2006, the annual employment growth rate has been 1.0%, far less than the average 4.1% growth rate of jobs in Western Sydney. The increase in business numbers between 2009 and 2011 of 3.2% was also below the Western Sydney average of 5.6%. However, between May 2011 and May 2012, employment in wholesale trade increased by 6.3%, a rate higher than the Western Sydney average of -0.2%.

According to the 2010 Access Economics study, the contribution of the wholesale trade industry to the NSW economy is expected to decline between 2010 and 2020 from 5.4% to 5.1% (see Table 38). While its contribution to the economy is expected to decline, Access Economics expects an annual employment growth rate of 1.5%, slightly higher than the average projected growth rate for all industries of 1.3%. This figure is also higher than the average growth rate in Western Sydney between 2006 and 2012 of 1.0%. In contrast, the NSW Bureau of Transport Statistics predicted a relatively low annual employment growth rate for the industry in Western Sydney of 0.5%.

Table 38: Forecasts for wholesale trade in NSW

	Forecasts
Gross State Product (2010 to 2020)	
Share of NSW total	Decline from 5.4% to 5.1%
Growth	22.6%
Employment	
2006-2036 change for Western Sydney (% annual growth) Source: *NSW Bureau of Transport Statistics (2009)*	5,546 (0.5%)
2010-2020 change for NSW (% annual growth)	22,000 (1.5%)
Labour productivity growth	0.6%

Note: Unless stated in the Table, the source for all the projections in this Table is Access Economics, *The NSW economy in 2020: a foresighting study*, August 2010.

5.7 Retail trade

In 2010-11, retail trade contributed $3.5 billion to the Western Sydney economy (see Table 39). Its share of the Western Sydney economy remained constant between 2008-09 and 2010-11. In May 2012, retail trade was the third largest employer in Western Sydney, employing 80,356 people. However, its significance as an employer appears to be declining. Between 2006 and May 2012, it experienced a growth rate of 2.4% per annum, less than the average Western Sydney employment growth rate of 4.1%. Further, retail trade shed 6,704 jobs between May 2011 and May 2012, the most of any industry.

Table 39: Retail trade in Western Sydney - key findings

	Key findings
Gross Regional Product (2010-11)	
Total ($million)	$3,505
% of Western Sydney total (rank)	4.5% (9)
Change in share of Western Sydney GRP (08-09 to 10-11)(1)	0.04
Growth since 2009-10 ($million) (%)(2)	$116.8 (2.7%)
% of Sydney's total retail trade industry	32.6%
Employment	
Total (May 2012)	80,356
% of Western Sydney total (rank)	10.5% (3)
Change since 2006 (% annual growth)	10,096 (2.4%)
Change since May 2011 (%)	-6,704 (-7.7%)
% of NSW retail trade jobs in Western Sydney	20.9%
Business numbers	
Total (2011)	8,893
% of Western Sydney total (rank)	7.3% (5)
% change between 2009 and 2011	7.5%

Notes: (1) Percentage point change.
(2) This applies to Western Sydney as defined by the NSW Government and RDA Sydney to include the Bankstown and The Hills LGAs.

According to the 2010 Access Economics study, retail trade's share of the NSW economy will decline between 2010 and 2020 from 5.2% to 4.9% (see Table 40). One of the pressures affecting the industry is the increased prevalence of online shopping for goods and services. This may explain in part the decline in employment since May 2011.

Table 40: Forecasts for retail trade in NSW

	Forecasts
Gross State Product (2010 to 2020)	
Share of NSW total	Decline from 5.2% to 4.9%
Growth	21.8%
Employment	
2006-2036 change for Western Sydney (% annual growth) Source: *NSW Bureau of Transport Statistics (2009)*	51,694 (2.5%)
2010-2020 change for NSW (% annual growth)	45,000 (1.2%)
Labour productivity growth	1.7%

Note: Unless stated in the Table, the source for all the projections in this Table is Access Economics, *The NSW economy in 2020: a foresighting study*, August 2010.

6.0 GOVERNMENT POLICIES

All three levels of government have developed policies and programs for encouraging economic growth in Western Sydney. Many of the O'Farrell Government policies are due for release in the second half of 2012. In August 2012, RDA Sydney and the Western Sydney Regional Organisation of Councils both released reports on Western Sydney, with recommendations concerning development of the Western Sydney economy and related issues such as infrastructure.

6.1 NSW Government policies

In May 2010, the Keneally Government released a *Western Sydney Business Growth Plan*.[66] This Plan, which was developed in partnership with the Commonwealth Government, set out three strategies for encouraging business growth in Western Sydney:

(1) Improve transport and grow jobs in Regional Cities and Strategic Centres;
(2) Support growing industry sectors in Western Sydney; and
(3) Create, attract, develop and retain skills in the region.[67]

The former Labor Government also established an Employment Lands Development Program (ELDP), a key program for "managing the supply of Employment Lands for the Sydney Region and assisting associated infrastructure coordination."[68] The ELDP has continued under the O'Farrell Government under the direction of the Employment Lands Task Force. The O'Farrell Government also has several relevant policy initiatives under development: NSW 2021 regional action plans; industry action plans; and the development of a new Metropolitan Strategy. The industry action plans are being developed by the Department of Trade & Investment, Regional Infrastructure & Services (DTIRIS). DTIRIS is also responsible for several other relevant initiatives, including:

- The NSW Export and Investment Advisory Board, which replaced the NSW Manufacturing Council;
- The NSW Innovation and Productivity Council;
- The NSW Multicultural Business Advisory Panel; and
- Small Business NSW.

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[66] NSW Premier Media Release, *Invest in the West: NSW Vision for Jobs in Western Sydney*, 5 May 2010.
[67] NSW Government, *Jobs for Western Sydney: Western Sydney Business Growth Plan*, May 2010.
[68] NSW Department of Planning, *Employment Lands Development Program 2010 Overview Report*, 2010, p.1.

6.1.1 NSW 2021 regional action plans

The NSW Government has divided Sydney into six regions for the purpose of developing NSW 2021 Regional Action Plans, two of which together make up Western Sydney: South Western Sydney; and Western Sydney (see Appendix 1). The NSW Government defines "South Western Sydney" as including the LGAs of Bankstown, Camden, Campbelltown, Fairfield, Liverpool and Wollondilly. Western Sydney is defined to include the LGAs of Auburn, Blacktown, Blue Mountains, Hawkesbury, The Hills, Holroyd, Parramatta and Penrith. Community discussion papers were released in 2011 for the two Western Sydney regions. The final Regional Action Plans are due for release in mid 2012.[69]

The Western Sydney community discussion paper states that:

> Western Sydney is a key engine room of the NSW economy and will continue to grow and diversify, maintaining its position as the largest manufacturing region in Australia. It will continue to be a pivotal transport and logistics hub due to its strategic location, strong skills base, significant road and rail infrastructure, extensive freight services and market access.[70]

According to the South Western Sydney community discussion paper:

> South Western Sydney plays a vital role in the NSW economy and will continue to grow and diversify, maintaining its position as one of the largest manufacturing regions in Australia with links to transport and freight hubs.[71]

Both discussion papers identify local priorities for each region. The four which concern each region's economy are the same:

- Grow the economy of South Western Sydney/Western Sydney;
- Improve access to jobs and facilitate employment growth, particularly for young people;
- Improve strategic planning to protect valuable agricultural land; and
- Provide greater access to affordable housing options.

Specific priority actions are identified for each local economic priority.

6.1.2 Industry Action Plans

The NSW Government has established industry-led taskforces to develop Industry Action Plans for six industries:

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[69] NSW Government, *NSW 2012: Delivering Locally*, 2012 [online - accessed 30/07/2012]

[70] NSW Government, *Western Sydney Regional Action Plan: Community Discussion Paper*, 2011, p.3

[71] NSW Government, *South Western Sydney Regional Action Plan: Community Discussion Paper*, 2011, p.3

- Creative Industries;
- Digital Economy;
- International Education & Research;
- Manufacturing;
- Professional Services; and
- Tourism & Events.

The Industry Action Plans are intended to position key sectors of the State's economy for strong growth, innovation and productivity over the next decade.[72] As of August 2012, a discussion paper has been released for Creative Industries, the Tourism & Events draft plan has been submitted to the NSW Government, and draft industry action plans have been released for the remaining four industries. Each taskforce was commissioned with terms of reference with a number of requirements, including: setting a vision; outlining a development strategy; setting goals; and making detailed recommendations. Given the focus on manufacturing in Chapter 5 of this paper, key aspects of the draft NSW Manufacturing Industry Action Plan are set out below.

The vision of the draft *NSW Manufacturing Industry Action Plan* is that:

> NSW will be the home of agile, innovative manufacturing companies that provide superior solutions to meet their customers' needs.[73]

To this end, the draft Plan makes nine recommendations:

- Establish the NSW Agility Program and Manufacturing Innovation Awards as the Centrepiece of the NSW Manufacturing Industry Action Plan;
- Position NSW as the pro-business “Innovation State” by:
  - promoting and highlighting the NSW Vision for Manufacturing, manufacturing success stories;
  - acknowledging the role manufacturing plays in providing high value jobs and driving innovation;
  - supporting the NSW Agility Program and NSW Manufacturing Innovation Awards;
- The NSW Government to implement a range of proactive procurement practices to develop the Manufacturing Industry including: Value for Money, Clarity, Transparency and Improvement of Processes, Full and Fair Access, Full Opportunities for Local Suppliers, and Supporting Industry and Innovation through Effective Planning and Communication;

[72] NSW Government, *Draft Industry Action Plans now available*, 2012 [online - accessed 30/07/2012]

[73] NSW Government, *NSW Manufacturing Industry Action Plan - draft for consultation*, prepared by the Manufacturing Industry Taskforce, 26 June 2012, p.7

- Address Skills Shortages in the NSW Manufacturing Industry;
- Build a NSW Government Infrastructure Development and Planning System that Supports Business and Encourages Clustering of Manufacturing Firms;
- Reduce the Cost Burden of Uncompetitive Taxes and Inefficient Regulation, including Payroll Tax, Stamp Duty and Workers Compensation;
- Enhance Access to Finance for SME Manufacturers;
- Develop a Design Strategy for NSW Business;
- Implement a Strategic Approach to Promoting Exports, especially to China, India and emerging Asian markets.[74]

6.1.3 Metropolitan Strategy

In December 2010, the Keneally Government released the Metropolitan Plan for Sydney 2036. The Plan set out 6 objectives for growing Sydney's economy:

(1) To ensure adequate land supply for economic activity, investment and jobs in the right locations;

(2) To focus Sydney's economic growth and renewal, employment and education in centres;

(3) To provide employment lands to support the economy's freight and industry needs;

(4) To provide for a broad range of local employment types in dispersed locations;

(5) To increase and diversify the jobs and skills base of Western Sydney; and

(6) To support Sydney's nationally significant economic gateways.[75]

In connection with Objectives 1 and 2, the Keneally Government set employment capacity targets by subregion and by strategic centre (see Chapter 7 of this paper). Subregional strategies contained more detailed information on the employment lands located within each subregion, their purposes and the targets adopted to achieve the objectives of the Metropolitan Plan.

The O'Farrell Government intends to release a new Metropolitan Strategy for

[74] NSW Government, *NSW Manufacturing Industry Action Plan - draft for consultation*, prepared by the Manufacturing Industry Taskforce, 26 June 2012, pp21-39

[75] NSW Government, *Metropolitan Plan for Sydney 2036*, December 2010, pp128-155

Sydney by the end of 2012. To this end, it released a discussion paper in May 2012: *Sydney over the next 20 years - A Discussion Paper*. The Metropolitan Strategy will be a 20-year plan

> … to build liveable places across Sydney. It will guide future planning and investment decisions covering housing, economic development and jobs, open space and the transport we need to connect our homes, jobs, education and recreation facilities.[76]

The Government intends to develop the Strategy so that it is strongly aligned with two other 20-year strategies: the State Infrastructure Strategy; and the Long Term Transport Master Plan. The Discussion Paper sets out some of the economic opportunities Sydney faces, stating:

> Our economic productivity is linked to competitive advantages in our skilled labour force. We need to attract and retain this skilled labour by keeping pace with technological advances, building upon our economic infrastructure and changing the way our industries do business.
>
> We must also make the most of green economy opportunities as we adapt to using less carbon. Sectors such as emissions trading, sustainable building and infrastructure, renewable energy sectors, research and development clusters and specialised manufacturing could, by 2020, achieve a market value between $6.8-10.9 billion annually. These opportunities could also generate a need to expand business park capacity.
>
> The demand created by the ageing population can create markets and opportunities as well as challenges in terms of available workforce, economic costs and productivity impacts.
>
> As the NSW economy strengthens, Sydney must provide cost effective industrial land and office and retail space to keep business costs low and to boost competitiveness in local, national and international markets. We must support strong growth in Western Sydney with policies to achieve an appropriate scale and mix of job opportunities for Western Sydney.[77]

The focus of the Government includes supporting the growth of certain industry sectors through the development of Industry Action Plans as well as:

> … tackling measures to promote business confidence and investment by prioritising infrastructure investment through Infrastructure NSW and setting a sound basis for planning for housing growth via our Metropolitan and Subregional Strategies.
>
> From a land use planning perspective, we will continue to focus on clustered economic activity in Sydney's Strategic Centres.[78]

The Discussion Paper also identifies the importance of building economic

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[76] NSW Government, *Sydney over the next 20 years - A Discussion Paper*, May 2012, p.5
[77] NSW Government, *Sydney over the next 20 years - A Discussion Paper*, May 2012, p.15,17
[78] NSW Government, *Sydney over the next 20 years - A Discussion Paper*, May 2012, p.17

infrastructure to support economic growth, particularly transport infrastructure. Transport projects of significance for Western Sydney that are currently under development include:

- The North West Rail Link;
- The South West Rail Link;
- Widening the M5 and M2 motorways; and
- Constructing the Southern Sydney Freight Line.

6.1.4 Employment Lands Task Force

In February 2012, the Employment Lands Task Force (ELTF) submitted a report on the current stock of Sydney employment lands to the Minister of Planning & Infrastructure. Work carried out by the ELTF in 2011 included reviewing the Employment Lands Development Program (ELDP) (see also section 4.7 of this paper) and providing comment on two unreleased draft Department of Planning & Infrastructure documents of particular relevance to Western Sydney: *Planning Principles for Sydney's Industrial Lands*[79]; and the *Western Sydney Employment Area Structure Plan*. The first is being developed to provide guidance for local councils and business on planning to ensure stocks of industrial lands are available to meet current and future demand across Sydney. The second is a plan to investigate the Western Sydney Employment Area (WSEA) Potential Expansion, an area south west of the existing WSEA based at Erskine Park and Eastern Creek nominated for investigation in the Metropolitan Plan.

The non-Government members of the ELTF raised several issues for possible inclusion in the ELTF's future work program, to which the Government replied in May 2012. Several of these issues are particularly pertinent to Western Sydney:

- Confirmation of the status of Metropolitan Planning;
- Consideration of the framework to assess Major Employment Generating Development;
- Expand the ELDP and the role of the ELTF - the ELDP currently only monitors industrial zoned land. The ELTF considers there would be significant advantages for planning for economic development if the ELDP was expanded to include other employment related land uses, such as offices, business parks and retail development, as these all have greater employment yields than industrial lands;
- Improve flexibility in industrial zones;
- Work with the Minister for Transport to finalise the NSW Freight Strategy;

[79] A consultation draft has been made available on the RDA Sydney website: NSW Department of Planning & Infrastructure, *Implementing the Metropolitan Plan: Planning Principles for Industrial Lands*, Consultation Draft, August 2011.

- Coordinate the servicing of already zoned employment lands as a priority;
- Facilitate employment growth in Western Sydney; and
- Progress the Structure Plan for the broader Western Sydney Employment Area.[80]

With regard to the issue of facilitating employment growth in Western Sydney, the ELTF stated that:

> There urgently needs to be a focus on actions that will deliver significant jobs growth in Western Sydney generally and South West Sydney specifically. Importantly, this is to provide local jobs for the future population and to redress the existing jobs deficit. Areas for immediate attention include the Regional Cities (Parramatta, Liverpool and Penrith), the Western Sydney Employment Area … and opportunities for a major new business park, given the share of jobs growth which has occurred in these developments over the last decade. Further, a forum should be organised in Western Sydney to bring key stakeholders together to discuss issues relating to planning for employment lands.[81]

The NSW Government responded to each of the issues raised, noting that many of them are being considered as part of the development of a new Metropolitan Strategy, or as part of the ongoing review of the NSW planning system. With regard to the issue of facilitating employment growth in Western Sydney, the Government stated that:

> … [in the document *Sydney over the next 20 years*] … a key question posed in the discussion paper is how the new Strategy can help provide Western Sydney with enough job opportunities across a range of sectors.
>
> In addition to preparing a new Metropolitan Strategy, the Department of Planning and Infrastructure is also proposing to prepare a structure plan for the broader Western Sydney Employment Area … and has committed to the ongoing operation of the ELDP, which will monitor the supply of employment lands in Western Sydney. Further, *NSW 2021* has a target to deliver major strategic infrastructure as a priority.[82]

6.2 Commonwealth Government policies

The Commonwealth Government has a number of economic policies of relevance to the Western Sydney economy. These include policies such as the establishment of a new National Workforce and Productivity Agency from 1 July 2012, which will administer the National Workforce Development Fund, Industry

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[80] Employment Lands Task Force, NSW Department of Planning & Infrastructure, *Employment Lands Task Force Report*, February 2012.

[81] Employment Lands Task Force, NSW Department of Planning & Infrastructure, *Employment Lands Task Force Report*, February 2012, p.13

[82] NSW Department of Planning & Infrastructure, *Fact Sheet: NSW Government response to the Employment Lands Task Force Report*, May 2012, p.3

Innovation Councils and the Prime Minister's Taskforce on Manufacturing. Two Commonwealth Government programs are considered in detail here due to their particular focus on Western Sydney: the Priority Employment Area Initiative; and the Regional Development Australia Sydney committee.

6.2.1 Priority Employment Area Initiative

First established in 2008, the Commonwealth Government recently extended the Priority Employment Area Initiative until 2013. Through the Initiative, twenty priority employment areas have been identified as requiring assistance to help address local labour market issues. These areas were identified:

> … on the basis of around 70 indicators of labour market disadvantage. These ranged from key labour market aggregates such as the unemployment rate, to broader socio-economic indicators like educational attainment and the industry structure in each area.[83]

Two of the twenty priority employment areas are located in Western Sydney: the Canterbury-Bankstown and South Western Sydney Priority Employment Area; and the Sydney West and Blue Mountains Priority Employment Area. Together, these priority employment areas cover all of Western Sydney as defined in this paper. Local employment coordinators have been appointed for each of the priority employment areas. Their task is to:

> … work closely with employers, employment services providers, local communities and all levels of government to help drive local solutions to labour market issues. This involves identifying opportunities, issues and helping to coordinate responses from businesses, government and other organisations to put in place strategies to help address them.[84]

Together with an advisory committee consisting of members from all levels of government and key industry and community stakeholders, each employment coordinator has also developed a regional employment plan. The Canterbury-Bankstown and South Western Sydney Priority Employment Area Regional Employment Plan has three broad key goals:

(1) Support employment, workforce participation and skills development including through maximising Government investments;

(2) Help retrenched workers transition into new employment and/or training; and

(3) Facilitate employment and training opportunities for job seekers, including disadvantaged groups, with a focus on industries experiencing skills shortages.[85]

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[83] Commonwealth Department of Education, Employment and Workplace Relations, *Priority Employment Area Initiative*, 2011 [online - accessed 31/07/2012]

[84] David Puckeridge, *Regional Employment Plan - Canterbury-Bankstown and South Western Sydney Priority Employment Area*, Australian Government, 2012, p.4

[85] David Puckeridge, *Regional Employment Plan - Canterbury-Bankstown and South Western Sydney Priority Employment Area*, Australian Government, 2012, p.6

The Sydney West and Blue Mountains Priority Employment Area Regional Employment Plan has the same three key goals, as well as to:

(1) Support the growth of social and environmental enterprise and encourage social procurement particularly in local and state government departments and agencies.[86]

6.2.2 Regional Development Australia Sydney

Regional Development Australia is a partnership between the Australian, State and Local Governments created to strengthen regional communities. RDA Sydney is part of a national network of 55 committees. RDA Sydney's purpose is to:

> … build partnerships between governments, key regional organisations and stakeholders, local businesses and community groups to provide strategic and targeted responses to economic, environmental and social issues affecting Sydney.[87]

Two RDA Sydney plans and policies are of particular relevance to the Western Sydney economy:

- The Regional Plan for Sydney (2011); and the
- Employment Lands Policy Position (2012) (see Chapter 7 of this paper).

The Regional Plan for Sydney:

> … describes Sydney's attributes, industry, employment base and key advantages. It sets out the economic, environmental and social vision for the region, articulating the drivers of change, identifying strengths, weaknesses and opportunities, and listing priorities for action. It is a 'living' document that will be updated annually and used by the Committee and its Region as appropriate to implement specific strategies.[88]

An update of the regional plan is scheduled for release in September 2012. The 2011 version of the plan set focus areas for RDA Sydney activities, in partnership with key stakeholders, under the following relevant headings:

> Sustainable Economic Development:
>
> - Creating 40 year vision for Sydney;
> - Integrated *whole of region* planning models and governance;
> - Short term, long term public transport/freight strategies for Sydney;
> - Better infrastructure and land-use planning, including urban renewal;
> - Ensuring adequate supply and certainty for employment lands;
> - Housing affordability;

[86] Narelle Wheatland, *Regional Employment Plan - Sydney West and Blue Mountains Priority Employment Area*, Australian Government, 2012, p.6

[87] RDA Sydney, *Regional Plan for Sydney*, August 2011, p.2

[88] RDA Sydney, *Regional Plan for Sydney*, August 2011, p.3

- More finance, property and professional business support services in outer non CBD centres;
- New emerging industry development in health, community care and life sciences;
- Supporting and developing existing industry clusters e.g. Manufacturing, Aerospace and Defence;
- New technology clusters to drive new Centres of Excellence;
- Urban fringe agriculture;
- Social enterprise sector development.

Skills Development - planning for industry needs in the short to medium term, particularly:

- Manufacturing;
- Transport and logistics;
- Health, aged and community care;
- Green jobs;
- Higher education participation rates;
- Labour force participation.[89]

6.3 Local Government

Two regional organisations of councils cover Western Sydney: the Western Sydney Regional Organisation of Councils (WSROC); and the Macarthur Regional Organisation of Councils (MACROC). Each of these ROCs is involved in planning and advocacy work on behalf of their member councils. WSROC has been the most active of the two ROCs, having recently released a Future Directions Strategy for Western Sydney.

6.3.1 Western Sydney Regional Organisation of Councils

The Western Sydney Regional Organisation of Councils (WSROC) has 10 member councils:

- Auburn;
- Bankstown;
- Blacktown;
- Blue Mountains;
- Fairfield;
- Hawkesbury;
- Holroyd;
- Liverpool;
- Parramatta; and
- Penrith.

WSROC has a number of objectives, including advocacy on behalf of Western Sydney and the economic and employment opportunities located in Western

[89] RDA Sydney, *Regional Plan for Sydney*, August 2011, p.3

Sydney. WSROC has recently released two relevant studies as part of its advocacy work. The first, *Getting Western Sydney Going*, investigated the infrastructure needs of Western Sydney and the funding responses necessary for those needs to be met. The second comprises a set of documents released in the development of a Future Directions Strategy, including a Discussion Paper and the final Next Steps paper.

WSROC's Future Directions Strategy was developed on the premise that:

> A key component of the greater Sydney conurbation, Western Sydney is disadvantaged when compared with other Sydney regions and other centres of a similar size in terms of transport, jobs, education, investment and community services.[90]

The Next Steps document describes "the key activities and changes that are required to enable the future directions to be achieved, including a Regional Integrated Planning Strategy (RIPS), a development agency, a greater leadership role for WSROC and a community empowerment program."[91] The document collates sets of key Ideas for future directions for Western Sydney under six headings. Five of these headings included key ideas of particular relevance to the Western Sydney economy. These are set out as follows:

> **Identity**: Distinct identities - Western Sydney has a series of smaller cities, towns and communities. Distinct identities for each city need to be developed, building on social or environmental assets or economic activity in the region.
>
> **Resilience**: Economic resilience - Western Sydney can become more economically resilient through diversifying businesses, increasing direct interactions between businesses and expanding the skills base of the workforce.
>
> **Quality of life**: Increase employment opportunities - Greater diversity of job options, including professional jobs and jobs in the creative sectors will provide greater opportunities for residents of Western Sydney to work locally. Closely linked to this is education, where the relationship between the two can be symbiotic.
>
> **Access and connectivity**: Jobs and services in regional centres - Reducing travel by private vehicle requires an approach that concentrates employment and industry in existing centres as well as decentralising services throughout the region for local community access.
>
> **Creativity and innovation**: Research centres of excellence - Niche economic centres in Western Sydney would benefit from investment in a research centre of excellence partnered with Western Sydney universities that is tasked with

[90] ARUP, *Future Directions Western Sydney 2030 - Next Steps*, Western Sydney Regional Organisation of Councils, February 2012, p.3

[91] ARUP, *Future Directions Western Sydney 2030 - Next Steps*, Western Sydney Regional Organisation of Councils, February 2012, p.2

exploring options for creative and innovative options to challenges facing the area.

> Low carbon solutions - Western Sydney holds a strong manufacturing base, good solar resource, arable land and access to significant waste streams. With this lies ample opportunity to engage in low-carbon energy generation, innovation in the design and manufacturing of new technologies and restructuring of existing processes.
>
> Creative industries - The creative industries sector brings the drive to seek innovation as they tend to lead the adoption of new ideas and technologies. Providing enabling infrastructure for creative industries to establish themselves in the region has the ability to hasten the uptake of new ideas and foster innovation in other sectors.[92]

The report made five recommendations:

(1) A Western Sydney Regional Integrated Planning Strategy be developed to provide an integrated framework within which infrastructure goals can be clearly articulated. In particular, this framework would link infrastructure to the outcomes identified in the Future Directions Strategy. This must involve the State government agencies, and be developed though a process designed to achieve buy in from the community, stakeholders and all levels of government.

(2) WSROC investigate appropriate structures and models for funding and delivery of large infrastructure and renewal projects. In particular, the possibility of securing a Western Sydney RDA be explored as an appropriate structure for a city region of 2.5m people.

(3) WSROC strengthen its position as political advocate and natural leader for the region by examining its own governance structure with a view to raising its profile and influence.

(4) WSROC invest in an extensive community engagement and empowerment program in order to develop a shared vision that has great community resonance and to empower community groups to participate in achieving that vision through grass-roots initiatives.

(5) WSROC actively engage with other regional stakeholders from the business, education, environmental and services sector to advance aspects of the strategy, including building a network of champions and hosting Regional Action Forums.[93]

[92] ARUP, *Future Directions Western Sydney 2030 - Next Steps*, Western Sydney Regional Organisation of Councils, February 2012, pp.16-28

[93] ARUP, *Future Directions Western Sydney 2030 - Next Steps*, Western Sydney Regional Organisation of Councils, February 2012, p.34

7.0 EMPLOYMENT TARGETS, FORECASTS AND REPORTS

The *Metropolitan Plan for Sydney 2036* set employment capacity targets for every Sydney LGA. Introduced by the Keneally Government in 2010, the Plan aimed to increase the number of jobs in Western Sydney by 384,000 between 2006 and 2036. Two recent reports have critiqued the capacity targets set in the Plan. The first, released by the Urban Taskforce Australia, identifies a jobs deficit in Western Sydney of 200,000 that it argues will increase to 319,000 by 2031 should the Plan's employment capacity targets come to pass. The second, released by RDA Sydney, argues that the targets will not be achieved without additional private and public sector stimulus. In particular, RDA Sydney argues that the NSW Government needs to release significant areas of employment lands in order to meet the employment capacity targets.

In respect to employment capacity targets, two key issues are discussed in this Chapter. First, the Chapter highlights the challenges currently faced by policy makers in creating jobs for Western Sydney. Second, the Chapter provides a baseline against which future Government policies may be assessed with regard to job creation for Western Sydney. Note that the Plan's employment capacity targets will be replaced soon by an O'Farrell Government Metropolitan Strategy.

7.1 Employment capacity targets for Western Sydney

In December 2010, the Keneally Government released *the Metropolitan Plan for Sydney 2036*. The Plan set employment capacity targets for every Sydney LGA and subregion. Note that the definition of Western Sydney employed in the Plan includes the two LGAs excluded from the definition of Western Sydney used in this paper: The Hills; and Bankstown (see Table 41). The Metropolitan Plan aimed to increase the number of jobs in Western Sydney by 384,000 between 2006 and 2036, an increase of 53%. This planned increase would take the proportion of all Sydney jobs located in Western Sydney from 34% to 39%. The South West subregion was expected to experience the most significant increase relative to the 2006 base employment figure, with a projected increase of 106%.

Table 41: Employment capacity targets by Sydney subregion (2006 to 2036)[94]

Subregion (LGAs)	Base employment 2006	Long term employment capacity target 2036	Employment growth 2006 to 2036	
			(persons)	(%)
North West (Blacktown, Blue Mountains, Hawkesbury, The Hills, Penrith)	266,000	411,000	145,000	55%
South West (Camden, Campbelltown, Liverpool, Wollondilly)	133,000	274,000	141,000	106%
West Central (Auburn, Bankstown, Fairfield, Holroyd, Parramatta)	322,000	420,000	98,000	30%
Total	721,000	1,105,000	384,000	53%
Share of Sydney total located in Western Sydney	34%	39%	50%	

Of the projected addition of 384,000 jobs in Western Sydney by 2036, 108,000 are expected to be located in Western Sydney strategic centres (see Table 42). This is equivalent to an 89% increase in employment in Western Sydney strategic centres. The strategic centres expected to house the largest additional number of jobs by 2036 are Parramatta (27,000 jobs), Sydney Olympic Park (19,000) and Liverpool (15,000).

Table 42: Distribution of employment capacity targets by strategic centres (2006 to 2036)[95]

Strategic centre	Base employment 2006	Long term employment capacity target 2036	Employment growth 2006-2036	Employment growth 2006-2036
Blacktown	11,000	16,000	5,000	45%
Campbelltown-Macarthur	14,000	25,000	11,000	79%
Leppington	0	13,000	13,000	-
Liverpool	16,000	31,000	15,000	94%
Parramatta	43,000	70,000	27,000	63%
Penrith	20,000	31,000	11,000	55%
Sydney Olympic Park	4,000	23,000	19,000	475%
Westmead	14,000	21,000	7,000	50%
Total	122,000	230,000	108,000	89%

[94] NSW Government, *Metropolitan Plan for Sydney 2036*, December 2010, p.133
[95] NSW Government, *Metropolitan Plan for Sydney 2036*, December 2010, p.135

7.2 Jobs in Western Sydney: Redressing the Balance (August 2012)

In August 2012, the Urban Taskforce Australia released its report, *Jobs in Western Sydney: Redressing the Balance*. This report argues that Sydney's biggest urban issue is traffic congestion linked to inadequate infrastructure. Much of this problem is driven by around 200,000 people travelling east from Western Sydney for work. It is expected that this number could rise to over 300,000 within 20 years. According to the report:

> The most important single change that would help the whole of Sydney will be to provide large numbers of new jobs in Western Sydney. Without this the city's transport systems just won't cope.[96]

Urban Taskforce Australia identifies a jobs deficit in Western Sydney of 200,000, as of 2011 (see Table 43).[97] That is, the number of jobs available in Western Sydney was significantly less than the total Western Sydney workforce. The deficit was most pronounced in the following LGAs: Blacktown (47,000 jobs); and Penrith (36,000 jobs). Only two LGAs had a surplus of jobs: Auburn (21,000 jobs); and Parramatta (31,000 jobs).

Table 43: Workforce to jobs by local government area in Western Sydney (2011)[98]

LGA	Workforce (2011)	Jobs (2011)
Auburn	30,000	51,000
Bankstown	82,000	75,000
Blacktown	152,000	105,000
Blue Mountains	44,000	22,000
Camden	30,000	21,000
Campbelltown	77,000	50,000
Fairfield	84,000	62,000
Hawkesbury	37,000	26,000
The Hills	100,000	67,000
Holroyd	48,000	39,000
Liverpool	84,000	67,000
Parramatta	80,000	111,000
Penrith	105,000	69,000
Wollondilly	24,000	12,000
Total	977,000	777,000

[96] Urban Taskforce Australia, *Jobs in Western Sydney: Redressing the Balance*, August 2012, p.1

[97] Urban Taskforce Australia use the NSW Government definition of Western Sydney, which includes the Bankstown and The Hills LGAs.

[98] Urban Taskforce Australia, *Jobs in Western Sydney: Redressing the Balance*, August 2012, p.15

The Western Sydney jobs deficit is expected to become more pronounced by 2031, should the employment capacity targets contained in the 2010 Metropolitan Plan be realised (see Table 44). A total jobs deficit of 319,000 could be expected for Western Sydney by 2031. The South West region of Western Sydney would have the largest jobs deficit, of 165,000 jobs.

Table 44: Jobs deficit by Western Sydney subregion (2031)[99]

Subregion	Workforce (2031)	Jobs (2031)	Jobs deficit
West Central(1)	422,000	404,000	18,000
North West(1)	537,000	400,000	137,000
South West(1)	385,000	220,000	165,000
Western Sydney	1,343,000	1,024,000	319,000

Notes: (1) West Central is made up of the Auburn, Bankstown, Fairfield, Holroyd and Parramatta LGAs. North West is made up of the Blacktown, Blue Mountains, Hawkesbury, The Hills and Penrith LGAs. South West is made up of the Camden, Campbelltown, Liverpool and Wollondilly LGAs.

Citing findings from a significant research report conducted by the UWS Urban Research Centre in 2008, which found that NSW Government employment capacity targets for Western Sydney were unlikely to be achieved[100], as well as a range of employment statistics, Urban Taskforce Australia identifies ten action areas for change. The first three are "visionary":

- The Western Sydney Jobs Diamond;
- A diverse and resilient jobs base; and
- Reimagining Western Sydney for investment.

These are intended to effectively reprioritise the focus of policy, public funding and private investment to set the framework for long-term, meaningful and tangible change in the planning and development of Western Sydney.

The next three advocate the development of workable and deliverable plans, policies and projects:

- Advance a subregional delivery plan for jobs in Western Sydney;
- Encouraging hybrid employment generating development; and
- Advancing catalyst projects.

The final four action areas are implementation mechanisms, proposed to establish governance structures, funding sources and incentives to deliver projects on the ground to drive job creation:

- Promoting government office decentralisation;

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[99] Urban Taskforce Australia, *Jobs in Western Sydney: Redressing the Balance*, August 2012, p.17

[100] Urban Research Centre, *North-West and West-Central Sydney Employment Strategies*, Final Report, 2008.

- Western Sydney Economic Development Authority;
- Western Sydney Infrastructure and Investment Fund; and
- Economic incentives.[101]

7.3 Employment Lands Policy Position (August 2012)

In August 2012, RDA Sydney released its *Employment Lands Policy Position*. RDA Sydney argues that:

> There has been a failure by successive governments in NSW to recognise, interpret and apply, international best practice approaches to employment land supply – impacting the economic growth potential of the Western Sydney region …[102]

According to RDA Sydney:

> [the] failure to achieve the employment targets [set out in the 2010 Metropolitan Plan] in areas recognised as major population growth corridors, based on the scenarios presented, may result in an estimated loss of GRP in 2035-36 of:
>
> - Up to $84 billion in Metropolitan Sydney, equating to over 11% of the potential size of the economy.
> - Up to $35 billion in Western Sydney, equating to 14% of the potential size of the Western Sydney economy.
> - Up to $14 billion in South West Sydney, equating to 5% of the potential size of the Western Sydney economy.[103]

The RDA Sydney report examined the connections between projected job growth figures, population growth figures and targets for employment lands in Sydney, with a particular focus on Western Sydney. Job and population growth projections were sourced from the NSW Department of Planning. The report found a significant discrepancy between projected job growth and projected population growth for Western Sydney (see Table 45). While Western Sydney is expected to cater for 63.3% of Sydney's population growth by 2036, only 50.5% of the projected additional jobs will be located in Western Sydney. This discrepancy is largest for the South West region, which is expected to house 27.3% of Sydney's future population growth but only 18.6% of Sydney's future jobs growth.

[101] Urban Taskforce Australia, *Jobs in Western Sydney: Redressing the Balance*, August 2012, p.25
[102] RDA Sydney, *Employment Lands Policy Position*, June 2012, p.iii
[103] RDA Sydney, *Employment Lands Policy Position*, June 2012, p.iii

Table 45: Population and job targets for Sydney (2006 to 2036)[104]

Subregion	Population		Jobs	
	Number	% of total	Number	% of total
Sydney City	99,400	5.8	114,000	15.0
East	52,200	3.1	31,000	4.1
South	96,200	5.7	52,000	6.8
Inner West	79,500	4.7	25,000	3.3
Inner North	75,900	4.5	62,000	8.2
North	59,200	3.5	15,000	2.0
North East	41,900	2.5	23,000	3.0
West Central[(1)]	217,200	12.8	98,000	12.9
North West[(1)]	394,700	23.2	145,000	19.1
South West[(1)]	464,400	27.3	141,000	18.6
Central Coast	120,000	7.1	54,000	7.1
Total	1,700,600	100	760,000	100

Notes: (1) West Central is made up of the Auburn, Bankstown, Fairfield, Holroyd and Parramatta LGAs. North West is made up of the Blacktown, Blue Mountains, Hawkesbury, The Hills and Penrith LGAs. South West is made up of the Camden, Campbelltown, Liverpool and Wollondilly LGAs.

RDA Sydney argues that, while some jobs will be created to meet the target of 760,000 additional jobs for Sydney by 2036 as a result of the natural impact of population growth and demand from servicing the growing population:

> … the remainder of the job target is vulnerable to issues such as transport infrastructure and access, government policy and the changing nature of business activity.[105]

RDA Sydney modelled three scenarios to examine the potential consequences of not meeting the required job target of 760,000 additional jobs for Sydney, as projected by the NSW Metropolitan Plan (2010):

> **Low**: Only population driven jobs growth under the Metropolitan Plan
>
> **Medium**: Population driven jobs growth and some vulnerable jobs achieved
>
> **High**: Full economic growth with stimulus through employment lands creation.[106]

RDA Sydney projected that servicing population growth in Sydney will only generate 416,430 of the total 760,000 jobs required by 2036, equivalent to 55% of the jobs target (see Table 46). In the case of Western Sydney, only 222,430

[104] RDA Sydney, *Employment Lands Policy Position*, June 2012, p.19
[105] RDA Sydney, *Employment Lands Policy Position*, June 2012, p.20
[106] RDA Sydney, *Employment Lands Policy Position*, June 2012, p.iii

jobs would be created of the 384,000 target, equivalent to 58%.

Table 46: Job growth by scenario (2006 to 2036)[107]

Subregion	Scenario		
	Low	Medium	High
Sydney City	64,260	64,260	114,000
East	15,210	31,000	31,000
South	15,950	52,000	52,000
Inner West	19,310	25,000	25,000
Inner North	32,440	53,270	62,000
North	11,510	15,000	15,000
North East	9,620	23,000	23,000
West Central[(1)]	57,440	78,950	98,000
North West[(1)]	80,760	85,690	145,000
South West[(1)]	84,230	84,470	141,000
Central Coast	25,700	35,780	54,000
Total	416,430	548,420	760,000

Notes: (1) West Central is made up of the Auburn, Bankstown, Fairfield, Holroyd and Parramatta LGAs. North West is made up of the Blacktown, Blue Mountains, Hawkesbury, The Hills and Penrith LGAs. South West is made up of the Camden, Campbelltown, Liverpool and Wollondilly LGAs.

RDA Sydney modelled the impact each scenario would have on Western Sydney's GRP in 2035-36 (see Table 47). Assuming the jobs target is achieved, as modelled under the high scenario, Western Sydney's GRP is expected to be over $253 billion by 2035-36, accounting for over a third of the Sydney economy. This is equivalent to real average growth of 4.0%. Under the low scenario, GRP is projected to be over $35 billion lower than the high scenario, or 13.9% less. Most of this loss would be expected to occur in the South West and North West subregions.

Table 47: Gross Regional Product in Western Sydney under three scenarios (2035-36)[108]

Scenario	GRP ($million)	% loss
Low scenario	$218,140	-13.9%
Medium scenario	$223,590	-11.8%
High scenario	$253,500	0.0%

RDA Sydney identified eight LGAs within Sydney that are expected to require significant stimulus from both the public and private sectors to achieve their job

[107] RDA Sydney, *Employment Lands Policy Position*, June 2012, p.21
[108] RDA Sydney, *Employment Lands Policy Position*, June 2012, p.22

growth targets. Six of the eight are located in Western Sydney, as defined in this paper (see Table 48).[109] Modelled GRP loss for each of these LGAs is significant. Campbelltown LGA would experience the largest loss of GRP if its jobs growth target was not met, up to 24.0% by 2035-36.

Table 48: Gross Regional Product by local government area (requiring stimulus) (2035-36)[110]

LGA	Low scenario	High scenario	% loss
Blacktown	$28,100	$31,020	-9.4%
Camden	$9,880	$11,470	-13.9%
Campbelltown	$15,370	$20,230	-24.0%
Liverpool	$21,020	$26,430	-20.5%
Parramatta	$36,620	$42,200	-13.2%
Penrith	$16,600	$19,820	-16.2%

According to the *Employment Lands Development Program 2010 Overview Report*, employment lands in Sydney contain 23.2% of total employment. RDA Sydney argues for an expansion of the definition of employment lands to include business and technology parks.[111] In this case, employment lands are estimated to contain 30-35% of all Sydney jobs. RDA Sydney expects that this may rise in the future to 40-44% of total employment. Employment lands, using the RDA Sydney definition, are particularly important for key Western Sydney industries such as "manufacturing", "wholesale trade" and "transport, postal & warehousing".[112] The low and medium scenarios modelled by RDA Sydney assume that job targets for Western Sydney will not be met due to constraints such as a lack of available and affordable employment land. It is projected that the employment land sector will contribute $145 billion to Western Sydney's GRP by 2035-36. However, this total would be approximately $23 billion less under the medium scenario and almost $28 billion less under the low scenario (see Table 49).

[109] The other two LGAs are The Hills, which is included by the NSW Government in Western Sydney, and the Sydney LGA.

[110] RDA Sydney, *Employment Lands Policy Position*, June 2012, p.22

[111] RDA Sydney defined employment land as: Land which supports traditional industries, new business and technology parks for higher order employment, and areas containing a mix of industrial activity such as manufacturing, warehousing, servicing, management and administration including urban services and utilities and limited business administration support services, cafes, food outlets, banking outlets; RDA Sydney, *Employment Lands Policy Position*, June 2012, p.2.

[112] See Appendix 11.

Table 49: Contribution of employment land to Gross Regional Product in Western Sydney under three scenarios (2035-36)[113]

Scenario	GRP (total)	GRP contribution (employment land)	GRP loss (employment land)	% loss of GRP
Low scenario	$218,140	$117,280	$27,910	-11.0%
Medium scenario	$223,590	$121,950	$23,240	-9.2%
High scenario	$253,500	$145,190	$0	0.0%

According to the RDA Sydney report, several Western Sydney industries would be significantly affected if additional employment lands are not made available. The two worst affected industries are "manufacturing", which would lose 24.4% GRP if no additional employment lands were made available by 2035-36, and "wholesale trade", which would lose 22.7% (see Table 5; see Appendix 11).

Table 50: Top five Western Sydney industries affected should job targets not be met by creating additional employment land (2035-36)[114]

Industry	GRP ($ million)			% loss	
	Low	Medium	High	Low scenario	Medium scenario
Manufacturing	31,670	33,510	41,890	-24.4%	-20.0%
Wholesale trade	17,020	18,000	22,020	-22.7%	-18.3%
Financial & insurance services	8,160	8,320	10,050	-18.8%	-17.2%
Rental, hiring & real estate services	1,380	1,420	1,690	-18.3%	-16.0%
Professional, scientific & technical services	3,370	3,440	4,110	-18.0%	-16.3%
Total (for all 19 industries)	117,280	121,950	145,190	-19.2%	-16.0%

In light of their analysis, RDA Sydney made ten recommendations:

(1) Employment lands are so critical to the economic future of Greater Western Sydney that the government should adopt an agreed Vision and Strategy for delivering over 8,000ha's on a rapid release program.

(2) The Minister for Western Sydney (The Hon Barry O'Farrell MP) establishes an "Implementation Committee" for employment lands, reporting to a nominated Minister & chaired by an independent professional from the commercial sector to facilitate employment land supply in NSW.

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113 RDA Sydney, *Employment Lands Policy Position*, June 2012, p.24

114 RDA Sydney, *Employment Lands Policy Position*, June 2012, p.43. See Appendix 12 for figures for all Western Sydney industries. Note that the definition of Western Sydney employed in this Table includes Bankstown and The Hills LGAs.

(3) The Premier considers implementing a similar Model to the Western Australia Planning Commission which effectively coordinates planning & economic activity across the State.

(4) Development and investment activity is stimulated by incentivizing the private sector through a similar initiative in Housing supply – where the industry can present solutions to the Planning Minister – the Hon Brad Hazzard MP and by the NSW government removing all developer levies from green-field employment land development projects.

(5) The Premier support the formation of an Inter-government working committee comprising representatives from local and state governments and the federal government to discuss infrastructure and financing arrangements for a rapid land release employment lands program. Infrastructure NSW is then charged with coordination and servicing this committee and reporting findings to the Premier and Minister for Western Sydney - within 6 months of inauguration.

(6) The Premier of NSW task the Inter-government Committee with preparing recommendations to the Productivity Commission requesting an urgent inquiry into financing local infrastructure requirements in NSW, off-setting developer levies with more effective tax policy and encouraging local Councils to be actively and effectively involved.

(7) The Implementation Committee immediately focus consideration of the acquisition of key corridors for “catalyst infrastructure” in the form of road and services – to avoid rapid price escalation through rezoning and value enhancement.

(8) To remove the current spatial imbalance in employment lands across Sydney – which has resulted in all the Business & Technology Parks lying north of the M4, new Strategic Centres and Business & Technology Parks are to be planned along both existing and the newly acquired corridors in the South West Sub Region.

(9) RDA Sydney encourages the early delivery of the sub regions infrastructure requirements and incorporates the “indicative infrastructure mapping” outlined in this Paper in their Revised Metropolitan Plan submission to the Department of Planning and Infrastructure. This infrastructure mapping for Greater Western Sydney identifies the likely infrastructure requirements, potential corridors and employment land areas, covering up to 8,000Ha’s in preparation for the Regional Forum and as a stimulus to debate and the formation of constructive action plans.

(10) To assist the Premier, Ministers, and the NSW Cabinet to visualize and comprehend the complex interplay of strategic planning initiatives which are vital to this process, including the overlay options for the numerous infrastructure, roads, utilities and servicing options on Greenfield land - new planning tools are introduced as a matter of priority.[115]

[115] RDA Sydney, *Employment Lands Policy Position*, June 2012, p.vi

8.0 CONCLUSION

This paper has surveyed a large, complex and ever-changing regional economy, one that is of considerable importance to NSW and Australia as a whole. The trends in population, employment, gross regional product and business numbers have been noted, as have some of the many government initiatives designed to meet the challenges facing Western Sydney. Among the many issues raised are those relating to the current jobs deficit and infrastructure needs of Western Sydney. Of the many suggestions noted is one for a Regional Development Australia committee dedicated to the Western Sydney region.

Macroeconomic trends observed in Western Sydney are, in part, consistent with the broader NSW trend towards a service-oriented economy. Manufacturing has recently lost part of its share of both the regional and Statewide economies; at the same time, an increase in the services sector was recorded for both Western Sydney and NSW. Given the importance of manufacturing for Western Sydney, a key issue is the development of an appropriate skills base to meet the challenges of a more innovative manufacturing sector.

Various contrasting points can be made about the Western Sydney economy, compared to that of NSW generally. One is that, unlike the State as a whole, the construction industry has grown in significance in Western Sydney. Conversely, there has been a recent decline in the finance & insurance services industry in Western Sydney, which has occurred at a time when the industry only contributes a relatively small share to the industry generally in NSW. This may give some cause for concern given that finance & insurance services have been identified as one of the key growth industries for the State.

The challenges facing all levels of government with regards to strengthening the Western Sydney economy and creating jobs are many and multifaceted. This paper provides a snapshot of the Western Sydney economy and its recent evolution. Given its significance, it is proposed to revisit key Western Sydney economic issues at a later date following the release of detailed census 2011 statistics.

APPENDIX 1: DEFINING WESTERN SYDNEY

This Appendix sets out how Western Sydney is defined by selected NSW, Local and Commonwealth Government bodies.

NSW Government

NSW 2021 is the O'Farrell Government's 10-year plan to "guide our policy and budget decision making and, in conjunction with the NSW Budget, to deliver on community priorities."[116] The NSW Government has divided Sydney into six regions[117] for the purpose of developing NSW 2021 Regional Action Plans, two of which together make up Western Sydney: South Western Sydney; and Western Sydney. The South Western Sydney subregion is made up of the following LGAs (see Figure below):

- Bankstown;
- Camden;
- Campbelltown;
- Fairfield;
- Liverpool; and
- Wollondilly.

The Western Sydney subregion is made up of the following LGAs (see Figure below):

- Auburn;
- Blacktown;
- Blue Mountains;
- Hawkesbury;
- The Hills;
- Holroyd;
- Parramatta; and
- Penrith.

[116] NSW Government, *NSW 2021: A Plan to Make NSW Number One*, September 2011, p.i

[117] This does not include the Central Coast, a subregion that is included in the Greater Sydney Metropolitan Region by some government bodies such as the ABS.

Figure: NSW 2021: South Western Sydney Map[118]

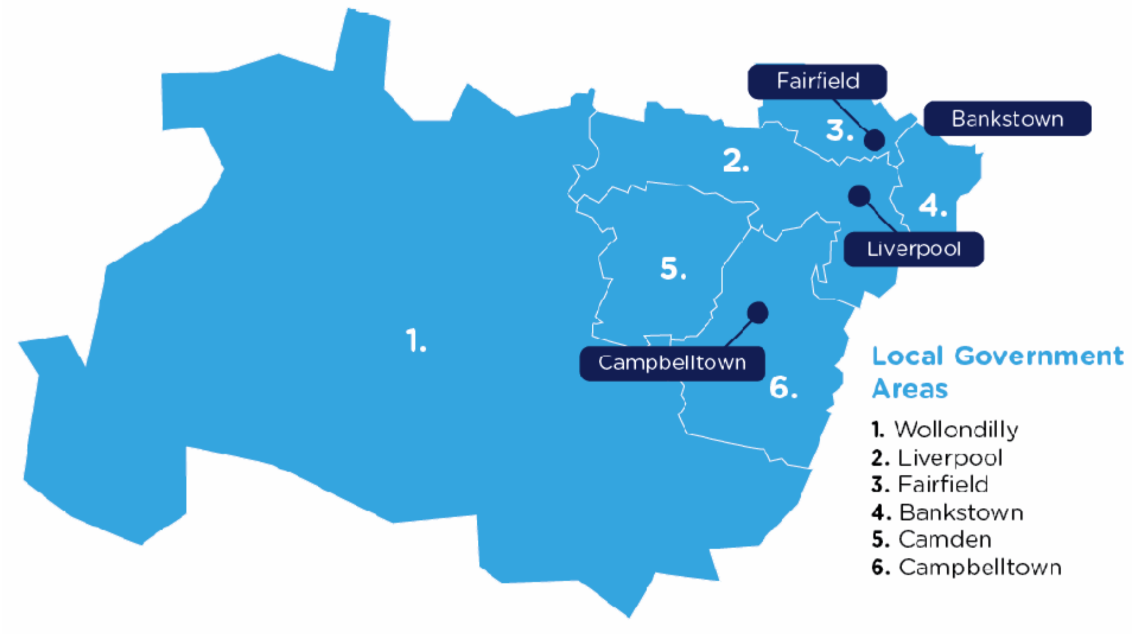


Figure: NSW 2021: Western Sydney Map[119]

[118] NSW Government, *NSW 2021 - South Western Sydney Regional Action Plan: Community Discussion Paper*, 2011, p.4

[119] NSW Government, *NSW 2021 - Western Sydney Regional Action Plan: Community Discussion Paper*, 2011, p.4

Local Government

While there are 14 local governments included in Western Sydney, as defined by the NSW Government, only 13 of these local governments are members of a Regional Organisation of Councils (ROC). The Hills Shire is not a member of a ROC.

Western Sydney Regional Organisation of Councils

The Western Sydney Regional Organisation of Councils (WSROC) has 10 member councils:

- Auburn;
- Bankstown;
- Blacktown;
- Blue Mountains;
- Fairfield;
- Hawkesbury;
- Holroyd;
- Liverpool;
- Parramatta; and
- Penrith.

WSROC locates its 10 member councils within the "Greater Western Sydney" region, a region identical to Western Sydney as defined by the NSW Government. WSROC has a number of objectives, including advocacy on behalf of Western Sydney and the economic and employment opportunities located in Western Sydney.

Macarthur Regional Organisation of Councils

The Macarthur Regional Organisation of Councils (MACROC) has three member councils: Camden; Campbelltown; and Wollondilly. MACROC's roles include strategic planning, regional coordination, advocacy and facilitation on behalf of its member councils.

Commonwealth Government

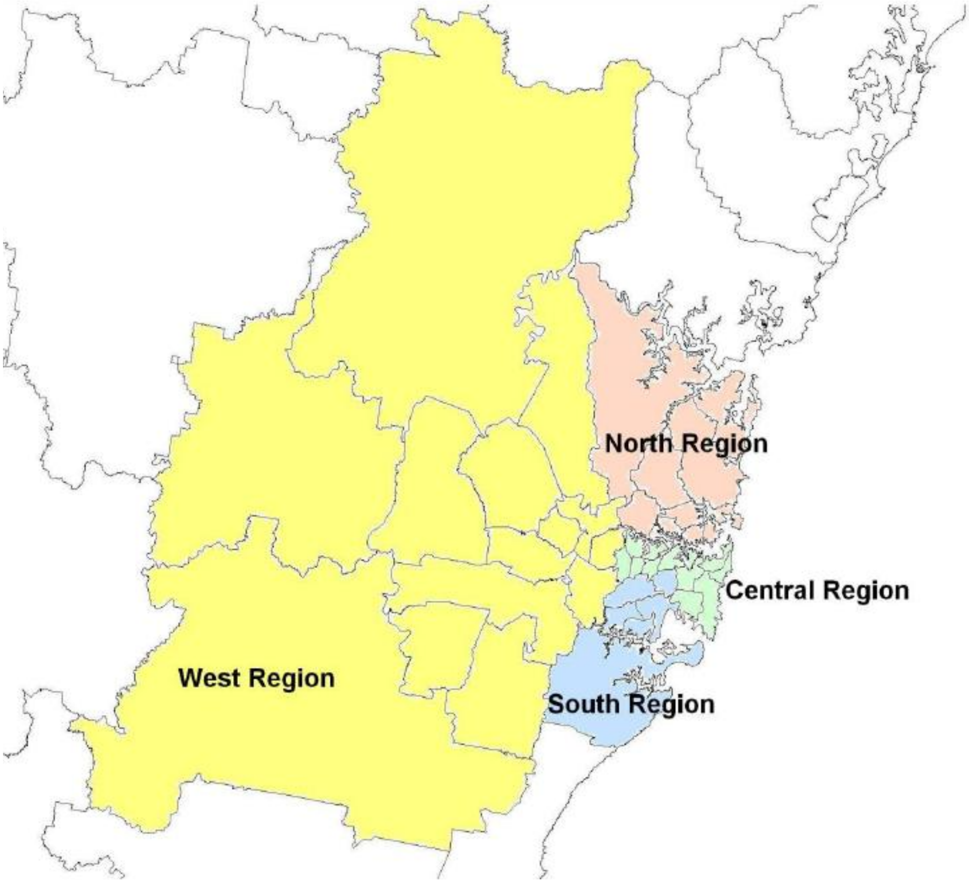
Department of Education, Employment and Workplace Relations

The Commonwealth Department of Education, Employment and Workplace Relations (DEEWR) uses ABS data for the publication of labour market information in its Labour Market Information Portal (LMIP). Labour Force Region data published by DEEWR uses the same statistical regions as the ABS. DEEWR also provides Small Area Labour Market data, which is available at the Statistical Local Area (SLA) level. Statistical regions are made up of SLAs.

Regional Development Australia

Regional Development Australia is a partnership between the Commonwealth, State and Local Governments. RDA Sydney is one of 55 RDA committees. RDA Sydney divides Sydney into four economic regions: Central; North; South; and West (see Figure below). The West region is equivalent to Western Sydney as defined by the NSW Government.

Figure: Map of Sydney Metropolitan Region (RDA Sydney)[120]



Defining Western Sydney

The Table below presents the correspondence between different geographical divisions of Sydney. From left to right, the Table sets out the decision making process for the selection of the four ABS labour force regions that make up "Western Sydney" for the purpose of this paper.

Column 1 lists the ABS labour force regions that together encompass all the LGAs included by the NSW Government in its definition of Western Sydney.

[120] RDA Sydney, *RDA Sydney Metropolitan Region Economic Baseline Assessment - Update*, Final Report, August 2011, p.2

Column 2 lists the LGAs that correspond to the ABS labour force regions listed in column 1.

Column 3 lists the LGAs that make up Western Sydney according to the NSW Government.

Column 4 lists the four ABS labour force regions that make up Western Sydney for the purpose of this paper. Western Sydney in this case consists of 12 LGAs: Auburn; Blacktown; Blue Mountains; Camden; Campbelltown; Fairfield; Hawkesbury; Holroyd; Liverpool; Parramatta; Penrith; and Wollondilly.

Table: Defining Western Sydney

ABS labour force regions	LGAs that make up the ABS labour force regions	LGAs that make up Western Sydney as defined by the NSW Government	ABS labour force regions that together make up Western Sydney for the purposes of this paper
Canterbury-Bankstown	Bankstown	Bankstown	
	Canterbury		
Central Northern Sydney	The Hills	The Hills	
	Hornsby		
	Ku-ring-gai		
Central Western Sydney	Auburn	Auburn	Central Western Sydney
	Holroyd	Holroyd	
	Parramatta	Parramatta	
Fairfield-Liverpool	Fairfield	Fairfield	Fairfield-Liverpool
	Liverpool	Liverpool	
North Western Sydney	Blacktown	Blacktown	North Western Sydney
	Blue Mountains	Blue Mountains	
	Hawkesbury	Hawkesbury	
	Penrith	Penrith	
Outer South Western Sydney	Camden	Camden	Outer South Western Sydney
	Campbelltown	Campbelltown	
	Wollondilly	Wollondilly	

Two LGAs have been omitted from the definition of Western Sydney adopted in this paper: Blacktown; and The Hills. Both of these LGAs have been omitted because the ABS groups them in statistical regions with LGAs that, for geographical and socio-economic reasons, could not be justifiably included in a working definition of "Western Sydney".

The decision to omit Blacktown LGA was made because of its inclusion with Canterbury LGA in the ABS statistical region Canterbury-Bankstown (see Figure 2). This statistical region was omitted for geographical reasons i.e.

Canterbury LGA is located too close to Inner Sydney to be justifiably defined as part of Western Sydney (compare Figures 1 and 2).

The decision to omit The Hills LGA was made because of its inclusion with Hornsby and Ku-ring-gai LGAs in the ABS statistical region Central Northern Sydney (see Figure 2). This statistical region was omitted for socio-economic reasons i.e. Hornsby and Ku-ring-gai LGAs have significantly different socio-economic profiles to LGAs generally considered to be part of Western Sydney, such as Blacktown or Penrith.

APPENDIX 2: GROSS REGIONAL PRODUCT FOR ALL WESTERN SYDNEY LOCAL GOVERNMENT AREAS AND LABOUR FORCE REGIONS

Table: Gross Regional Product by industry by local government area (2010-11) (part 1)[121]

Industry	LGA ($m)			
	Auburn	Blacktown	Blue Mts	Camden
Agriculture, forestry & fishing	8.1	55.3	22.7	44.1
Mining	11	121.3	4.5	20.7
Manufacturing	1,114.0	1,843.70	68.9	176.2
Electricity, gas, water & waste services	115.7	748.9	53.7	65.2
Construction	417.7	889.6	148.1	206.6
Wholesale trade	892.1	951.5	45.8	86
Retail trade	225.8	607.4	145.9	151.1
Accommodation & food services	100.2	287.4	149.9	76.9
Transport, postal & warehousing	656.1	1,170.2	105.1	168.1
Information media & telecommunications	333.4	155.7	58.3	21.5
Financial & insurance services	461.8	618.1	132.6	127.3
Rental, hiring & real estate services	140.7	265	77.9	71.4
Professional, scientific & technical services	270.8	327.2	159.3	100.5
Administrative & support services	146.6	391.4	71	51
Public administration & safety	286.2	475.8	133	60.1
Education & training	190.6	709.1	189.1	148.7
Health care & social assistance	204.8	608.4	258.4	141.1
Arts & recreation services	103.7	68.9	40.7	24.5
Other services	134.3	248.8	60.4	59
Sub-total	5,813.4	10,543.6	1,925.5	1,799.7
Ownership of dwellings & general government	1,077.50	1,954.30	356.9	333.6
Gross Regional Product	6,891	12,497.9	2,282.4	2,133.3
% of Western Sydney	8.8	16.0	2.9	2.7
Value-add per employed person ($)	132,826	123,080	107,847	125,572

[121] Current prices. Source: RDA Sydney, *RDA Sydney Metropolitan Region Economic Baseline Assessment - Update*, Final, June 2012, p.90

Table: Gross Regional Product by industry by local government area, (2010-11) (part 2)[122]

Industry	LGA ($m)			
	Campbelltown	Fairfield	Hawkesbury	Holroyd
Agriculture, forestry & fishing	9.4	27.3	133.7	5.3
Mining	109.1	22.6	11	19.4
Manufacturing	899.9	1,453.1	353.6	1,254
Electricity, gas, water & waste services	51.0	149.7	45.8	73.9
Construction	314.5	472.7	275.3	305.2
Wholesale trade	260.5	612.4	102.5	506.4
Retail trade	350.2	316.7	151.8	204.4
Accommodation & food services	184.8	207.8	106.2	102.6
Transport, postal & warehousing	371.5	483.7	129.1	534.8
Information media & telecommunications	98.0	66.5	109.5	45.3
Financial & insurance services	288.1	354.6	130	156.8
Rental, hiring & real estate services	160.8	162.2	78.4	87.7
Professional, scientific & technical services	185.2	190.8	141.3	149.5
Administrative & support services	160.4	190.8	67.9	94.4
Public administration & safety	262.8	240.5	312.7	104.2
Education & training	456.1	373.2	184.8	168.4
Health care & social assistance	404.1	381.2	184.4	214.4
Arts & recreation services	38.0	41.8	37.7	13.5
Other services	125.5	172.4	76.9	98.8
Sub-total	4,729.6	5,920.0	2,632.7	4,138.8
Ownership of dwellings & general government	876.6	1,097.3	488	767.1
Gross Regional Product	5,606.2	7,017.3	3,120.7	4,906.0
% of Western Sydney	7.2	9.0	4.0	6.3
Value-add per employed person ($)	123,870	127,878	114,128	122,845

[122] Current prices. Source: RDA Sydney, *RDA Sydney Metropolitan Region Economic Baseline Assessment - Update*, Final, June 2012, p.90

Table: Gross Regional Product by industry by local government area, (2010-11) (part 3)[123]

Industry	LGA ($m)			
	Liverpool	Parramatta	Penrith	Wollondilly
Agriculture, forestry & fishing	72.4	9.4	62.4	63.5
Mining	16.1	44.5	114.2	778.9
Manufacturing	1,066	1,333	863.7	160.1
Electricity, gas, water & waste services	229.1	135.5	318.8	70.7
Construction	505.7	689.9	576.9	137.9
Wholesale trade	373.1	711.1	262.3	38.8
Retail trade	354.2	467.9	476.9	52.8
Accommodation & food services	143.8	279.7	279.5	32.8
Transport, postal & warehousing	571.4	667.4	412.6	79.6
Information media & telecommunications	166	601.7	133	12.9
Financial & insurance services	374.2	3,696.00	408.2	46.9
Rental, hiring & real estate services	182.4	334.4	205.7	25.6
Professional, scientific & technical services	272.6	788	304.8	65.1
Administrative & support services	288.7	467	190.5	24.9
Public administration & safety	457.4	1,240.00	505	49.3
Education & training	416.2	448.4	555.3	76.3
Health care & social assistance	660.7	1,447.50	655.5	48.8
Arts & recreation services	51.3	103.8	79	12.4
Other services	152	257.6	179.6	27.1
Sub-total	6,352.7	13,722.1	6,583.8	1,804.4
Ownership of dwellings & general government	1,177.5	2,543.4	1,220.3	334.4
Gross Regional Product	7,530.2	16,265.5	7,804.1	2,138.8
% of Western Sydney	9.6	20.8	10.0	2.7
Value-add per employed person ($)	129,488	144,789	114,503	200,846

[123] Current prices. Source: RDA Sydney, *RDA Sydney Metropolitan Region Economic Baseline Assessment - Update*, Final, June 2012, p.90

Table: Gross Regional Product by industry by labour force region (2010-11)[124]

Industry	Labour force region ($m)			
	Central Western Sydney	Fairfield-Liverpool	North Western Sydney	Outer South Western Sydney
Agriculture, forestry & fishing	22.8	99.7	274.1	117
Mining	74.9	38.7	251	908.7
Manufacturing	3,700.5	2,518.7	3,129.9	1,236.2
Electricity, gas, water & waste services	325.1	378.8	1,167.2	186.9
Construction	1,412.8	978.4	1,889.9	659
Wholesale trade	2,109.6	985.5	1,362.1	385.3
Retail trade	898.1	670.9	1,382	554.1
Accommodation & food services	482.5	351.6	823	294.5
Transport, postal & warehousing	1,858.3	1,055.1	1,817	619.2
Information media & telecommunications	980.4	232.5	456.5	132.4
Financial & insurance services	4,314.6	728.8	1,288.9	462.3
Rental, hiring & real estate services	562.8	344.6	627	257.8
Professional, scientific & technical services	1,208.3	463.4	932.6	350.8
Administrative & support services	708	479.5	720.8	236.3
Public administration & safety	1,630.4	697.9	1,426.5	372.2
Education & training	807.4	789.4	1,638.3	681.1
Health care & social assistance	1,866.7	1,041.9	1,706.7	594
Arts & recreation services	221	93.1	226.3	74.9
Other services	490.7	324.4	565.7	211.6
Sub-total	23,674.3	12,272.7	21,685.6	8,333.7
Ownership of dwellings & general government	4,388	2,274.8	4,019.5	1,544.6
Gross Regional Product	28,062.5	14,547.5	25,705.1	9,878.3
% of Western Sydney	35.9	18.6	32.9	12.6
Value-add per employed person ($)	137,457	128,707	117,802	135,512

124 Current prices. Source: RDA Sydney, *RDA Sydney Metropolitan Region Economic Baseline Assessment - Update*, Final, June 2012, p.90

Table: Gross Regional Product by industry for Western Sydney (2010-11)[125]

Industry	Region				
	Western Sydney				Sydney
	GRP ($m)	% of Western Sydney	Change in share of Western Sydney since 2008-09 (%)	% of Sydney industry total	
Agriculture, forestry & fishing	513.6	0.66	+0.19	62.3	823.8
Mining	1,273.3	1.63	-0.19	59.4	2,142.6
Manufacturing	10,585.3	13.54	-1.67	48.1	22,010.0
Electricity, gas, water & waste services	2,058	2.63	+0.46	37.2	5,534.2
Construction	4,940.1	6.32	+0.69	35.1	14,080.6
Wholesale trade	4,842.5	6.19	-0.79	33.9	14,267.8
Retail trade	3,505.1	4.48	+0.04	32.6	10,742.9
Accommodation & food services	1,951.6	2.50	+0.39	27.0	7,231.6
Transport, postal & warehousing	5,349.6	6.84	+0.28	32.9	16,240.4
Information media & telecommunications	1,801.8	2.30	+0.06	11.6	15,551.8
Financial & insurance services	6,794.6	8.69	-0.59	13.0	52,336.0
Rental, hiring & real estate services	1,792.2	2.29	-0.39	24.5	7,300.6
Professional, scientific & technical services	2,955.1	3.78	+0.17	11.9	24,740.7
Administrative & support services	2,144.6	2.74	+0.35	23.4	9,156.7
Public administration & safety	4,127	5.28	+0.14	34.9	11,838.5
Education & training	3,916.2	5.01	+0.87	31.6	12,401.1
Health care & social assistance	5,209.3	6.66	+0.52	32.4	16,082.8
Arts & recreation services	615.3	0.79	+0.03	21.8	2,817.0
Other services	1,592.4	2.04	+0.05	31.5	5,059.5
Sub-total	65,966.3	84.36	-0.38	26.3	250,358.3
Ownership of dwellings & general government	12,226.9	15.64	+0.38	26.3	46,403.8
Gross Regional Product	78,193.4	100	-	26.3	296,762.1
Value-add per employed person ($)	128,547	-	-	-	143,404

[125] Current prices. Source: RDA Sydney, *RDA Sydney Metropolitan Region Economic Baseline Assessment - Update*, Final, June 2012, p.90

APPENDIX 3: CHANGE IN GROSS REGIONAL PRODUCT BY INDUSTRY FOR WESTERN SYDNEY, AS DEFINED BY RDA SYDNEY: 2009-10 TO 2010-11

Table: Change in Gross Regional Product by industry for Western Sydney, as defined by RDA Sydney (2009-10 to 2010-11)[126]

Industry	Gross Regional Product		Change in Gross Regional Product between 2009-10 & 2010-11	
	2009-10	2010-11	Amount	%
Agriculture, forestry & fishing	400.2	598.5	198.3	49.6
Mining	1,640.9	1,367.5	-273.4	-16.7
Manufacturing	13,431.7	13,240.3	-191.4	-1.4
Electricity, gas, water & waste services	2,720.5	2,365.6	-354.9	-13.0
Construction	5,826.5	6,220.1	393.6	6.8
Wholesale trade	5,869.2	6,098.5	229.3	3.9
Retail trade	4,390.2	4,507	116.8	2.7
Accommodation & food services	2,267.2	2,350.6	83.4	3.7
Transport, postal & warehousing	5,924.8	6,336.4	411.6	6.9
Information media & telecommunications	2,266.9	2,305.2	38.3	1.7
Financial & insurance services	8,138.1	8,120.4	-17.7	-0.2
Rental, hiring & real estate services	2,451.8	2,243.1	-208.7	-8.5
Professional, scientific & technical services	3,940.9	4,052.5	111.6	2.8
Administrative & support services	2,438.5	2,572.4	133.9	5.5
Public administration & safety	4,532.5	4,543.9	11.4	0.3
Education & training	4,598.4	4,854.7	256.3	5.6
Health care & social assistance	6,147.1	6,121.2	-25.9	-0.4
Arts & recreation services	716.8	740.3	23.5	3.3
Other services	2,237	1,973.1	-263.9	-11.8
Sub-total	79,939.3	80,611.2	671.9	0.8
Ownership of dwellings & general government	14,786.8	14,941.2	154.4	1.0
Gross Regional Product	94,726.1	95,552.4	826.3	0.9

Note: The definition of Western Sydney used in this Table includes the Bankstown and The Hills LGAs.

[126] Source: RDA Sydney, *RDA Sydney Metropolitan Region Economic Baseline Assessment - Update*, Final, June 2012, p.50

APPENDIX 4: CHANGE IN SHARE OF GROSS REGIONAL PRODUCT BY INDUSTRY FOR WESTERN SYDNEY LABOUR FORCE REGIONS: 2008-09 TO 2010-11

Table: Change in share of Gross Regional Product by industry for Western Sydney labour force regions (2008-09 to 2010-11)[127]

Industry	Change in share of GRP (2008-09 to 2010-11)			
	Central Western Sydney	Fairfield-Liverpool	North Western Sydney	Outer South Western Sydney
Agriculture, forestry & fishing	+0.02	+0.18	+0.30	+0.32
Mining	-0.03	-0.03	-0.13	-1.15
Manufacturing	-1.37	-2.08	-1.86	-1.56
Electricity, gas, water & waste services	+0.21	+0.44	+0.68	+0.31
Construction	+0.61	+0.72	+0.67	+0.69
Wholesale trade	-0.79	-0.78	-0.83	-0.48
Retail trade	+0.06	+0.01	-0.07	+0.01
Accommodation & food services	+0.28	+0.38	+0.45	+0.45
Transport, postal & warehousing	+0.40	+0.30	+0.12	+0.26
Information media & telecommunications	+0.16	+0.04	+0.05	+0.05
Financial & insurance services	-0.63	-0.25	-0.35	-0.24
Rental, hiring & real estate services	-0.32	-0.42	-0.47	-0.46
Professional, scientific & technical services	+0.25	+0.14	+0.13	+0.16
Administrative & support services	+0.35	+0.41	+0.31	+0.31
Public administration & safety	+0.22	+0.10	+0.11	+0.11
Education & training	+0.52	+0.91	+0.99	+1.16
Health care & social assistance	+0.60	+0.53	+0.45	+0.47
Arts & recreation services	+0.03	+0.02	+0.02	+0.02
Other services	+0.06	+0.05	+0.01	+0.04
Ownership of dwellings & general government	+0.38	+0.38	+0.38	+0.38

[127] Sources: RDA Sydney, *Sydney Metropolitan Region Economic Baseline Assessment*, Final, July 2010; RDA Sydney, *RDA Sydney Metropolitan Region Economic Baseline Assessment - Update*, Final, June 2012, p.50

APPENDIX 5: EMPLOYMENT BY INDUSTRY BY LABOUR FORCE REGION (2006 TO MAY 2012)

This Appendix sets out employment by industry statistics for each of the four Western Sydney labour force regions. Changes in employment between 2006 and May 2012 are investigated and the top employing industries for each region are identified. NSW employment by industry data is also included for comparative purposes.

Central Western Sydney

In May 2012, 160,940 residents of Central Western Sydney were in employment, an increase of 39,509 since 2006. This is equivalent to an increase of 32.5% in the number of people employed in Central Western Sydney. The largest proportion of these people were employed in "health care & social assistance" (21,979 persons), while the smallest proportion were employed in mining (211 persons). Other significant employers included "construction" (14,176 persons), "retail trade" (14,063 persons) and "manufacturing" (13,904 persons).

In terms of absolute numbers, the biggest increases in employment between 2006 and May 2012 took place in "health care & social assistance" (9,256 jobs), "construction" (4,740 jobs) and "other services" (4,355 jobs). Two industries experienced decreases in employment, losing the following number of jobs: "manufacturing" (937 jobs); and "electricity, gas, water & waste services" (483 jobs).

The fastest areas of growth in employment between 2006 and May 2012 took place in the following industries: "agriculture, forestry & fishing" (131.9%); "other services" (89.4%); and "mining" (79.2%). Two industries experienced a decrease in employment between 2006 and May 2012: "electricity, gas, water & waste services" (-45.7%); and "manufacturing" (-6.3%).

The *LQ* value provided in the final column of the Central Western Sydney Table provides a measure of the difference between Central Western Sydney and NSW in employment shares by industry. According to the *LQ* values, the three most important industries in Central Western Sydney, relative to NSW, were: "wholesale trade", "other services" and "information media and telecommunications". The least important industries were "mining" and "agriculture, forestry & fishing".

Table: Central Western Sydney: employment by industry (May 2012)[128]

Industry	Central Western Sydney				NSW	
	May 2012 (Persons)	Change since 2006 (Persons)	Change since 2006 (%)	% of total	% of total	*LQ* value
Agriculture, forestry & fishing	603	343	131.9	0.37	2.31	0.16
Mining	211	93	79.2	0.13	1.27	0.10
Manufacturing	13,904	-937	-6.3	8.64	7.82	1.10
Electricity, gas, water & waste services	574	-483	-45.7	0.36	1.03	0.35
Construction	14,176	4,740	50.2	8.81	8.34	1.06
Wholesale trade	9,205	944	11.4	5.72	3.75	1.53
Retail trade	14,063	683	5.1	8.74	10.69	0.82
Accommodation & food services	11,827	3,725	46.0	7.35	7.10	1.03
Transport, postal & warehousing	10,661	3,603	51.0	6.62	5.23	1.27
Information media & telecommunications	5,232	2,113	67.7	3.25	2.45	1.33
Financial & insurance services	9,513	1,695	21.7	5.91	5.01	1.18
Rental, hiring & real estate services	1,877	10	0.5	1.17	1.74	0.67
Professional, scientific & technical services	12,575	4,040	47.3	7.81	8.80	0.89
Administrative & support services	7,486	3,034	68.1	4.65	3.66	1.27
Public administration & safety	8,061	1,269	18.7	5.01	6.01	0.83
Education & training	7,842	503	6.9	4.87	7.20	0.68
Health care & social assistance	21,979	9,256	72.7	13.66	11.84	1.15
Arts & recreation services	1,923	523	37.3	1.19	1.64	0.73
Other services	9,228	4,355	89.4	5.73	4.11	1.39
Total	160,940	39,509	32.5	100	100	-

Fairfield-Liverpool

In May 2012, 158,761 residents of the Fairfield-Liverpool labour force region were in employment, an increase of 30,909 since 2006. This is equivalent to an increase of 24.2% in the number of people employed in the Fairfield-Liverpool labour force region. The largest proportion of these people were employed in "manufacturing" (21,579 persons), while the smallest proportion were employed in "mining" (324 persons). Other significant employers included "retail trade"

[128] Sources: ABS, *2006 Census Community Profiles by Location*; ABS, *Labour Force, Australia, Detailed, Quarterly, May 2012*, Catalogue No. 6291.0.55.003, June 2012.

(19,854 persons), "health care & social assistance" (17,478 persons) and "construction" (14,691 persons).

Table: Fairfield-Liverpool: employment by industry (May 2012)[129]

Industry	Fairfield-Liverpool				NSW	
	May 2012 (Persons)	Change since 2006 (Persons)	Change since 2006 (%)	% of total	% of total	*LQ value*
Agriculture, forestry & fishing	1,780	918	106.5	1.12	2.31	0.49
Mining	445	324	267.5	0.28	1.27	0.22
Manufacturing	21,579	-2,372	-9.9	13.59	7.82	1.74
Electricity, gas, water & waste services	1,078	113	11.7	0.68	1.03	0.66
Construction	14,691	2,960	25.2	9.25	8.34	1.11
Wholesale trade	7,287	-548	-7.0	4.59	3.75	1.22
Retail trade	19,854	5,052	34.1	12.51	10.69	1.17
Accommodation & food services	12,882	5,859	83.4	8.11	7.10	1.14
Transport, postal & warehousing	14,055	4,577	48.3	8.85	5.23	1.69
Information media & telecommunications	1,432	-917	-39.0	0.90	2.45	0.37
Financial & insurance services	6,305	351	5.9	3.97	5.01	0.79
Rental, hiring & real estate services	1,879	113	6.4	1.18	1.74	0.68
Professional, scientific & technical services	7,786	1,867	31.5	4.90	8.80	0.56
Administrative & support services	4,924	363	8.0	3.10	3.66	0.85
Public administration & safety	9,783	2,725	38.6	6.16	6.01	1.02
Education & training	6,193	285	4.8	3.90	7.20	0.54
Health care & social assistance	17,478	6,698	62.1	11.01	11.84	0.93
Arts & recreation services	1,197	-101	-7.8	0.75	1.64	0.46
Other services	8,135	2,644	48.2	5.12	4.11	1.25
Total	158,761	30,909	24.2	100	100	-

In terms of absolute numbers, the biggest increases in employment between 2006 and May 2012 took place in "health care & social assistance" (6,698 persons), "accommodation & food services" (5,859 persons) and "retail trade" (5,052 persons). Four industries experienced decreases in employment, losing the following number of jobs: "manufacturing" (2,372 jobs); "information media &

129 Sources: ABS, *2006 Census Community Profiles by Location*; ABS, *Labour Force, Australia, Detailed, Quarterly, May 2012*, Catalogue No. 6291.0.55.003, June 2012.

telecommunications" (917 jobs); "wholesale trade" (548 jobs); and "arts & recreation services" (101 jobs).

The fastest areas of growth in employment between 2006 and May 2012 took place in the following industries: mining (267.5%), "agriculture, forestry & fishing" (106.5%); and "accommodation & food services" (83.4%). Four industries experienced decreases in employment between 2006 and May 2012: "information media & telecommunications" (-39%); manufacturing (-9.9%); "arts & recreation services" (-7.8%); and "wholesale trade" (-7%).

The *LQ* value provided in the final column of the Fairfield-Liverpool Table provides a measure of the difference between Fairfield-Liverpool and NSW in employment shares by industry. According to the *LQ* values, the three most important industries in the Fairfield-Liverpool labour force region, relative to NSW, were: "manufacturing"; "transport, postal & warehousing"; and "other services". The least important industries were "mining" and "information media & telecommunications".

North Western Sydney

In May 2012, 314,358 residents of North Western Sydney were in employment, an increase of 55,502 since 2006. This is equivalent to an increase of 21.4% in the number of people employed in North Western Sydney. The largest proportion of these people were employed in "health care & social assistance" (37,202 persons), while the smallest proportion were employed in "mining" (766 persons). Other significant employers included "manufacturing" (36,911 persons), "retail trade" (34,525 persons) and "construction" (25,962 persons).

In terms of absolute numbers, the biggest increases in employment between 2006 and May 2012 took place in "health care & social assistance" (10,788 persons), "education & training" (6,337 persons) and "transport, postal & warehousing" (6,256 persons). Three industries experienced decreases in employment, losing the following number of jobs: "wholesale trade" (1,224 jobs); "electricity, gas, water & waste services" (79 jobs); and "agriculture, forestry & fishing" (6 jobs).

The fastest areas of growth in employment between 2006 and May 2012 took place in the following industries: "mining" (54.5%); "professional, scientific & technical services" (46.1%); and "administrative & support services" (45%). Three industries experienced decreases in employment between 2006 and May 2012: "wholesale trade" (-8%); "electricity, gas, water & waste services" (-2.5%); and "agriculture, forestry & fishing" (-0.3%).

The *LQ* value provided in the final column of the North Western Sydney Table provides a measure of the difference between North Western Sydney and NSW in employment shares by industry. According to the *LQ* values, the three most important industries in North Western Sydney, relative to NSW, were: "manufacturing"; "transport, postal & warehousing"; and "wholesale trade". The least important industries were "mining" and "agriculture, forestry & fishing".

Table: North Western Sydney: employment by industry (May 2012)[130]

Industry	North Western Sydney				NSW	
	May 2012 (Persons)	Change since 2006 (Persons)	Change since 2006 (%)	% of total	% of total	*LQ* value
Agriculture, forestry & fishing	2,394	-6	-0.3	0.76	2.31	0.33
Mining	766	270	54.5	0.24	1.27	0.19
Manufacturing	36,911	2,675	7.8	11.74	7.82	1.50
Electricity, gas, water & waste services	3,075	-79	-2.5	0.98	1.03	0.95
Construction	25,962	3,671	16.5	8.26	8.34	0.99
Wholesale trade	14,000	-1,224	-8.0	4.45	3.75	1.19
Retail trade	34,525	4,843	16.3	10.98	10.69	1.03
Accommodation & food services	15,613	1,058	7.3	4.97	7.10	0.70
Transport, postal & warehousing	23,892	6,256	35.5	7.60	5.23	1.45
Information media & telecommunications	5,373	458	9.3	1.71	2.45	0.70
Financial & insurance services	15,945	3,932	32.7	5.07	5.01	1.01
Rental, hiring & real estate services	4,282	428	11.1	1.36	1.74	0.78
Professional, scientific & technical services	18,738	5,910	46.1	5.96	8.80	0.68
Administrative & support services	11,668	3,623	45.0	3.71	3.66	1.01
Public administration & safety	19,595	1,000	5.4	6.23	6.01	1.04
Education & training	25,041	6,337	33.9	7.97	7.20	1.11
Health care & social assistance	37,202	10,788	40.8	11.83	11.84	1.00
Arts & recreation services	4,212	1,137	37.0	1.34	1.64	0.82
Other services	15,163	4,424	41.2	4.82	4.11	1.17
Total	314,358	55,502	21.4	100	100	-

Outer South Western Sydney

In May 2012, 128,312 residents of Outer South Western Sydney were in employment, an increase of 23,700 since 2006. This is equivalent to an increase of 22.7% in the number of people employed in Outer South Western Sydney. The largest proportion of these people were employed in "manufacturing" (14,906 persons), while the smallest proportion were employed in "mining" (587 persons). Other significant employers included "health care &

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130 Sources: ABS, *2006 Census Community Profiles by Location*; ABS, *Labour Force, Australia, Detailed, Quarterly, May 2012*, Catalogue No. 6291.0.55.003, June 2012.

social assistance" (14,093), "retail trade" (11,913 persons) and "construction" (11,850 persons).

Table: Outer South Western Sydney: employment by industry (May 2012)[131]

Industry	Outer South Western Sydney				NSW	
	May 2012 (Persons)	Change since 2006 (Persons)	Change since 2006 (%)	% of total	% of total	*LQ* value
Agriculture, forestry & fishing	706	-324	-31.4	0.55	2.31	0.24
Mining	587	-27	-4.4	0.46	1.27	0.36
Manufacturing	14,906	-498	-3.2	11.62	7.82	1.49
Electricity, gas, water & waste services	1,891	701	58.9	1.47	1.03	1.43
Construction	11,850	2,830	31.4	9.24	8.34	1.11
Wholesale trade	8,564	3,087	56.4	6.67	3.75	1.78
Retail trade	11,913	-483	-3.9	9.28	10.69	0.87
Accommodation & food services	5,861	266	4.8	4.57	7.10	0.64
Transport, postal & warehousing	9,050	622	7.4	7.05	5.23	1.35
Information media & telecommunications	2,206	573	35.1	1.72	2.45	0.70
Financial & insurance services	6,316	2,004	46.5	4.92	5.01	0.98
Rental, hiring & real estate services	1,329	-488	-26.8	1.04	1.74	0.59
Professional, scientific & technical services	8,000	3,017	60.6	6.24	8.80	0.71
Administrative & support services	3,674	535	17.0	2.86	3.66	0.78
Public administration & safety	8,534	1,995	30.5	6.65	6.01	1.11
Education & training	10,163	2,323	29.6	7.92	7.20	1.10
Health care & social assistance	14,093	4,426	45.8	10.98	11.84	0.93
Arts & recreation services	2,883	1,648	133.5	2.25	1.64	1.37
Other services	5,785	1,492	34.7	4.51	4.11	1.10
Total	128,312	23,700	22.7	100	100	-

In terms of absolute numbers, the biggest increases in employment between 2006 and May 2012 took place in "health care & social assistance" (4,426 persons), "wholesale trade" (3,087 persons) and "professional, scientific & technical services" (3,017 persons). Five industries experienced decreases in

[131] Sources: ABS, *2006 Census Community Profiles by Location*; ABS, *Labour Force, Australia, Detailed, Quarterly, May 2012*, Catalogue No. 6291.0.55.003, June 2012.

employment, losing the following number of jobs: "manufacturing" (498 jobs); "rental, hiring and real estate services" (488 jobs); "retail trade" (483 jobs); "agriculture, forestry & fishing" (324 jobs); and "mining" (27 jobs).

The fastest areas of growth in employment between 2006 and May 2012 took place in the following industries: "arts & recreation services" (133.5%); "professional, scientific & technical services" (60.6%); and "electricity, gas, water & waste services" (58.9%). Five industries experienced decreases in employment between 2006 and February 2012: "agriculture, forestry & fishing" (-31.4%); "rental, hiring & real estate services" (-26.8%); "mining" (-4.4%); "retail trade" (-3.9%); and "manufacturing" (-3.2%).

The *LQ* value provided in the final column of the Outer South Western Sydney Table provides a measure of the difference between Outer South Western Sydney and NSW in employment shares by industry. According to the *LQ* values, the three most important industries in Outer South Western Sydney, relative to NSW, were: "wholesale trade"; "manufacturing"; and "electricity, gas, water & waste services". The least important industries were "agriculture, forestry & fishing" and "mining".

APPENDIX 6: DISTRIBUTION OF EMPLOYMENT BY INDUSTRY ACROSS THE WESTERN SYDNEY LABOUR FORCE REGIONS

This table sets out the distribution of employment by industry for Western Sydney across the four labour force regions i.e. each row adds up to 100%. This table enables quick identification of significant concentrations or absences of employment by industry in a labour force region by comparison of each figure with the 'total' figure for each region. For example, 29.22% of all mining jobs in Western Sydney were held by people who live in Outer South Western Sydney. Were employment by industry equally distributed across each labour force region according to each region's population, each value in the "Outer South Western Sydney" column would be equivalent to the total for the column i.e. 16.83%. Therefore, in May 2012 there was a significant concentration of mining jobs in the Outer South Western Sydney region.

Table: Distribution of employment by industry for Western Sydney across the four labour force regions (May 2012)

Industry	Central Western Sydney	Fairfield-Liverpool	North Western Sydney	Outer South Western Sydney
Agriculture, forestry & fishing	11.00	32.47	43.66	12.88
Mining	10.52	22.13	38.13	29.22
Manufacturing	15.93	24.72	42.28	17.07
Electricity, gas, water & waste services	8.68	16.29	46.46	28.57
Construction	21.26	22.03	38.94	17.77
Wholesale trade	23.57	18.66	35.85	21.93
Retail trade	17.50	24.71	42.97	14.83
Accommodation & food services	25.61	27.89	33.81	12.69
Transport, postal & warehousing	18.49	24.38	41.44	15.70
Information media & telecommunications	36.73	10.05	37.72	15.49
Financial & insurance services	24.98	16.56	41.87	16.59
Rental, hiring & real estate services	20.04	20.06	45.71	14.19
Professional, scientific & technical services	26.70	16.53	39.78	16.99
Administrative & support services	26.97	17.74	42.05	13.24
Public administration & safety	17.53	21.28	42.62	18.56
Education & training	15.93	12.58	50.86	20.64
Health care & social assistance	24.22	19.26	40.99	15.53
Arts & recreation services	18.82	11.72	41.23	28.23
Other services	24.09	21.23	39.58	15.10
Total	21.11	20.82	41.23	16.83

Another way of comparing the distribution of employment in Western Sydney across the four labour force regions of Western Sydney is by calculating the coefficient of variation (see Table below). This is a measure of the variable distribution of employment by industry across Western Sydney; the higher the coefficient of variation value, the more variation in the distribution of employment within an industry across Western Sydney. The most variably distributed jobs in Western Sydney are in the following industries: "electricity, gas, water & waste services"; "information media & telecommunications"; and mining. The least variability was found for the following three industries: construction; "other services"; and "health care & social assistance".

Table: Comparing employment by industry between areas (May 2012)

Industry	% of total jobs				Coefficient of variation (%)
	Central Western Sydney	Fairfield-Liverpool	North Western Sydney	Outer South Western Sydney	
Agriculture, forestry & fishing	0.37	1.12	0.76	0.55	45.8
Mining	0.13	0.28	0.24	0.46	48.6
Manufacturing	8.64	13.59	11.74	11.62	18.0
Electricity, gas, water & waste services	0.36	0.68	0.98	1.47	54.4
Construction	8.81	9.25	8.26	9.24	5.3
Wholesale trade	5.72	4.59	4.45	6.67	19.5
Retail trade	8.74	12.51	10.98	9.28	16.5
Accommodation & food services	7.35	8.11	4.97	4.57	28.0
Transport, postal & warehousing	6.62	8.85	7.60	7.05	12.8
Information media & telecommunications	3.25	0.90	1.71	1.72	51.8
Financial & insurance services	5.91	3.97	5.07	4.92	16.0
Rental, hiring & real estate services	1.17	1.18	1.36	1.04	11.3
Professional, scientific & technical services	7.81	4.90	5.96	6.24	19.3
Administrative & support services	4.65	3.10	3.71	2.86	22.3
Public administration & safety	5.01	6.16	6.23	6.65	11.7
Education & training	4.87	3.90	7.97	7.92	33.9
Health care & social assistance	13.66	11.01	11.83	10.98	10.6
Arts & recreation services	1.19	0.75	1.34	2.25	45.3
Other services	5.73	5.12	4.82	4.51	10.3
Total	100	100	100	100	-

APPENDIX 7: WHERE WESTERN SYDNEY RESIDENTS WORKED IN 2006

The data presented in this section of the paper qualifies the employment by industry data presented in section 4.3 of the paper. This data, sourced from the 2006 Census, reveals where the residents of each area in Western Sydney work. Overall, 60% of Western Sydney residents work in Western Sydney (see Table below). Of the labour force regions of Western Sydney, Central Western Sydney had the lowest proportion of residents who worked in Western Sydney (45.8%) while North Western Sydney had the highest proportion (66.7%). At the LGA level, the Blue Mountains LGA had the highest percentage of residents who worked in Western Sydney (77.0%) and the Auburn LGA had the lowest (37.0%).

Table: Where Western Sydney's residents work (2006)[132]

Area	Where Western Sydney's residents work		
	LGA (%)	Subregion (%)	Western Sydney (%)
Central Western Sydney			
Auburn	20.1	29.4	37.0
Holroyd	17.1	39.5	54.9
Parramatta	25.0	33.9	43.7
Central Western Sydney (total)	n/a	34.8	45.8
Fairfield-Liverpool			
Fairfield	27.4	35.4	57.3
Liverpool	28.3	36.9	55.4
Fairfield-Liverpool (total)	n/a	36.1	56.4
North Western Sydney			
Blacktown	29.8	35.5	57.8
Blue Mountains	40.7	67.3	77.0
Hawkesbury	46.6	65.3	73.8
Penrith	37.0	54.0	72.4
North Western Sydney (total)	n/a	48.7	66.7
Outer South Western Sydney			
Camden	28.3	47.6	69.6
Campbelltown	33.5	38.5	60.6
Wollondilly	29.7	53.5	72.7
Outer South Western Sydney (total)	n/a	43.3	64.9
Western Sydney	n/a	n/a	60.0

[132] Source: B Beard, *Who works where and how do they get there? GWS Journey to Work 2006*, WESTIR Ltd, Occasional Paper No. 6 - March 2011, 2011

APPENDIX 8: EMPLOYMENT BY INDUSTRY BY LABOUR FORCE REGION (MAY 2011 TO MAY 2012)

Table: Central Western Sydney: employment by industry (May 2011 to May 2012)[133]

Industry	May 2012 (Persons)	Change since 2006 (Persons)	Change since May 2011 (Persons)	Change since May 2011 (%)
Agriculture, forestry & fishing	603	343	125	26.2
Mining	211	93	211	n/a[(1)]
Manufacturing	13,904	-937	-386	-2.7
Electricity, gas, water & waste services	574	-483	-2,049	-78.1
Construction	14,176	4,740	796	5.9
Wholesale trade	9,205	944	660	7.7
Retail trade	14,063	683	-7,930	-36.1
Accommodation & food services	11,827	3,725	1,136	10.6
Transport, postal & warehousing	10,661	3,603	1,194	12.6
Information media & telecommunications	5,232	2,113	1,313	33.5
Financial & insurance services	9,513	1,695	1,040	12.3
Rental, hiring & real estate services	1,877	10	483	34.7
Professional, scientific & technical services	12,575	4,040	306	2.5
Administrative & support services	7,486	3,034	1,222	19.5
Public administration & safety	8,061	1,269	-1,274	-13.6
Education & training	7,842	503	154	2.0
Health care & social assistance	21,979	9,256	4,507	25.8
Arts & recreation services	1,923	523	-7	-0.4
Other services	9,228	4,355	2,406	35.3
Total	160,940	39,509	3,907	2.5

Note: (1) The May 2011 and May 2012 figures are calculated as four-quarter averages. In this case, the Labour Force Survey reported zero employment in mining in Central Western Sydney in the four quarters August 2010, November 2010, February 2011 and May 2011. It is worth noting at this point that the Labour Force Survey is based on a sample of private dwellings (approximately 29,000 houses, flats etc) and non-private dwellings, such as hotels and motels. The sample covers about 0.33% of the Australian civilian population aged 15 years or over. The primary purpose of the survey is to provide labour force estimates for the nation and, secondarily, for each State and Territory. Consequently, regional-level data may be more likely to be subject to errors.

[133] Sources: ABS, *2006 Census Community Profiles by Location*; ABS, *Labour Force, Australia, Detailed, Quarterly, May 2012*, Catalogue No. 6291.0.55.003, June 2012.

Table: Fairfield-Liverpool: employment by industry (May 2011 to May 2012)[134]

Industry	May 2012 (Persons)	Change since 2006 (Persons)	Change since May 2011 (Persons)	Change since May 2011 (%)
Agriculture, forestry & fishing	1,780	918	260	17.1
Mining	445	324	150	50.8
Manufacturing	21,579	-2,372	-4,149	-16.1
Electricity, gas, water & waste services	1,078	113	-822	-43.3
Construction	14,691	2,960	-800	-5.2
Wholesale trade	7,287	-548	1,028	16.4
Retail trade	19,854	5,052	3,677	22.7
Accommodation & food services	12,882	5,859	2,828	28.1
Transport, postal & warehousing	14,055	4,577	680	5.1
Information media & telecommunications	1,432	-917	-1,295	-47.5
Financial & insurance services	6,305	351	-612	-8.8
Rental, hiring & real estate services	1,879	113	-1,405	-42.8
Professional, scientific & technical services	7,786	1,867	-409	-5.0
Administrative & support services	4,924	363	-479	-8.9
Public administration & safety	9,783	2,725	2,191	28.9
Education & training	6,193	285	2	0.0
Health care & social assistance	17,478	6,698	637	3.8
Arts & recreation services	1,197	-101	-1,369	-53.4
Other services	8,135	2,644	1,212	17.5
Total	158,761	30,909	1,324	0.8

[134] Sources: ABS, *2006 Census Community Profiles by Location*; ABS, *Labour Force, Australia, Detailed, Quarterly, May 2012*, Catalogue No. 6291.0.55.003, June 2012.

Table: North Western Sydney: employment by industry (May 2011 to May 2012)[135]

Industry	May 2012 (Persons)	Change since 2006 (Persons)	Change since May 2011 (Persons)	Change since May 2011 (%)
Agriculture, forestry & fishing	2,394	-6	-587	-19.7
Mining	766	270	191	33.1
Manufacturing	36,911	2,675	1,886	5.4
Electricity, gas, water & waste services	3,075	-79	-2,876	-48.3
Construction	25,962	3,671	1,166	4.7
Wholesale trade	14,000	-1,224	-2,356	-14.4
Retail trade	34,525	4,843	-2,516	-6.8
Accommodation & food services	15,613	1,058	-5,268	-25.2
Transport, postal & warehousing	23,892	6,256	-793	-3.2
Information media & telecommunications	5,373	458	-844	-13.6
Financial & insurance services	15,945	3,932	3,056	23.7
Rental, hiring & real estate services	4,282	428	-1,743	-28.9
Professional, scientific & technical services	18,738	5,910	415	2.3
Administrative & support services	11,668	3,623	1,146	10.9
Public administration & safety	19,595	1,000	-2,566	-11.6
Education & training	25,041	6,337	1,034	4.3
Health care & social assistance	37,202	10,788	4,095	12.4
Arts & recreation services	4,212	1,137	-1,394	-24.9
Other services	15,163	4,424	2,483	19.6
Total	314,358	55,502	-5,471	-1.7

[135] Sources: ABS, *2006 Census Community Profiles by Location*; ABS, *Labour Force, Australia, Detailed, Quarterly, May 2012*, Catalogue No. 6291.0.55.003, June 2012.

Table: Outer South Western Sydney: employment by industry (May 2011 to May 2012)[136]

Industry	May 2012 (Persons)	Change since 2006 (Persons)	Change since May 2011 (Persons)	Change since May 2011 (%)
Agriculture, forestry & fishing	706	-324	706	n/a[(1)]
Mining	587	-27	-1,307	-69.0
Manufacturing	14,906	-498	-295	-1.9
Electricity, gas, water & waste services	1,891	701	467	32.8
Construction	11,850	2,830	-4,836	-29.0
Wholesale trade	8,564	3,087	2,992	53.7
Retail trade	11,913	-483	65	0.6
Accommodation & food services	5,861	266	-1,048	-15.2
Transport, postal & warehousing	9,050	622	-1,819	-16.7
Information media & telecommunications	2,206	573	740	50.4
Financial & insurance services	6,316	2,004	2,873	83.4
Rental, hiring & real estate services	1,329	-488	-1,091	-45.1
Professional, scientific & technical services	8,000	3,017	1,123	16.3
Administrative & support services	3,674	535	-1,046	-22.2
Public administration & safety	8,534	1,995	847	11.0
Education & training	10,163	2,323	-834	-7.6
Health care & social assistance	14,093	4,426	914	6.9
Arts & recreation services	2,883	1,648	1,173	68.6
Other services	5,785	1,492	-774	-11.8
Total	128,312	23,700	-1,151	-0.9

Note: (1) The May 2011 and May 2012 figures are calculated as four-quarter averages. In this case, the Labour Force Survey reported zero employment in "agriculture, forestry & fishing" in Central Western Sydney in the four quarters August 2010, November 2010, February 2011 and May 2011. It is worth noting at this point that the Labour Force Survey is based on a sample of private dwellings (approximately 29,000 houses, flats etc) and non-private dwellings, such as hotels and motels. The sample covers about 0.33% of the Australian civilian population aged 15 years or over. The primary purpose of the survey is to provide labour force estimates for the nation and, secondarily, for each State and Territory. Consequently, regional-level data may be more likely to be subject to errors.

[136] Sources: ABS, *2006 Census Community Profiles by Location*; ABS, *Labour Force, Australia, Detailed, Quarterly, May 2012*, Catalogue No. 6291.0.55.003, June 2012.

APPENDIX 9: LOCATION QUOTIENTS AND ECONOMIC DIVERSITY INDICES FOR WESTERN SYDNEY AND ITS LABOUR FORCE REGIONS

The diversity of a region's economy can be calculated using either GRP or employment data, depending on the method chosen. Both of the methods used in this paper - the location quotient and the Hachman Index - could use either GRP or employment data. GRP figures would have been preferable as they are a measure of the region's economy whereas the employment figures available are a measure of the employment of the region's residential population. However, employment data was used for two reasons: adequate GRP data for the calculation of the Hachman Index value was unavailable; and employment data was more recent (May 2012 compared with 2010-11 figures).

The location quotient (*LQ*) is a measure of the relative significance of an industry sector for a region in comparison to a larger economy of which it is a part, generally the national economy. The *LQ* is calculated using the following formula:

$$LQ = \frac{Industry\ employment\ share\ (Region)}{Industry\ employment\ share\ (National)}$$

An *LQ* of one indicates that the share of an industry in the regional economy and the national economy are the same; a value of the *LQ* greater (or smaller) than one means that the regional economy has a greater (or smaller) share of that industry in its economy than the national economy does.

There are limitations involved in calculating location quotients. As argued by Wagner (2000):

> An assumption of using location quotients is that local and national demand and supply functions are identical. However, if there are differences between local and national demand, then the excess employment might be used to satisfy local needs and not for export. In addition, if production technology is different between the local and national level, then this would account for the excess employment. Furthermore, LQ are sensitive to the level of aggregation used. An industry defined using a 2-digit Standard Industrial Classification (SIC) Code may have a LQ less than one; however, using a 4-digit SIC code, the LQ is greater than one. Finally, the level of cross-hauling can impact the LQ. Cross-hauling occurs when a community produces a good for export at the same time as it imports the same good for local consumption.[137]

A further difficulty with using location quotients is the calculation of the statistical significance of the *LQ* values. While calculable, the statistical significance of the *LQ* values derived in this paper was not calculated due to time and complexity constraints.[138]

[137] Wagner, 2000. Regional Economic Diversity: Action, Concept, or State of Confusion, *The Journal of Regional Analysis & Policy*, 30(2): 1-22.

[138] See for example: D O'Donoghue and B Gleave, 2004. A Note on Methods for Measuring Industrial Agglomeration, *Regional Studies*, 38(4): 419-427; P Guimarães, O Figueiredo and D Woodward, *Dartboard Tests for the Location Quotient*, FEP Working Papers, n. 273, May

The Hachman Index is one of many measures of the diversity of a region's economy. The Index measures the relative economic diversity of a region in comparison to a larger economy of which it is a part, generally the national economy. The Hachman Index value is calculated using the following formula:

$$\text{Hachman Index} = \frac{1}{\sum_{i=1}^{N}[LQ_i \text{ x } S_i]}$$

where i = 1, 2, …N sectors, LQ_i is the location quotient for each industry and S_i is the employment share for each industry in the region. This measure is bounded between 0 and 1, where 1 means the region has exactly the same industrial structure as the larger economy and 0 means that the region has a totally different industrial structure. A possible weakness of the Hachman Index is that it involves the assumption that the larger economy (i.e. the NSW economy or Australian economy in this case) is a diverse economy.

This Appendix contains the location quotient and Hachman Index values for each Western Sydney labour force region and for Western Sydney as a whole. Location quotients calculated in comparison to both the NSW economy and the Australian economy are presented.

2008.

Table: Location quotients and Hachman Index values for the Central Western Sydney and Fairfield-Liverpool regions

Industry	Central Western Sydney (Location quotient)		Fairfield-Liverpool (Location quotient)	
	NSW	Australia	NSW	Australia
Agriculture, forestry & fishing	0.16	0.13	0.49	0.38
Mining	0.10	0.06	0.22	0.13
Manufacturing	1.10	1.03	1.74	1.63
Electricity, gas, water & waste services	0.35	0.27	0.66	0.51
Construction	1.06	0.98	1.11	1.03
Wholesale trade	1.53	1.59	1.22	1.27
Retail trade	0.82	0.82	1.17	1.18
Accommodation & food services	1.03	1.10	1.14	1.21
Transport, postal & warehousing	1.27	1.34	1.69	1.79
Information media & telecommunications	1.33	1.71	0.37	0.48
Financial & insurance services	1.18	1.58	0.79	1.06
Rental, hiring & real estate services	0.67	0.64	0.68	0.65
Professional, scientific & technical services	0.89	1.00	0.56	0.63
Administrative & support services	1.27	1.33	0.85	0.88
Public administration & safety	0.83	0.78	1.02	0.97
Education & training	0.68	0.64	0.54	0.51
Health care & social assistance	1.15	1.16	0.93	0.94
Arts & recreation services	0.73	0.65	0.46	0.41
Other services	1.39	1.43	1.25	1.28
Index of economic diversity	0.927	0.893	0.873	0.869

Table: Location quotients and Hachman Index values for the North Western Sydney and Outer South Western Sydney regions

Industry	North Western Sydney (Location quotient)		Outer South Western Sydney (Location quotient)	
	NSW	Australia	NSW	Australia
Agriculture, forestry & fishing	0.33	0.26	0.24	0.19
Mining	0.19	0.11	0.36	0.21
Manufacturing	1.50	1.40	1.49	1.39
Electricity, gas, water & waste services	0.95	0.73	1.43	1.10
Construction	0.99	0.92	1.11	1.03
Wholesale trade	1.19	1.23	1.78	1.85
Retail trade	1.03	1.03	0.87	0.87
Accommodation & food services	0.70	0.74	0.64	0.68
Transport, postal & warehousing	1.45	1.54	1.35	1.42
Information media & telecommunications	0.70	0.90	0.70	0.91
Financial & insurance services	1.01	1.35	0.98	1.31
Rental, hiring & real estate services	0.78	0.75	0.59	0.57
Professional, scientific & technical services	0.68	0.77	0.71	0.80
Administrative & support services	1.01	1.06	0.78	0.82
Public administration & safety	1.04	0.98	1.11	1.04
Education & training	1.11	1.05	1.10	1.04
Health care & social assistance	1.00	1.01	0.93	0.93
Arts & recreation services	0.82	0.73	1.37	1.23
Other services	1.17	1.20	1.10	1.13
Index of economic diversity	0.933	0.924	0.910	0.907

Table: Location quotients and Hachman Index values for Western Sydney

Industry	Western Sydney (Location quotient)	
	NSW	AUS
Agriculture, forestry & fishing	0.31	0.25
Mining	0.21	0.12
Manufacturing	1.46	1.37
Electricity, gas, water & waste services	0.84	0.65
Construction	1.05	0.98
Wholesale trade	1.37	1.42
Retail trade	0.99	0.99
Accommodation & food services	0.85	0.90
Transport, postal & warehousing	1.45	1.53
Information media & telecommunications	0.76	0.98
Financial & insurance services	1.00	1.33
Rental, hiring & real estate services	0.71	0.68
Professional, scientific & technical services	0.70	0.79
Administrative & support services	0.99	1.04
Public administration & safety	1.00	0.94
Education & training	0.90	0.85
Health care & social assistance	1.01	1.01
Arts & recreation services	0.82	0.73
Other services	1.22	1.25
Index of economic diversity	0.937	0.924

APPENDIX 10: EMPLOYMENT FORECASTS BY INDUSTRY BY WESTERN SYDNEY LABOUR FORCE REGIONS (2006 TO 2036)

In 2009, the NSW Bureau of Transport Statistics (BTS) released employment forecasts for the Sydney Greater Metropolitan Area (see the Table below). These forecasts relate to the *working population* of Western Sydney and its subregions. The Table identifies the industries expected to experience the most and least amount of job growth between 2006 and 2036.

Table: Employment forecasts: most significant changes between 2006 and 2036 by region

Region	Rank according to number of jobs created/lost (% change)			
	1	2	18	19
Central Western Sydney	Health care & social assistance (11,422) (50.4%)	Retail trade (7,608) (43.5%)	Wholesale trade (-670) (-3.9%)	Manufacturing (-2,556) (-7.7%)
Fairfield-Liverpool	Retail trade (13.594) (103.5%)	Health care & social assistance (12,465) (98.2%)	Mining (69) (80.4%)	Information media & telecomm. (-293) (-30.5%)
North Western Sydney	Manufacturing (27,102) (95.8%)	Retail trade (17,040) (63.8%)	Mining (139) (28.4%)	Information media & telecomm. (-707) (-40.7%)
Outer South Western Sydney	Retail trade (13,452) (125.0%)	Health care & social assistance (8,667) (120.5%)	Electricity, gas, water & waste services (172) (30.3%)	Information media & telecomm. (-102) (-18.5%)
Western Sydney	Retail trade (51,694) (75.9%)	Health care & social assistance (49,197) (77.6%)	Mining (687) (27.9%)	Information media & telecomm. (-1,394) (-19.4%)
Sydney	Retail trade (128,567) (57.1%)	Health care & social assistance (117,453) (55.6%)	Electricity, gas, water & waste services (267) (1.5%)	Information media & telecomm. (-2,949) (-4.7%)

According to the BTS report, the two industries expected to create the most jobs between 2006 and 2036 in Western Sydney are "retail trade" (51,694 jobs) and "health care & social assistance" (49,197 jobs). These two industries are also expected to create the most jobs for each of the labour force regions in Western Sydney except for North Western Sydney. In this case, "manufacturing" is expected to create the most jobs (27,102). In contrast, there is expected to be a loss of "manufacturing jobs" in Central Western Sydney (-2,556 jobs). At the Western Sydney level, only the "information media & telecommunications" industry is expected to lose jobs by 2036 (-1,394 jobs). This expected trend is also true for the whole of Sydney.

Ranking industries by job growth as a percentage provides a substantially different picture of job growth in Western Sydney. In this case, the top two growth industries in Western Sydney are expected to be "rental, hiring & real estate services" (108.2%) and "accommodation & food services" (89.5%). The industries expected to grow the least are "wholesale trade" (0.9%) and "information media & telecommunications" (-4.7%).

Table: Employment forecasts: 2006 to 2036 by region (number) (part one)

Industry	2006 to 2036 (number)			
	Central Western Sydney	Fairfield-Liverpool	Western Sydney	Sydney
Agriculture, forestry & fishing	144	360	1,554	2,897
Mining	16	69	687	955
Manufacturing	-2,556	7,950	35,320	29,986
Electricity, gas, water & waste services	-278	513	2,935	267
Construction	-173	4,829	15,479	20,287
Wholesale trade	-670	2,245	5,546	1,081
Retail trade	7,608	13,594	51,694	128,567
Accommodation & food services	4,432	6,365	28,949	85,442
Transport, postal & warehousing	4,833	3,773	20,921	40,612
Information media & telecommunications	-293	-293	-1,394	-2,949
Financial & insurance services	6,194	415	8,566	30,734
Rental, hiring & real estate services	1,675	2,064	9,954	23,982
Professional, scientific & technical services	3,437	1,415	9,121	75,997
Administrative & support services	514	338	2,594	1,923
Public administration & safety	5,149	3,221	15,667	48,533
Education & training	3,021	8,048	31,275	77,955
Health care & social assistance	11,422	12,465	49,197	117,453
Arts & recreation services	831	338	2,738	8,598
Other services	3,329	4,876	15,112	37,420
Unclassified	3,423	2,619	11,273	31,630
Total	52,059	75,204	317,190	761,369

Table: Employment forecasts: 2006 to 2036 by region (number) (part two)

Industry	2006 to 2036 (number)			
	North Western Sydney	Outer South Western Sydney	Western Sydney	Sydney
Agriculture, forestry & fishing	659	391	1,554	2,897
Mining	139	463	687	955
Manufacturing	27,102	2,824	35,320	29,986
Electricity, gas, water & waste services	2,529	172	2,935	267
Construction	6,822	4,002	15,479	20,287
Wholesale trade	3,276	695	5,546	1,081
Retail trade	17,040	13,452	51,694	128,567
Accommodation & food services	11,320	6,832	28,949	85,442
Transport, postal & warehousing	9,005	3,309	20,921	40,612
Information media & telecommunications	-707	-102	-1,394	-2,949
Financial & insurance services	1,129	829	8,566	30,734
Rental, hiring & real estate services	3,401	2,814	9,954	23,982
Professional, scientific & technical services	2,735	1,534	9,121	75,997
Administrative & support services	911	831	2,594	1,923
Public administration & safety	5,820	1,476	15,667	48,533
Education & training	12,323	7,884	31,275	77,955
Health care & social assistance	16,644	8,667	49,197	117,453
Arts & recreation services	913	656	2,738	8,598
Other services	4,498	2,409	15,112	37,420
Unclassified	3,591	1,640	11,273	31,630
Total	129,149	60,778	317,190	761,369

Table: Employment forecasts: 2006 to 2036 by region (%) (part one)

Industry	2006 to 2036 (% change)			
	Central Western Sydney	Fairfield-Liverpool	Western Sydney	Sydney
Agriculture, forestry & fishing	72.2	38.3	32.5	33.3
Mining	10.5	80.4	27.9	21.2
Manufacturing	-7.7	35.0	37.1	14.4
Electricity, gas, water & waste services	-28.3	46.6	47.7	1.5
Construction	-1.6	63.8	40.4	17.4
Wholesale trade	-3.9	28.2	14.1	0.9
Retail trade	43.5	103.5	75.9	57.1
Accommodation & food services	55.9	108.7	89.5	66.4
Transport, postal & warehousing	38.8	53.6	58.4	36.3
Information media & telecommunications	-7.4	-30.5	-19.4	-4.7
Financial & insurance services	55.1	21.8	48.4	22.1
Rental, hiring & real estate services	58.0	119.0	108.2	60.4
Professional, scientific & technical services	38.3	40.2	41.2	40.1
Administrative & support services	10.3	10.0	17.2	2.9
Public administration & safety	32.5	47.8	39.2	40.2
Education & training	31.7	87.5	67.9	50.6
Health care & social assistance	50.4	98.2	77.6	55.6
Arts & recreation services	36.5	37.0	43.8	28.5
Other services	46.8	104.0	65.4	48.1
Unclassified	65.4	81.2	74.3	53.6
Total	26.7	65.2	54.0	36.4

Table: Employment forecasts: 2006 to 2036 by region (%) (part two)

Industry	2006 to 2036 (% change)			
	North Western Sydney	Outer South Western Sydney	Western Sydney	Sydney
Agriculture, forestry & fishing	25.7	36.0	32.5	33.3
Mining	28.4	26.7	27.9	21.2
Manufacturing	95.8	25.4	37.1	14.4
Electricity, gas, water & waste services	72.1	30.3	47.7	1.5
Construction	46.7	78.3	40.4	17.4
Wholesale trade	29.6	22.5	14.1	0.9
Retail trade	63.8	125.0	75.9	57.1
Accommodation & food services	82.9	139.1	89.5	66.4
Transport, postal & warehousing	73.7	80.4	58.4	36.3
Information media & telecommunications	-40.7	-18.5	-19.4	-4.7
Financial & insurance services	33.8	68.0	48.4	22.1
Rental, hiring & real estate services	104.9	210.9	108.2	60.4
Professional, scientific & technical services	38.9	58.3	41.2	40.1
Administrative & support services	18.1	49.5	17.2	2.9
Public administration & safety	42.2	41.3	39.2	40.2
Education & training	63.8	98.7	67.9	50.6
Health care & social assistance	79.9	120.5	77.6	55.6
Arts & recreation services	40.3	82.5	43.8	28.5
Other services	54.5	79.3	65.4	48.1
Unclassified	71.3	97.4	74.3	53.6
Total	63.6	82.0	54.0	36.4

APPENDIX 11: PROPORTION OF JOBS IN SYDNEY EMPLOYMENT LAND BY INDUSTRY

Table: Proportion of jobs in Sydney employment land by industry (2010)[139]

Industry	Existing
Agriculture, forestry & fishing	0.0%
Mining	0.0%
Manufacturing	100.0%
Electricity, gas, water & waste services	60.5%
Construction	32.7%
Wholesale trade	100.0%
Retail trade	22.9%
Accommodation & food services	11.8%
Transport, postal & warehousing	100.0%
Information media & telecommunications	37.7%
Financial & insurance services	33.6%
Rental, hiring & real estate services	42.2%
Professional, scientific & technical services	38.9%
Administrative & support services	48.2%
Public administration & safety	42.7%
Education & training	16.8%
Health care & social assistance	30.3%
Arts & recreation services	42.9%
Other services	34.4%
Total	43.7%

[139] Source: RDA Sydney, *Employment Lands Policy Position*, June 2012, p.23

APPENDIX 12: CONTRIBUTION OF EMPLOYMENT LAND TO GROSS REGIONAL PRODUCT IN WESTERN SYDNEY: 2035-36

Table: Impact on Western Sydney industries should job targets not be met by creating additional employment land (2035-36)[140]

Industry	GRP ($ million)			% loss	
	Low	Medium	High	Low scenario	Medium scenario
Agriculture, forestry & fishing	0	0	0	-	-
Mining	0	0	0	-	-
Manufacturing	31,670	33,510	41,890	24.4	20.0
Electricity, gas, water & waste services	1,970	2,010	2,290	14.0	12.2
Construction	3,990	4,070	4,630	13.8	12.1
Wholesale trade	17,020	18,000	22,020	22.7	18.3
Retail trade	2,690	2,740	2,990	10.0	8.4
Accommodation & food services	500	520	560	10.7	7.1
Transport, postal & warehousing	13,220	13,620	15,690	15.7	13.2
Information media & telecommunications	2,500	2,550	2,970	15.8	14.1
Financial & insurance services	8,160	8,320	10,050	18.8	17.2
Rental, hiring & real estate services	1,380	1,420	1,690	18.3	16.0
Professional, scientific & technical services	3,370	3,440	4,110	18.0	16.3
Administrative & support services	1,940	1,990	2,320	16.4	14.2
Public administration & safety	3,690	3,740	3,970	7.1	5.8
Education & training	1,550	1,580	1,710	9.4	7.6
Health care & social assistance	3,410	3,450	3,590	5.0	3.9
Arts & recreation services	560	570	590	5.1	3.4
Other services	1,320	1,350	1,420	7.0	4.9
Total Industry Value Added	98,940	102,880	122,490	19.2	16.0
Ownership of dwellings	9,860	10,250	12,200	19.2	16.0
Gross Value Added	108,800	113,130	134,690	19.2	16.0
Taxes less subsidies	8,480	8,820	10,500	19.2	16.0
Gross Regional Product	117,280	121,950	145,190	19.2	16.0

140 RDA Sydney, *Employment Lands Policy Position*, June 2012, p.43