briefing paper

NSW Parliamentary Research Service

Western Sydney: an economic profile

Briefing Paper No 10/2015

by Daniel Montoya

RELATED PUBLICATIONS

- *NSW Economic Update Winter 2015*. Statistical Indicators 3/2015 by Andrew Haylen
- *Sydney Airport: performance and potential competition from a second airport*. Briefing Paper 2/2014 by Andrew Haylen
- *Labour force trends in Greater Sydney*. Statistical Indicators 5/2014 by Daniel Montoya
- *NSW regional labour force trends by labour force indicator*. Statistical Indicators 7/2014 by Daniel Montoya
- *Western Sydney: an economic profile*. Briefing Paper 6/2012 by Daniel Montoya

ISSN 1325-5142

ISBN 978-0-7313-1939-8

August 2015

Western Sydney: an economic profile

by

Daniel Montoya

NSW PARLIAMENTARY RESEARCH SERVICE

Gareth Griffith (BSc (Econ) (Hons), LLB (Hons), PhD),
Manager, Politics & Government/Law .... (02) 9230 2356

Daniel Montoya (BEnvSc (Hons), PhD),
Senior Research Officer, Environment/Planning .... (02) 9230 2003

Lenny Roth (BCom, LLB),
Senior Research Officer, Law.. (02) 9230 2768

Christopher Angus (BA(Media&Comm), LLM(Juris Doctor)),
Research Officer, Law .... (02) 9230 2906

Tom Gotsis (BA, LLB, Dip Ed, Grad Dip Soc Sci)
Research Officer, Law .... (02) 9230 3085

Andrew Haylen (BResEc (Hons)),
Research Officer, Public Policy/Statistical Indicators .... (02) 9230 2484

John Wilkinson (MA, PhD),
Research Officer, Economics .... (02) 9230 2006

Should Members or their staff require further information about this publication please contact the author.

Information about Research Publications can be found on the Internet at:

http://www.parliament.nsw.gov.au/prod/parlment/publications.nsf/V3LIstRPSubject

CONTENTS

Summary i

Glossary v

1. Introduction 1

2. Western Sydney: definitions and key features 2

2.1 Definitions 2

2.2 Key features 4

3. Demographic facts and figures 11

3.1 Population trends 11

3.2 Population projections 14

4. Gross Regional Product 17

4.1 Gross Regional Product 17

4.2 GRP contribution by employed person 21

5. Western Sydney employment opportunities 22

5.1 Employment capacity 22

5.2 Employment self-containment 23

5.3 Employment self-sufficiency 24

6. Resident labour force 25

6.1 Demographic profile 25

6.2 Labour force indicators 26

6.3 Youth labour force indicators 31

6.4 Employment by industry 35

6.5 Employment by occupation 36

6.6 Qualifications 37

6.7 Longitudinal labour force indicators 40

7. Western Sydney workforce 44
7.1 Demographic profile 44
7.2 Qualifications 45
7.3 Employment by occupation 47
7.4 Total, full and part-time employment 47
7.5 Employment by industry 48
8. Economic diversity 53
9. Employment projections 57
10. Business numbers 62
11. Employment lands 67
12. Building approvals and completions 71
12.1 Approvals 71
12.2 Completions 73
13. Housing market 74
14. Government policies 78
14.1 NSW Government 78
14.2 Commonwealth Government 87
14.3 Local Government 89
15. Conclusion 92
Appendix 1: NSW electorates in Western Sydney 93
Appendix 2: Key Western Sydney sources 94
Appendix 3: Defining Western Sydney geographically 96
Appendix 4: Rest of Sydney LGAs and SA4s 100
Appendix 5: National parks in Western Sydney 101

SUMMARY

This paper outlines key demographic and economic facts and figures for Western Sydney. Australia's third largest economy, Western Sydney is home to 47% of Sydney's total population (2.12 million) and produces 31% of Sydney's Gross Regional Product ($104 billion). 29 NSW electorates, almost a third of the State's total, lie at least partly within Western Sydney (Appendix 1).

Defining Western Sydney

The NSW Government defines Western Sydney as being made up of 14 Local Government Areas (LGAs): Auburn; Bankstown; Blacktown; Blue Mountains; Camden; Campbelltown; Fairfield; Hawkesbury; Holroyd; Liverpool; Parramatta; Penrith; The Hills; and Wollondilly. This paper uses this definition for all but one chapter – Chapter 6 is based on a definition that uses ABS regions (SA4s). 6 SA4s make up Western Sydney: Baulkham Hills & Hawkesbury; Blacktown; Outer South West; Outer West & Blue Mountains; Parramatta; and South West. With regards to the relationship between these two definitions of Western Sydney, 90.9% of Western Sydney (LGA) is made up of Western Sydney (SA4). The SA4-based definition has been adopted because the most recent available data for Western Sydney's *resident labour force* uses SA4 boundaries. **[2.1]**

Demographics

Between 2004 and 2014, the population of Western Sydney grew at an average annual rate of 1.62% to reach 2.12 million. Western Sydney has grown, and is expected to grow, faster than the Rest of Sydney. By 2031, the population of Western Sydney is expected to number 2.92 million. **[3.0]**

Population: current and projected

Area	Demographics		
	Population (2004)	Population (2014)	Av. annual growth rate
Western Sydney	1,805,213	2,120,088	1.62%
Rest of Sydney	2,079,473	2,389,491	1.40%
NSW	6,650,735	7,518,472	1.23%
	2011 population	2031 projected population	Av. annual growth rate
Western Sydney	2,003,200	2,919,550	1.90%
Rest of Sydney	2,283,100	2,942,300	1.28%
NSW	7,218,500	9,228,550	1.24%

Employment opportunities

A long-standing goal of NSW government policy has been the regionalisation of jobs across Sydney. Three indicators can be used to measure the extent to which a region maximises local employment opportunities: employment capacity; employment self-containment; and employment self-sufficiency.

Employment capacity is a means of examining whether or not Western Sydney could theoretically provide jobs for all of its residents should they choose to work in Western Sydney. In 1971, 67% of Western Sydney residents could have found employment in Western Sydney. This figure rose to 80% in 1991, fell to 70% in 2001 then rose to a high of 81% in 2011. **[5.1]**

Employment self-containment measures the proportion of employed residents who are employed within the region in which they live. 59% of employed residents worked in Western Sydney in 1981. This rose to 64.0% in 1991 and reached a high of 64.2% in 2001, falling thereafter to 63.7% in 2006 and 63.1% in 2011. **[5.2]**

Employment self-sufficiency measures the degree to which Western Sydney's residents meet the labour requirements of Western Sydney. In 2011, 82.9% of Western Sydney workers lived in Western Sydney. **[5.3]**

Economic diversity

According to an economic diversity index, in 2011 two industries were of particular significance to the Western Sydney economy, relative to the Australian economy: wholesale trade; and manufacturing. The Western Sydney economy as a whole is relatively diverse, compared to the Australian economy. It is also more diverse than the Rest of Sydney economy. **[8.0]**

NSW Government policies

A large number of NSW Government policies and programs are either directly or indirectly relevant to the Western Sydney economy, including a number of planning, transport and infrastructure policies. More specifically, between 2012 and 2014 the Government finalised seven industry action plans for the agriculture, creative industries, digital economy, international education and research, manufacturing, professional services, and visitor economy industries. In 2013, it released a *Broader Western Sydney Employment Area Draft Structure Plan*, which proposes expansion of the Western Sydney Employment Area. In 2014, the Government released its *NSW Economic Development Framework* which, via five key principles, is aimed at supporting industry growth in all the major sectors of the NSW economy. **[14.1]**

Commonwealth Government policies

Relevant Commonwealth Government policies and developments include Priority Employment Areas, the Western Sydney airport at Badgerys Creek and the Moorebank Intermodal Terminal. Regional Development Australia Sydney, a partnership between Commonwealth, State and Local Governments, has set out a vision for Sydney in its *Regional Plan for Sydney 2013 – 2016*. Priorities set out under four key themes include Western Sydney-specific objectives. **[14.2]**

Local Government policies

The 14 LGAs that make up Western Sydney each have policies aimed at strengthening their respective economy. Two regional local council organisations cover Western Sydney: the Western Sydney Regional

...

Organisation of Councils (WSROC) and the Macarthur Regional Organisation of Councils (MACROC). Since 2012, only WSROC has published a paper of relevance to the Western Sydney economy – *State Election Issues Brief March 2015*, in which it sets out Action plans for Western Sydney. **[14.3]**

Key facts and figures

Chapters 4 to 13 of this paper set out a range of economic indicators, including: Gross Regional Product, the labour force who are *residents* of Western Sydney, the labour force whose *place of work* is Western Sydney, employment projections by *place of work*, business numbers, employment lands, building approvals and completions, and the housing market. Comparisons are also made to the Rest of Sydney economy and, on occasion, the NSW economy. The Table below sets out the key economic indicators for Western Sydney in comparison to the Rest of Sydney.

Key facts and figures: Western Sydney and the Rest of Sydney

Indicator		
Gross Regional Product: total	2013-14 ($m)	Av. ann. growth (08-09 to 13-14)
Western Sydney	$104,037.3	1.8%
Rest of Sydney	$230,407.2	2.5%
Gross Regional Product: top industry	2013-14 ($m)	Av. ann. growth (08-09 to 13-14)
Western Sydney (manufacturing)	$12,736.5	-1.2%
Rest of Sydney (financial & insurance services)	$43.006.4	3.3%
Resident labour force: employment	May 2015	Av. ann. growth (2010 to 2015)
Western Sydney	939,000	1.55%
Rest of Sydney	1,373,000	1.74%
Resident labour force: unemployment rate	May 2015	5 year average
Western Sydney	6.0%	6.1%
Rest of Sydney	4.5%	4.3%
Resident labour force: participation rate	May 2015	5 year average
Western Sydney	63.9%	64.3%
Rest of Sydney	68.0%	67.6%
Resident labour force: youth employment	May 2015	Av. ann. growth (2010 to 2015)
Western Sydney	166,800	1.2%
Rest of Sydney	170,200	-0.7%
Resident labour force: youth unemployment rate	May 2015	5 year average
Western Sydney	11.1%	12.1%
Rest of Sydney	10.9%	10.3%
Resident labour force: youth participation rate	May 2015	5 year average
Western Sydney	62.6%	61.8%
Rest of Sydney	61.8%	62.6%
Western Sydney workforce: employment	2013-14	Av. ann. growth (08-09 to 13-14)
Western Sydney	685,974	0.8%
Rest of Sydney	1,276,735	1.5%
Western Sydney workforce: top industry	2013-14	Av. ann. growth (08-09 to 13-14)
Western Sydney (manufacturing)	95,464	-1.9%
Rest of Sydney (professional, scientific & technical services)	185,326	2.6%

Employment projections: total	2041	Av. ann. growth (2011 to 2041)
Western Sydney	1,336,243	1.81%
Rest of Sydney	1,934,779	1.14%
Employment projections: top industry	2041	Av. ann. growth (2011 to 2041)
Western Sydney (retail trade)	171,135	2.16%
Rest of Sydney (professional, scientific & technical services)	254,310	1.11%
Business numbers: total	2014	Growth (2012 to 2014)
Western Sydney	155,878	-2.2%
Rest of Sydney	293,639	-1.3%
Business numbers: top industry	2014	Growth (2012 to 2014)
Western Sydney (construction)	32,085	-2.2%
Rest of Sydney (professional, scientific & technical services)	53,887	-1.6%
Value of residential building approvals	2014-15 ($m)	Av. ann. growth (08-09 to 14-15)
Western Sydney	$6,005	22.4%
Rest of Sydney	$7,056	17.0%
Dwelling completions	2013-14	Av. ann. growth (08-09 to 13-14)
Western Sydney	10,967	12.5%
Rest of Sydney	11,783	11.1%
Median dwelling price growth	Dec 2014	Growth (2012 to 2014)
Western Sydney	$600,900	33.0%
Rest of Sydney	$990,200	34.3%
Median dwelling rent growth	Mar 2015	Growth (2013 to 2015)
Western Sydney	$435/week	8.0%
Rest of Sydney	$573/week	7.7%

GLOSSARY

Employed	All persons aged 15 years and over who, during the week of the Labour Force Survey: • worked for one hour or more for pay, profit, commission or payment in kind in a job or business, or on a farm; or • worked for one hour or more without pay in a family business or on a farm; or • were employees who had a job but were not at work; or • were employers or own account workers, who had a job, business or farm, but were not at work.
Employment by industry	Industry is categorised according to the Australian and New Zealand Standard Industrial Classification (ANZSIC 2006).
Employment by occupation	Occupations are categorised according to the Australian and New Zealand Standard Classification of Occupations (ANZSCO 2013).
Employment to population ratio	The number of employed persons expressed as a percentage of the civilian population in the same age group.
Gross Regional Product	The total market value of goods and services produced in a region within a given period after deducting the cost of goods and services used up in the process of production but before deducting allowances for the consumption of fixed capital.
Labour force	The total number of employed and unemployed persons.
Long-term unemployed	All persons unemployed for 52 weeks or over.
Long-term unemployment rate	The number of persons unemployed for 52 weeks or over expressed as a percentage of the labour force.
Not in labour force (NILF)	Persons not in the categories employed or unemployed.
Participation rate	The labour force expressed as a percentage of the civilian population in the same age group.
Part-time employed	Employed persons who usually worked fewer than 35 hours a week (in all jobs) and either did so during the Labour Force Survey week or were not at work during the reference week.

Ratio of youth-to-adult unemployment rates	This measures the difference between the youth unemployment rate and the adult unemployment rate, where youth are persons aged 15 to 24 and adults are persons aged 25 and over. It is calculated by dividing the youth unemployment rate by the adult unemployment rate.
Unemployed	Persons aged 15 years and over who were not employed during the week of the Labour Force Survey, and: • had actively looked for full time or part time work at any time in the four weeks up to the end of the reference week and were available for work in the reference week; or • were waiting to start a new job within four weeks from the end of the reference week and could have started in the reference week if the job had been available then.
Unemployment rate	The number of unemployed persons expressed as a percentage of the labour force.
Youth population	Persons aged 15 to 24.
Youth unemployment rate	The number of unemployed youth expressed as a percentage of the youth labour force.
Youth unemployment ratio	The number of unemployed youth expressed as a percentage of the youth population.

1. INTRODUCTION

Western Sydney is Australia's third largest economy. It covers 85% of Sydney, contains 47% of its population (2.12 million) and produces 31% of its Gross Regional Product ($104 billion). 29 NSW electorates, almost a third of the State's total, lie at least partly within Western Sydney (Appendix 1). In recognition of its size and significance, Premier Mike Baird is the current Minister for Western Sydney, as was his predecessor Barry O'Farrell. On 6 October 2015, the Premier will set out the NSW Government's plans for Western Sydney in a State of the Region address.

Since the Research Service published its 2012 paper, *Western Sydney: An economic profile*, a number of significant developments have occurred in Western Sydney. These include the completion of the South West Rail Link, commencement of the North West Rail Link, Westconnex and Northconnex, announcement of the Badgerys Creek airport and the Moorebank Intermodal Terminal, and continued investigation into a Western Sydney Light Rail Network centred on Parramatta. Governance of Western Sydney is also likely to change, with the possible amalgamation of councils and the proposed establishment of a Greater Sydney Commission.

This paper focuses primarily on Western Sydney as a whole, with brief mention of its constituent local government areas (LGAs) at certain points. Appendix 2 lists a range of relevant published material, most of which deals in detail with the economies of the fourteen Western Sydney LGAs.

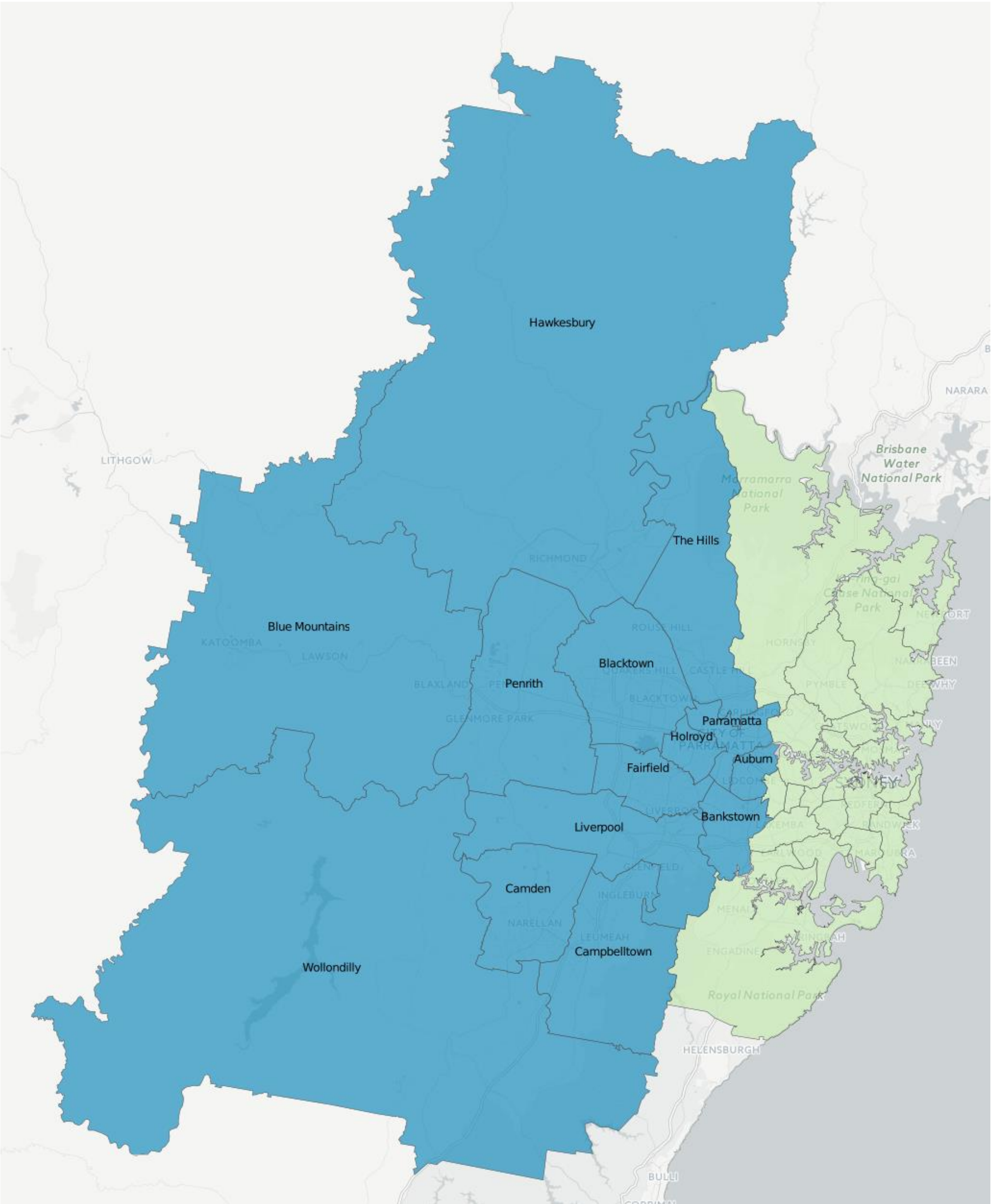
The first part of this paper defines Western Sydney and illustrates some of its main features using parts of the current metropolitan strategy, *A Plan for Growing Sydney*. This is followed by a summary of demographic facts and figures, including population trends and projections. The largest part of this paper deals with the economic characteristics of Western Sydney, including its Gross Regional Product, the labour force who are *residents* of Western Sydney, the labour force whose *place of work* is Western Sydney, employment projections, business numbers, employment lands, building approvals and completions, and the housing market. The paper ends with summaries of relevant government policies.

2. WESTERN SYDNEY: DEFINITIONS AND KEY FEATURES

2.1 Definitions

Western Sydney is defined by the NSW Government and Regional Development Australia Sydney (RDA Sydney) as consisting of 14 local government areas (LGAs) (Figure 1).

Figure 1: Western Sydney (LGA)



© OpenStreetMap contributors © CartoDB CartoDB attribution

14 LGAs make up Western Sydney under this definition: Auburn; Bankstown; Blacktown; Blue Mountains; Camden; Campbelltown; Fairfield; Hawkesbury; Holroyd; Liverpool; Parramatta; Penrith; The Hills; and Wollondilly.

The NSW Government definition differs from the way in which the Australian Bureau of Statistics (ABS) breaks Sydney into regions. With the introduction of its new statistical geography in 2010, the ABS no longer based its regions on groups of LGAs. Rather, its new regions (Statistical Areas Level 4 or SA4s) are aggregations of smaller statistical areas (Statistical Areas Level 1). According to the ABS, SA4s provide the best sub-state socio-economic breakdown in the new statistical geography and were designed for the output of Labour Force Survey data.[1] Sydney is divided into 15 SA4s, 6 of which could be said to constitute Western Sydney (Figure 2): Baulkham Hills & Hawkesbury; Blacktown; Outer South West; Outer West & Blue Mountains; Parramatta; and South West.

For the purposes of this paper, two working definitions of Western Sydney are used: **Western Sydney (LGA);** and **Western Sydney (SA4)**. With regards to the degree to which these two definitions overlap (see further Appendix 3):

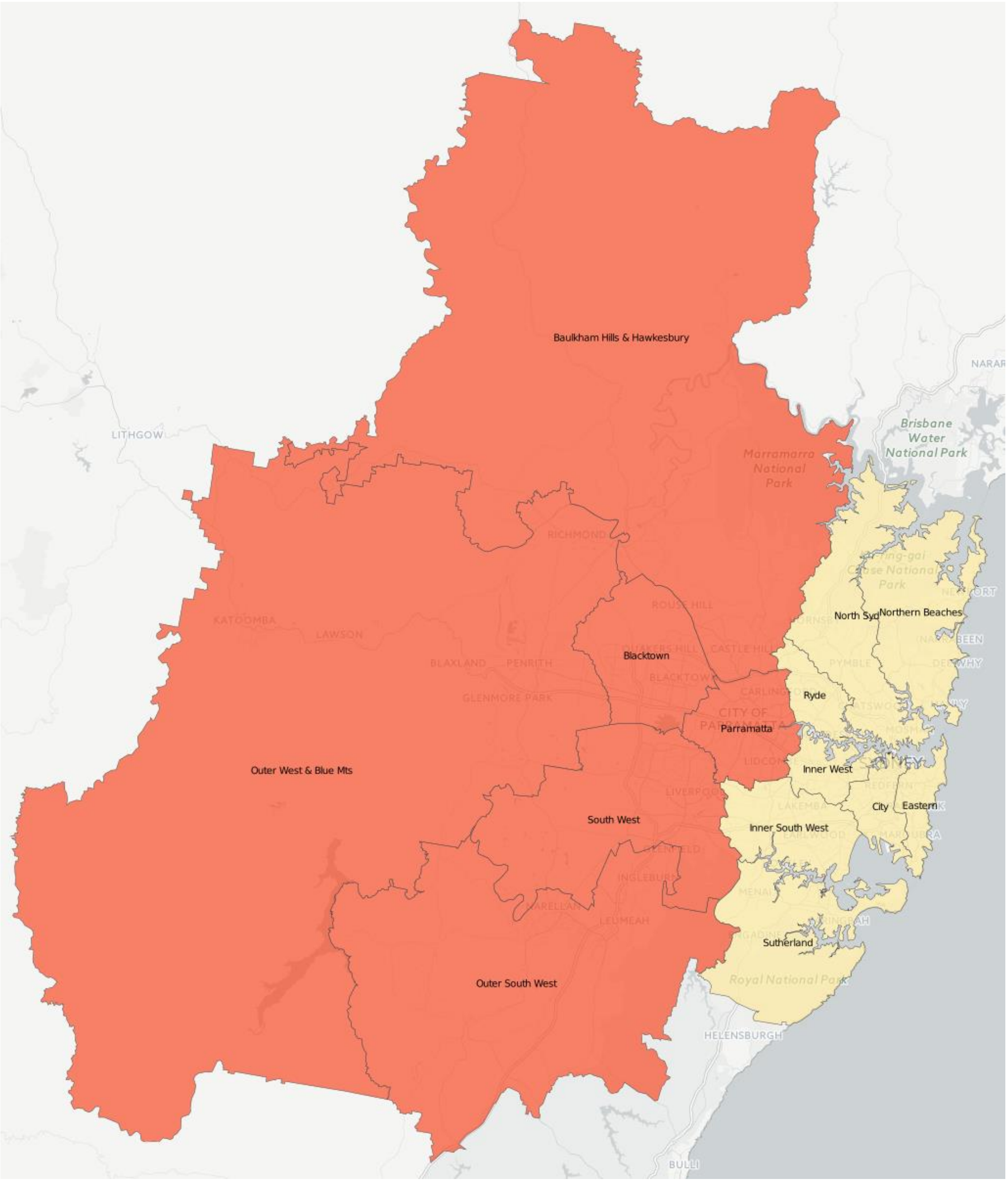
- 90.9% of Western Sydney (LGA) is made up of Western Sydney (SA4); and
- 97.6% of Western Sydney (SA4) is made up of Western Sydney (LGA).

Western Sydney (LGA) is used for all but Chapter 6 of this paper. Chapter 6 deals with the Western Sydney *resident labour force*, for which the most recent available data is published using SA4 boundaries, namely the ABS Labour Force Survey. Because of this, mention of Western Sydney throughout this paper can be read as reference to Western Sydney (LGA) unless otherwise stated.[2]

[1] ABS, *Australian Statistical Geography Standard (ASGS)*, 10 June 2014 [online – accessed 29 April 2015]

[2] See Appendix 1 for a list of which NSW electorates may be found in each definition of Western Sydney.

Figure 2: Western Sydney (SA4)[3]



© OpenStreetMap contributors © CartoDB CartoDB attribution

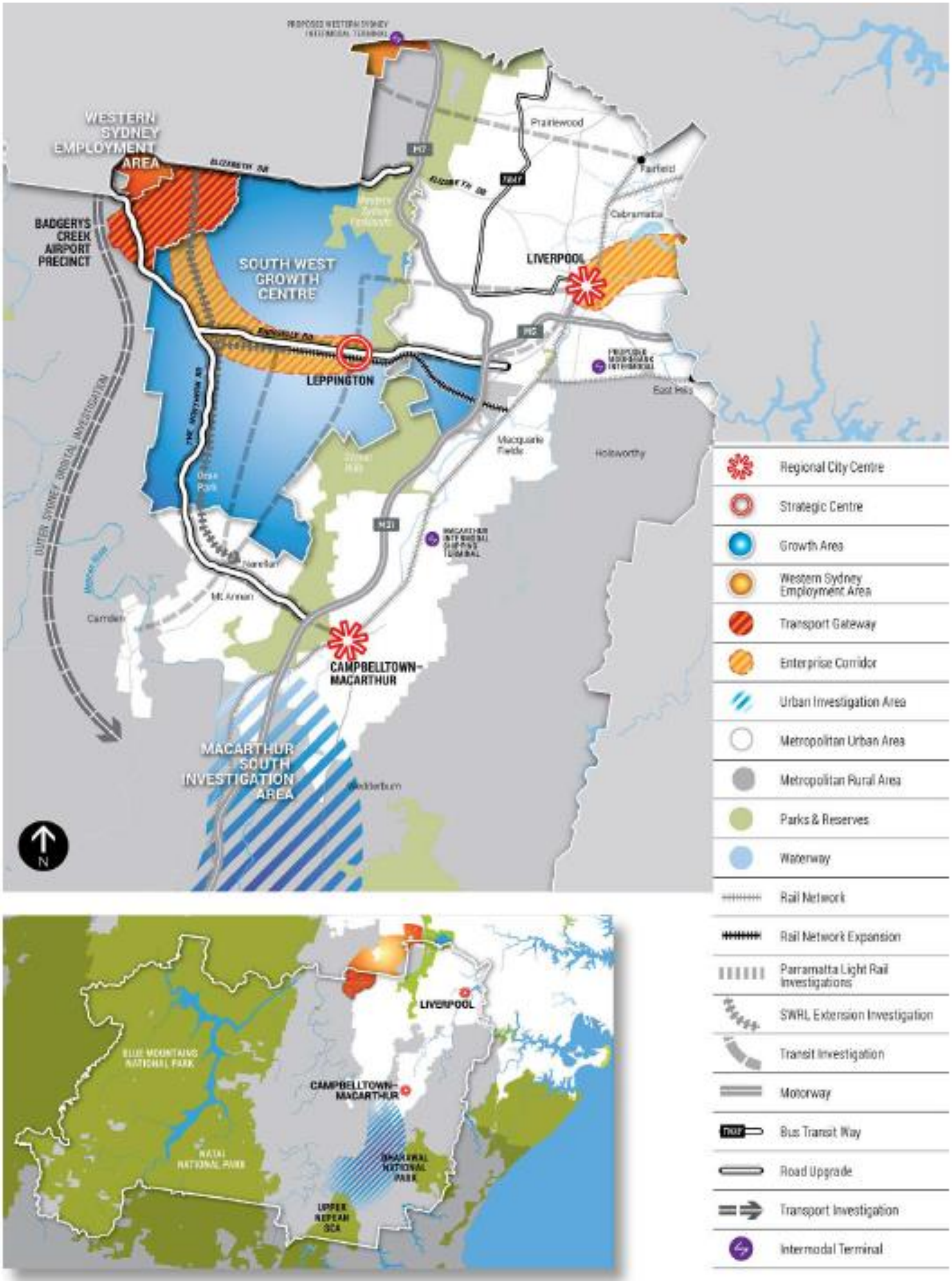
2.2 Key features

A Plan for Growing Sydney, the NSW Government's metropolitan strategy, divides Sydney into six subregions, three of which make up Western Sydney: South West (Camden, Campbelltown, Fairfield, Liverpool and Wollondilly

[3] Full names for the non-Western Sydney SA4s are as follows: North Syd = North Sydney & Hornsby; City = City & Inner South; Eastern = Eastern Suburbs.

LGAs), West (Blue Mountains, Hawkesbury and Penrith LGAs) and West Central (Auburn, Bankstown, Blacktown, Holroyd, Parramatta and The Hills LGAs).

Figure 3: South West subregion[4]



[4] NSW Government, *A Plan for Growing Sydney*, December 2014, p.129

The South West subregion has three strategic centres: Campbelltown-Macarthur, Leppington and Liverpool (Figure 3). The Plan states that:

> The South West subregion is the fastest growing subregion in Sydney. The Badgerys Creek Airport will be a catalyst for investment in infrastructure and jobs in the subregion, enhancing connections to other cities across Australia and around the world. Liverpool, Campbelltown-Macarthur, Leppington and the Western Sydney Employment Area will also contribute to the growth and diversification of the subregion's economy. The South West Growth Centre will continue to play a key role in providing housing and jobs for future residents. The subregion will benefit from improved access including a potential extension of the South West Rail Link.[5]

The West subregion has two strategic centres: Penrith and Penrith Education and Health (Figure 4). The Plan says that:

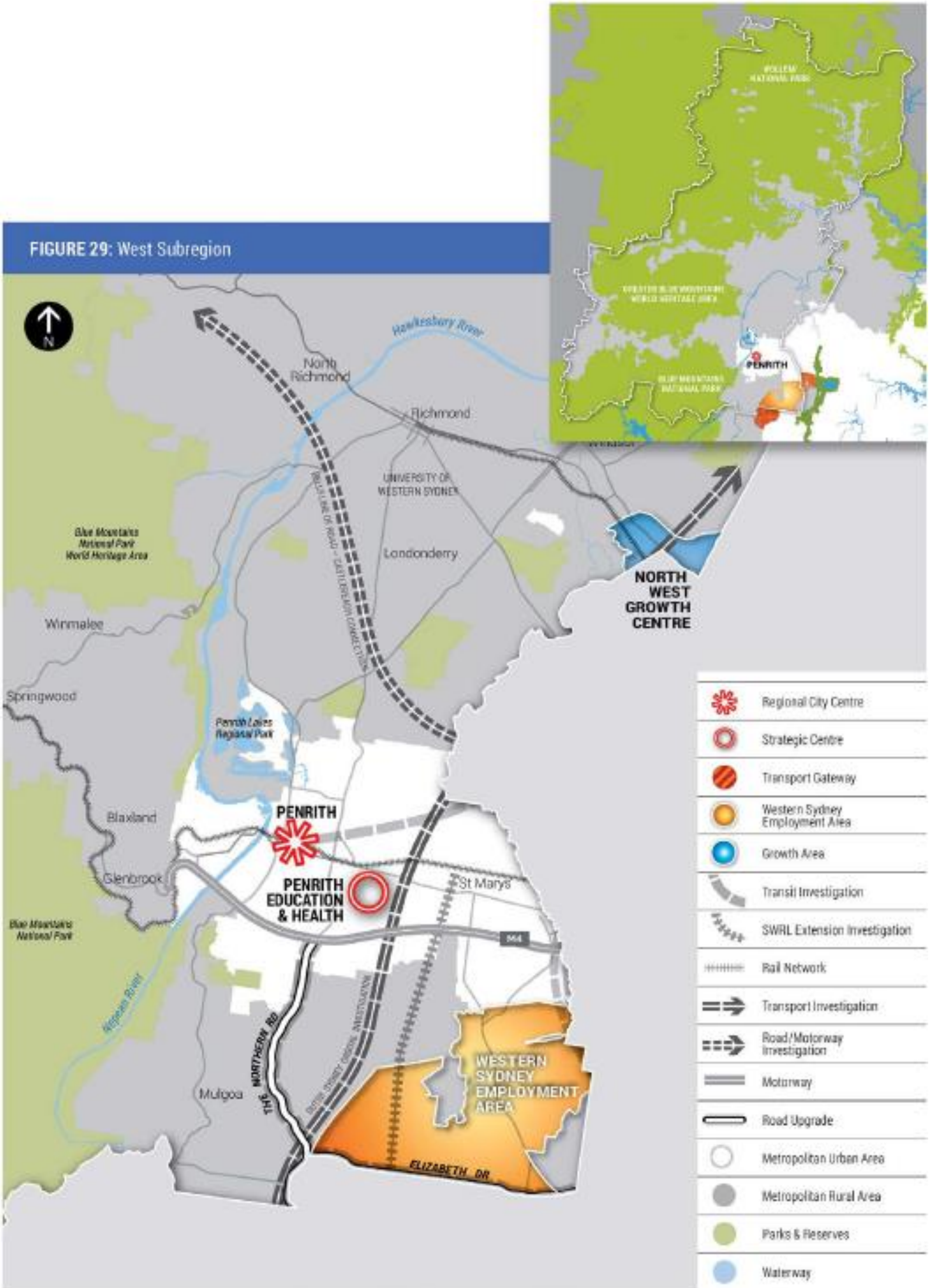
> The West subregion will continue to provide distinctive rural landscapes, extensive agricultural and resource lands, and large areas of native bushland, national parks and reserves. The subregion also includes major parts of the urban area of Sydney.
>
> The Greater Blue Mountains World Heritage Area brings international visitors to the subregion, and also contributes to Sydney's drinking water catchment and related infrastructure. Hazards associated with bushfires and with flooding in the Hawkesbury-Nepean Valley need to be at the forefront of planning for future growth in the subregion.
>
> Badgerys Creek Airport will be a catalyst for significant new investment in infrastructure and jobs in the subregion. Along with new supporting transport infrastructure, the airport will greatly enhance national and international connections. Penrith will be a focus for housing and jobs growth, particularly in professional services, health and education.[6]

The West Central subregion has eight strategic centres: Bankstown, Blacktown, Castle Hill, Greater Parramatta, Marsden Park, Norwest, Rouse Hill and Sydney Olympic Park (Figure 5). Greater Parramatta includes five precincts: Camellia, Parramatta CBD, Parramatta North, Rydalmere Education Precinct and Westmead Health Precinct. According to the Plan:

> The West Central subregion will be a significant focus for infrastructure investment and intensive growth over the next 20 years. Greater Parramatta will continue to be Sydney's second CBD and a focus for jobs growth and services delivery in Sydney's west. A growing and prosperous Greater Parramatta will be supported by a network of centres providing jobs and services closer to home for many of the subregion's residents. This will improve liveability and contribute to strong, resilient communities throughout the subregion.[7]

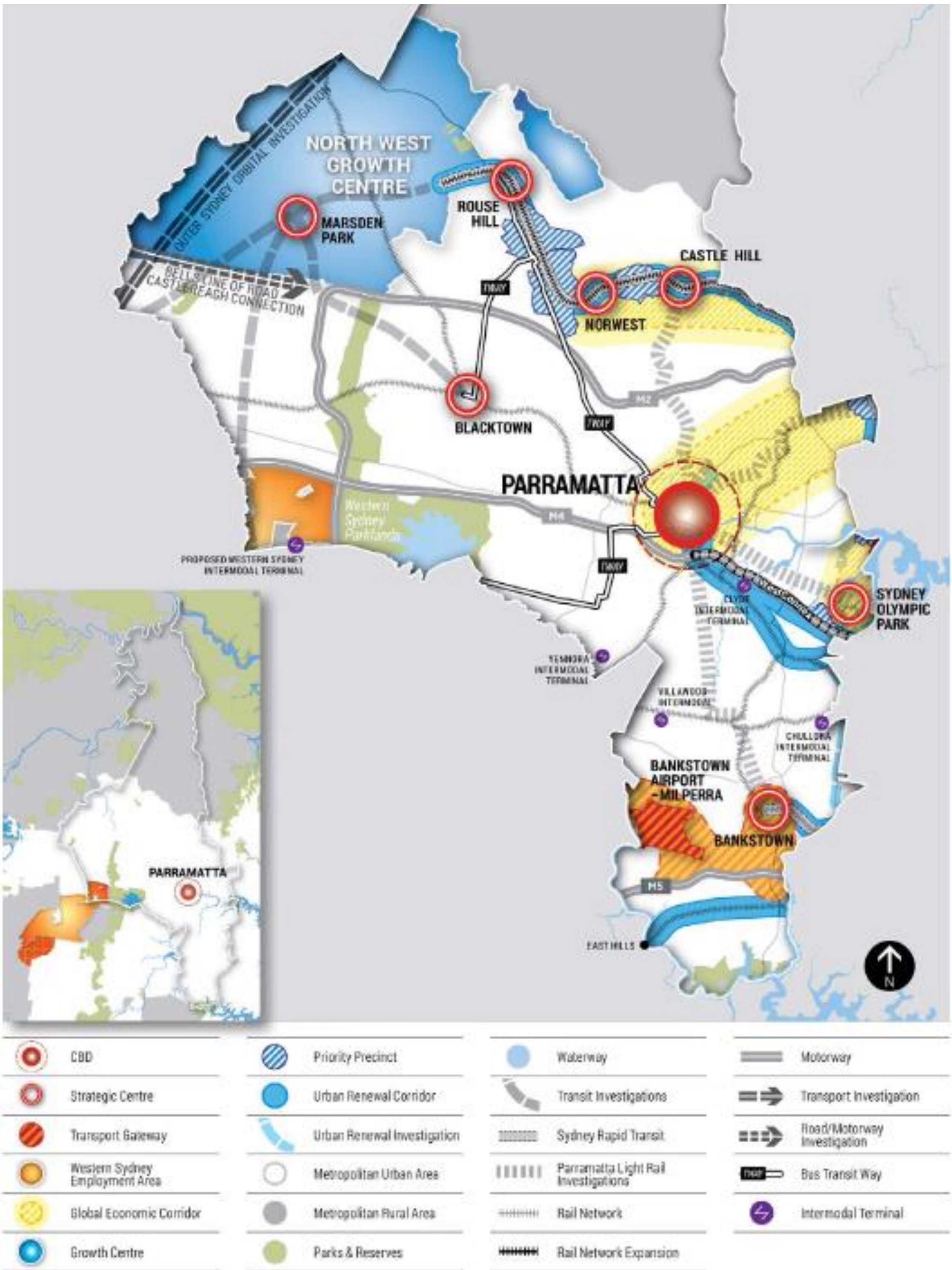
[5] Ibid., p.128
[6] Ibid., p.120
[7] Ibid., p.114

Figure 4: West subregion[8]



[8] Ibid., p.121

Figure 5: West Central subregion[9]



A Plan for Growing Sydney also outlines the major transport projects designed to support a growing city (Figure 6). One objective of these projects is connecting jobs and homes (Figure 7).

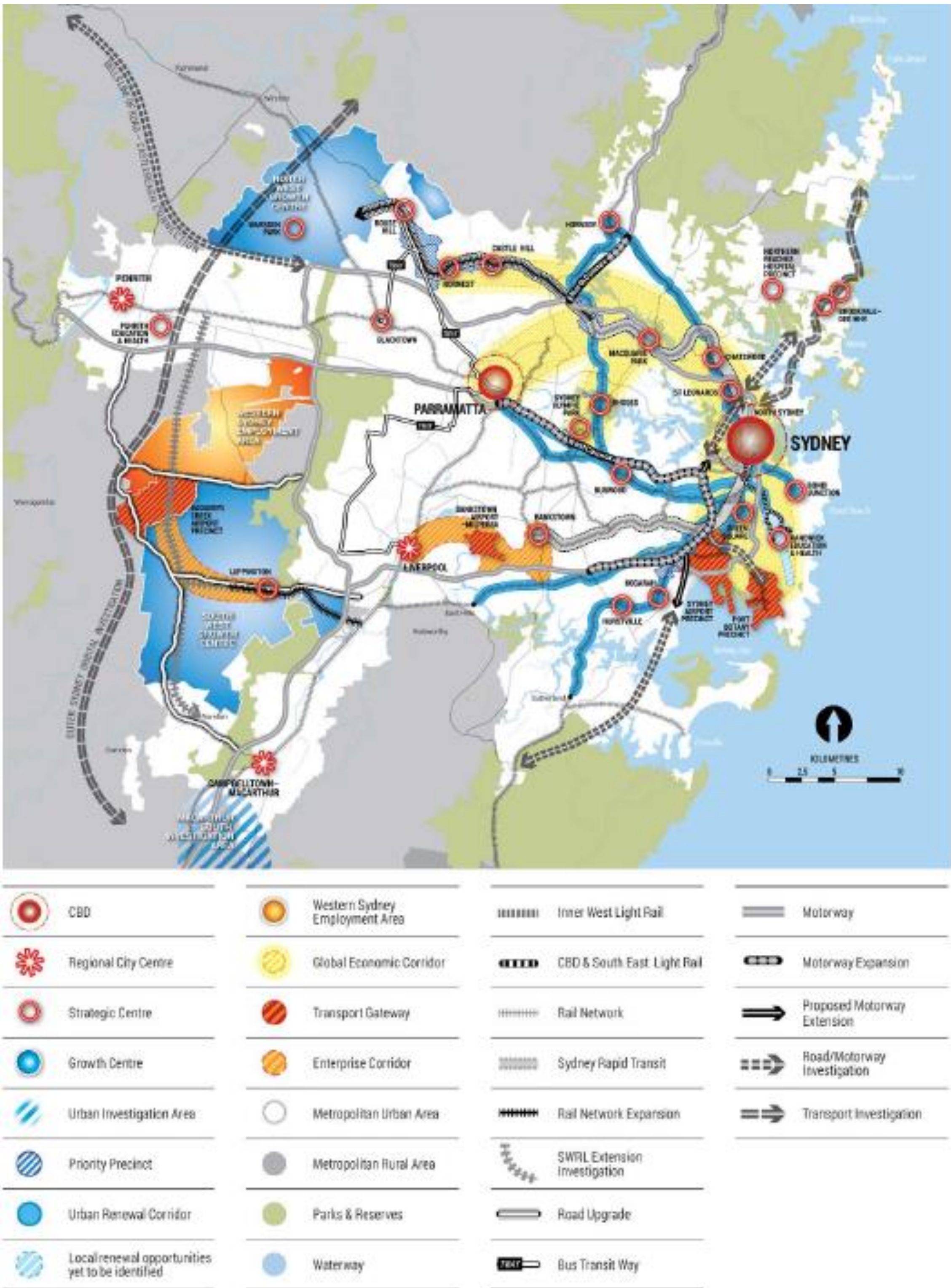
---

[9] Ibid., p.115

Figure 6: Major transport projects to support a growing city[10]

10 Ibid., p.14

Figure 7: A Plan for Growing Sydney – connecting jobs and homes[11]



[11] Ibid., p.15

3. DEMOGRAPHIC FACTS AND FIGURES

3.1 Population trends

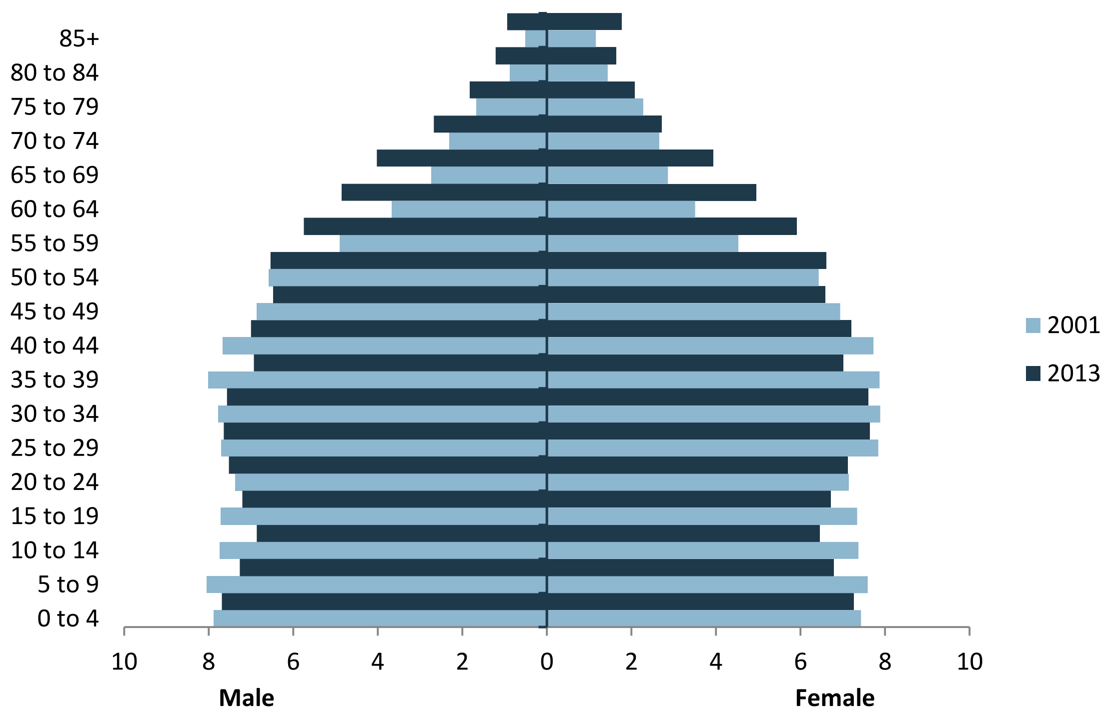
Between 2004 and 2014, the population of Western Sydney (LGA) grew at an average annual rate of 1.62%, a rate substantially higher than the NSW rate of 1.23% (Table 1). The Western Sydney population grew by 315,000 over this period. In 2014, the Western Sydney population (2.12 million) made up almost half of the total Sydney population (4.51 million).

Table 1: Western Sydney population growth (2004 to 2014)[12]

Area	Population (2004)	Population (2014)	Av. annual growth rate
Western Sydney	1,805,213	2,120,088	1.62%
Rest of Sydney[13]	2,079,473	2,389,491	1.40%
NSW	6,650,735	7,518,472	1.23%

Population growth was unevenly distributed across Western Sydney between 2004 and 2014 (Figure 9). The fastest growth rates were experienced in the Camden (3.21%) and Auburn (3.04%) LGAs; the slowest rates in the Blue Mountains (0.42%) and Hawkesbury (0.55%) LGAs. Camden and Auburn experienced the fastest growth rates of any Sydney LGA over this period.

Figure 8: Western Sydney population distribution by age (2001 to 2013)[14]



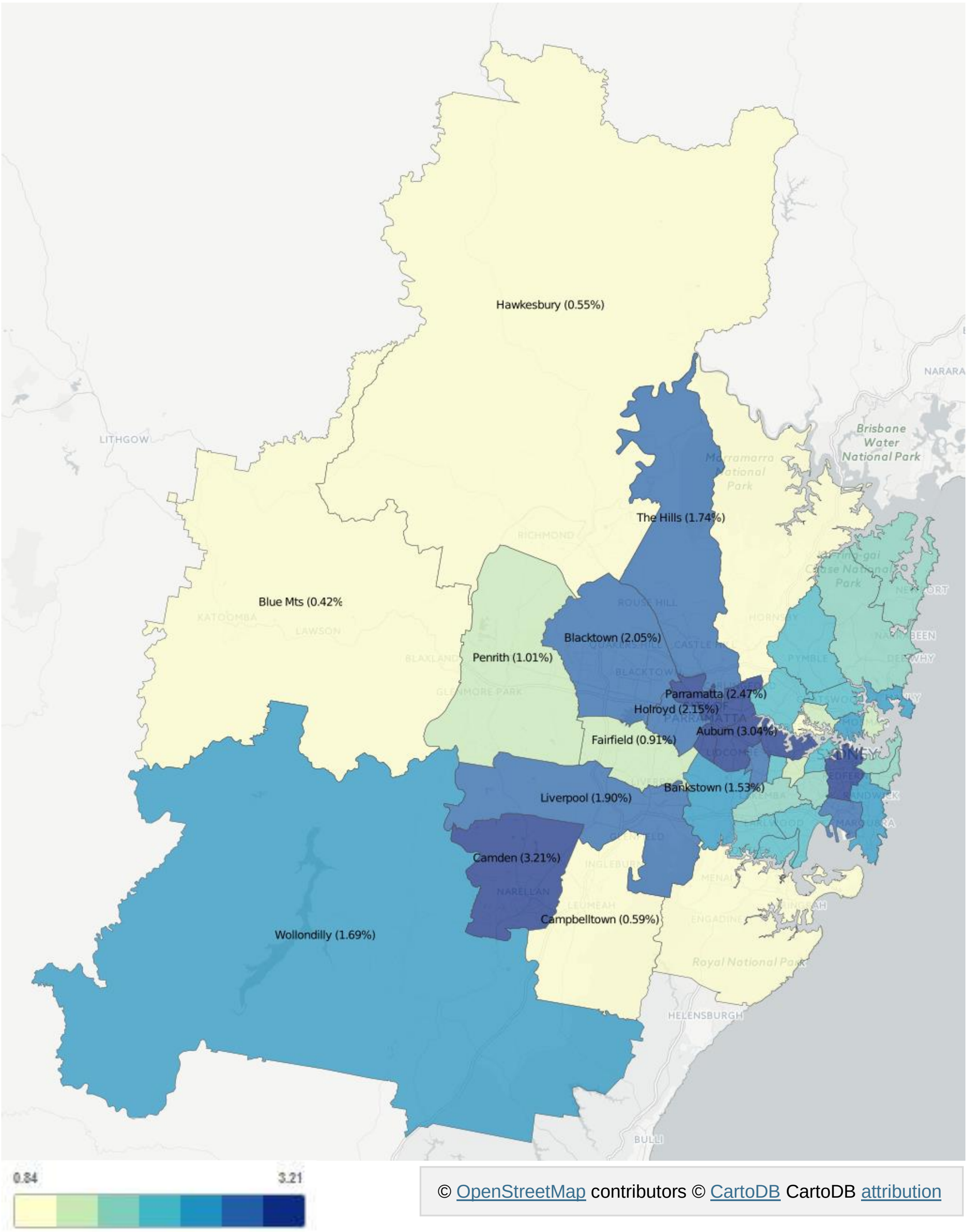
[12] ABS, *ABS.Stat – ERP by LGA (ASGS 2014), 2001 to 2014*, 2015

[13] See Appendix 4 for the list of LGAs and SA4s which make up the "Rest of Sydney"

[14] ABS, *ABS.Stat – Estimated Resident Population by Sex by Age Group by LGA, 2001-2013 on ASGS 2013*, 2015

Between 2001 and 2013, the Western Sydney population aged (Figure 8). The proportion of the population aged 0 to 19 fell; the proportion of the population aged 55 and over rose, especially between the ages of 55 and 69.

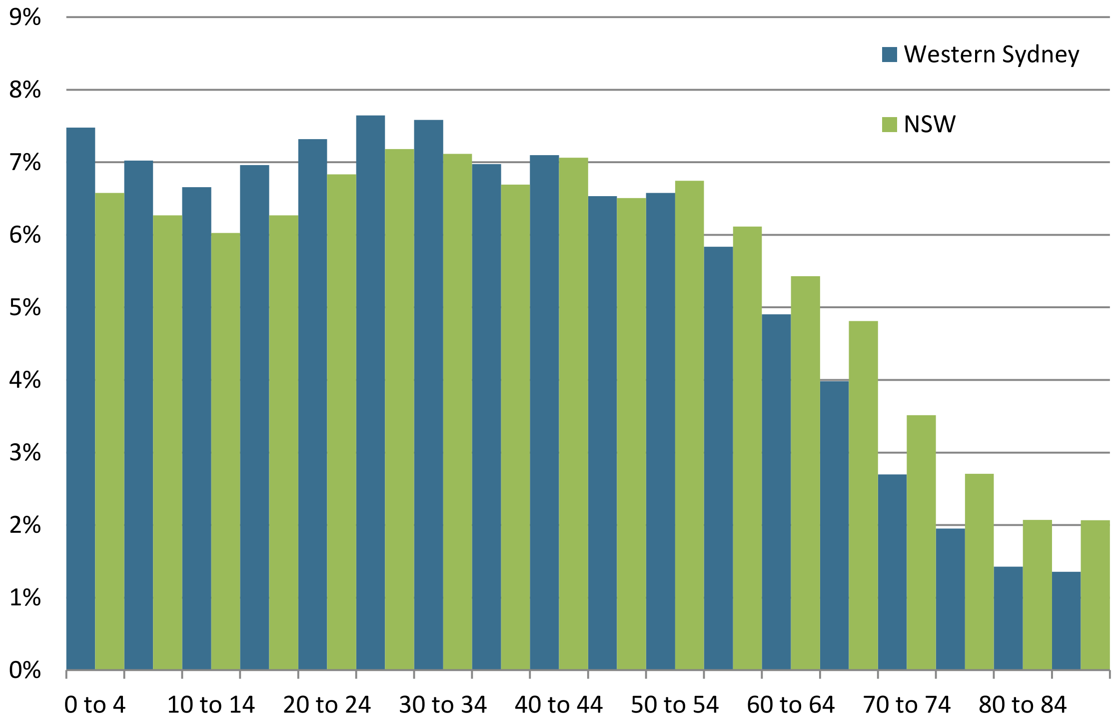
Figure 9: Average annual population growth rates: 2004 to 2014



© OpenStreetMap contributors © CartoDB CartoDB attribution

Despite having aged between 2001 and 2013, the Western Sydney population is still younger when compared with the NSW population (Figure 10).

Figure 10: Western Sydney and NSW population distributions by age (2013)[15]



In 2014, the population density of Western Sydney was 237 persons per square kilometre (Table 2). This figure is slightly misleading given a significant proportion of the Blue Mountains, Hawkesbury and Wollondilly LGAs is made up of National Park (see Appendix 5). At the LGA level, even the most dense Western Sydney LGA (Parramatta; 3,095 persons per square kilometre) was less than half as dense as the most dense LGA in Sydney (Waverley; 7,767 persons per square kilometre) (Figure 11). After Parramatta, the next two densest LGAs in Western Sydney were Holroyd (2,765) and Auburn (2,631).

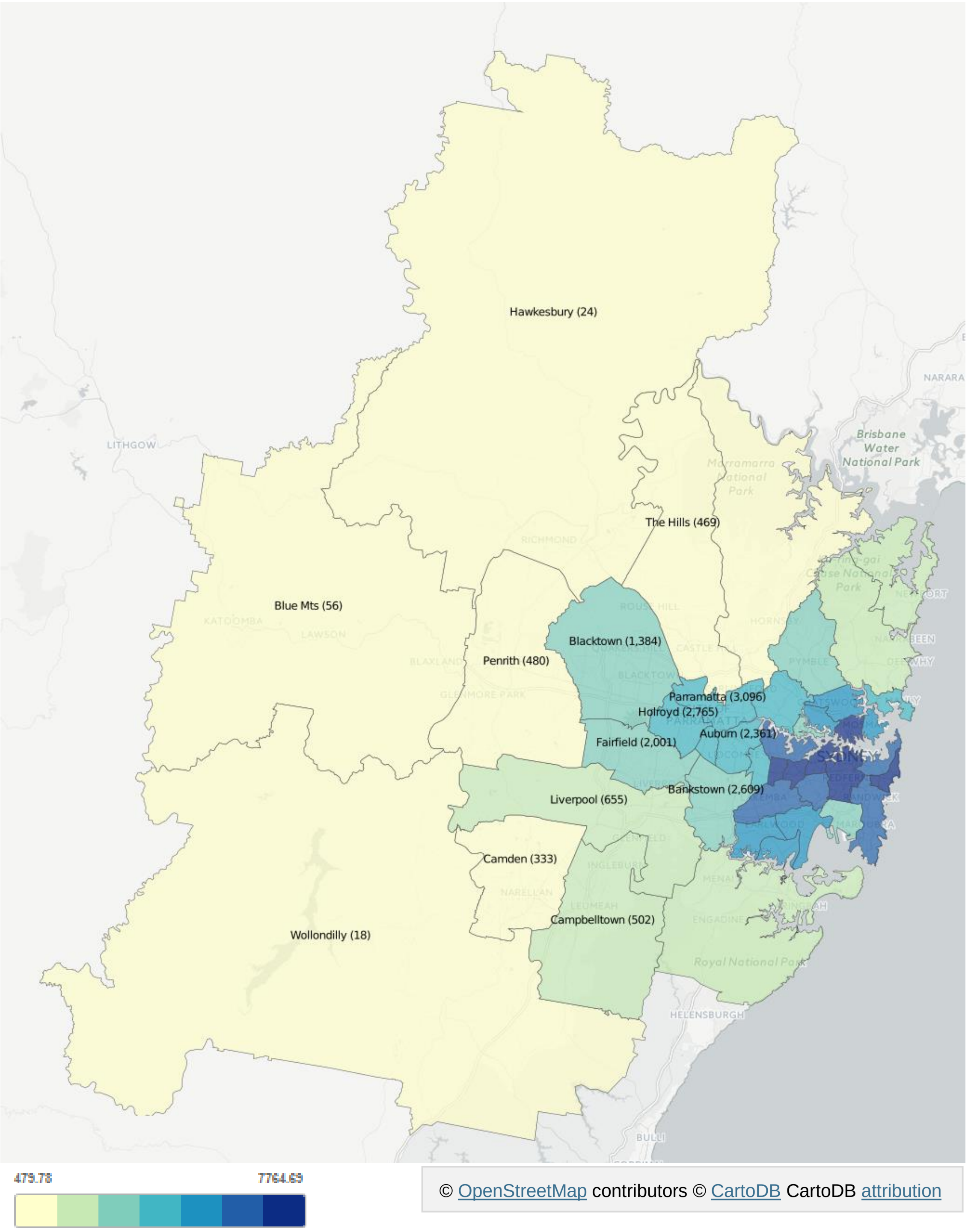
Table 2: Western Sydney population density (2004 to 2014)[16]

Area	Population density 2004	Population density 2014	% change (2004 to 2014)
Western Sydney	201.97	237.20	17.4%
Rest of Sydney	1,371.75	1,576.25	14.9%
NSW	8.31	9.39	13.0%

[15] ABS, *ABS.Stat – Estimated Resident Population by Sex by Age Group by LGA, 2001-2013 on ASGS 2013*, 2015

[16] ABS, *ABS.Stat – ERP by LGA (ASGS 2014), 2001 to 2014*, 2015

Figure 11: Population density in 2014 (persons per square kilometre)



© OpenStreetMap contributors © CartoDB CartoDB attribution

3.2 Population projections

According to Department of Planning & Environment projections, the Western Sydney population is expected to reach 2.92 million in 2031, growing at an average annual rate of 1.90% (Table 3). This is considerably higher than the average annual growth rate between 2004 and 2014 of 1.62%. In comparison, the Rest of Sydney is expected to grow at an annual rate of 1.28%; NSW is expected to grow at an annual rate of 1.24%.

Western Sydney LGAs make up 8 of the top 10 Sydney LGAs expected to grow the fastest between 2011 and 2031 (Figure 12). The top five LGAs are as follows: Camden (5.11%); Auburn (2.59%); The Hills (2.31%); Liverpool (2.15%); and Blacktown (2.08%).

Figure 12: Projected average annual population growth rates: 2011 to 2031

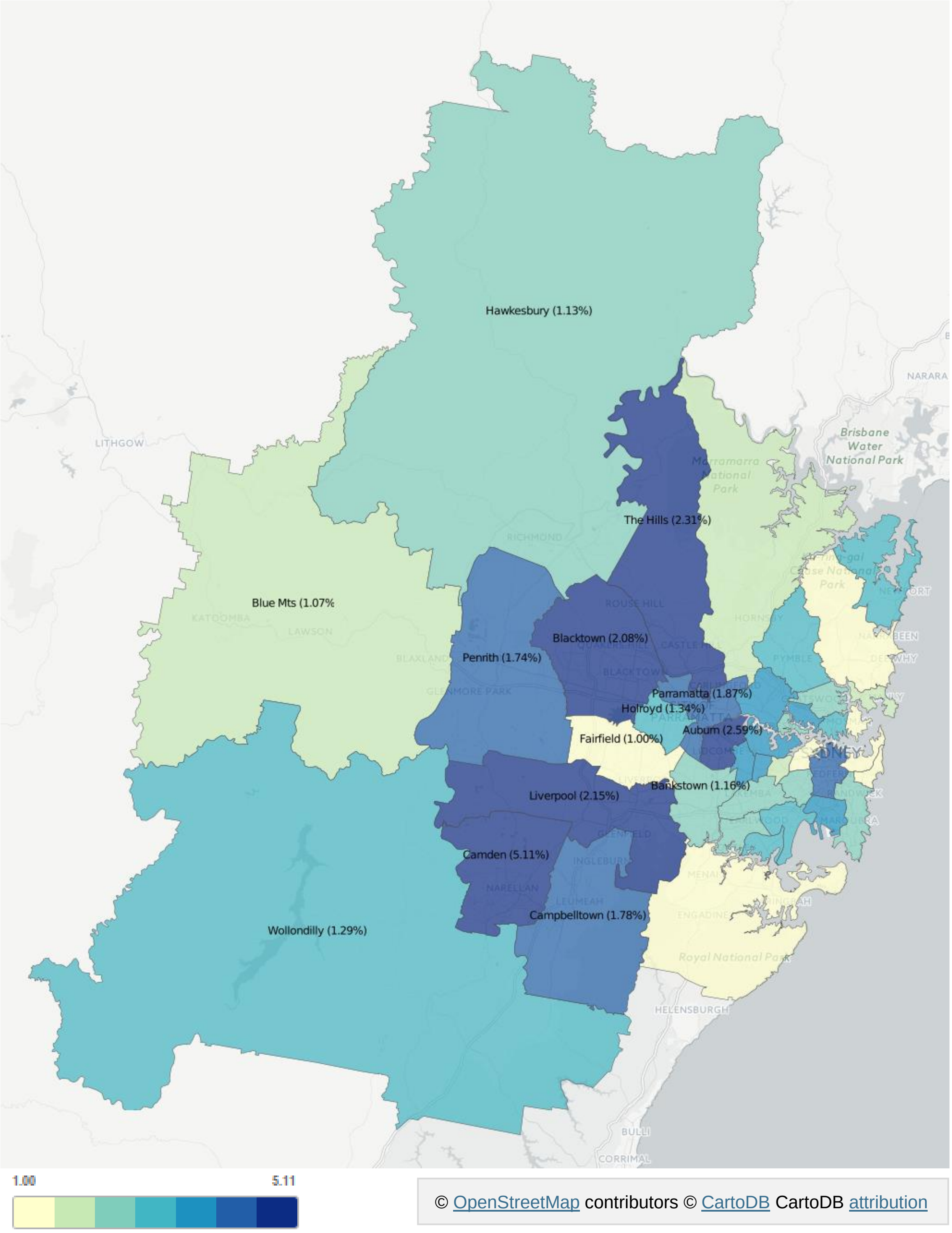


Table 3: Western Sydney projected population (2011 to 2031)[17]

Area	2011 population	2031 projected population	% change (2011 to 2031)	Average annual growth rate
Western Sydney	2,003,200	2,919,550	45.74%	1.90%
Rest of Sydney	2,283,100	2,942,300	28.87%	1.28%
NSW	7,218,500	9,228,550	27.85%	1.24%

[17] NSW Department of Planning & Environment, *Population, Household and Dwelling Projections*, 2014 [online – accessed 22 May 2015]

4. GROSS REGIONAL PRODUCT

4.1 Gross Regional Product

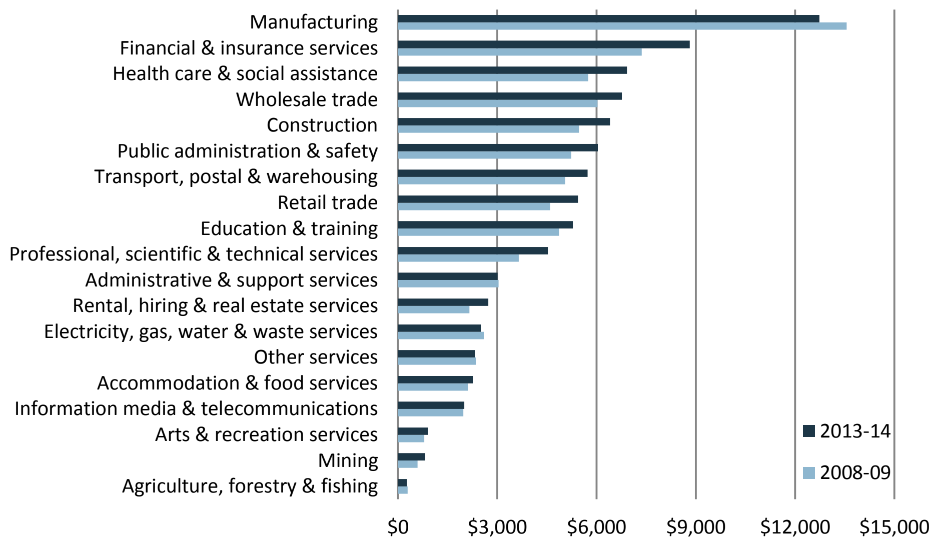
Regional Development Australia Sydney has published Gross Regional Product (GRP) data for all Sydney LGAs in its 2015 paper, *RDA Sydney Metropolitan Region Economic Baseline Assessment Report 2015*. In 2013-14, Western Sydney had a Gross Regional Product (GRP) of $104 billion, having increased by 9.4% from $95 billion in 2008-09 at an average annual rate of 1.8% (Table 4). In comparison, the Rest of Sydney's GRP had increased at an average annual rate of 2.5% to reach $230 billion in 2013-14.

Table 4: Gross Regional Product

Area	2008-09 ($m)	2013-14 ($m)	2008-09 to 2013-14		
			$m	%	Av. annual growth
Western Sydney	$95,139.5	$104,037.3	$8,897.8	9.4%	1.8%
Rest of Sydney	$203,277.1	$230,407.2	$27,130.1	13.3%	2.5%
NSW	$445,139.0	$492,479.0	$47,340.0	10.6%	2.0%

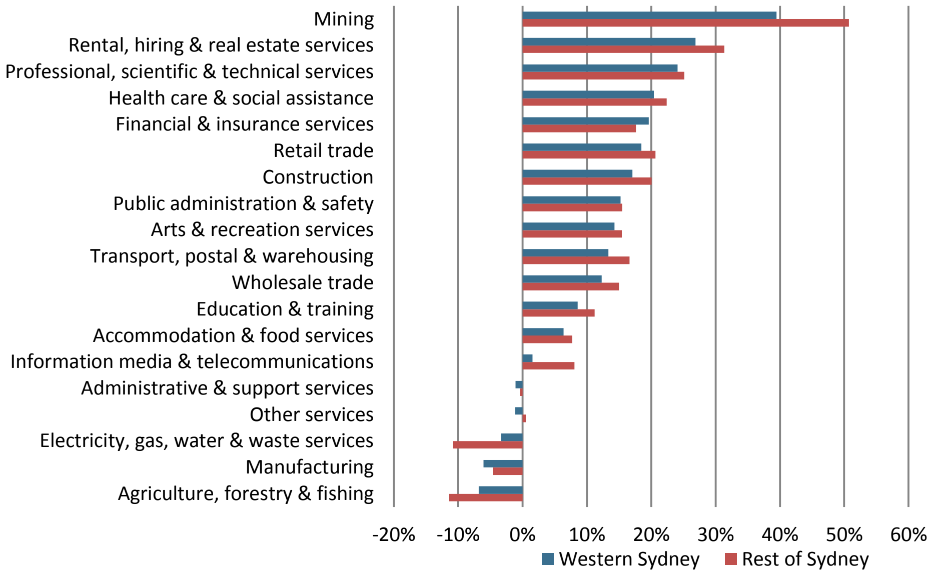
In 2013-14, manufacturing made the largest contribution to Western Sydney's GRP ($12,700m), down from $13,600m in 2008-09 (Figure 13). The next largest industries were financial & insurance services ($8,800m) and health care & social assistance ($6,900m). Manufacturing was the largest industry in 7 Western Sydney LGAs and financial & insurance services was the largest in 2 LGAs (Figure 16). Professional, scientific & technical services was the industry that was most commonly the largest in the Rest of Sydney LGAs.

Figure 13: Industry contribution to GRP in Western Sydney (2008-09 to 2013-14)



The Western Sydney industries which experienced the largest growth between 2008-09 and 2013-14 were mining (+39.5%), rental, hiring & real estate services (+26.9%) and professional, scientific & technical services (24.1%) (Figure 14). Only one industry grew more in Western Sydney than it did in the Rest of Sydney: financial & insurance services (19.6% vs 17.6%). 5 Western Sydney industries shrank between 2008-09 and 2013-14, including manufacturing (-6.1%) and electricity, gas, water & waste services (-3.4%).

Figure 14: Industry growth (2008-09 to 2013-14)



For several industries, there is a significant difference in the industry's share of GRP when comparing Western Sydney to the Rest of Sydney (Figure 15). In 2013-14, these industries were financial & insurance services (10.2 percentage points), manufacturing (8.5 percentage points), professional, scientific & technical services (6.2 percentage points) and information media & telecommunications (4.4 percentage points).

Figure 15: Industry shares of GRP (2013-14)

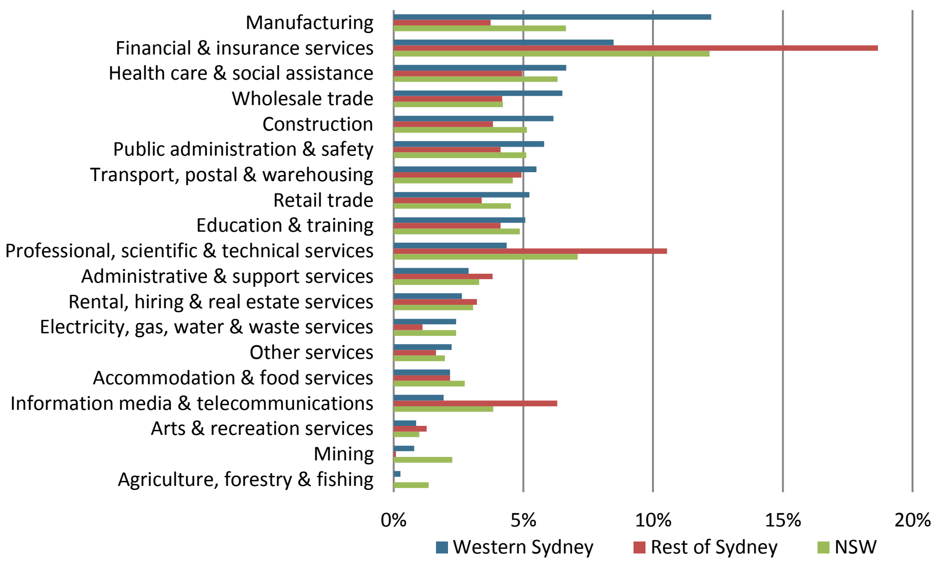


Figure 16: Largest industries by LGA (2013-14)

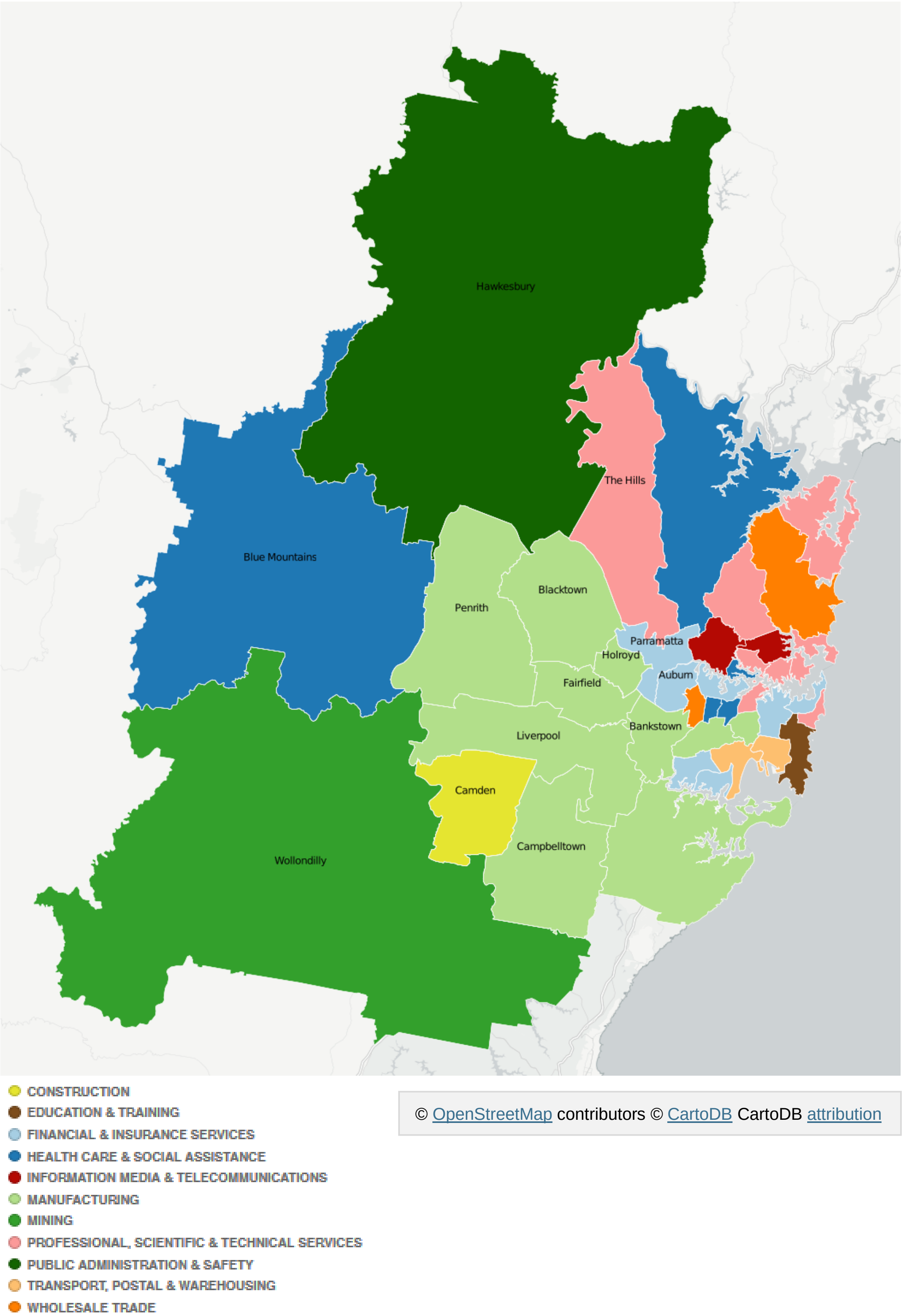
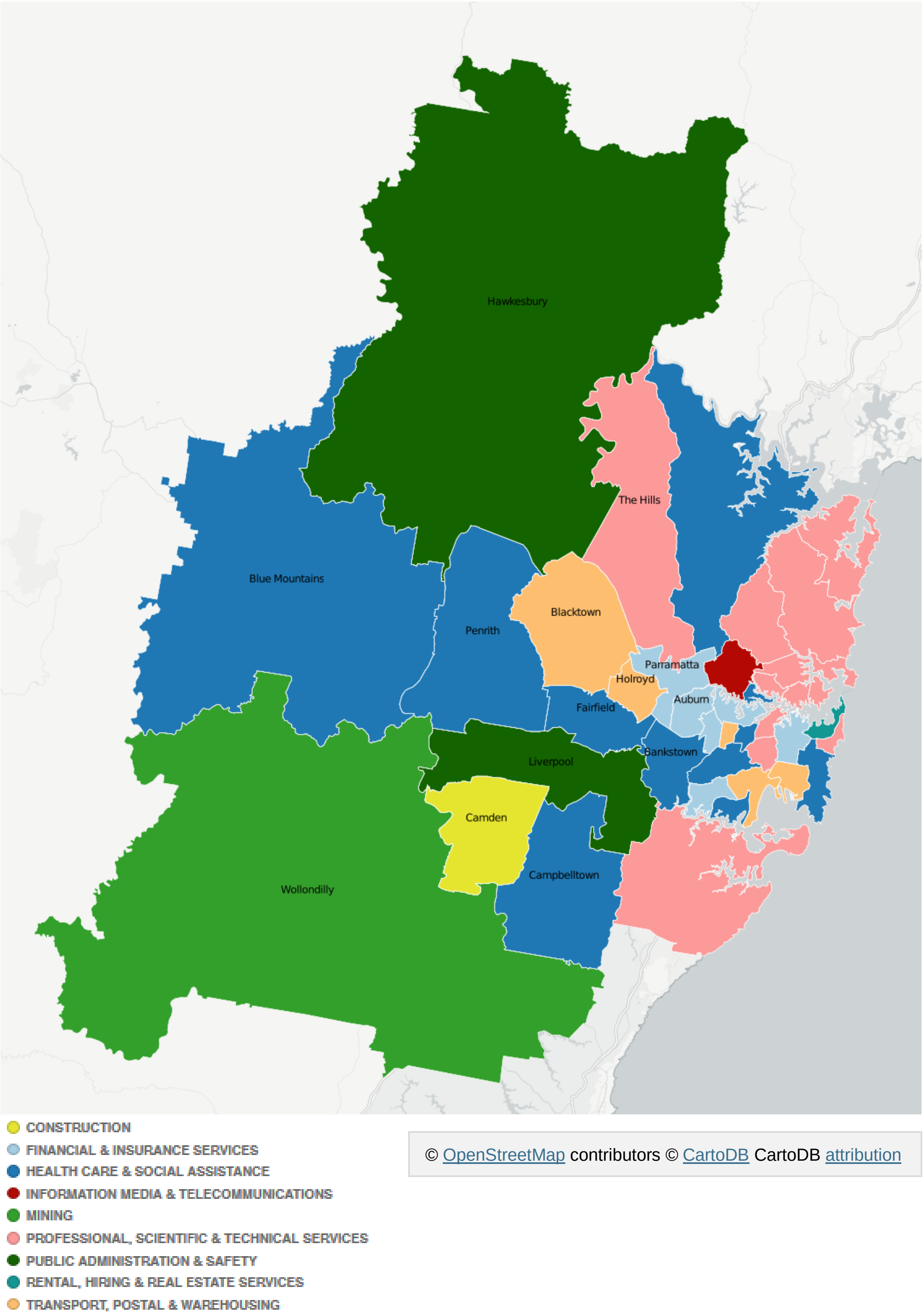


Figure 17: Largest industry growth by LGA (2008-09 to 2013-14)



Between 2008-09 and 2013-14, the health care & social assistance industry experienced the largest growth in contribution to GRP in 5 Western Sydney

LGAs (Figure 17). Other leading growth industries in Western Sydney included financial & insurance services, transport, postal & warehousing and public administration & safety. The professional, scientific & technical services industry was the largest growth industry in 12 Rest of Sydney LGAs.

4.2 GRP contribution by employed person

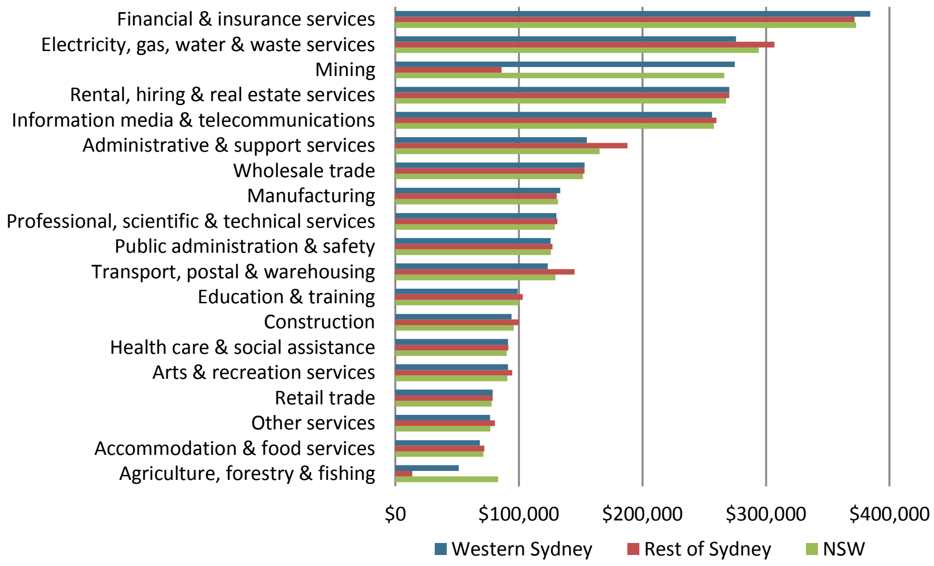
In 2013-14, Western Sydney industries had an average GRP contribution by employed person of $124,619 (Table 5). This figure grew at an average annual rate of 1.2% between 2008-09 and 2013-14. The average GRP contribution by employed person for the Rest of Sydney also grew at an average annual rate of 1.2% to reach $148,103 in 2013-14.

Table 5: GRP contribution per employed person

Area	2008-09 ($m)	2013-14 ($m)	2008-09 to 2013-14		
			$m	%	Av. annual growth
Western Sydney	$117,651	$124,619	$6,968	5.9%	1.2%
Rest of Sydney	$139,291	$148,103	$8,812	6.3%	1.2%
NSW	$125,708	$131,937	$6,229	5.0%	1.0%

The financial & insurance services industry had the highest GRP contribution per employed person in 2013-14 in Western Sydney ($384,429) (Figure 18). Other industries with a high GRP contribution per employed person were electricity, gas, water & waste services ($275,865) and mining ($274,645).

Figure 18: GRP contribution by employed person (2013-14)



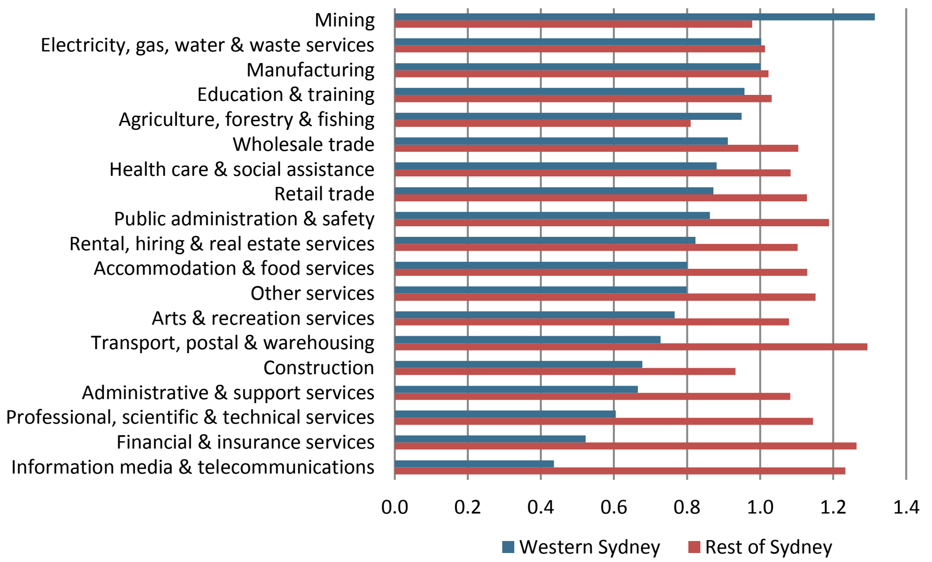
5. WESTERN SYDNEY EMPLOYMENT OPPORTUNITIES

One focus of debate on the Western Sydney economy is the under-provision of *jobs located in Western Sydney* (covered in Chapter 7) for those who live in the region – the *resident labour force* (covered in Chapter 6).[18] Three indicators can be used to measure the extent to which a region maximises local employment opportunities: employment capacity; employment self-containment; and employment self-sufficiency. These are explored in this Chapter.

5.1 Employment capacity

Using a ratio, employment capacity is a means of examining whether or not Western Sydney could theoretically provide jobs for all of its residents should they choose to work in Western Sydney. The ratio is calculated by dividing the number of local jobs by the number of employed residents. From 1971, the ratio rose from 0.67 to a high of 0.80 in 1991. In other words, in 1991 80% of all employed residents could have found work in Western Sydney if they chose to do so. Since then, the ratio dropped to 0.70 in 2001, before rising to 0.76 in 2006.[19] By comparison, in 2006 the Rest of Sydney had a ratio of 1.05.

Figure 19: Employment capacity by industry



In 2011, according to Census data the ratio fell to 0.73; at the same time, the ratio for the Rest of Sydney was 1.04. However, the 2011 Census undercounted the number of jobs in an area due to a significant increase in the number of people with an undefined place of work.[20] The Bureau of Transport Statistics (BTS) Journey to Work dataset accounts for Census respondents who have not

[18] Robert Fagan and Phillip O'Neill, *Work, places and people in Western Sydney: changing suburban labour markets 2001-2014*, Centre for Western Sydney, University of Western Sydney, 2015

[19] Ibid.

[20] The number rose from 27,460 to 181,283 between 2006 and 2011

been assigned a place of work by the ABS. Further to the issue of calculating a ratio for 2011, the 2011 Census undercounted the Greater Sydney population by 1.8%.[21] Bearing all of this in mind, if BTS data is used, the ratio for Western Sydney rose from 0.76 in 2006 to 0.81 in 2011. Similarly, the ratio for the Rest of Sydney rose from 1.05 to 1.12.

Using BTS data, the ratio varies significantly by industry (Figure 19). In 2011, mining, electricity, gas, water & waste services and manufacturing all had a ratio of 1 or higher i.e. they provided enough jobs in Western Sydney for all Western Sydney residents employed in that industry. In contrast, 16 industries in the Rest of Sydney provided enough jobs for Rest of Sydney residents. The two industries in Western Sydney with the lowest ratio (financial & insurance services and information media & telecommunications) had two of the highest ratios in the Rest of Sydney.

5.2 Employment self-containment

Employment self-containment measures the proportion of employed residents who are employed within the region in which they live. According to Fagan and O'Neill (2015), job growth in Western Sydney rapidly increased during the 1970s, so that 59% of employed residents worked in Western Sydney by 1981. The proportion has been relatively stable since 1991, when the proportion reached 64.0%. After reaching 64.2% in 2001,[22] it has fallen in consecutive Censuses to 63.7% in 2006[23] and 63.1% in 2011. Also in 2011, 25.1% of employed Western Sydney residents worked in the Rest of Sydney. In contrast, in 2011 82.9% of Rest of Sydney residents worked in the Rest of Sydney; only 8.5% worked in Western Sydney.

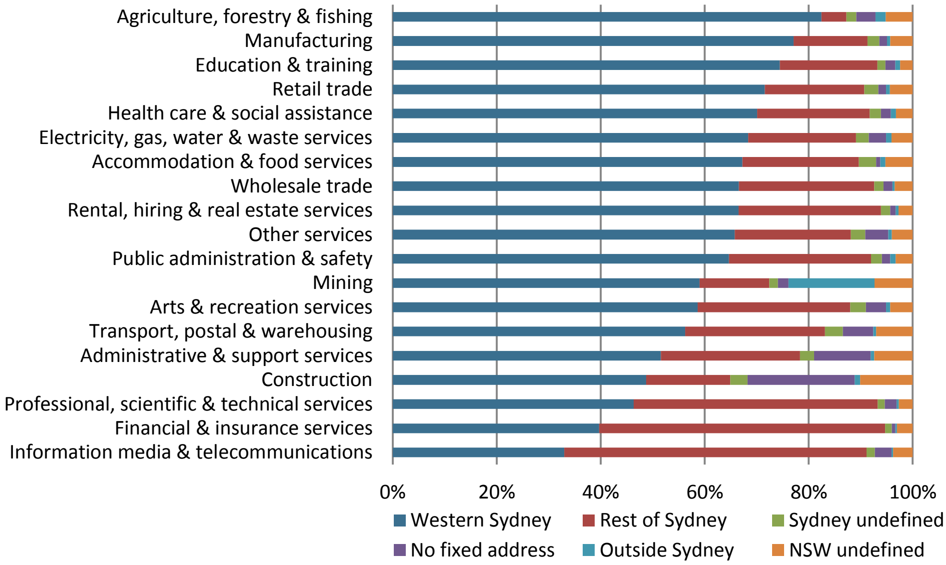
Figure 20 explores employment self-containment by industry. Self-containment in Western Sydney was highest for industries like agriculture, forestry & fishing (82.4%), manufacturing (77.1%) and education & training (74.4%). The lowest three industries were information media & telecommunications (33.0%), financial & insurance services (39.7%) and professional, scientific & technical services (46.3%). For all three, a larger proportion worked in the Rest of Sydney – 58.1%, 55.0% and 46.9% respectively. Note that for industries like construction and administrative & support services, the proportion recorded as working in Western Sydney is more likely to be an undercount compared to other industries given the significant number of respondents who reported "no fixed address" or "NSW undefined" for their place of work.

[21] ABS, *Census of Population and Housing – Details of Undercount, 2011*, Cat. No. 2940.0, June 2012

[22] Robert Fagan and Phillip O'Neill, op. cit.

[23] UWS Urban Research Centre, *North-West and West-Central Sydney employment strategies*, Final Report, Prepared for the Western Regional Organisation of Councils and Projects Partners, November 2008

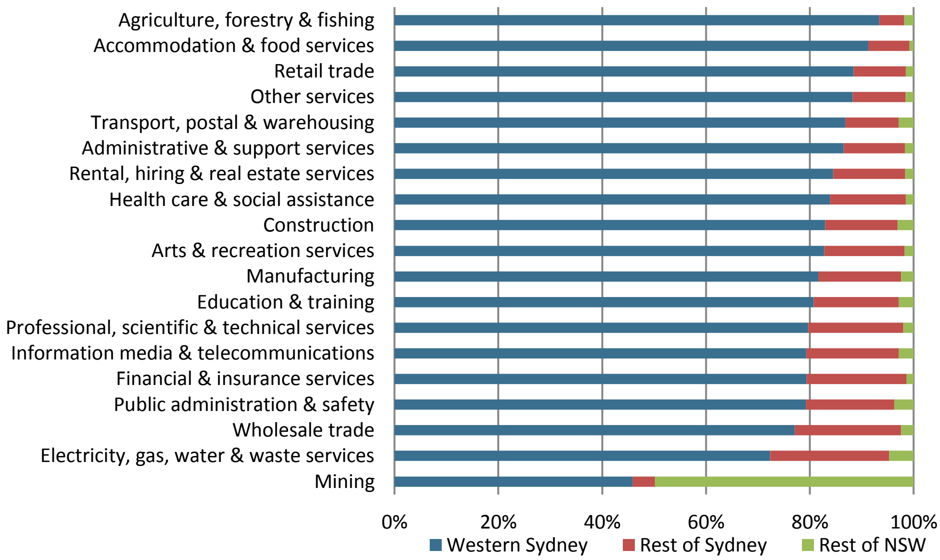
Figure 20: Employment self-containment by industry – where employed Western Sydney residents work



5.3 Employment self-sufficiency

Employment self-sufficiency measures the degree to which an area's residents meet the labour requirements of the area's businesses. In 2011, 82.9% of Western Sydney workers lived in Western Sydney, and 14.4% lived in the Rest of Sydney. For the Rest of Sydney, 77.7% of workers lived in the Rest of Sydney and 18.3% in Western Sydney. The Western Sydney industries with the largest proportion of workers who were also residents were agriculture, forestry & fishing (93.4%), accommodation & food services (91.2%) and retail trade (88.4%) (Figure 21).

Figure 21: Employment self-sufficiency by industry – where Western Sydney workers live



6. RESIDENT LABOUR FORCE

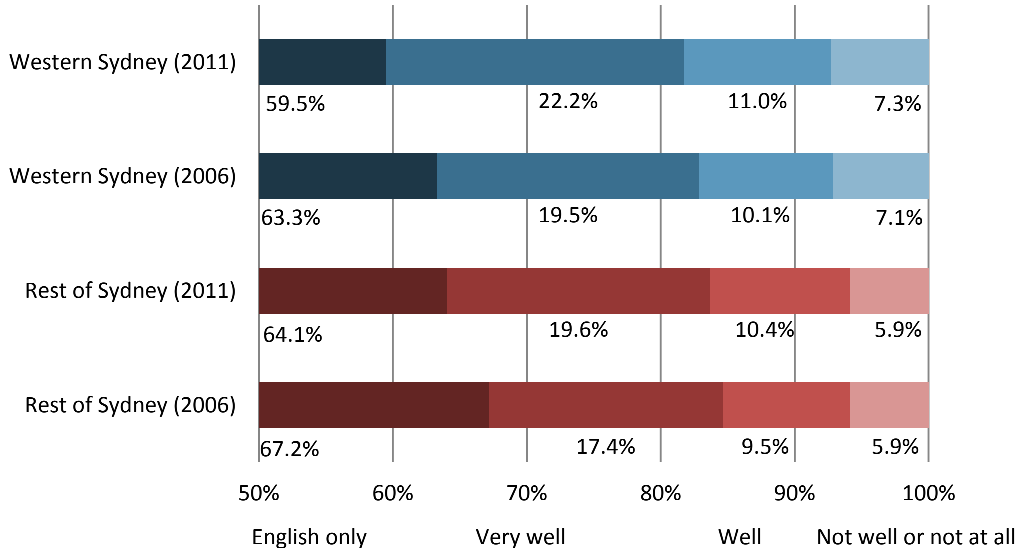
Chapters 6 and 7 examine two different populations aged 15 and over: the Western Sydney *resident labour force* i.e. those persons who reside in Western Sydney but may work either within or outside Western Sydney (Chapter 6); and the Western Sydney *workforce* i.e. those persons who work in Western Sydney (Chapter 7). Considerable detail is provided for both populations as they are quite distinct; different policy implications may therefore be drawn from the respective chapters. This Chapter uses the Western Sydney (SA4) definition throughout, as the most recent ABS labour force data is published on this basis.[24] This May 2015 data is supplemented by 2006 and 2011 data from the Census and the Australian Census Longitudinal Dataset.

6.1 Demographic profile

In May 2015, the youth population of Western Sydney (15-24) made up 19.2% of the resident labour force (Figure 23). In comparison, only 14.6% of the Rest of Sydney resident labour force was aged 15-24. Western Sydney also had a higher proportion in the 45-54 (16.0% vs 15.6%) and 55-64 (13.4% vs 12.7%) age brackets.

In May 2015, 49.4% of the Western Sydney resident labour force was male, up slightly from 49.2% in May 2000. 49.1% of the Rest of Sydney resident labour force was male in May 2015.

Figure 22: Proficiency in English (2006 to 2011)



The proportion of people speaking a language other than English at home has risen faster in Western Sydney (+3.2%) than the Rest of Sydney (+1.6%). In both areas, the proportion of people speaking another language and English

[24] All data is original, non-seasonally adjusted data. Sources: ABS, *Labour force, Australia, Detailed – Electronic Delivery, May 2015*, Cat. No. 6291.0.55.001, 18 June 2015 and ABS, *Labour force, Australia, Detailed, Quarterly, May 2015*, Cat. No. 6291.0.55.003, 18 June 2015

well rose between 2006 and 2011 (Figure 22). The proportion of people speaking English not well or not at all stayed the same in the Rest of Sydney while rising by 0.2 percentage points to 7.3% in 2011 in Western Sydney.

6.2 Labour force indicators

The total number of employed people in Western Sydney grew by 2.8% in the last year to reach 939,000 (Figure 24). In comparison, the number of employed people in the Rest of Sydney grew by 1.7%. However, average annual growth over the past five years in Western Sydney has been 1.55%, lower than growth in the Rest of Sydney (1.74%). Both rates exceeded average annual employment growth across all of NSW over the last 5 years (1.34%).

Further to this picture, the employment-to-population ratio shows that employment growth in Western Sydney has lagged behind population growth since June 2009, when the ratio reached a high of 62.1% (Figure 25). The employment-to-population ratio in May 2015 (60.1%) was approximately the same as it was in May 2000 (59.8%), having risen slightly since a low of 59.6% in July 2014. In contrast, the employment-to-population ratio in the Rest of Sydney was only marginally lower (64.9%) in May 2015 than its high of 65.3% in August 2013.

A larger proportion of the job growth in the last 5 years in Western Sydney is attributable to part-time job growth. Average annual full-time job growth was 0.95% between May 2010 and May 2015 (+31,000 jobs to reach 669,000 jobs); average annual part-time job growth was 3.11% (+38,400

Figure 23: Age distribution (2000 to 2015)

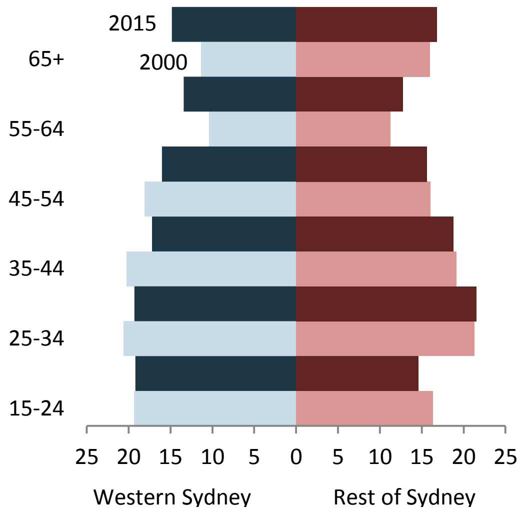


Figure 24: Annual employment growth

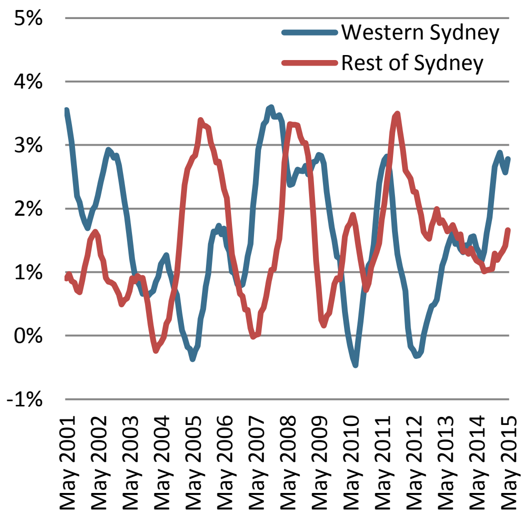
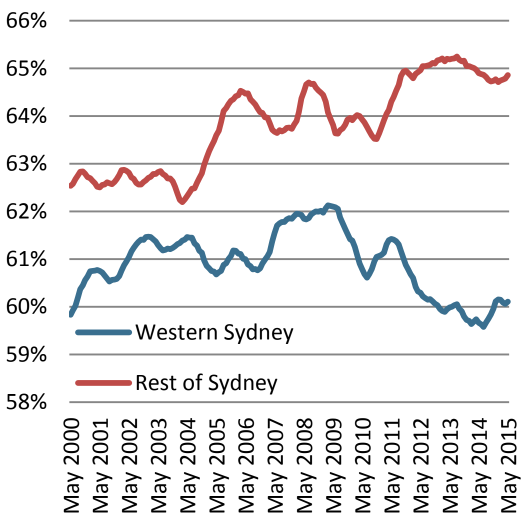


Figure 25: Employment-to-population ratio



jobs to reach 270,000 jobs) (Figure 26). In the last year, the full-time job creation growth rate in Western Sydney increased from -0.4% to 2.5%. Part-time job creation fell from an annual rate of 6.0% to 3.4%, down from a high of 9.7% in November 2014. Over the last five years, full-time job growth has always been higher in the Rest of Sydney, while part-time job growth has generally been higher in Western Sydney (Figure 27). The male full-time job growth rate in Western Sydney rose from a low of -2.5% in June 2014 to 4.5% in May 2015. In contrast, the female full-time job growth rate in Western Sydney has been trending below zero since October 2014; it was -0.8% in May 2015.

Figure 26: Full-time employment growth

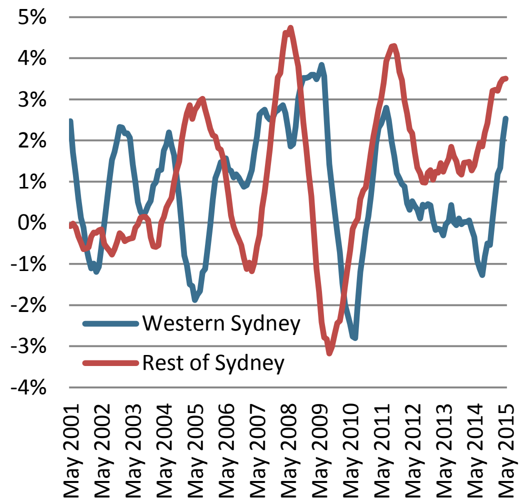
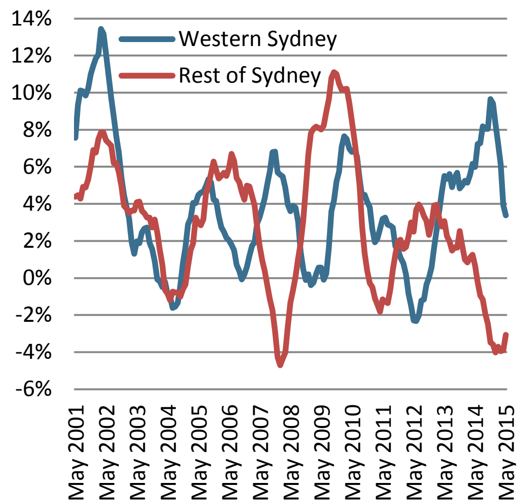


Figure 27: Part-time employment growth



The proportion of employed people in part-time work has slowly increased over the last 15 years, reaching 28.8% in Western Sydney in May 2015 (Figure 28). Since May 2009, the proportion has generally increased in Western Sydney while it plateaued then fell in the Rest of Sydney.

Figure 28: Proportion of employed people in part-time employment

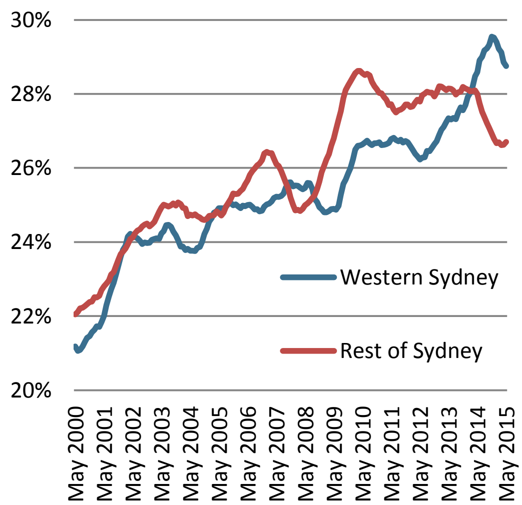
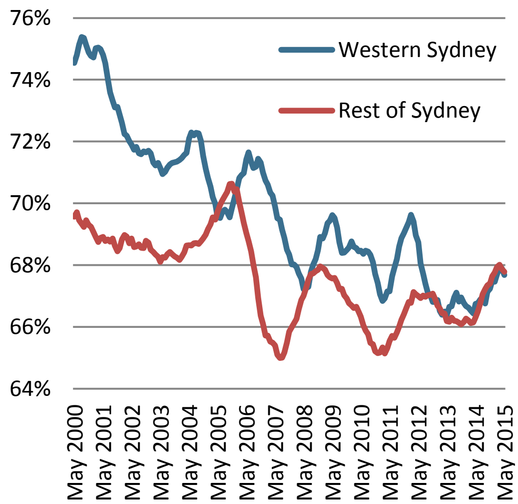


Figure 29: Proportion of part-time employees who are women



In May 2000, the proportion of part-time employees who are women was roughly 5 percentage points higher in Western Sydney (74.5%) than the Rest of Sydney (69.6%) (Figure 29). However, since July 2012 the proportion in Western Sydney has closely approximated the proportion in the Rest of Sydney, being consistently within a percentage point.

In May 2015, there were 59,800 unemployed people in Western Sydney and 65,400 unemployed people in the Rest of Sydney. These are equivalent to unemployment rates of 6.0% and 4.5% respectively (Figure 30). This Western Sydney rate is below the 2-year average of 6.7%, but roughly equivalent to the 5 and 10 year averages of 6.1% and 6.0% respectively. The 2, 5 and 10 year averages for the Rest of Sydney are 4.1%, 4.3% and 4.0% respectively.

Figure 30: Unemployment rate

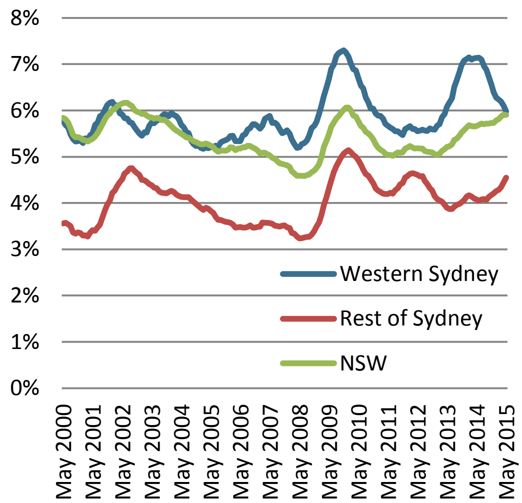
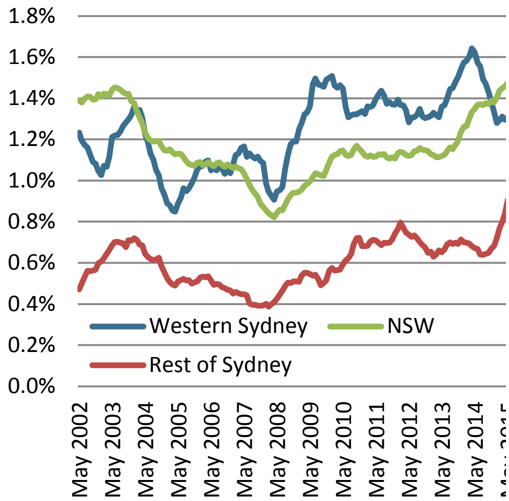


Figure 31: Long-term unemployment rate



In May 2015, approximately 13,000 people were long-term unemployed in both Western Sydney and the Rest of Sydney. The Western Sydney long-term unemployment rate was 1.3%, down from a high of 1.6% in May 2014 (Figure 31). The long-term unemployment rate in the Rest of Sydney was 0.9%, the highest it has been since May 2002. The 2 and 5 year averages for Western Sydney were 1.5% and 1.4% respectively.

Figure 32 shows unemployment rates across all of Sydney for March 2015. These rates are modelled by the Department of Employment for Statistical Areas Level 2 (SA2s) using ABS labour force data. 48 of 235 SA2s across all of Sydney had an unemployment rate above 7%. Of these, 35 were in Western Sydney.[25]

[25] Note that, of the 13 in the Rest of Sydney, 5 would also be included in Western Sydney under the definition of Western Sydney (LGA).

Figure 32: Unemployment rates by SA2 (March 2015)[26]

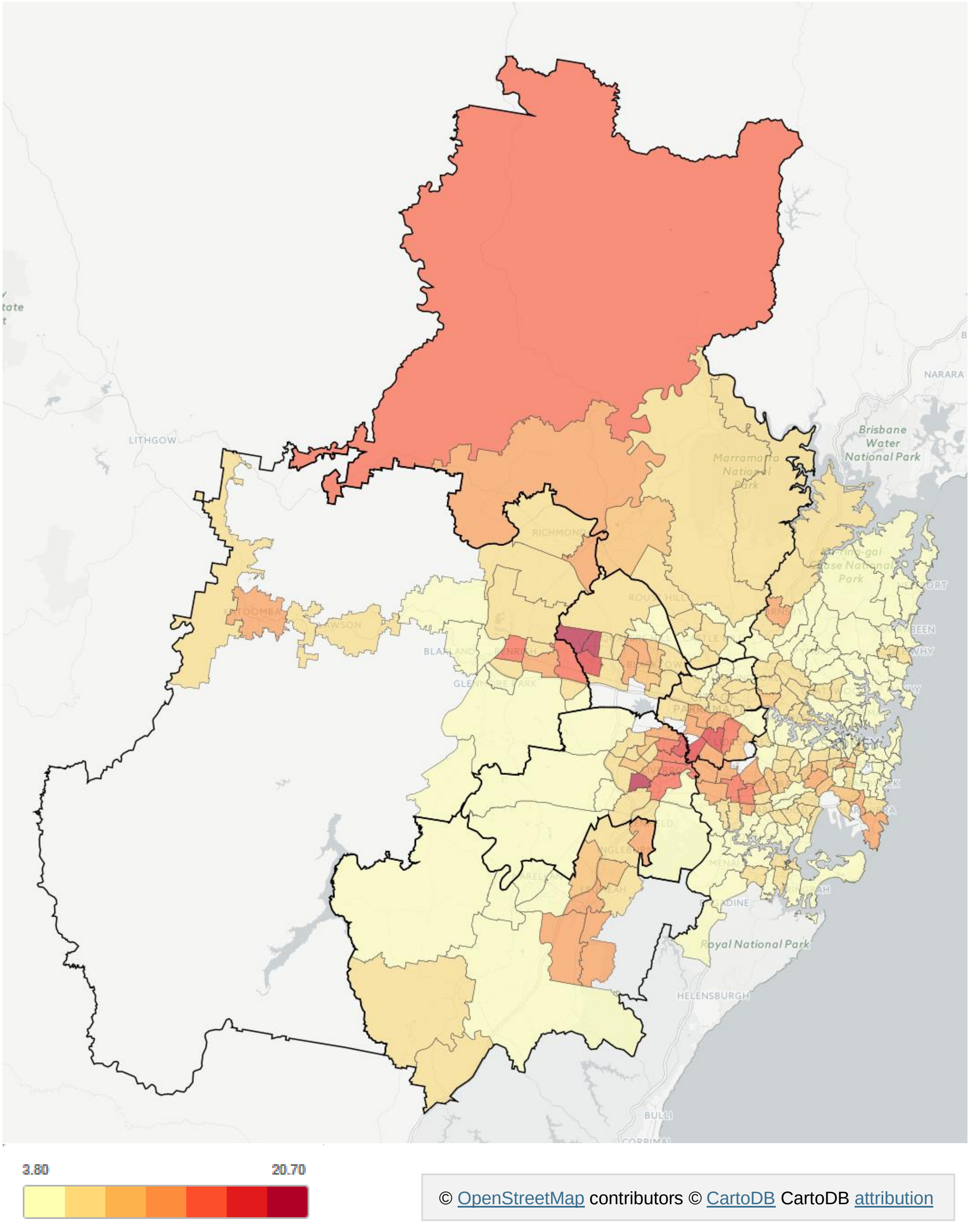
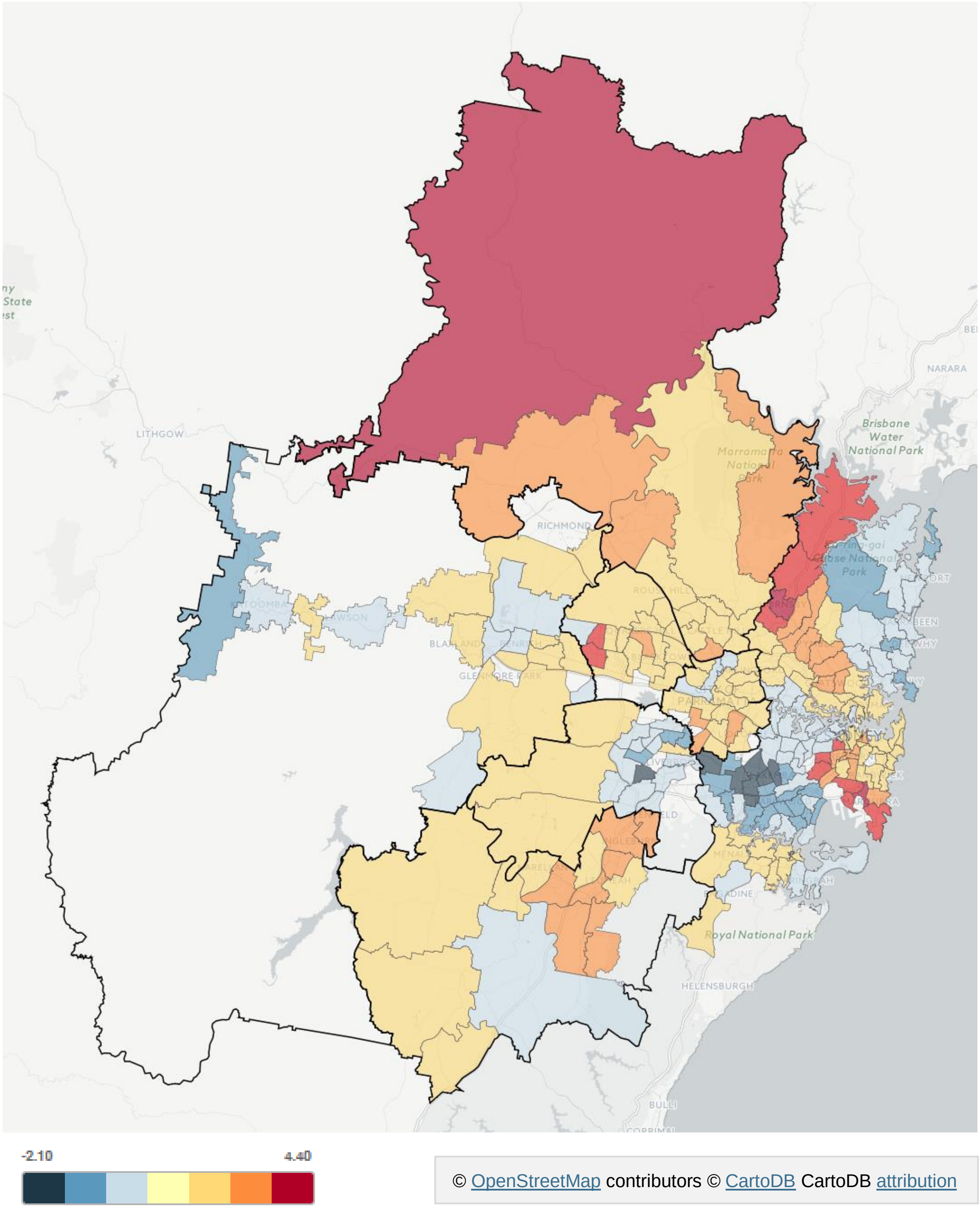


Figure 33 shows changing unemployment rates between March 2011 and March 2015. Areas where unemployment rates are now higher are in orange and red; areas in blue have lower unemployment rates. The largest falls

[26] Department of Employment, *Small Area Labour Market, March quarter 2015 – data tables*, 19 June 2015

generally occurred in the Bass Hill and Lakemba areas of Sydney; the largest increases near Mount Druitt, Hornsby, Redfern, Marrickville and Mascot.

Figure 33: Changing unemployment rates (March 2011 to March 2015)[27]



The Western Sydney resident labour force participation rate has declined since reaching a high of 66.7% in July 2009 (Figure 34). It was 63.9% in May 2015,

[27] Ibid.

slightly below the 2 year average of 64.2%. In contrast, the participation rate in the Rest of Sydney, at 68.0%, is close to its high of 68.2% in July 2012.

Much of the decline in the Western Sydney participation rate can be explained by declining male participation (Figure 35). The male participation rate fell from a high of 75.3% in July 2009 to 71.3% in May 2015. In the Rest of Sydney, the rate was 74.4%. The female participation rate in Western Sydney, while also declining substantially after August 2009, from 58.4% to 55.1% in February 2013, has risen since, being 56.7% in May 2015 (Figure 36). Compared to the male participation rate, the female participation rate in Western Sydney has consistently been several percentage points below the Rest of Sydney since May 2000. In May 2015, the female participation rate in the Rest of Sydney was 61.8%.

Figure 34: Participation rate

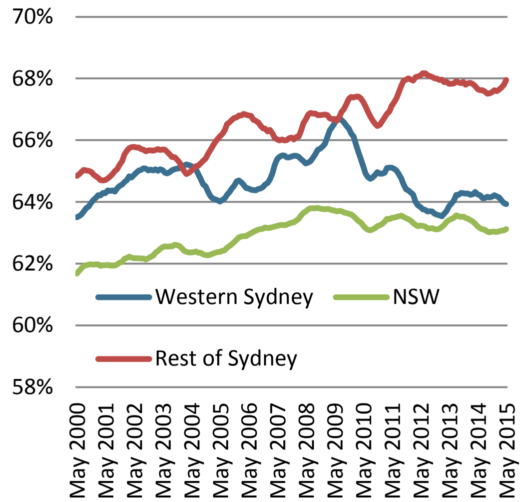


Figure 35: Male participation rate

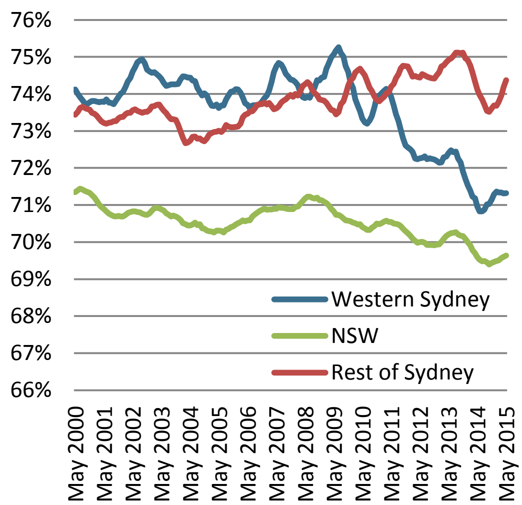
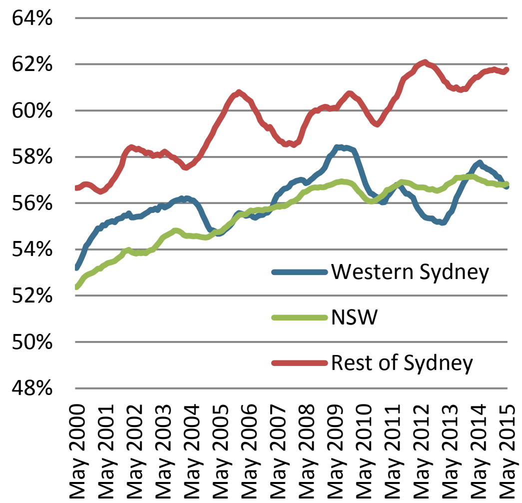


Figure 36: Female participation rate



6.3 Youth labour force indicators

Youth annual employment growth is relatively volatile (Figure 37). The number of employed youth in Western Sydney grew by 15.7% in the last year to reach 166,800 in May 2015 (Figure 38). However, the 5-year average annual growth rate is 1.2%. Youth employment in the Rest of Sydney reached a low in February 2015 of 166,900, increasing slightly to 170,200 by May 2015. The 5-year average annual growth rate for the Rest of Sydney is -0.7%.

Figure 37: Annual youth employment growth

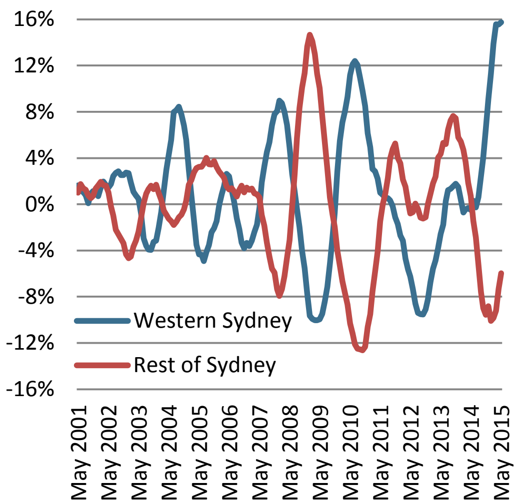
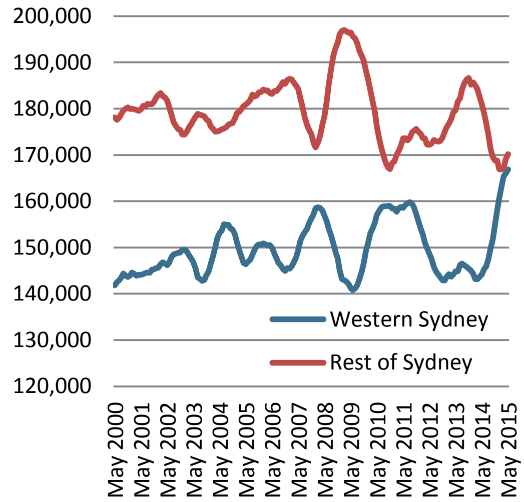
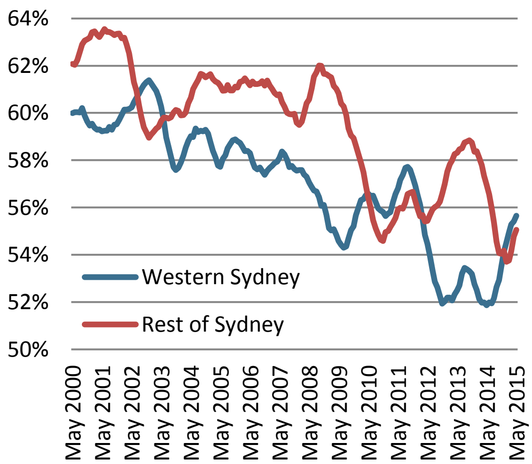


Figure 38: Youth employment



While youth employment in Western Sydney has risen in the last year, the youth-to-population ratio has declined over the past 15 years (Figure 39). The ratio was 55.6% in May 2015, down from 60.0% in May 2000. At its lowest point, the ratio reached 51.9% in May 2014. The ratio in the Rest of Sydney has also declined, falling to 55.1% in May 2015, down from a peak of 63.5% in June 2001. While these figures show that a smaller proportion of youth are employed today compared to 15 years ago, there is no 2015 data available at the regional level on what youth who are not employed are doing i.e. whether they are studying or neither studying nor engaged in the labour force.

Figure 39: Youth employment-to-population ratio



Between May 2000 and May 2015, youth full-time employment in both Western Sydney and the Rest of Sydney declined substantially by 15.4% (14,700 jobs) and 26.1% (28,700 jobs) respectively (Figure 40). Although the number of full-time jobs in Western Sydney increased by 17.4% in the last year, the 2 and 5 year average annual growth rates are 4.2% and -1.2% respectively. In contrast, youth part-time employment in Western Sydney and the Rest of Sydney has increased substantially, by 85.5% (39,700 jobs) and 30.3% (20,700 jobs) respectively since May 2000 (Figure 41). Part-time youth employment in Western Sydney grew by 14.3% in the last year, and at an average annual rate of 3.9% over the last 5 years. The proportion of employed youth in part-time employment in Western Sydney has therefore substantially increased from 32.8% in May 2000 to 51.7% in May 2015.

Figure 40: Youth full-time employment

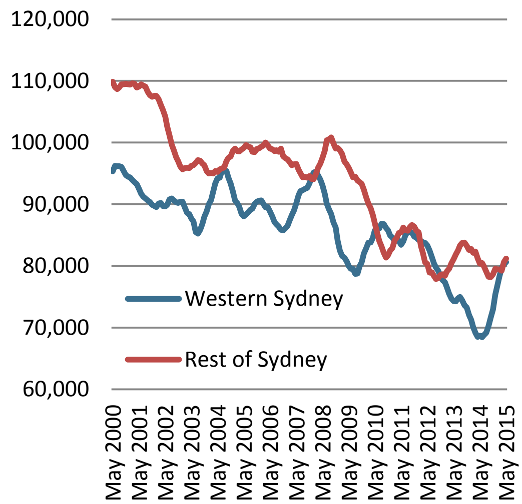
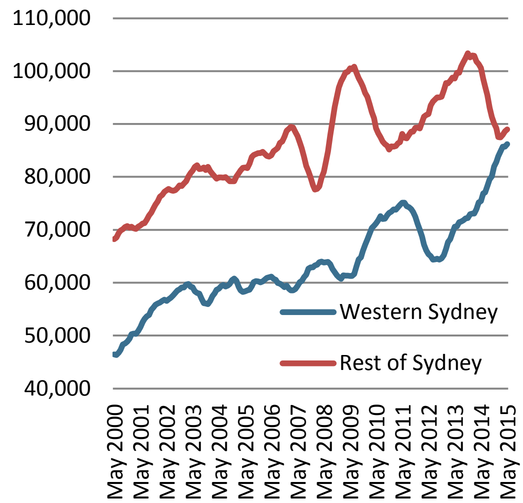


Figure 41: Youth part-time employment



The youth unemployment rate only paints part of the picture of youth unemployment.[28] The youth unemployment rate is the number of unemployed youth expressed as a percentage of the *youth labour force*, whereas the youth unemployment ratio is the number of unemployed youth expressed as a percentage of the *youth population*. The ratio places youth unemployment into perspective by showing what proportion of all youth are affected by unemployment. It has been argued that the youth unemployment rate overestimates youth unemployment and the youth unemployment ratio underestimates youth unemployment, so that the true unemployment estimate lies somewhere between the two.

Figure 42: Youth unemployment rate

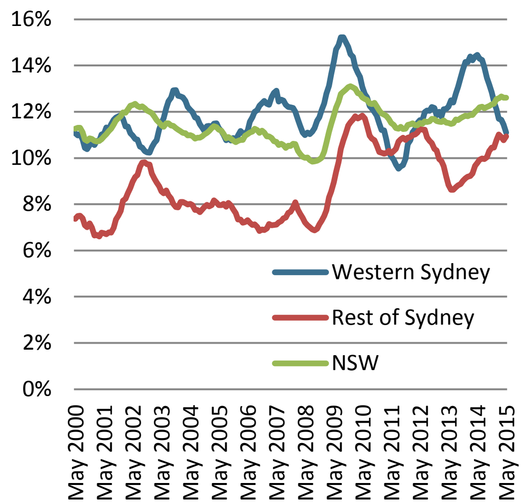
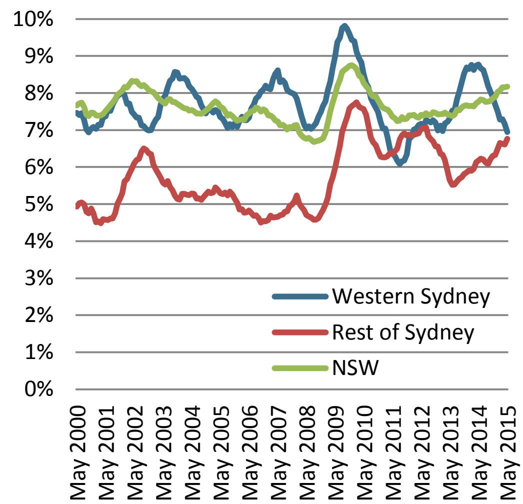


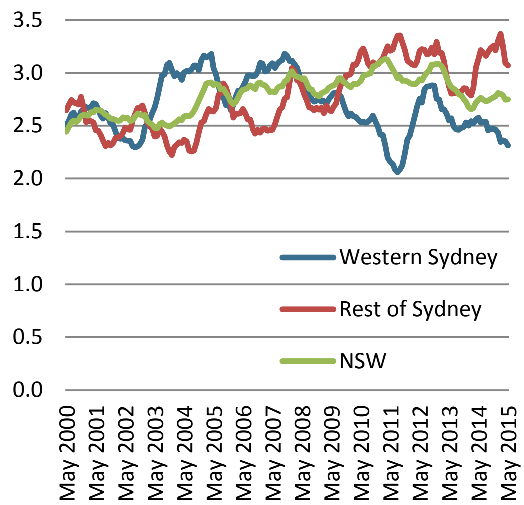
Figure 43: Youth unemployment ratio



[28] D Montoya, Labour force trends in Greater Sydney, NSW Parliamentary Research Service, Statistical Indicators 5/2014, August 2014

In May 2015, there were 20,800 unemployed youth in Western Sydney, equivalent to an unemployment rate of 11.1% (Figure 42). In the Rest of Sydney, there were 20,900 unemployed youth (unemployment rate 10.9%). While the 2-year average for Western Sydney is 13.2%, the 5 and 10-year averages are lower at 12.1% and 12.2% respectively. In contrast, the 2, 5 and 10 year averages for the Rest of Sydney are 9.8%, 10.3% and 9.2% respectively.

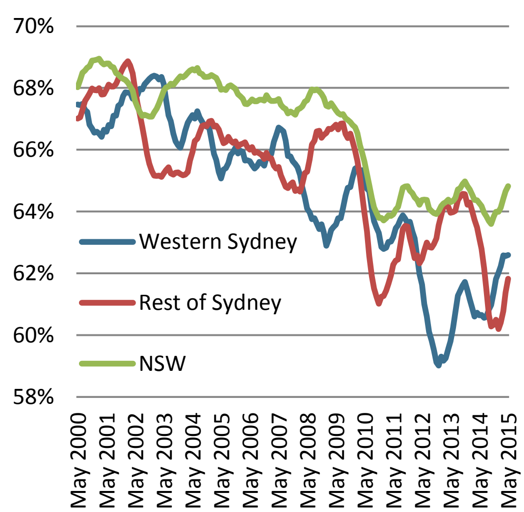
Figure 44: Ratio of youth-to-adult unemployment rates



The youth unemployment ratio follows a similar graphical pattern to the unemployment rate, but is several percentage points lower (Figure 43). In May 2015, the unemployment ratio was 6.9% in Western Sydney and 6.8% in the Rest of Sydney. The 2 and 5-year averages for Western Sydney and the Rest of Sydney were 8.1% and 7.4%, and 6.1% and 6.4% respectively.

Another measure of youth unemployment is the ratio of youth-to-adult unemployment rates (Figure 44). Other things being equal, a ratio of 1 would indicate that youth and adults are equally affected by unemployment; however, the likelihood that the youth unemployment rate is an overestimate of youth unemployment suggests that a ratio higher than 1 is the point at which youth and adults are equally affected. In May 2015, the ratio was 2.3 in Western Sydney and 3.1 in the Rest of Sydney. Since August 2009, the Western Sydney ratio has been smaller than the Rest of Sydney ratio. The 2 and 5-year averages for Western Sydney have both been 2.5, while the 2 and 5 year averages for the Rest of Sydney have been 3.0 and 3.1.

Figure 45: Youth participation rate



Youth participation rates across the State have declined since May 2000 (Figure 45). In May 2015, the Western Sydney rate was 62.6%, down from 67.5%. While regional figures are not available for youth who are studying, it is worth noting that at the Australian level, declining participation rates can be explained at least in part by an increase in the percentage of youth who are studying full-time from 44.1% to 51.9%.

6.4 Employment by industry

The ABS categorises employment using an industry classification framework, ANZSIC 2006. In May 2015, more Western Sydney residents were employed in retail trade (109,900) than any other industry (Figure 46). The top four employing industries were rounded out by health care & social assistance (105,400), construction (97,300) and manufacturing (95,400). Four industries employ less people in May 2015 than May 2000: manufacturing (-20,600; -17.8%); information media & telecommunications (-2,300; -14.1%); agriculture, forestry & fishing (-1,100; -19.6%); and mining (-400; -36.4%).

Figure 46: Employment by industry in Western Sydney

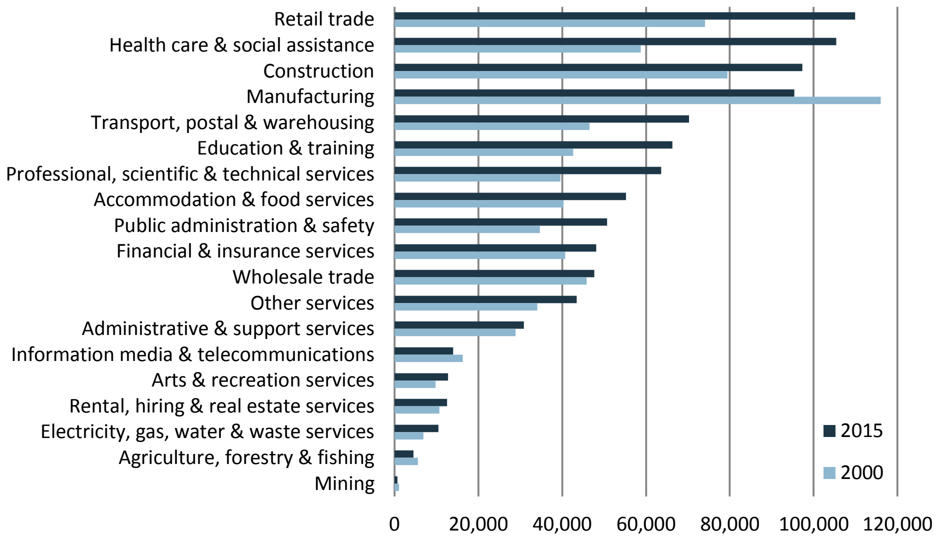
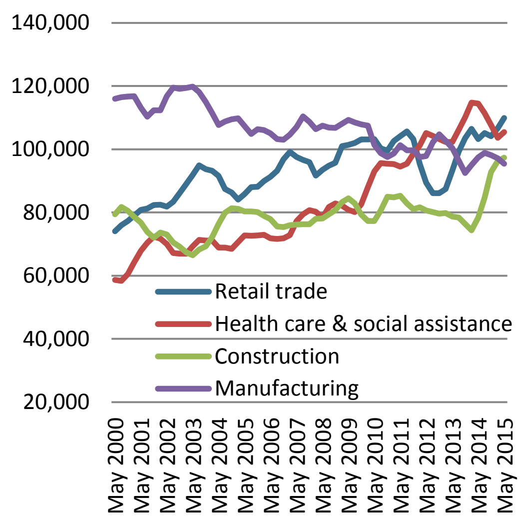


Figure 47: Top four employing industries in Western Sydney

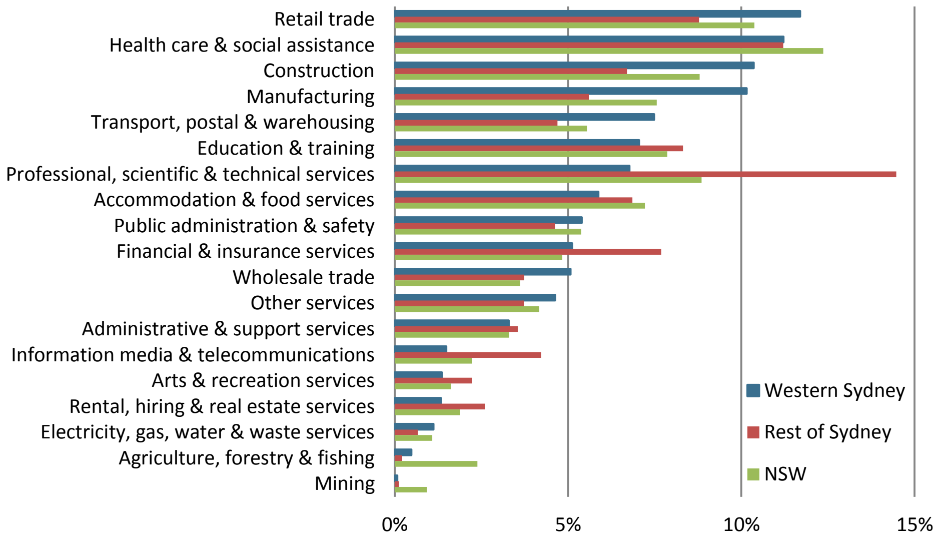


Of the top four employing industries, only manufacturing has experienced negative average annual growth in the last five years (-1.2%) (Figure 47). The fastest growing industries were education & training (4.8% per annum) and construction (4.7% per annum). Most of the employment growth in construction occurred in the last year, when 22,900 jobs were added between February 2014 and May 2015.

The top four industries in Western Sydney generally employ a higher *share of residents* in Western Sydney than they do in the Rest of Sydney or NSW, their shares in Western Sydney being as follows: retail trade (11.7%); health care & social assistance (11.2%); construction (10.4%); and manufacturing (10.2%) (Figure

48). For comparison, the top four industries in the Rest of Sydney by share are as follows: professional, scientific & technical services (14.5%); health care & social assistance (11.2%); retail trade (8.8%); and education & training (8.3%)

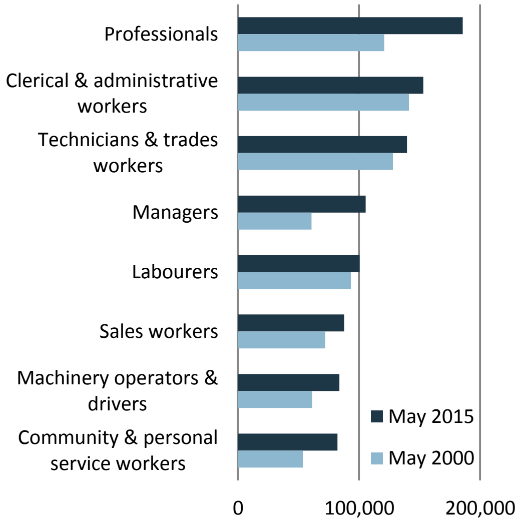
Figure 48: Industry share of the resident labour force



6.5 Employment by occupation

The ABS also categorises employment by occupation, according to ANZSCO 2013. In May 2015, the top three occupations in Western Sydney were professionals (185,800), clerical & administrative workers (153,300) and technicians & trades workers (139,800) (Figure 49). Between 2000 and 2015, professionals experienced the largest numerical growth (65,100) and managers experienced the largest percentage growth (73.5%). Labourers experienced the smallest numerical (7,000) and percentage growth (7.5%).

Figure 49: Employment by occupation in Western Sydney



Over the last five years, the fastest growing occupations per annum in Western Sydney have been machinery operators & drivers (2.9%), professionals (2.9%) and managers (2.6%) (Figure 50). Compared to the Rest of Sydney, there are a much larger share of Western Sydney residents employed as technicians & trades workers, labourers, and machinery operators & drivers (Figure 51). In contrast, 33.4% of Rest of Sydney residents are employed as professionals compared to 19.8% in Western Sydney.

Figure 50: 5-year average annual employment growth by occupation in Western Sydney

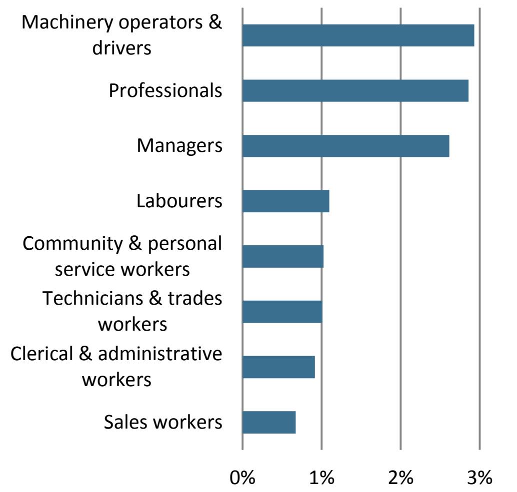
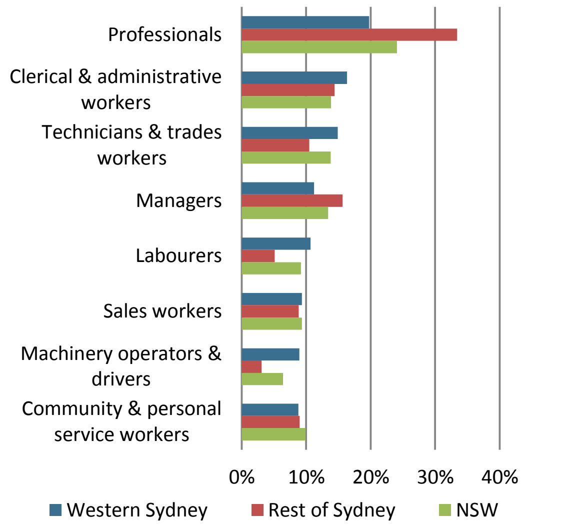


Figure 51: Occupation share of the resident labour force

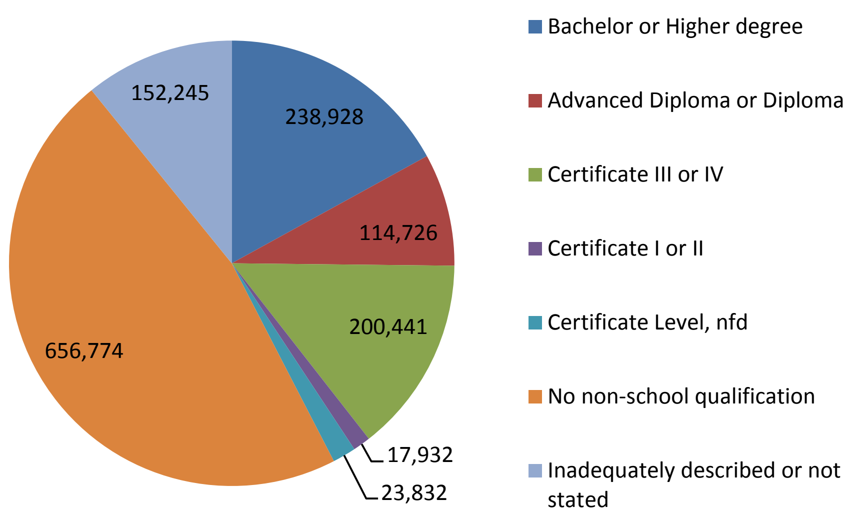


6.6 Qualifications

6.6.1 Level of education

According to the Census, in 2011 238,928 Western Sydney residents had a bachelor or higher degree, equivalent to 17.0% of all residents (Figure 52). Almost half of all residents had no non-school qualifications (656,774 people).

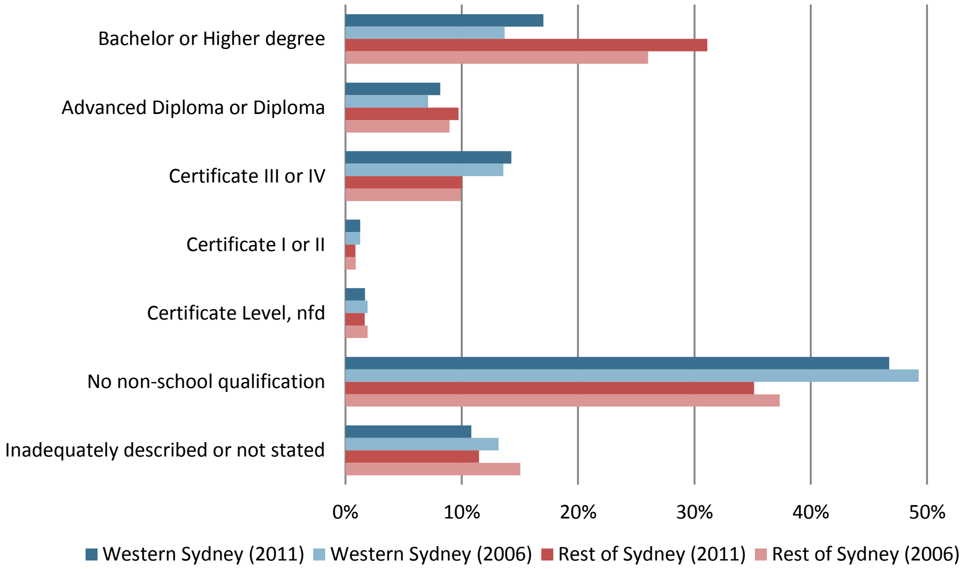
Figure 52: Levels of education in the Western Sydney resident labour force (2011)



Levels of education in Western Sydney improved between 2006 and 2011 (Figure 53). The proportion of people with a bachelor or higher degree rose from 13.7% to 17.0%, the largest change for any category. The proportion of people without a non-school qualification fell from 49.3% to 46.7%. Figure 53 shows three key differences between Western Sydney and the Rest of Sydney:

- The Rest of Sydney has a much higher proportion of people with a bachelor or higher degree (31.1% vs 17.0%). This proportion also experienced a larger increase in the Rest of Sydney (5.1%) compared to Western Sydney (3.3%) between 2006 and 2011;
- Western Sydney has a higher proportion of people with a Certificate III or IV (14.3% vs 10.0%); and
- Western Sydney has a higher proportion of people with no non-school qualification (46.7% vs 35.1%).

Figure 53: Changing levels of education in Sydney (2006 to 2011)



6.6.2 Field of study

In 2011, 159,379 residents in Western Sydney had a qualification in management and commerce, the highest number of any field of study (Figure 54). Other common fields of study were engineering and related technologies (122,501 residents) and society and culture (67,452 residents). The fields that experienced the largest numerical growth were management and commerce (35,399 residents), society and culture (19,299 residents) and health (10,819 residents).

11.3% of the Western Sydney resident labour force had a management and commerce qualification; this was true of 15.8% of the Rest of Sydney (Figure 55). The Rest of Sydney also had a notably higher proportion of residents with qualifications in society and culture and the creative arts. On the other hand, Western Sydney had a much higher proportion of residents with a qualification in engineering and related technologies (8.7% vs 7.3%). The fastest growing fields of qualification in Western Sydney between 2006 and 2011 were society and culture (40.1%), information technology (32.1%), management and commerce (28.6%) and the creative arts (27.8%) (Figure 56).

Figure 54: Fields of study in the Western Sydney residential labour force (2006 to 2011)

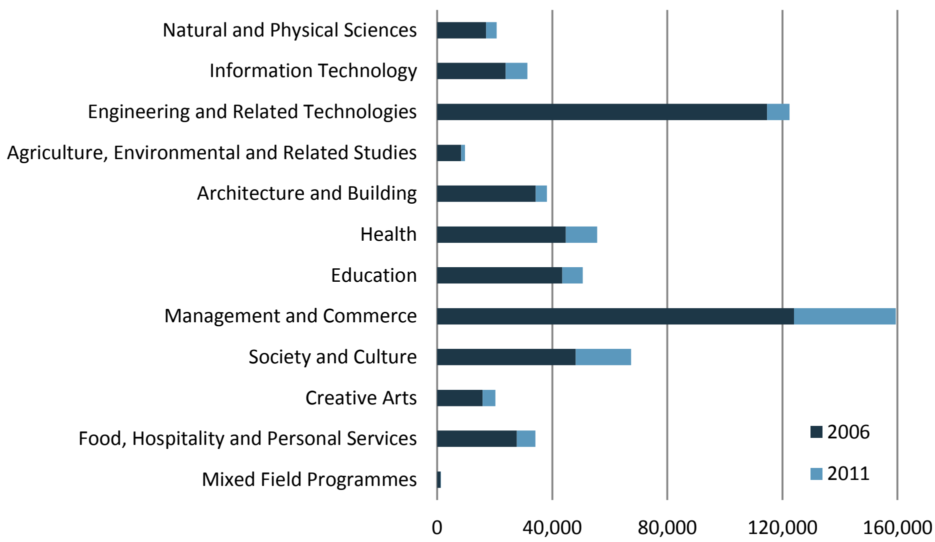
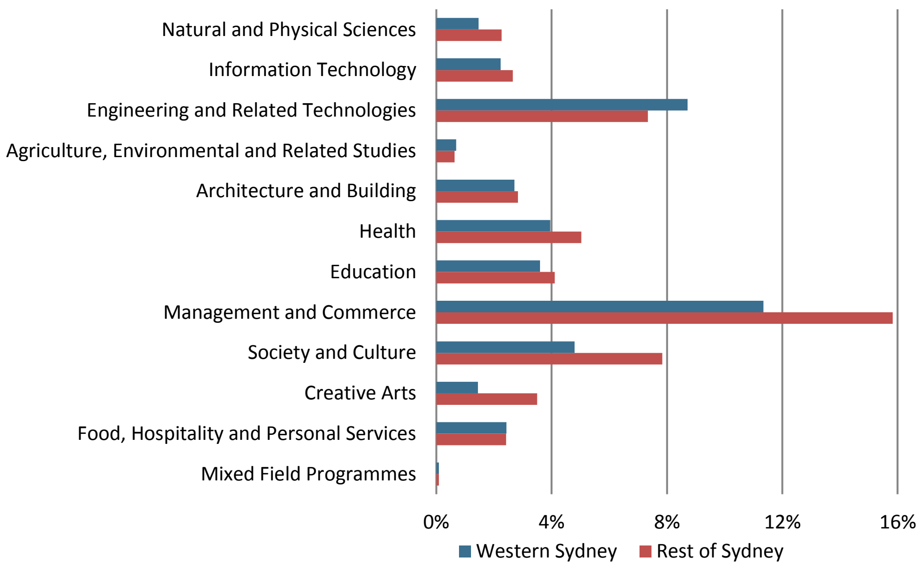


Figure 55: Fields of study in the Sydney resident labour force (2011)



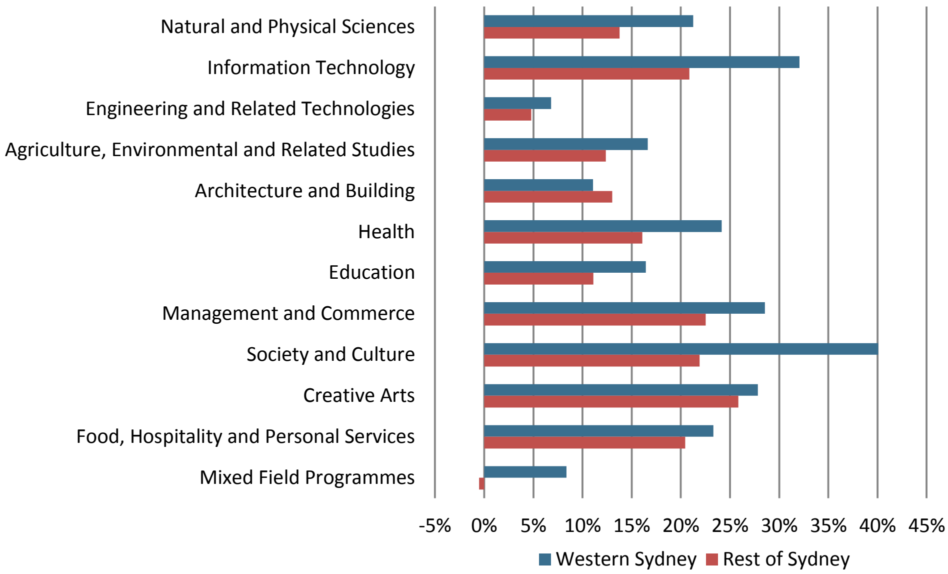
STEM (Science, Technology, Engineering and Mathematics) qualifications are defined according to the Australian Standard Classification of Education (2001) as those in the fields of natural and physical sciences, information technology, engineering and related technologies and agriculture, environment and related studies. Western Sydney had roughly equivalent or higher figures for STEM than the Rest of Sydney:

- 13.1% of Western Sydney residents had STEM qualifications, compared to 12.9%;
- 184,307 Western Sydney residents had STEM qualifications, compared to 244,193;
- 30.2% of Western Sydney *residents with a qualification* had a STEM

qualification, compared to 23.7%; and

- The number of Western Sydney residents with a STEM qualification grew by 12.5% between 2006 and 2011, compared to 9.7%.

Figure 56: Growth in fields of study in Sydney (2006 to 2011)



6.7 Longitudinal labour force indicators

The Australian Census Longitudinal Dataset (ACLD) uses data from the Census of Population and Housing to build a longitudinal picture of Australian society. It has done this by linking a 5% random sample from the 2006 Census with corresponding records from the 2011 Census. The data is weighted to the ABS Estimated Resident Population to infer results for the Australian population. The ACLD therefore enables examination of the changing economic circumstances of a particular population.[29] The following analysis considers only those people who were residents of the same area in both 2006 and 2011.

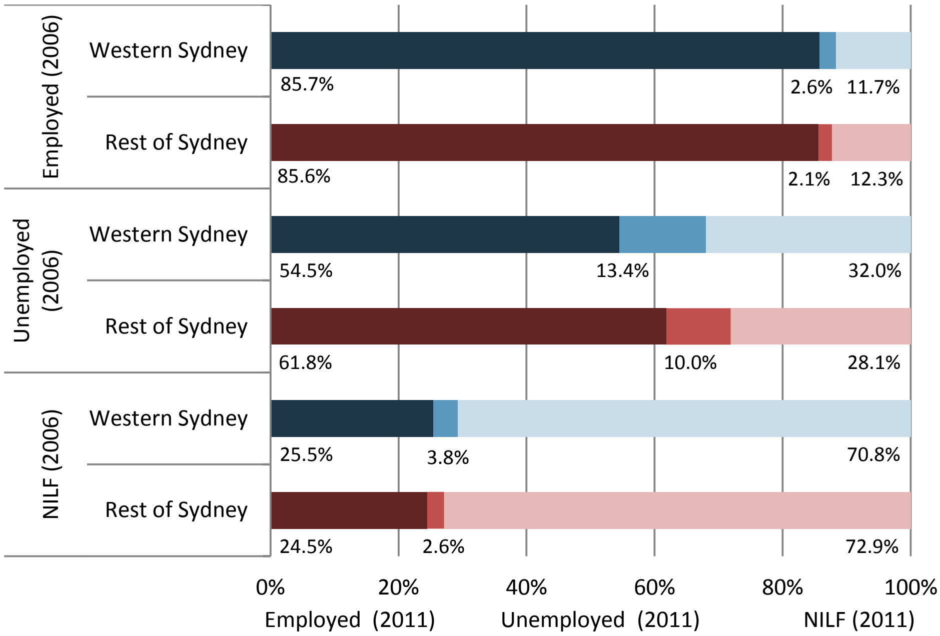
6.7.1 Labour force status

Figure 57 compares changing labour force status over time for the Western Sydney and Rest of Sydney populations aged over 15 in 2006. Whatever the labour force status in 2006, Western Sydney residents were always more likely to be unemployed in 2011 than Rest of Sydney residents. For example, for residents employed in 2006, in 2011 2.6% were unemployed in Western Sydney and 2.1% in the Rest of Sydney. The differences between Western Sydney and the Rest of Sydney were most pronounced for residents who were unemployed in 2006. By 2011, Western Sydney residents were more likely to

[29] Note that analysis of changes over time relies solely on two point-in-time surveys conducted five years apart. An example of a problem that may arise in interpreting the significance of the data is where a person may have been unemployed the week of the 2006 Census and the week of the 2011 Census, yet employed for the entire period between the two Censuses. People whose response is recorded as 'not stated' or 'not applicable' have been excluded.

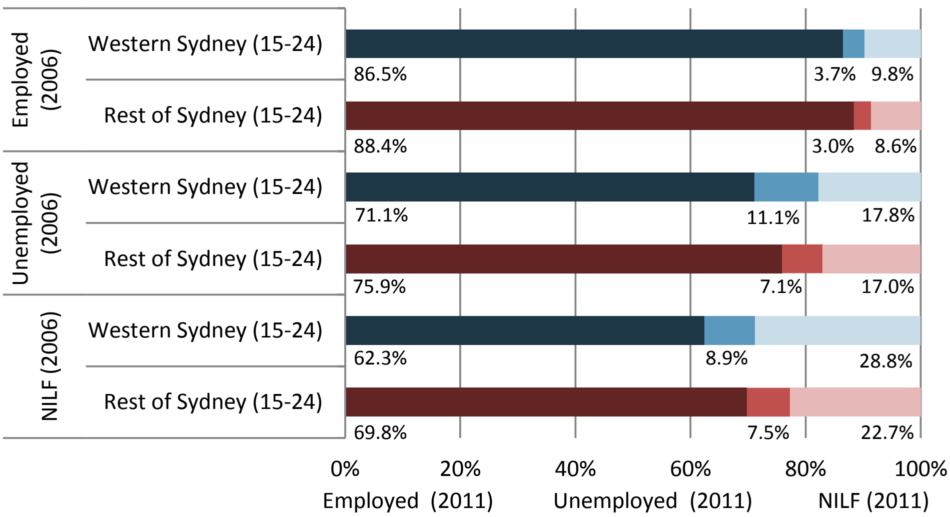
be unemployed (13.4% vs 10.0%) or not in the labour force (NILF) (32.0% vs 28.1%) than Rest of Sydney residents.

Figure 57: Changing labour force status (2006 to 2011)



Similar differences were true for youth (persons aged 15-24) (Figure 58). Western Sydney youth employed in 2006 were more likely to be unemployed or NILF in 2011. This was also true for youth who were either unemployed or NILF in 2006. Comparing Figure 58 to Figure 57, it can be seen that youth who were unemployed in 2006 were more likely to be employed in 2011 (Western Sydney – 71.1%; Rest of Sydney – 75.9%) than persons of any age who were unemployed in 2006 (Western Sydney – 54.5%; Rest of Sydney – 61.8%).

Figure 58: Changing labour force status for youth (15-24) (2006 to 2011)



6.7.2 Employment by industry and occupation

On average, 56.4% of Western Sydney residents were employed in the same industry in both 2006 and 2011 (Figure 59). In comparison, this was true of 54.9% of Rest of Sydney residents. Aside from agriculture, forestry & fishing and mining, which were the smallest industries, the largest differences between Western Sydney and the Rest of Sydney were for manufacturing (10.2 percentage points), retail trade (6.9 percentage points) and public administration & safety (6.6 percentage points).

Figure 59: Proportion of people in each industry in 2006 still working in the same industry in 2011

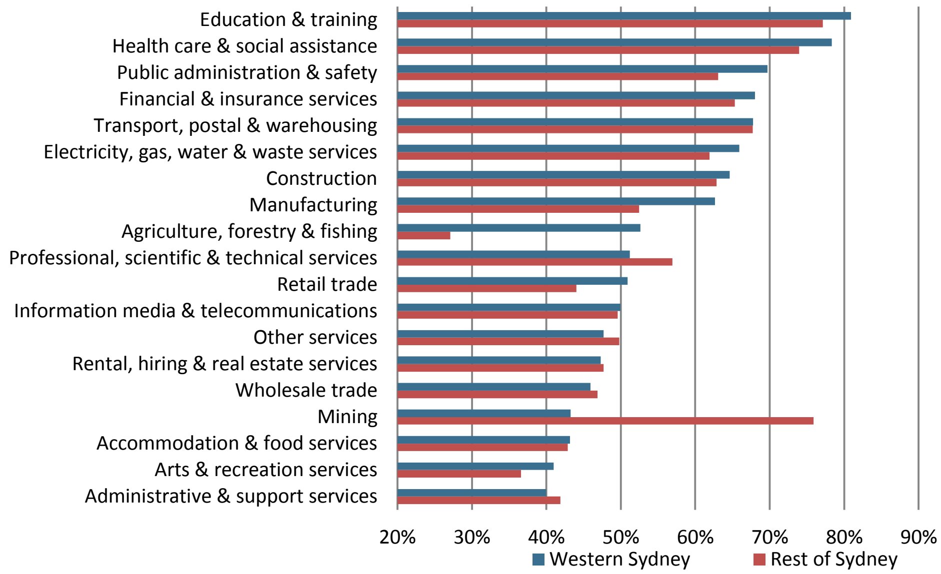


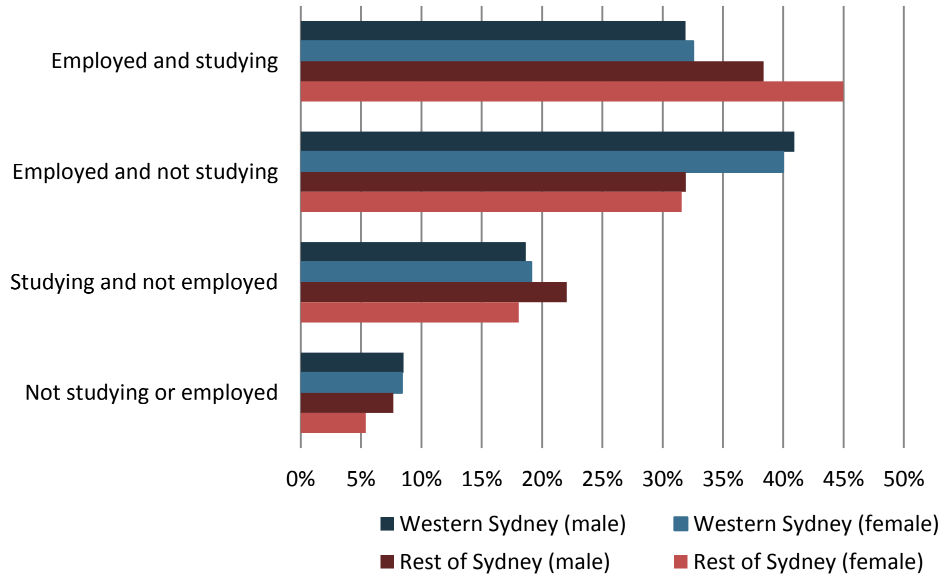
Figure 60: Proportion of people by occupation in 2006 still working in the same occupation in 2011

On average, 59.7% of Western Sydney residents had the same occupation in both 2006 and 2011 (Figure 60). In comparison, this was true of 55.7% of Rest of Sydney residents. The differences between Western Sydney and the Rest of Sydney were largest for community & personal service workers (7.4 percentage points) and clerical & administrative workers (6.2 percentage points).

6.7.3 Education and qualifications

Figure 61 looks at the study and employment status in 2011 of people who were studying in Year 11 or 12 in 2006. Western Sydney residents were less likely to be employed and studying (32.2%) than Rest of Sydney residents (41.9%). Conversely, Western Sydney residents (40.4%) were more likely to be employed and not studying than Rest of Sydney residents (31.7%). Western Sydney residents (8.5%) were also more likely to be not studying or employed than Rest of Sydney residents (6.5%).

Figure 61: Employed and/or undertaking higher studies, people enrolled in Year 11 or 12 in 2006



Between 2006 and 2011, 16.7% of Western Sydney residents aged over 15 in 2006 acquired a higher qualification (e.g. their highest level of qualification in 2006 was a diploma and in 2011 it was a bachelor degree). In comparison, 22.6% of Rest of Sydney residents aged over 15 in 2006 acquired a higher qualification.

7. WESTERN SYDNEY WORKFORCE

Whereas Chapter 6 focused on Western Sydney's *residential labour force*, this Chapter is confined to its *workforce* i.e. those persons who work in Western Sydney. It therefore provides insight into the industries located in Western Sydney – what skills they require and how they are changing. Utilising the Western Sydney (LGA) definition, this chapter compares the Western Sydney workforce (persons aged 15 and over) to the Rest of Sydney and NSW workforces using three datasets, all of which contain different labour force characteristics: Census place of work, NSW Bureau of Transport Statistics (BTS) Journey to Work (JTW), and the *RDA Sydney Metropolitan Region Economic Baseline Assessment Report 2015*. There are two problems with Census place of work data. In 2011, due to changes in methodology, a much larger number of people have an undefined place of work. The 2011 Census also undercounted the Greater Sydney population by 1.8%. The BTS Journey to Work dataset accounts for the first problem, but not the second.

This Chapter uses the three datasets as follows:

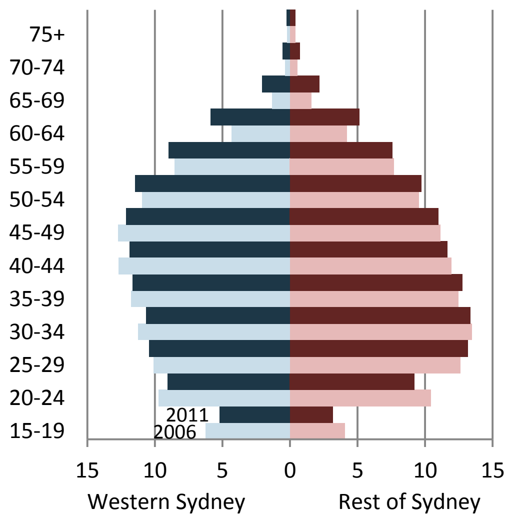
- Census 2011 (percentages only): demographic profile, full and part-time jobs and qualifications;
- Journey to Work 2011 (percentages only): employment by occupation and employment across Sydney by travel zone; and
- *RDA Sydney Metropolitan Region Economic Baseline Assessment Report 2015* (counts and percentages): total jobs and employment by industry.

7.1 Demographic profile

The Western Sydney and Rest of Sydney workforces both aged between 2006 and 2011 (Figure 62). Nevertheless, the Western Sydney workforce remains older the than Rest of Sydney workforce, its age distribution skewed towards 35 to 54 while the Rest of Sydney's distribution is skewed towards 25 to 44. That said, Western Sydney also had a higher percentage of 15-19 year olds (5.2% vs 3.2%) in 2011.

In 2011, 53.0% of the Western Sydney workforce was male, down from 53.8% in 2006. In comparison, in 2011 51.7% of the Rest of Sydney workforce was male, down from 52.0% in 2006.

Figure 62: Age distribution (2006 to 2011)

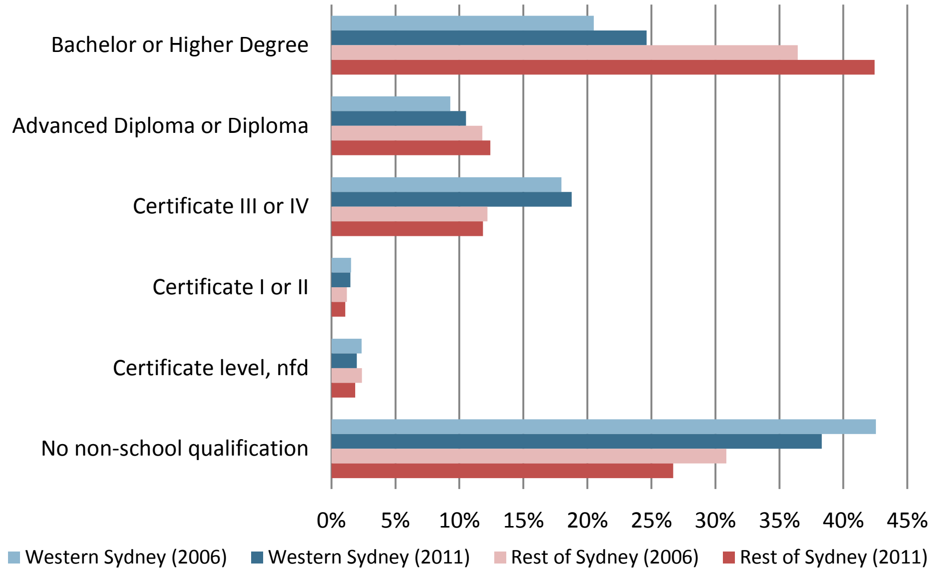


7.2 Qualifications

7.2.1 Level of education

In 2011, 24.6% of the Western Sydney workforce had a bachelor or higher degree, up from 20.5% in 2006 (Figure 63).[30] The proportion rose faster in the Rest of Sydney workforce, from 36.4% to 42.5%. Members of the Western Sydney workforce were also less likely to have an Advanced Diploma or Diploma in 2011 (10.5% vs 12.4%). On the other hand, members of the Western Sydney workforce were more likely to have any type of Certificate or no non-school qualification.

Figure 63: Changing levels of education in Sydney (2006 to 2011)



7.2.2 Field of study

In 2011, 14.4% of the Western Sydney workforce had a qualification in management and commerce (Figure 64). However, a much larger percentage of the Rest of Sydney workforce had a qualification in this area (22.1%). Fields of study which were of more significance in Western Sydney were engineering and related technologies (12.5% vs 8.9%) and education (6.1% vs 4.5%). The fields of study which were of more significance in the Rest of Sydney were management and commerce, society and culture (10.1% vs 6.5%) and creative arts (4.6% vs 1.6%).

[30] Note that the growth in the number of people with a non-school qualification may be overstated as there was a substantial decline in the number of respondents in the 'level of education inadequately described' and 'level of education not stated' categories between 2006 and 2011. This point also holds true for the next section of this Chapter.

Figure 64: Fields of study in the Sydney workforce (2011)

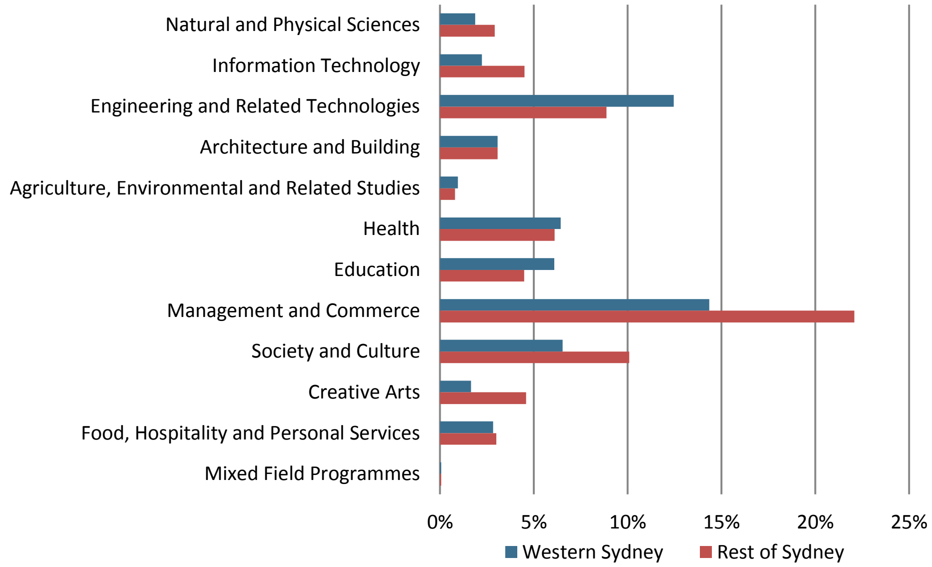
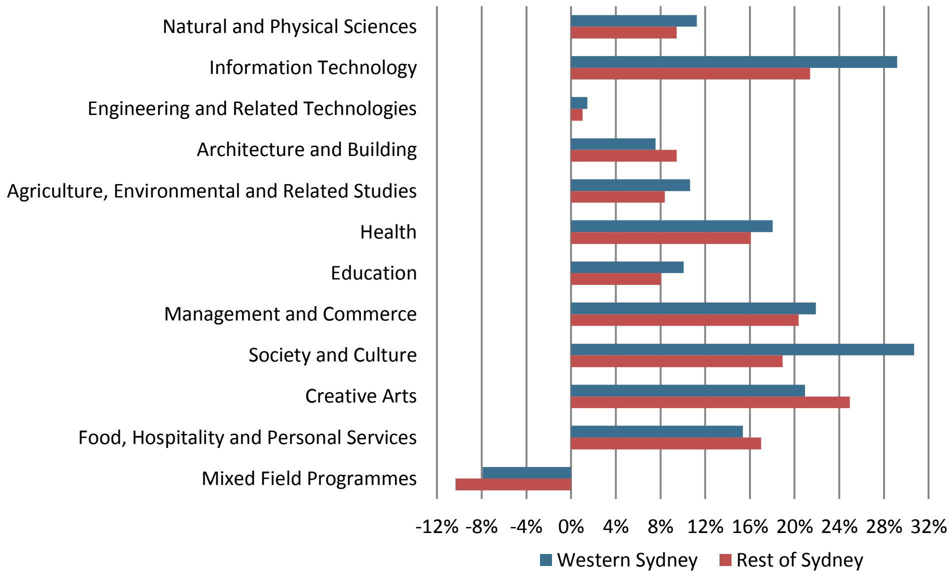


Figure 65: Growth in fields of study in the Sydney workforce (2006 to 2011)



The fields of study which grew fastest between 2006 and 2011 in Western Sydney were society and culture (+30.7%) and information technology (+29.2%) (Figure 65). Aside from mixed field programme qualifications, which only 0.1% of the Western Sydney workforce had in 2011, the fields of study which grew slowest in Western Sydney were engineering and related technologies (1.4%) and architecture and building (7.6%).

STEM (Science, Technology, Engineering and Mathematics) qualifications are defined according to the Australian Standard Classification of Education (2001) as those in the fields of natural and physical sciences, information technology, engineering and related technologies and agriculture, environment and related studies. The 2011 figures for STEM jobs in Sydney are as follows:

- 17.5% of the Western Sydney workforce had a STEM qualification, compared to 17.1% of the Rest of Sydney workforce;
- 29.9% of the Western Sydney *workforce with a qualification* had a STEM qualification, compared to 24.2%; and
- There was a 5.8% increase in the number of people in the Western Sydney workforce with a STEM qualification, compared to 7.5%.

7.3 Employment by occupation

While professional jobs held the largest share of total jobs in Western Sydney in 2011 (19.1%), they were relatively less important compared to the Rest of Sydney (Figure 66). Clerical & administrative workers held the second largest share in Western Sydney (16.3%). While community & personal service workers held the lowest share of total Western Sydney jobs (9.0%), they experienced the largest proportional growth, having made up 8.0% of the workforce in 2006.

The largest differences between Western Sydney and the Rest of Sydney with regards to occupation share of the workforce were for professionals (11.6 percentage points), machinery operators & drivers (6.3 percentage points) and labourers (4.2 percentage points).

Community & service workers was the occupation which grew the most between 2006 and 2011 in Western Sydney (+30.2%) (Figure 67). Sales workers and labourers grew the least (9.0% and 9.3% respectively).

Figure 66: Occupation share of the workforce

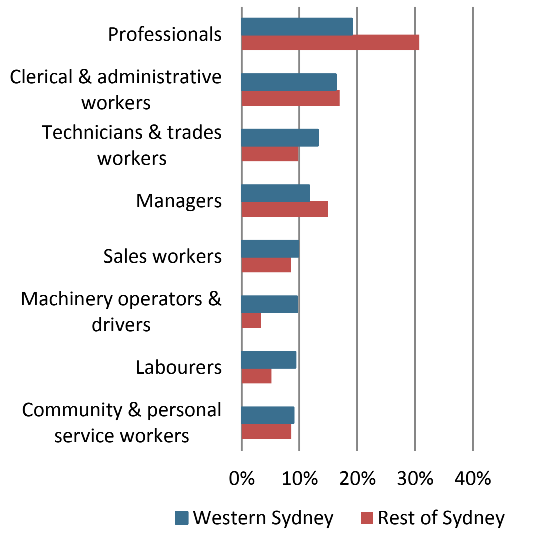


Figure 67: Job growth by occupation in Sydney (2006 to 2011)

7.4 Total, full and part-time employment

Overall, there were 685,974 jobs in Western Sydney in 2013-14, an increase of 27,436 jobs (4.2%) from 2008-09 at an average annual growth rate of 0.8% (Table 6). In contrast, the number of jobs in the Rest of Sydney increased by 7.9% (93,314 jobs) between 2008-09 and 2013-14 at an average annual growth rate of 1.5%.

Table 6: Western Sydney workforce and Rest of Sydney workforce

Area	2008-09 (#)	2013-14 (#)	2008-09 to 2013-14		
			#	%	Av. annual growth
Western Sydney	658,539	685,974	27,436	4.2%	0.8%
Rest of Sydney	1,183,421	1,276,735	93,314	7.9%	1.5%

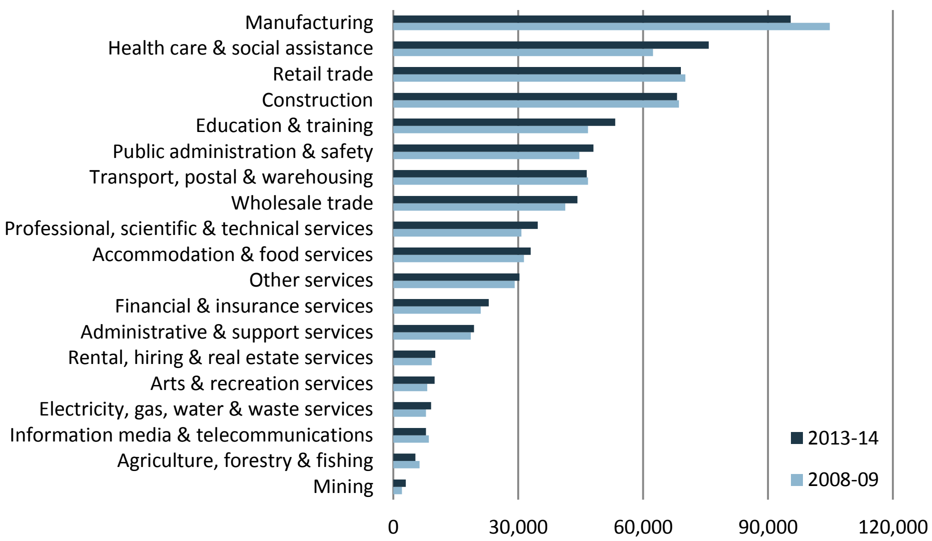
In 2011, according to the Census 67.6% of jobs in Western Sydney were full-time, down from 69.0% in 2006. The figures were slightly higher in the Rest of Sydney: 69.4% were full-time in 2011, down from 70.6% in 2006.

Figure 69 shows the distribution of jobs across Sydney, with the Western Sydney LGAs outlined in black. In Western Sydney, the highest concentrations of jobs were located in the Penrith CBD, Westmead hospital, Parramatta CBD, Wetherill Park industrial area, Olympic Park, the Bella Vista commercial area (The Hills LGA), Rydalmere industrial estate, Campbelltown town centre, Blacktown town centre and Liverpool station.

7.5 Employment by industry

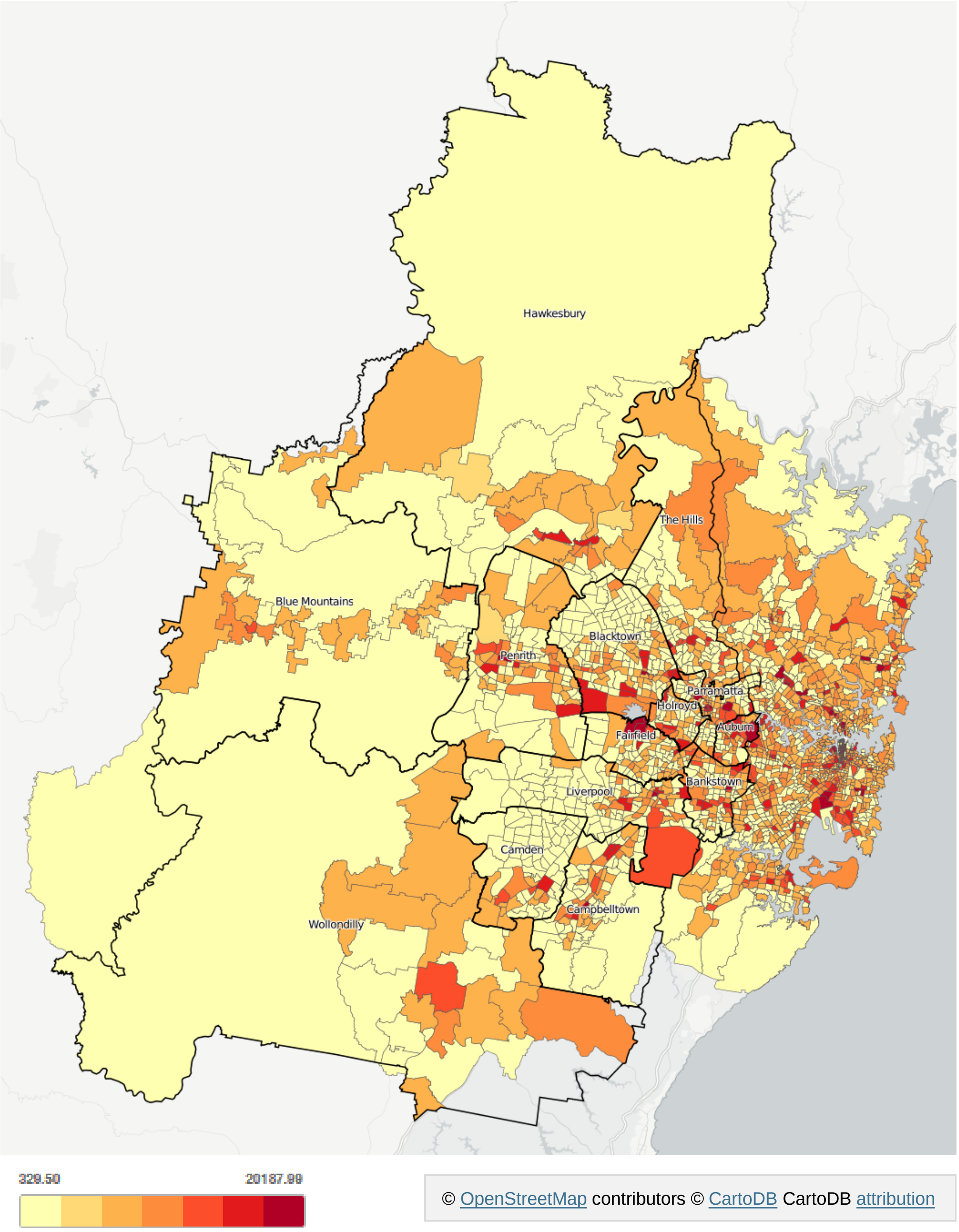
Manufacturing was the industry with the largest number of jobs (95,464 jobs) in Western Sydney in 2013-14, with 13.9% of the total (Figure 68). However, the number of manufacturing jobs fell by 9,376 between 2008-09 and 2013-14. Manufacturing's share of total jobs also fell, from 15.9%. The three industries which experienced the largest growth in numbers were health care & social assistance (+13,410 jobs), education & training (+6,565 jobs) and professional, scientific & technical services (+3,937 jobs).

Figure 68: Employment by industry in the Western Sydney workforce



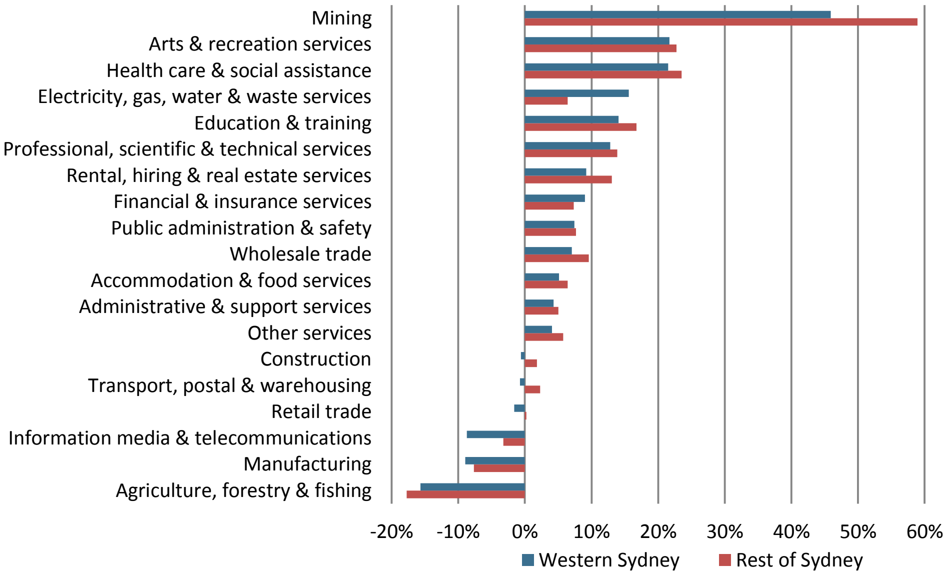
The largest percentage increase in jobs in Western Sydney was experienced by the mining industry (+45.9%), the smallest industry (Figure 70). Other significant growth industries included arts & recreation services (+21.5%), health care & social assistance (+21.5%) and electricity, gas, water & waste services (+15.6%). Six industries declined in Western Sydney, including manufacturing (-8.9%) and information media & telecommunications (-8.7%).

Figure 69: Employment by travel zone in Sydney



© OpenStreetMap contributors © CartoDB CartoDB attribution

Figure 70: Changing employment by industry of the Sydney workforce (2008-09 to 2013-14)



For several industries, there is a significant difference in the industry's share of total employment when comparing Western Sydney to the Rest of Sydney (Figure 71). In 2013-14, these industries were professional, scientific & technical services (9.5 percentage points), manufacturing (8.8 percentage points), financial & insurance services (5.7 percentage points) and information media & telecommunications (3.2 percentage points).

Figure 71: Industry share of the workforce (2013-14)

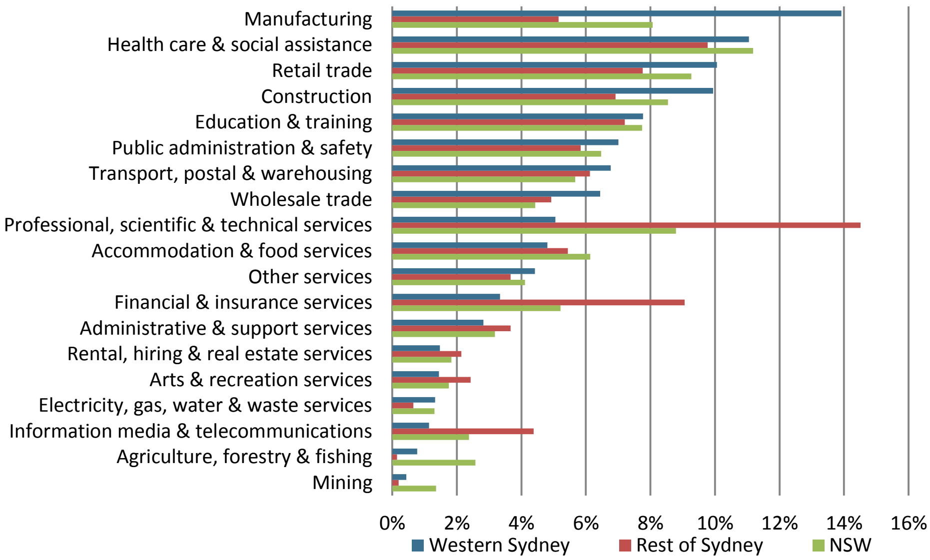


Figure 72 shows which industry made up the largest proportion of jobs by LGA in 2013-14. Manufacturing was the most important industry in 7 of the 14 Western Sydney LGAs, with health care & social assistance, retail trade, public administration & safety, construction and mining making up the remainder.

Figure 73 shows which industries contributed to the largest jobs growth between 2008-09 and 2013-14. In Western Sydney, health care & social assistance contributed to the largest growth in 12 of 14 LGAs, with mining and financial & insurance services contributing in the other 2 LGAs.

Figure 72: Largest industries by LGA in Sydney (2013-14)

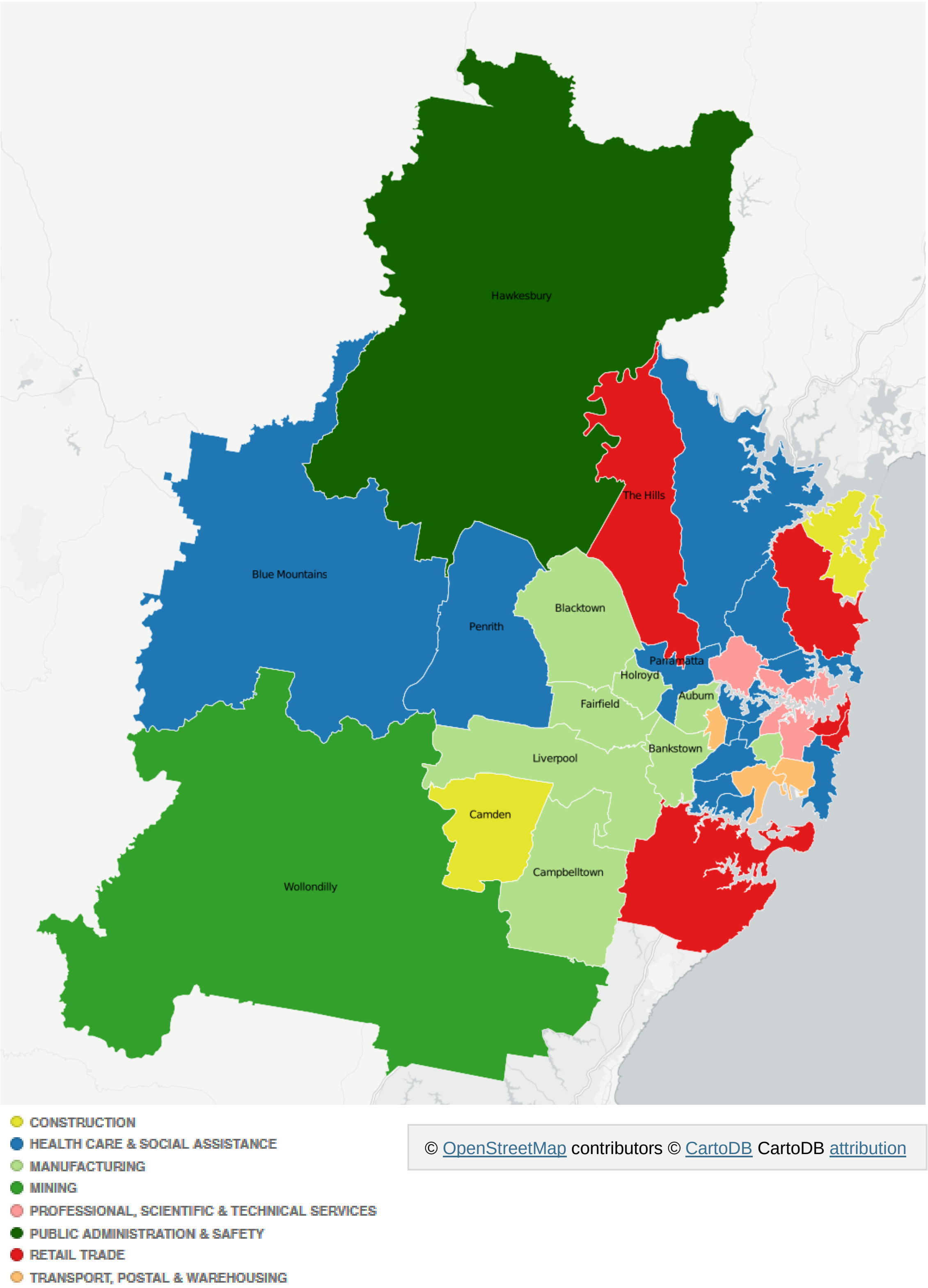
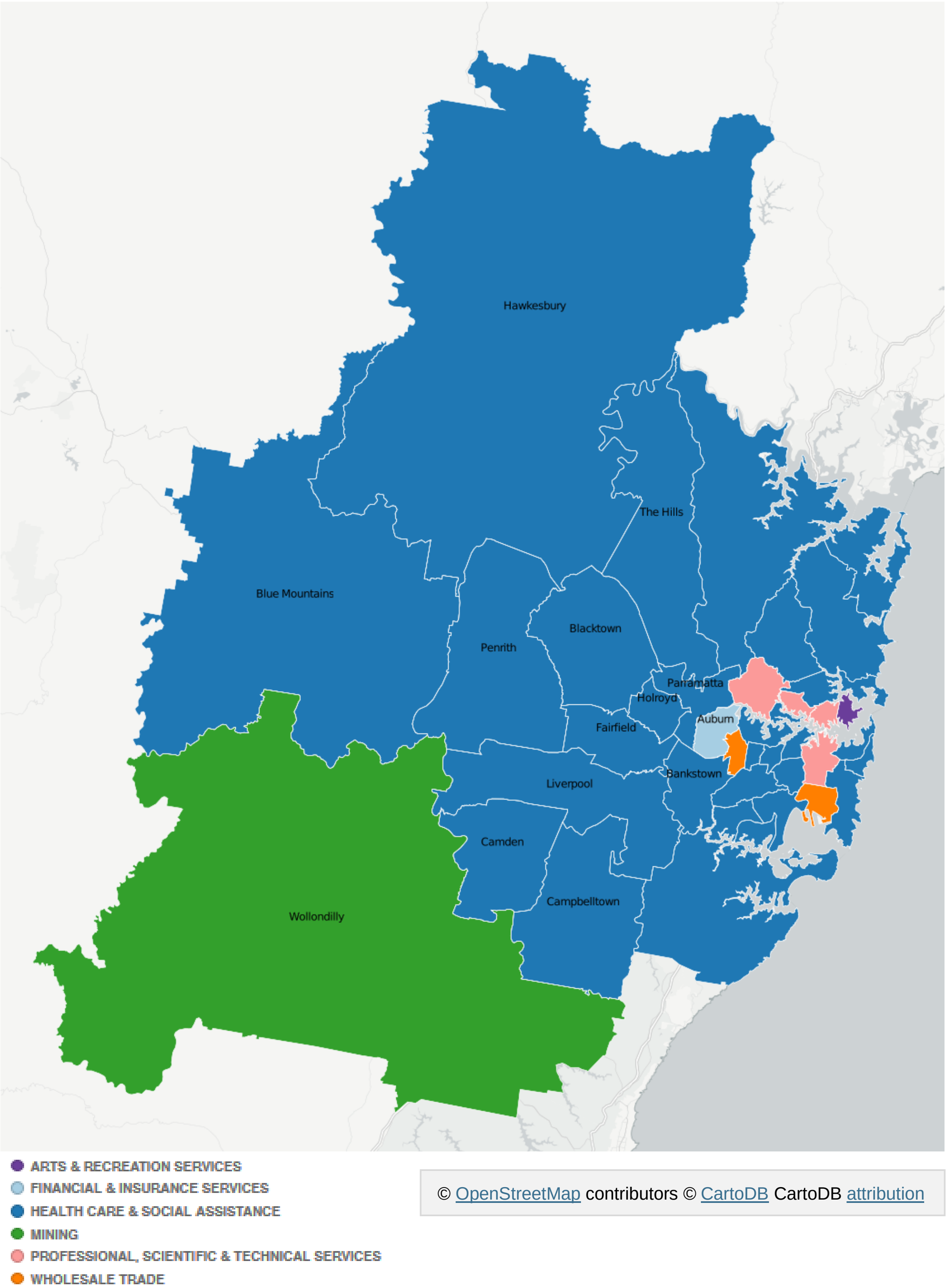


Figure 73: Largest industry growth by LGA (2008-09 to 2013-14)



8. ECONOMIC DIVERSITY

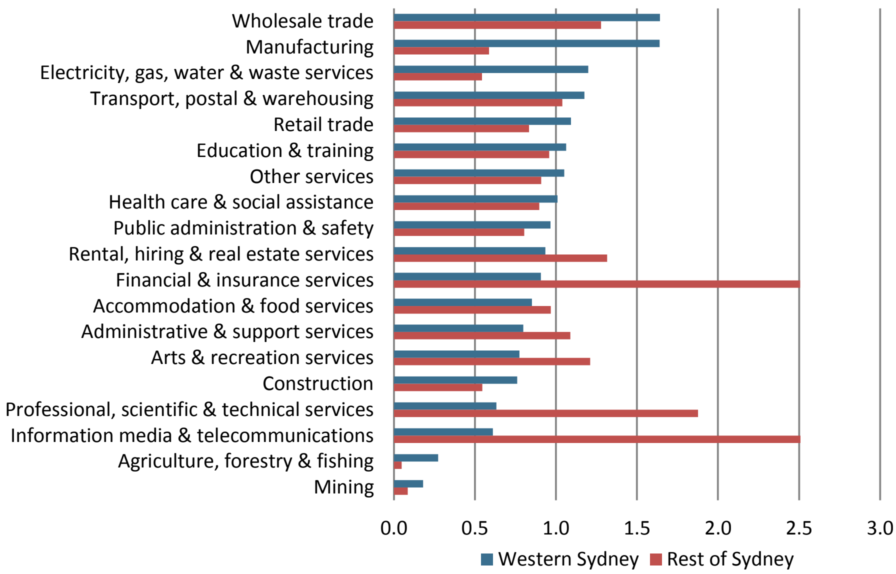
It is generally held that the economic diversity of a region is a significant contributor to its long-term economic development and sustainability. Two measures of economic diversity are used in this chapter:

- Location quotients (*LQ*) – a ratio demonstrating the relative significance of an industry for Western Sydney compared 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 equals its share of the Australian economy; an *LQ* greater than one means that the industry has a larger share of the Western Sydney economy than it has of the Australian economy. It has been argued that an *LQ* above 1.5 indicates that there is a degree of specialisation or concentration in that particular industry.
- 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.

Both measures use employment by industry data. In this case, Census data for the Western Sydney and Rest of Sydney workforces has been used in order to compare their respective economies to the Australian economy.

In 2011, two industries were of particular significance to the Western Sydney economy with *LQ* values above 1.5: wholesale trade (1.64) and manufacturing (1.64) (Figure 74). Three different industries were of particular significance to the Rest of Sydney economy: financial & insurance services (2.51); information media & telecommunications (2.51); and professional, scientific & technical services (1.88).

Figure 74: Relative industry significance (2011)



Between 2006 and 2011, manufacturing and wholesale trade became relatively more significant for the Western Sydney economy, their *LQ* values rising by 0.07 and 0.04 respectively (Figure 75). However, two other industries experienced a much larger increase in their *LQ* value: electricity, gas, water & waste services (0.19) and financial & insurance services (0.12).

Figure 75: Changing industry significance in Western Sydney (2006 to 2011)

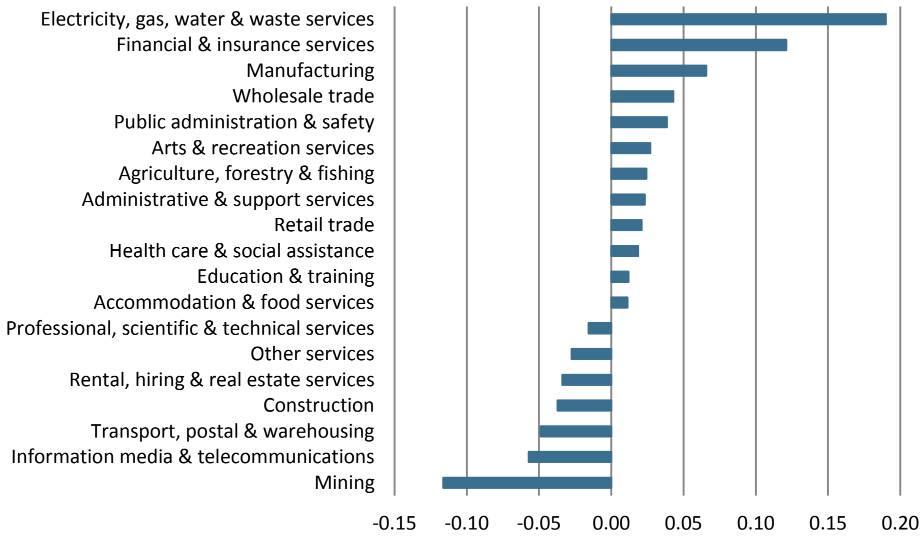
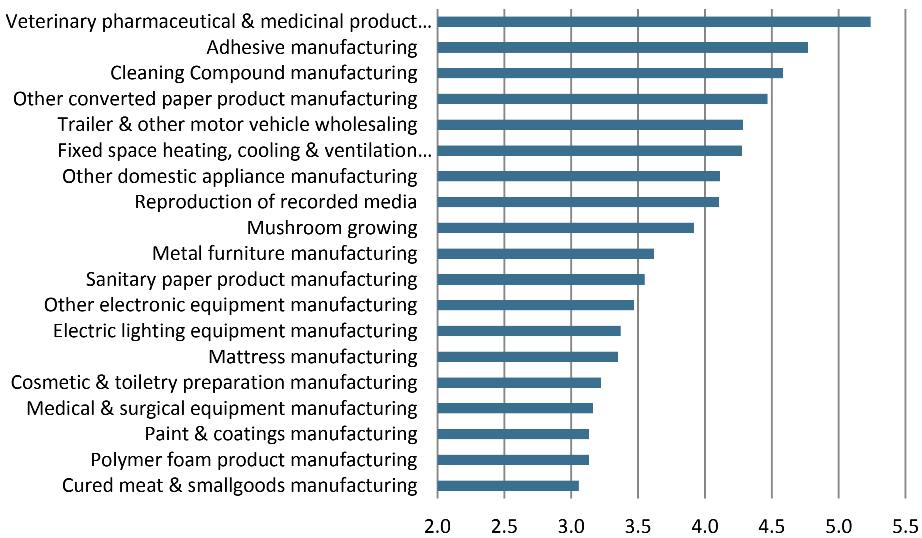


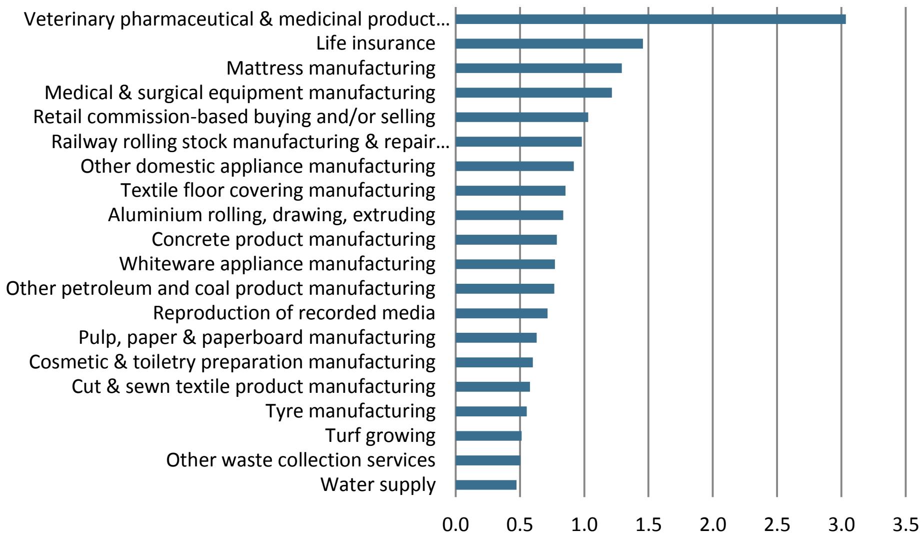
Figure 76: Specific industries with an *LQ* above 3.0 in Western Sydney (2011)



When using the most detailed classification of industry sectors (ANZSIC 2006 4 digit level), there were 107 industries employing more than 100 people in Western Sydney with an *LQ* above 1.5.[31] Of these, 69 were manufacturing industries and 17 were wholesale trade industries. Figure 76 shows those with an *LQ* above 3, all of which are manufacturing industries except trailer & other motor vehicle wholesaling and mushroom growing. The highest of these was veterinary pharmaceutical & medicinal product manufacturing (*LQ* = 5.24). This industry grew by 179.5% between 2006 and 2011, increasing from 88 jobs to 246 jobs.

Figure 77 shows the 20 4 digit level industries which experienced the largest *LQ* increase between 2006 and 2011. Of these, 15 were manufacturing industries. The others were financial & insurance service (Life insurance), retail trade (Retail commission-based buying and/or selling), agriculture, forestry & fishing (turf growing), and electricity, gas, water & waste service (Other waste collection services and Water supply) industries.

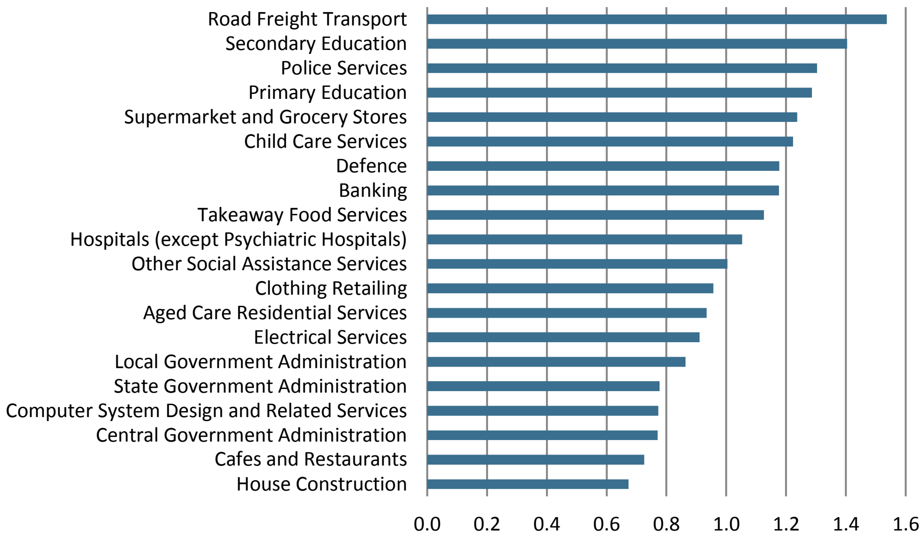
Figure 77: Changing significance of selected industries in Western Sydney (2006 to 2011)



Of the top twenty employing industries in Western Sydney (ANZSIC 4 digit level), only one has an *LQ* value above 1.5: road freight transport (1.54) (Figure 78). Half of the industries have an *LQ* value equal to or less than 1, i.e. they are of equal or less significance to the Western Sydney economy compared to the Australian economy.

[31] This also excludes any industry categories that were partly undefined e.g. “beverage manufacturing, not further defined” or not elsewhere classified, e.g. “other fabricated metal product manufacturing, not elsewhere classified”.

Figure 78: *LQ* values of the top twenty employing industries (2011)



The index of economic diversity measures the economic diversity of a regional economy relative to a larger economy, in this case the Australian economy. The index is calculated as follows:

Index of economic diversity = $\frac{1}{\sum_{i=1}^{N}[LQ_i \times S_i]}$

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. There are two limitations to this Index. First, it assumes that the larger economy is a diverse economy. Second, being based on *LQ* values, they are subject to a limitation of *LQ* values; namely, that *LQ*s are sensitive to the level of industry aggregation used. An industry defined using the 1 digit ANZSIC industrial classification may have an *LQ* less than one; however, using a 4 digit ANZSIC industrial classification, the *LQ* may be greater than one. Table 7 therefore presents the 2006 and 2011 Index values for Western Sydney and the Rest of Sydney using the ANZSIC 1 digit and 4 digit industry codes. In both cases, the differences between Western Sydney and the Rest of Sydney, and the changes over time for each area, are approximately the same magnitude. What can be inferred from the Table is that (a) Western Sydney had a more diverse economy than the Rest of Sydney in both 2006 and 2011, (b) that using the ANZSIC 4 digit industry codes significantly reduces the calculated diversity of each economy relative to the Australian economy and (c) that both regional economies became less diverse between 2006 and 2011.

Table 7: Index of economic diversity

	ANZSIC 1 digit industry codes		ANZSIC 4 digit industry codes	
	2006	2011	2006	2011
Western Sydney	0.910	0.905	0.791	0.783
Rest of Sydney	0.804	0.786	0.692	0.670

9. EMPLOYMENT PROJECTIONS

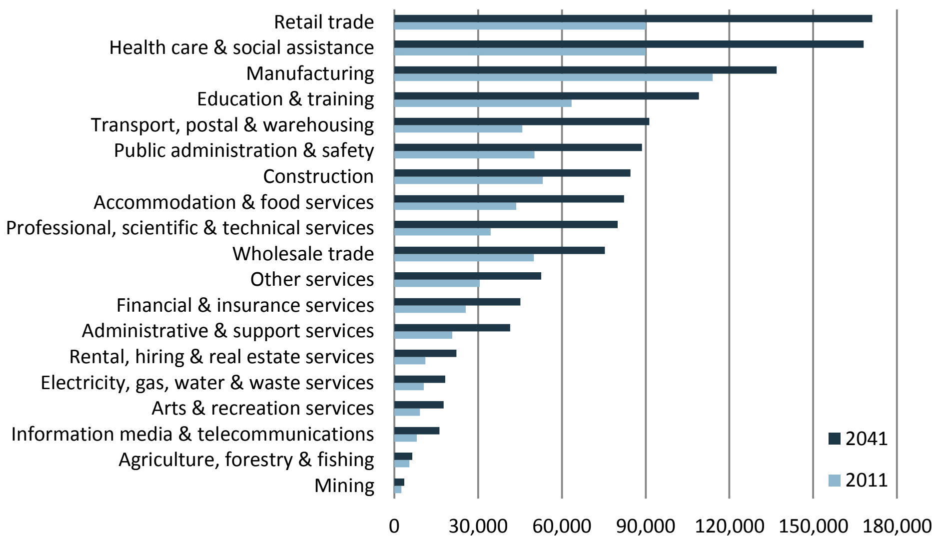
The Bureau of Transport Statistics models employment growth in the Greater Metropolitan Area i.e. the Area's workforce.[32] Its model takes into account significant potential major employment generating developments e.g. the Western Sydney Employment Area. Note that it also accounts for Census undercount of Sydney job numbers; hence these 2011 figures do not match Chapter 7 figures. The number of jobs located in Western Sydney is expected to increase by 71.1% between 2011 and 2041, from 780,859 to 1,336,243 (Table 8). The Rest of Sydney is expected to grow by 40.6%. Two-thirds of the Western Sydney growth is expected to occur in 5 LGAs: Blacktown; Liverpool; Parramatta; Penrith; and The Hills (368,542 jobs). However, the fastest growth will occur in Camden (3.32% per annum), followed by The Hills (2.66% per annum) and Penrith (2.43%) (Figure 80).

Table 8: Employment projections for Sydney (2011 to 2041)

Area	2011 (#)	2041 (#)	2011 to 2041 #	2011 to 2041 %
Western Sydney	780,859	1,336,243	555,384	71.1%
Rest of Sydney	1,375,847	1,934,779	558,932	40.6%

Retail trade is expected to experience the largest growth (+81,073 jobs) (Figure 79). Only health care & social assistance comes close in terms of expected growth (+78,045 jobs), with education & training a distant third (+45,502 jobs). Manufacturing, the largest industry in 2011, is expected to grow by 22,943 jobs. At an LGA level, retail trade and health care & social assistance are forecast to be the largest growth industries in 5 Western Sydney LGAs each (Figure 83).

Figure 79: Jobs by industry in Western Sydney (2011 to 2041)



[32] The Commonwealth Department of Employment has 5 year employment projections for the Western Sydney resident labour force.

Western Sydney job growth is expected to occur at an average annual growth rate of 1.81%, higher than the projected rate for the Rest of Sydney of 1.14%. In Western Sydney, the fastest growing industry is expected to be professional, scientific & technical services (2.8%), followed by information media & telecommunications (2.4%) and administrative & support services (2.3%) (Figure 81). Manufacturing on the other hand will be the second slowest growing industry (0.6%).

Figure 80: Projected average annual job growth by LGA (2011 to 2041)

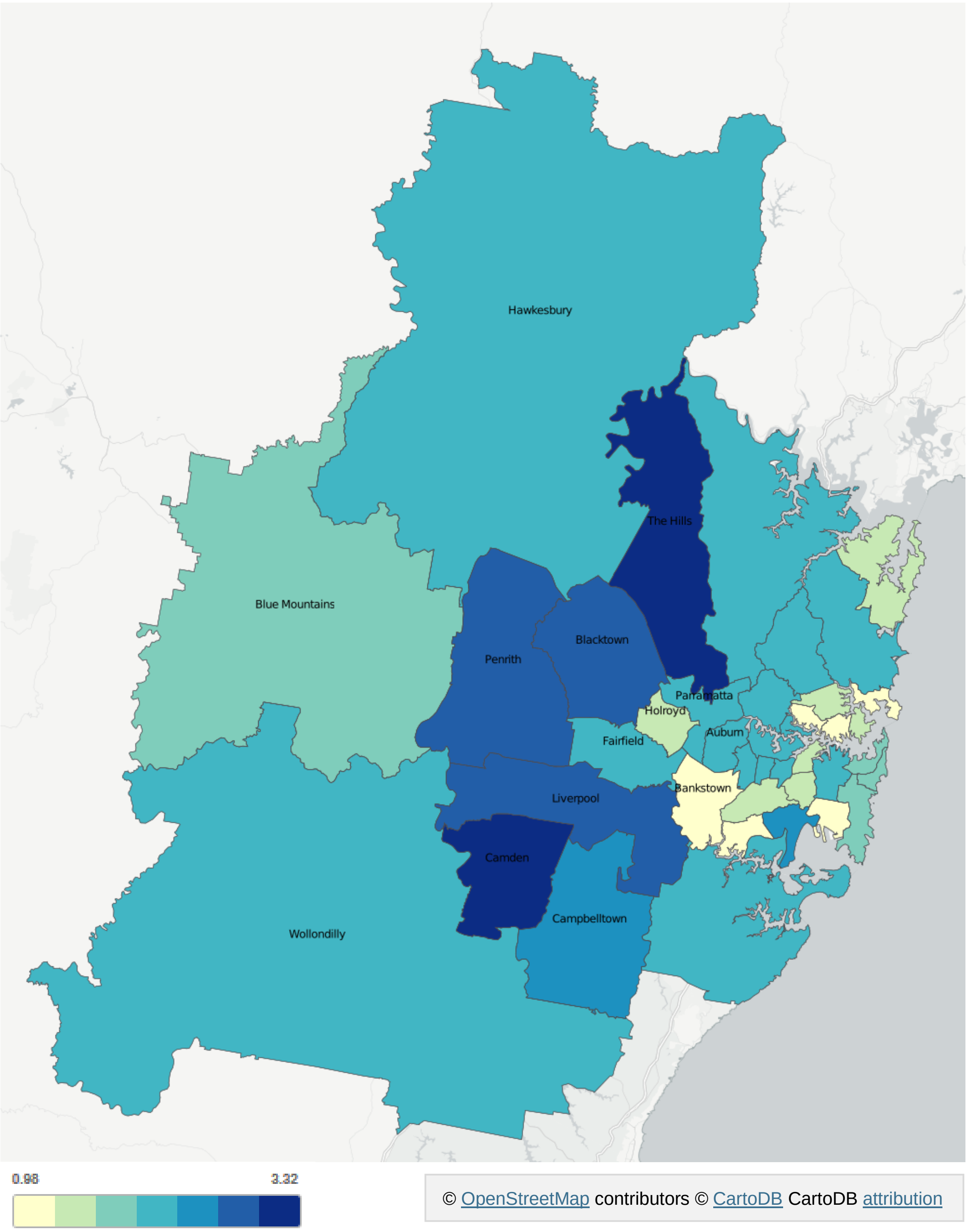
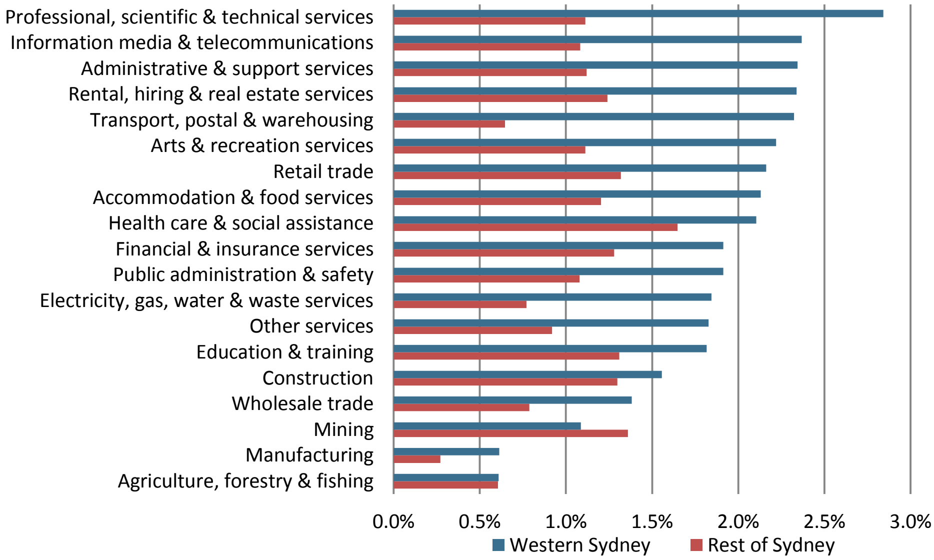
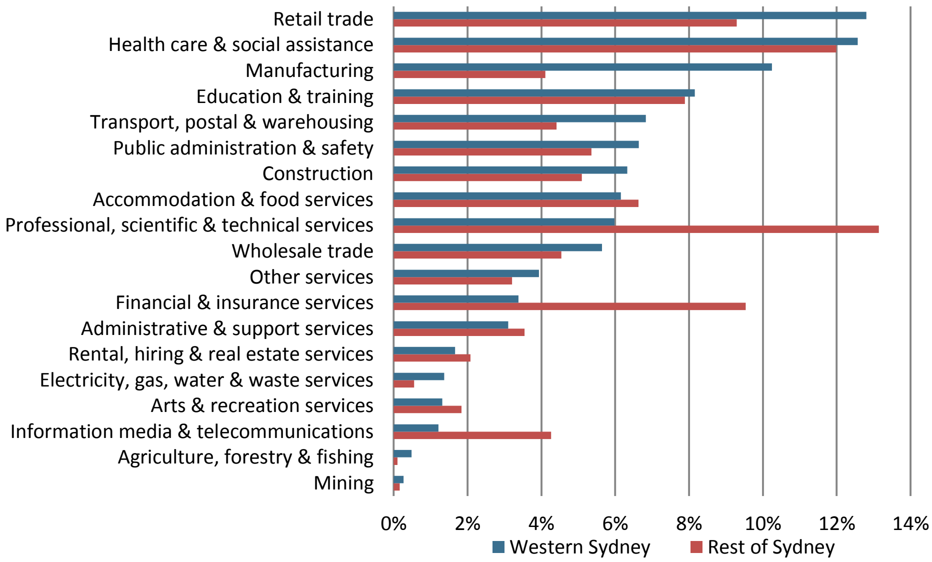


Figure 81: Projected industry average annual growth rates (2011 to 2041)



In 2041, retail trade and health care & social assistance are expected to have the largest shares of total Western Sydney employment, having increased their shares by 1.3% and 1.1% respectively since 2011 (Figure 82). Manufacturing, while still one of the most significant industries, will have lost 4.4% share of total employment. By 2041, one of retail trade, health care & social assistance or manufacturing will be the largest industry in 13 of the 14 Western Sydney LGAs (Figure 84). Construction is expected to be the largest in Wollondilly.

Figure 82: Projected industry shares of total jobs in 2041



As in 2011, for several industries there is expected to be a significant difference in the industry's share of total employment when comparing Western Sydney to the Rest of Sydney (Figure 82). The industries with the largest percentage differences are expected to be professional, scientific & technical services (7.2 percentage points), financial & insurance services (6.2 percentage points), manufacturing (6.1 percentage points) and retail trade (3.5 percentage points).

Figure 83: Projected largest industry growth by LGA (2011 to 2041)

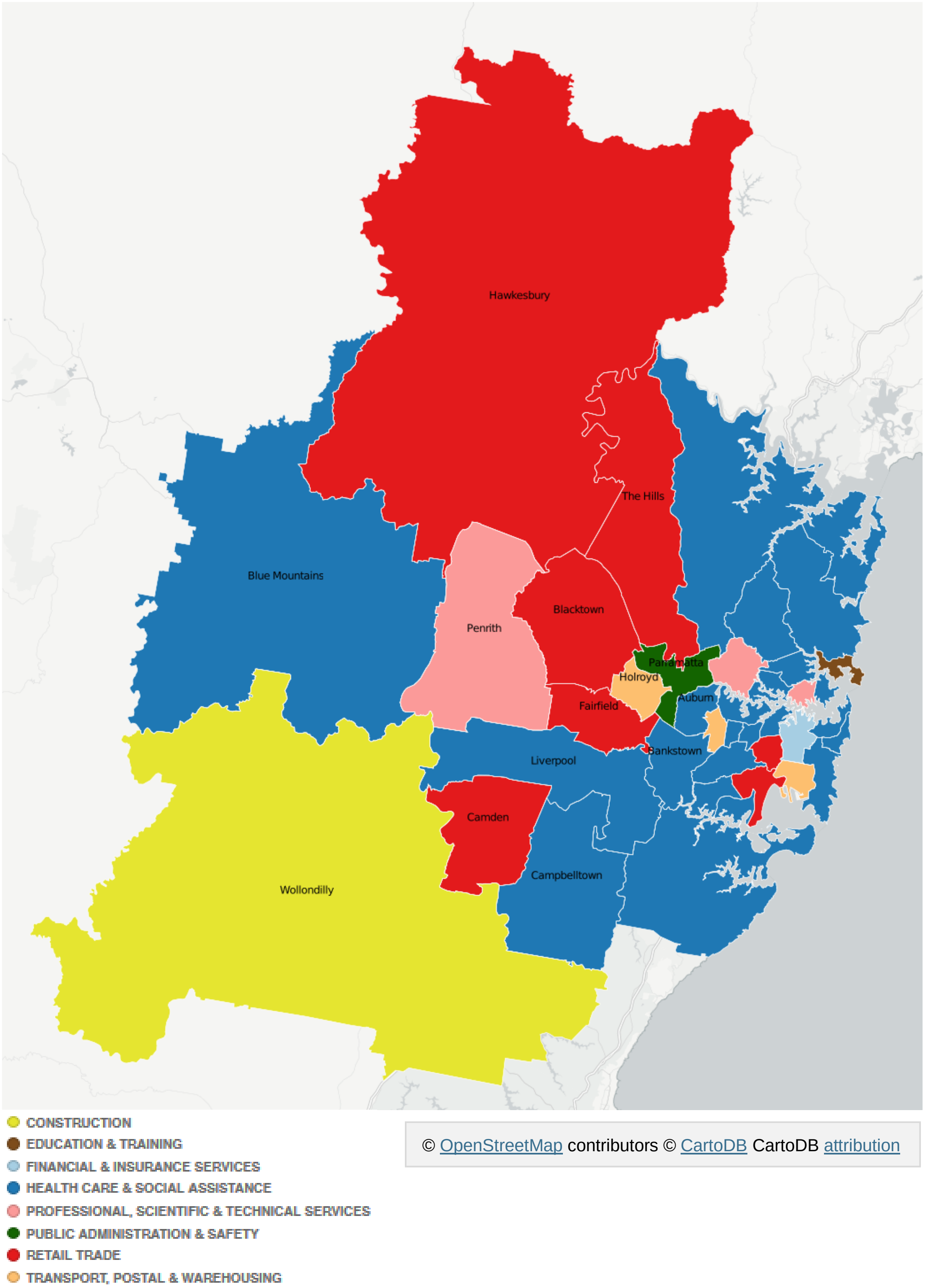
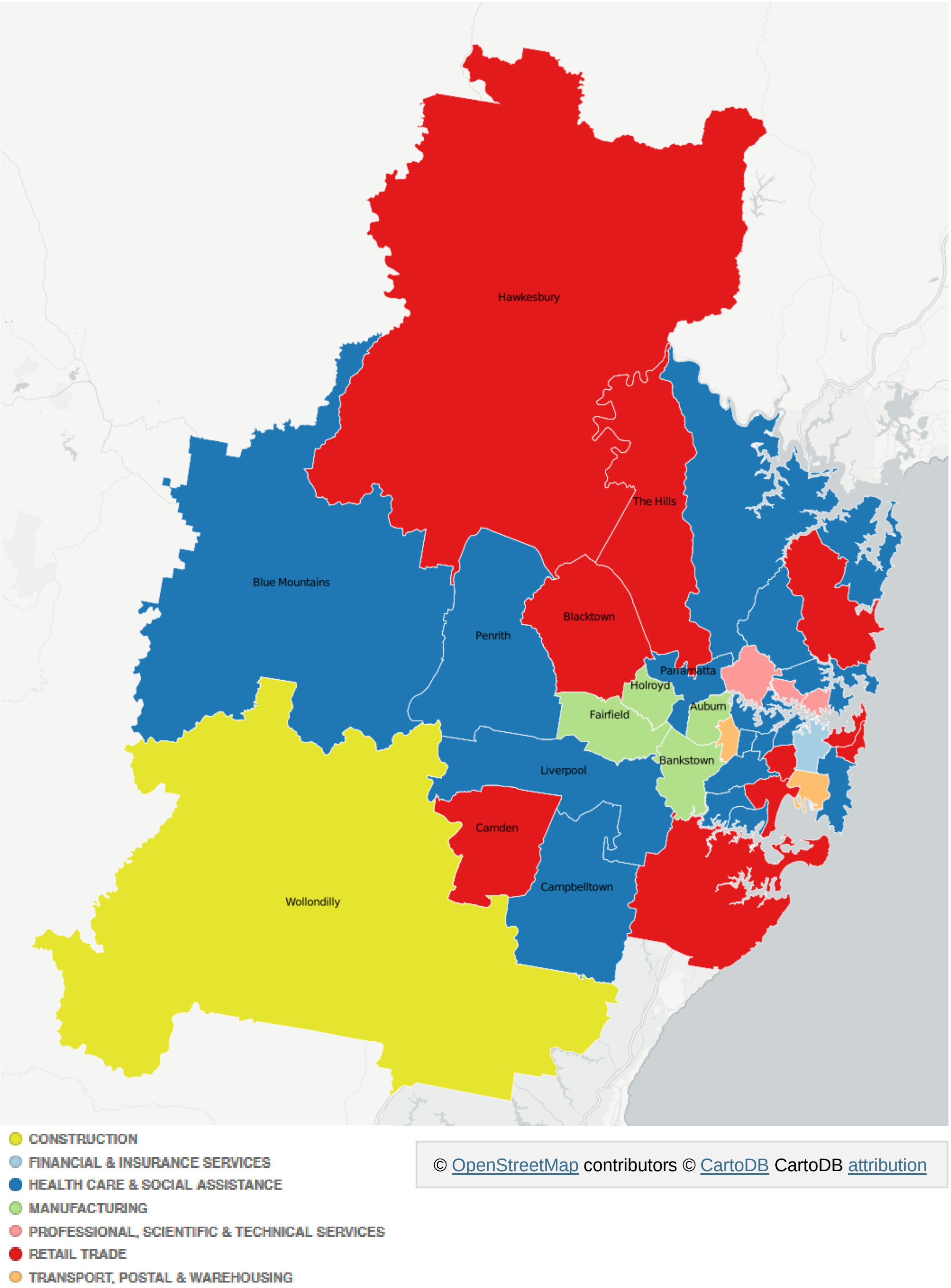


Figure 84: Projected largest industry by LGA in 2041



10. BUSINESS NUMBERS

The most recent data on business numbers in Western Sydney is released on a Statistical Area Level 2 (SA2) basis.[33] SA2s are components of SA4s, not LGAs. However, a much closer correlation can be made between SA2s and LGAs compared to SA4s and LGAs. There is only a 1% difference in population between Western Sydney (LGA) and Western Sydney (SA2). Therefore, SA2 data is used here as a close approximation of Western Sydney (LGA).

In 2014, there were 155,878 businesses in Western Sydney, the total having fallen by 4.0% between 2012 and 2013 before rising by 1.9% between 2013 and 2014 (Table 9). Between 2012 and 2014, business numbers fell by a higher percentage in Western Sydney (-2.2%) than the Rest of Sydney (-1.3%) and the NSW average (-1.9%).

Table 9: Businesses in Western Sydney by employment size (2012 to 2014)

	Western Sydney					Rest of Sydney	NSW
	2012	2013	2014				
	#	#	#	% of total	% change 2012-14	% change 2012-14	% change 2012-14
Small (0-19)	156,109	149,729	152,531	97.85%	-2.3%	-1.5%	-2.0%
Medium (20-199)	3,194	3,147	3,275	2.10%	2.5%	6.6%	3.1%
Large (200+)	60	69	72	0.05%	20.0%	26.4%	2.6%
Total	159,363	152,945	155,878	100.00%	-2.2%	-1.3%	-1.9%

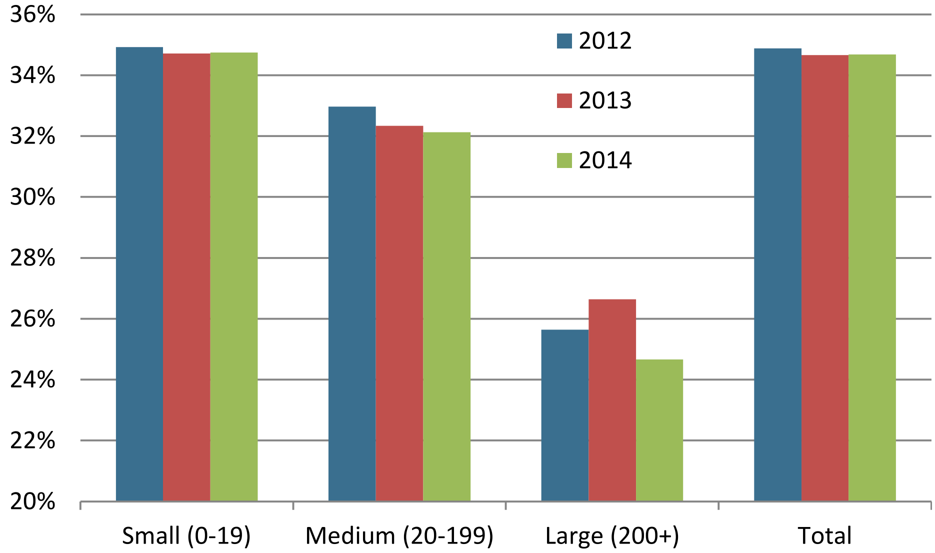
The proportion of Sydney businesses located in Western Sydney has declined slightly between 2012 and 2014, from 34.9% to 34.7% (Figure 85). The decline was most pronounced for medium (33.0% to 32.1%) and large (25.6% to 24.7%) businesses.

There is no consistently used definition for small business.[34] When using ABS data, a small business either employs between 0 and 19 employees or has an annual turnover of less than $2 million. When defined in terms of employment, in 2014 there were 152,531 small businesses (97.85% of all businesses) in Western Sydney (Table 9); this is 2.3% less than there were in 2012. When defined in terms of turnover, in 2014 there were 146,076 small businesses (93.8% of all businesses); 2.9% less than in 2012 (Figure 85).

[33] ABS, *Counts of Australian Businesses, including Entries and Exits, Jun 2010 to Jun 2014*, Cat. No. 8165.0, March 2015

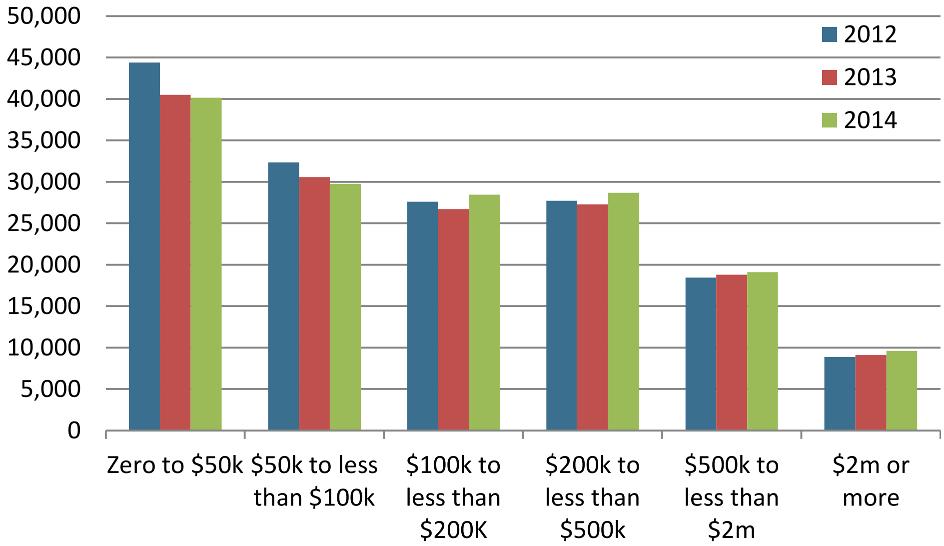
[34] E. Connolly et al., *Small Business: An economic overview*, Small Business Finance Roundtable, Reserve Bank of Australia, May 2012

Figure 85: Proportion of Sydney businesses located in Western Sydney



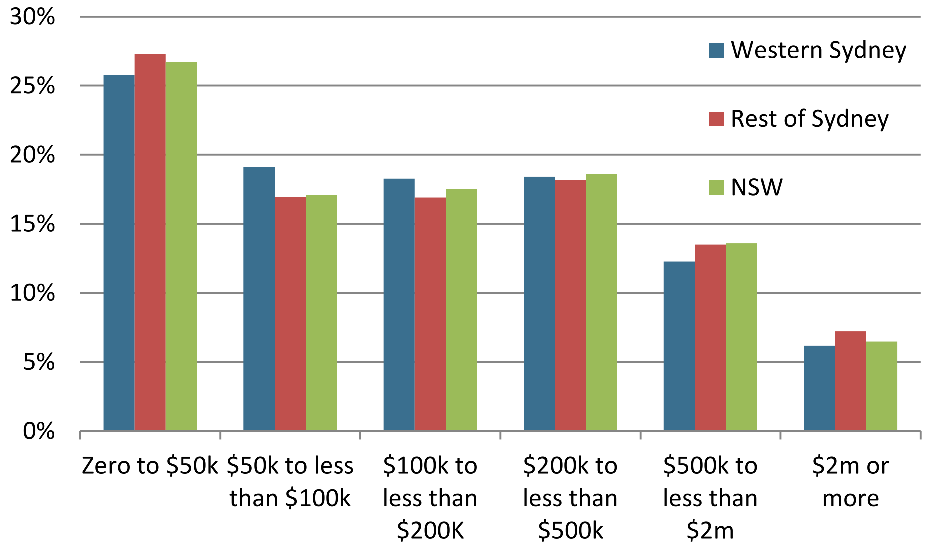
Whether defined in terms of employment or turnover, small business accounts entirely for the decline in business numbers between 2012 and 2014. More particularly, the number of small businesses earning between zero and $100,000 fell by 8.9% (6,853 businesses) (Figure 86). The number of businesses earning over $100,000 grew, the largest growth occurring amongst those earning over $2 million (8.5%).

Figure 86: Businesses in Western Sydney by turnover (2012 to 2014)



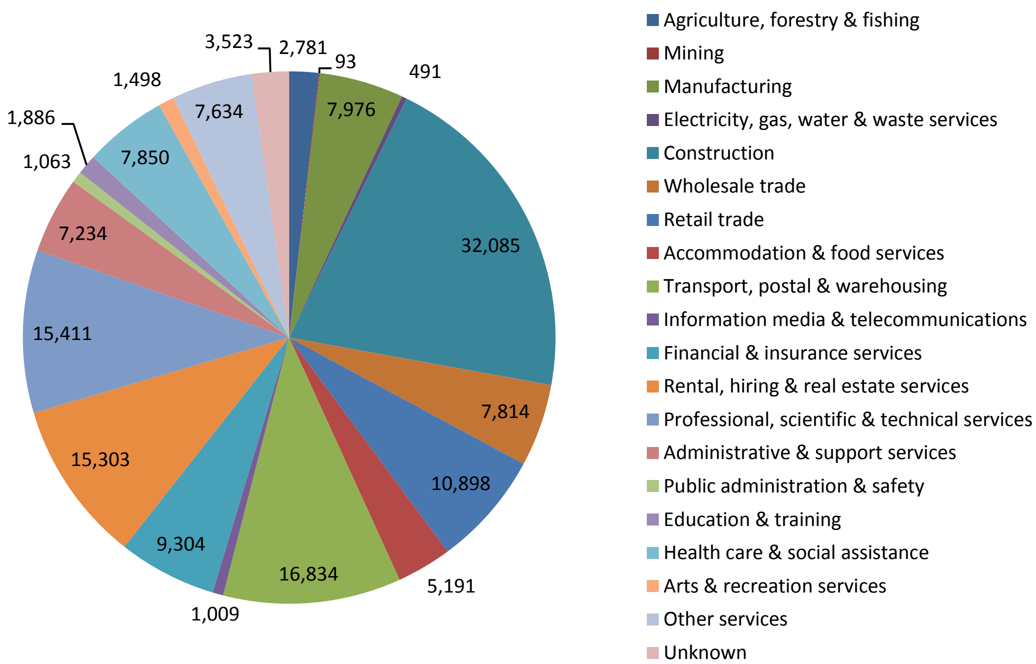
Over a quarter of Western Sydney businesses have an annual turnover of less than $50,000 (Figure 87). Only 6.2% have an annual turnover of over $2 million. Businesses earning between $50,000 and $200,000 make up a larger proportion of businesses in Western Sydney than the Rest of Sydney (37.4% vs 33.8%). Businesses earning over $500,000 make up a smaller proportion of businesses in Western Sydney than the Rest of Sydney (18.5% vs 20.7%).

Figure 87: Distribution of businesses by turnover (2014)



In 2014, the industry with the largest number of businesses in Western Sydney was construction (32,085) (Figure 88). Rounding out the top five were transport, postal & warehousing (16,834), professional, scientific & technical services (15,411), rental, hiring & real estate services (15,303) and retail trade (10,898).

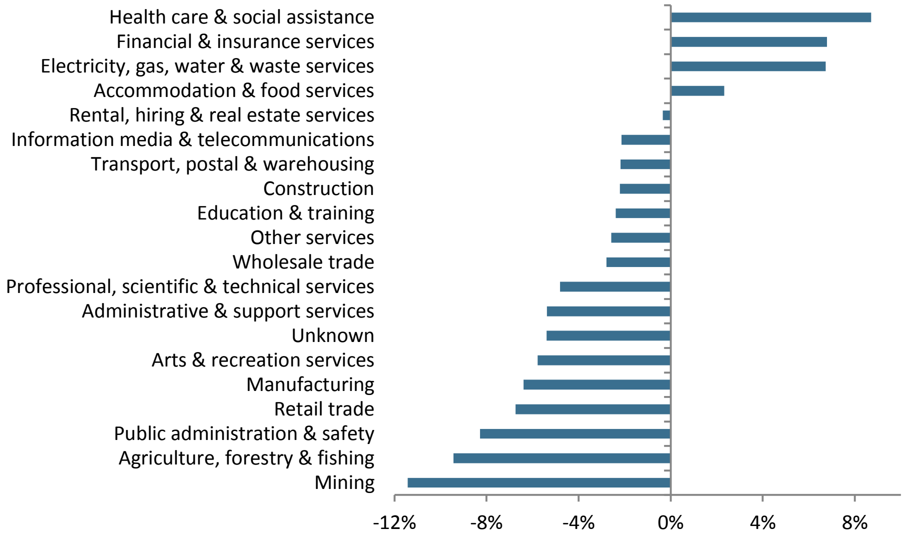
Figure 88: Western Sydney businesses by industry (2014)



Only four industries had a higher number of businesses in 2014 than 2012: health care & social assistance (8.7%); financial & insurance services (6.8%); electricity, gas, water & waste services (6.7%); and accommodation & food services (2.3%) (Figure 89). Of the five largest industries, retail trade (-6.7%)

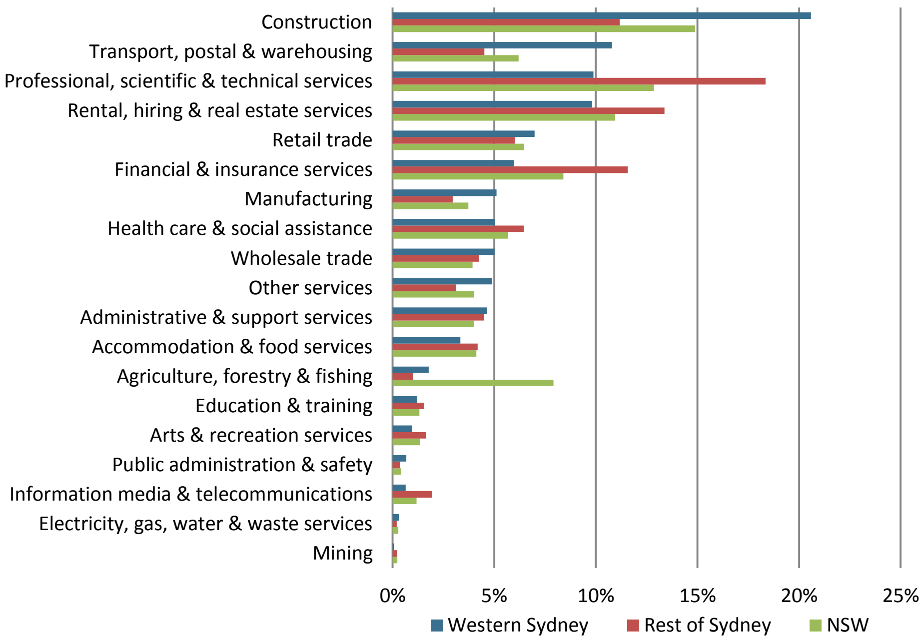
and professional, scientific & technical services (-4.8%) recorded the largest proportional decline.

Figure 89: Western Sydney business growth by industry (2012 to 2014)



Note that following the 4.0% decline in business numbers between 2012 and 2013, most industries experienced growth between 2013 and 2014. Of the 4 that did not, the most notable was manufacturing: business numbers fell by 5.4% between 2012 and 2013 and a further 1.1% between 2013 and 2014. Manufacturing's share of the total number of businesses in Western Sydney fell from 5.3% to 5.1%.

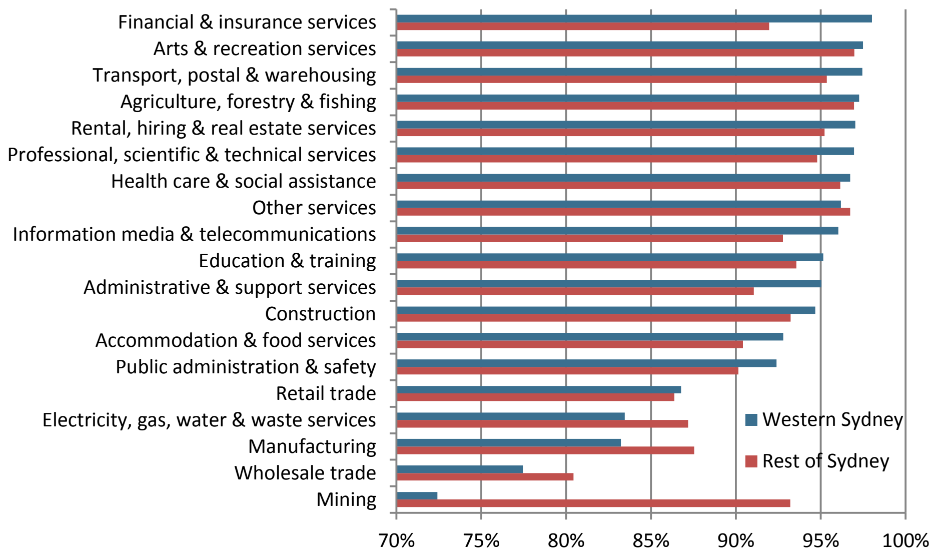
Figure 90: Industry share of total businesses (2014)



Industry shares of the total number of businesses varied substantially in some cases between Western Sydney and the Rest of Sydney (Figure 90). Construction had a larger share in Western Sydney (9.4 percentage points), as did transport, postal & warehousing (6.3 percentage points). Conversely, professional, scientific & technical services (8.5 percentage points) and financial & insurance services (5.6 percentage points) had higher shares in the Rest of Sydney.

The share of businesses which are small businesses varies by industry. Small businesses generally dominate service industries such as financial & insurance services and arts & recreation services (Figure 91). This is particularly the case in Western Sydney compared to the Rest of Sydney. Figure 91 shows that larger businesses in industries such as the financial & insurance services, administrative & support services and information media & telecommunications tend to be located in the Rest of Sydney. On the other hand, larger businesses in the electricity, gas, water & waste services, manufacturing, wholesale trade and mining industries are more likely to be found in Western Sydney.

Figure 91: Percentage of businesses which are small businesses, by industry and turnover (2014)

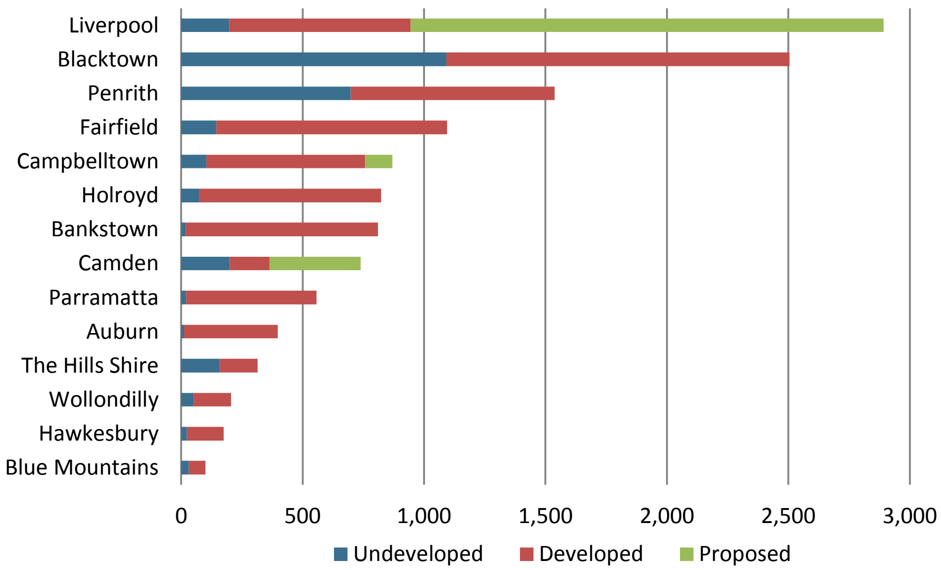


11. EMPLOYMENT LANDS

Employment lands consist of 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. The NSW Government manages employment lands under the Employment Lands Development Program, which manages supply of employment lands for the Sydney region.

As of January 2014, there were 13,288.5 ha of employment lands in Sydney. Of this amount, 10,582.8 ha was located in Western Sydney (Figures 92 and 93), up by 0.8% from 2010. Blacktown (1,412.9 ha), Fairfield (949.6 ha) and Penrith (838.8 ha) had the largest amount of developed employment land. Blacktown (1,092.1 ha), Penrith (698.7 ha) and Camden (199.3 ha) had the largest amount of undeveloped employment land. In 2014, proposed employment lands were only found in Liverpool (1,947.9 ha), Camden (375.3 ha) and Campbelltown (112.3 ha).

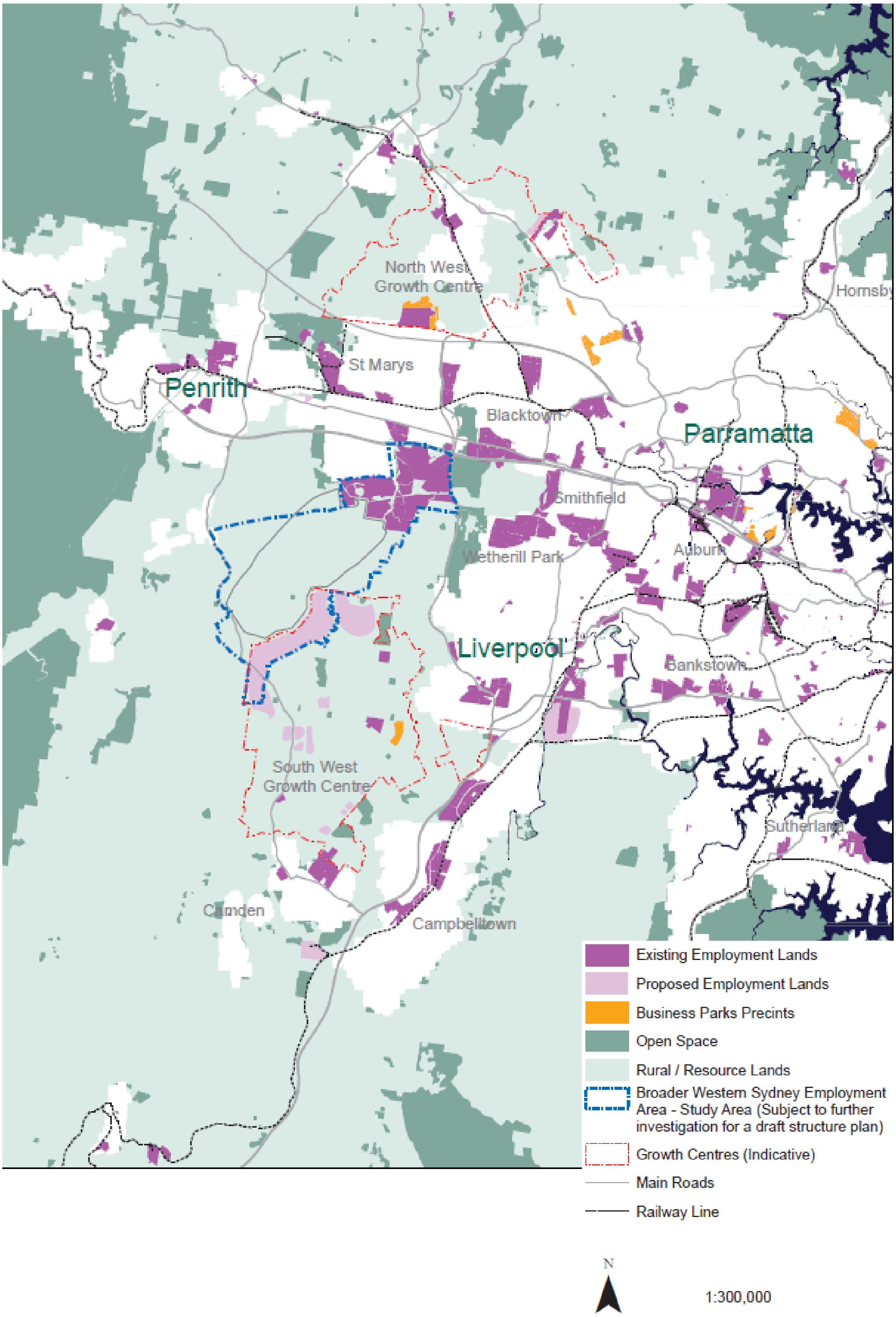
Figure 92: Employment lands by Western Sydney LGA (January 2014)[35]



Between 2010 and 2014, the amount of undeveloped land fell by 7.6% to 2,825.6 ha while the amount of developed land rose by 4.2% to 7,757.2 ha (Figure 94). The relatively small change in total employment land is due in part to zoning changes; 119 ha were rezoned for other uses between 2013 and 2014. Of this amount, 98.8 ha was rezoned B5 (Business Development) and 14 ha was rezoned B6 (Enterprise Corridor). These zones are more versatile, permitting a mixture of land uses including some types of industrial uses. The fall in undeveloped land was due to rezoning and development.

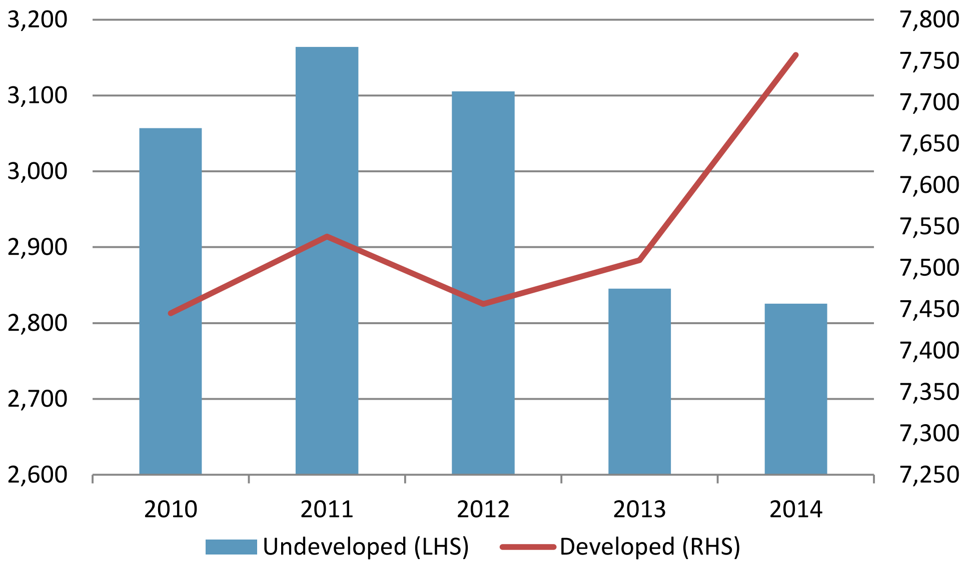
[35] NSW Department of Planning & Environment, *Employment Lands Development Program: 2014 Update Report*, 2014, pp 12-18 & 23

Figure 93: Existing and proposed employment lands (January 2014)[36]



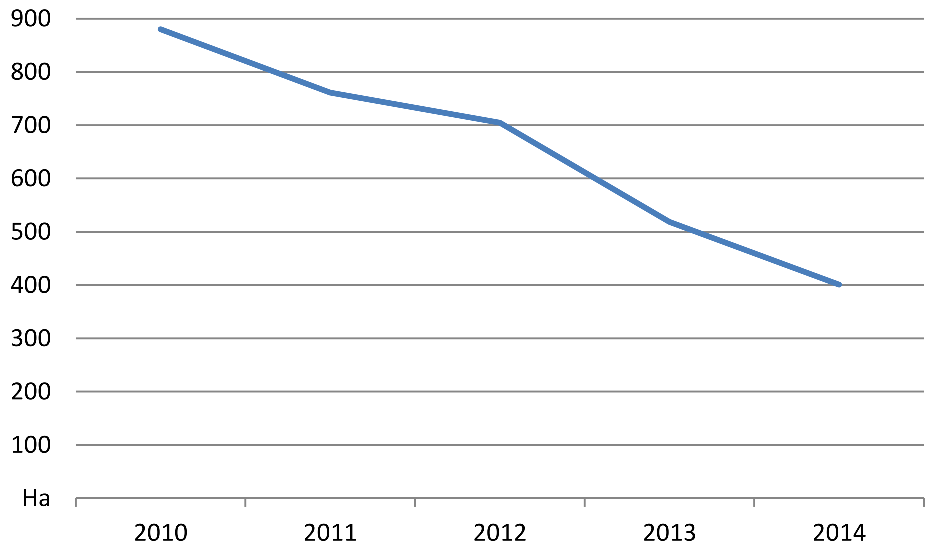
36 Ibid., p.4

Figure 94: Undeveloped and developed employment lands in Western Sydney (2010 to 2014)[37]



In January 2014, 98.3% of all undeveloped and serviced land in Sydney was found in Western Sydney (400.8 ha) (Figure 95). Undeveloped land is classified as serviced if it has a water and sewer connection. Undeveloped and serviced land stocks have steadily declined since 2010, falling to 400.8 ha in 2014. This is primarily due to the take-up of land.

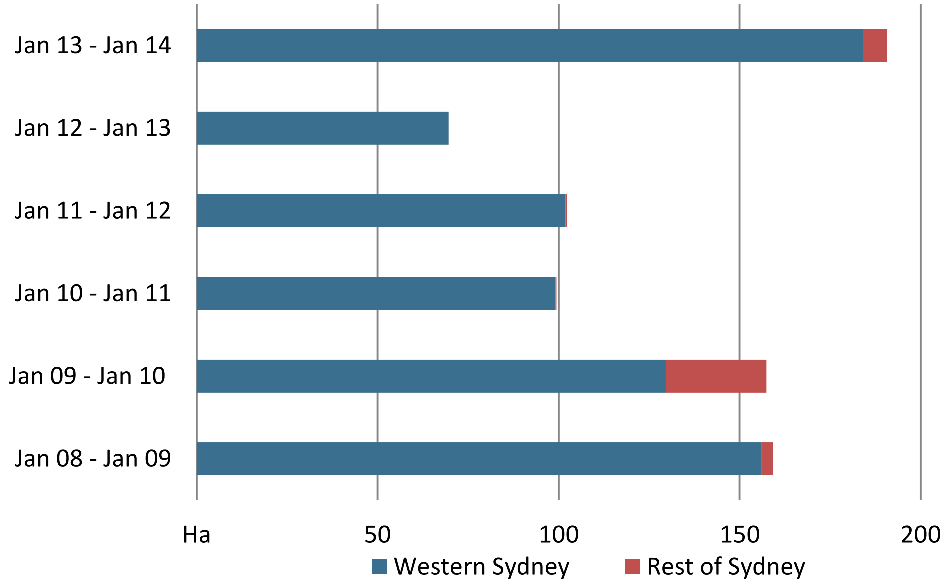
Figure 95: Undeveloped and serviced land in Western Sydney (2010 to 2014)[38]



[37] Ibid., pp 12-18
[38] Ibid., p19

Take-up of employment land in Western Sydney declined steadily between 2008-09 and 2012-13, before rising rapidly in 2013-14 (Figure 96). Take-up across the six year period was highest in Blacktown (262.8 ha), Penrith (160.9 ha) and Liverpool (98.0 ha).

Figure 96: Take-up of employment land in Sydney (2008 to 2014)[39]



Across Sydney, there are sufficient stocks of existing undeveloped not serviced and proposed future employment lands under both high and low take-up rates to meet supply standards (Table 10). However, there is an undersupply of undeveloped and serviced land under a high take-up scenario. Only 1.5 years of supply remain under such a scenario; in January 2013, there were 2 years of supply under such a scenario.

Table 10: Adequacy of employment lands supply at January 2014[40]

Status of employment lands	Number of years estimated supply			Supply standards
	Jan 2014 (ha)	High take-up (300 ha pa)	Low take-up (80 ha pa)	
Proposed	7,097	24	89	20 yrs
Undeveloped not serviced	3,626	12	45	8-10 yrs
Undeveloped and serviced	463	1.5	6	5-7 yrs

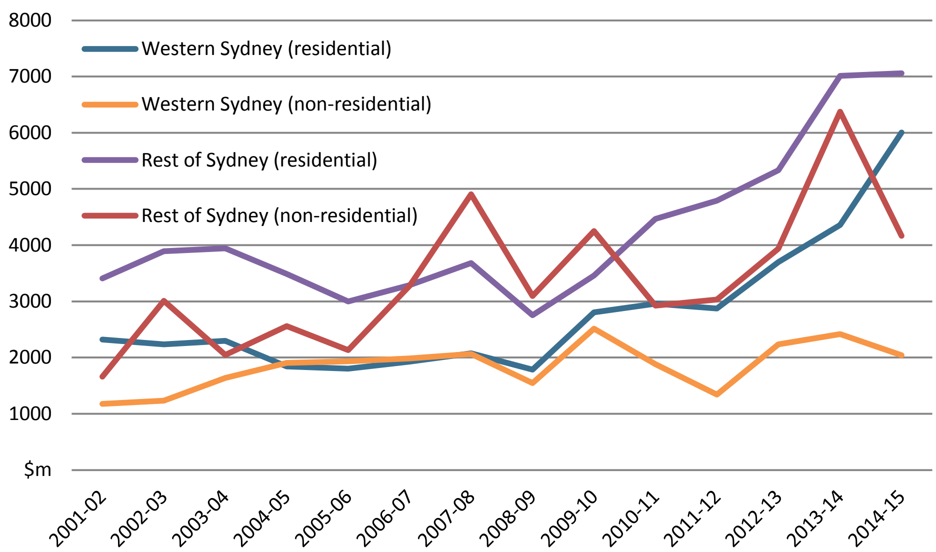
[39] Ibid., p29
[40] Ibid., p32

12. BUILDING APPROVALS AND COMPLETIONS

12.1 Approvals

In 2014-15, the total value of residential building approvals in Western Sydney (new buildings as well as alterations and additions to existing buildings) reached $6 billion (Figure 97).[41] The total value of residential building approvals in the Rest of Sydney was just over $7 billion. Since 2008-09, the value of residential building approvals in Western Sydney has increased at an average annual rate of 22.4%; the rate was -3.7% between 2001-12 and 2008-09. The value of non-residential building approvals in Western Sydney has risen at an average annual rate of 4.4% since 2001-02, although it declined from $2.4 billion in 2013-14 to just over $2 billion in 2014-15.

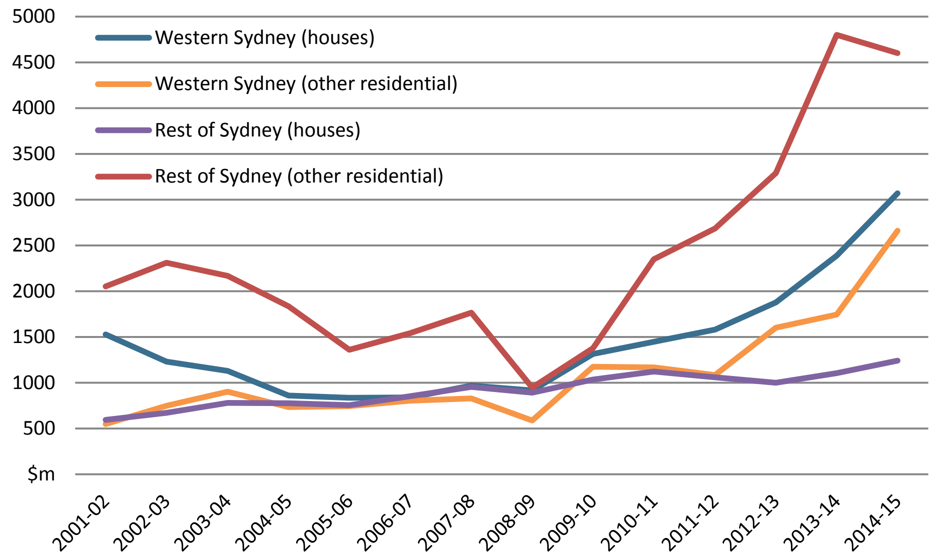
Figure 97: Value of building approvals, residential & non-residential



The value of new house approvals in Western Sydney has consistently been higher than the value of new other residential building approvals (Figure 98); in 2014-15, these approvals reached $3 billion and $2.7 billion respectively. Since 2008-09, the value of other residential building approvals has grown at a faster average annual rate than house approvals (28.7% vs 22.3% respectively). In contrast, the value of other residential approvals in the Rest of Sydney has consistently outstripped the value of house approvals.

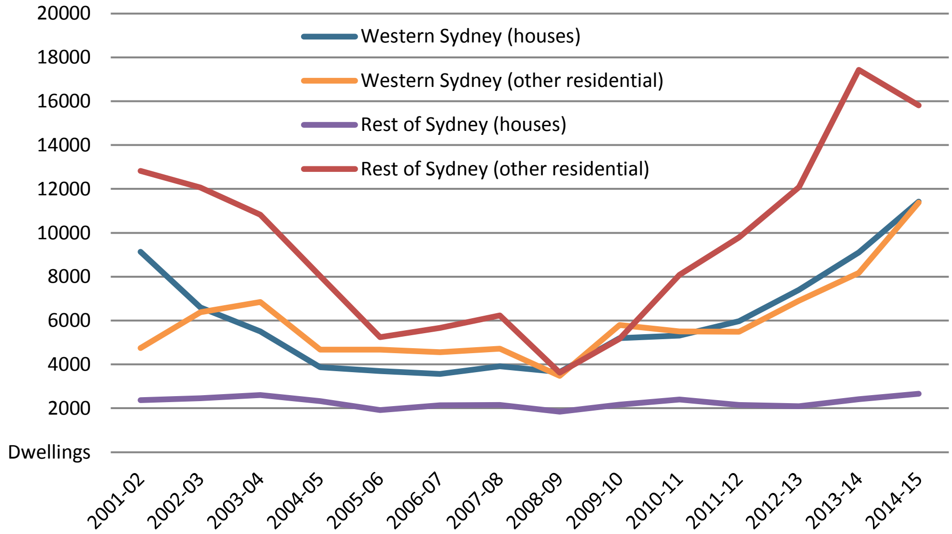
[41] ABS, *Building Approvals, Australia, Jun 2015*, Cat. No. 8731.0, 30 July 2015

Figure 98: Value of house and other residential building approvals



The number of Western Sydney house and other residential building approvals in 2014-15 was almost the same, 11,422 and 11,373 respectively (Figure 99). In contrast, there were almost 6 times as many other residential building approvals than house approvals in the Rest of Sydney. House and other residential building approvals in Western Sydney have grown on average at 20.9% and 21.8% per annum respectively since 2008-09. In the Rest of Sydney, these figures were 27.9% and 6.3% respectively.

Figure 99: Number of house and other residential building approvals



The ratio of house to other residential approvals in Western Sydney fell sharply after 2001-02 before slowly rising to reach a new high of 1.11 in 2013-14 (Figure 100). The ratio then fell to 1.00 in 2014-15. The ratio has trended downwards in NSW and the Rest of Sydney since 2008-09, rising slightly from an all-time low in 2013-14 to reach 0.76 and 0.17 in 2014-15 respectively.

12.2 Completions

Between 2004-05 and 2008-09, annual dwelling completions in Western Sydney fell from 8,600 to 6,100. Since then they have increased at an average annual rate of 12.5%, to reach 11,000 in 2013-14. By April 2015, a further 10,300 dwellings had been completed, with the 2014-15 year on track to reach a projected total of 12,400 if the rate of completions remains steady (Figure 101).

Since 2008-09, dwelling completions in the Rest of Sydney have risen by an average annual rate of 11.1%, with the majority of growth taking place between 2011-12 and 2013-14. Rest of Sydney dwelling completions are on course to reach 13,700 in 2014-15 if the rate of completions remains steady.

Figure 100: Ratio of house to other residential approvals

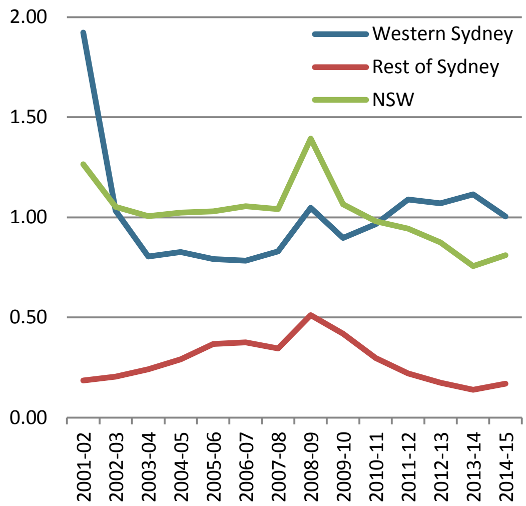
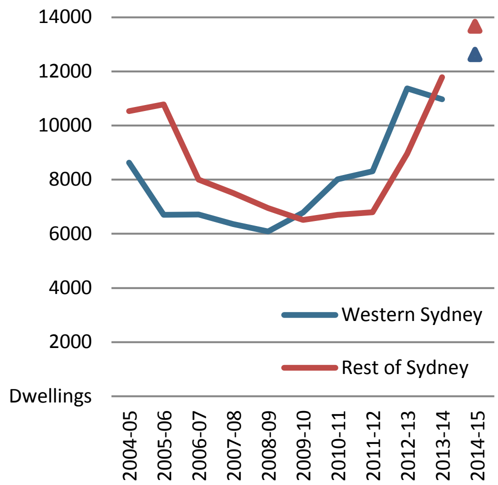


Figure 101: Dwelling completions in Sydney (2004-05 to 2014-15)



13. HOUSING MARKET

House prices and rents are indicative of the economic desirability of living in an area. Figure 102 charts increasing dwelling prices in Western Sydney, the Rest of Sydney and NSW. Western Sydney prices have closely followed average NSW prices, whereas median dwelling prices in the Rest of Sydney are much larger than those in Western Sydney (Figure 103).

Figure 102: Median dwelling prices (September 1994 to December 2014)[42]

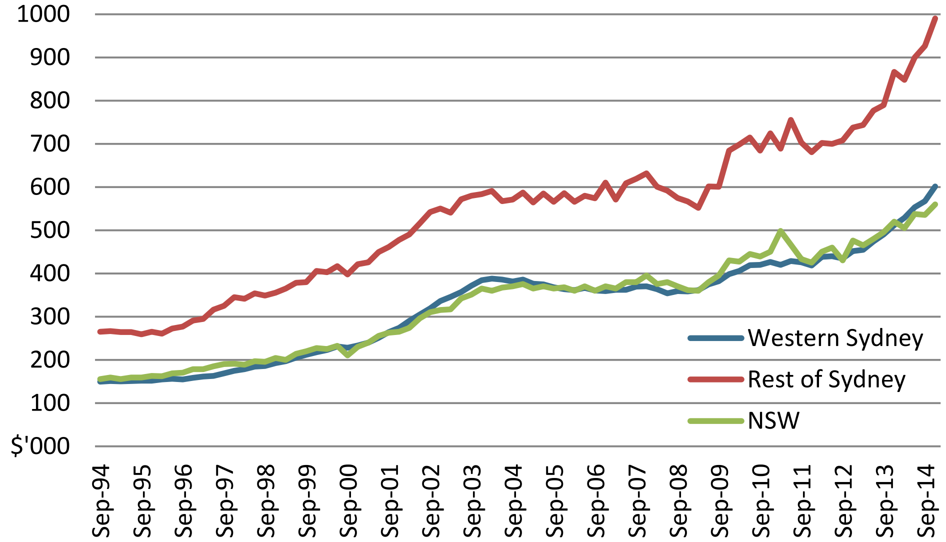
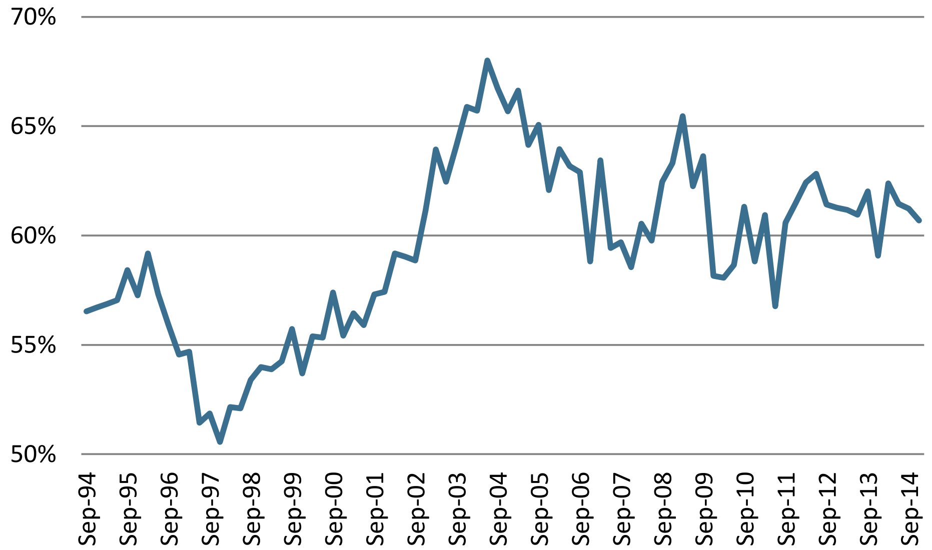


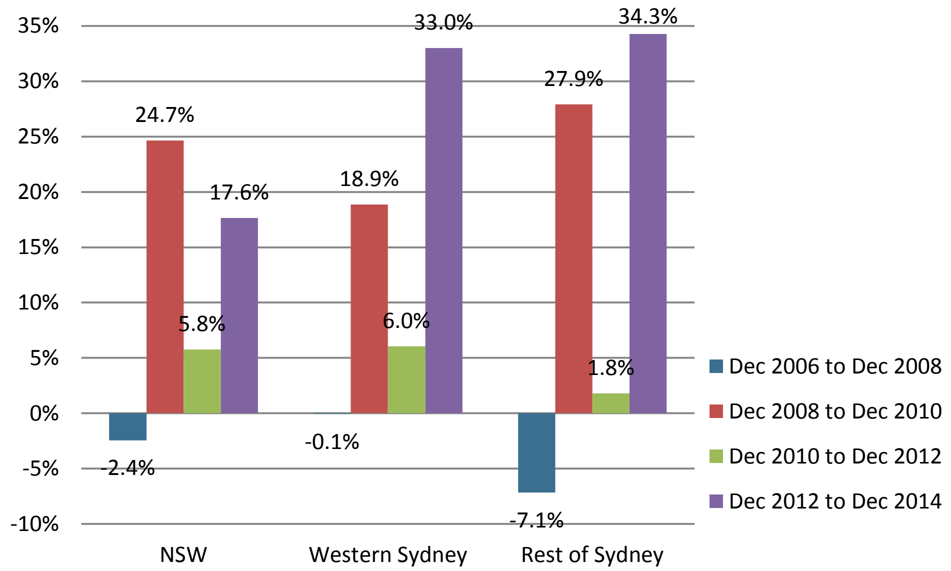
Figure 103: Western Sydney median dwelling prices as a percentage of Rest of Sydney median dwelling prices



[42] The median dwelling prices and rents for Western Sydney and the Rest of Sydney in this chapter are averages of the median dwelling prices for each LGA which makes up Western Sydney or the Rest of Sydney. Department of Family and Community Services, *Rent and Sales Report*, No. 111, Additional Sales Tables – December 2014, 2015

In December 2014, the median dwelling price in Western Sydney was $600,900; it was $990,200 in the Rest of Sydney. The median dwelling price in Western Sydney rose 33.0% in the two years up to December 2014, only marginally less than the Rest of Sydney median dwelling price (Figure 104). In contrast, between December 2010 and December 2012 median dwelling prices in Western Sydney only grew by 6.0%.

Figure 104: Median dwelling price growth: 2006 to 2014



The trends are generally similar when considering strata and non-strata dwellings. The main differences are as follows:

- The Western Sydney non-strata dwelling median price grew faster than the Rest of Sydney price (34.0% vs 29.8%);
- The Western Sydney non-strata median price was only 46% of the Rest of Sydney price ($666,800 vs $1,451,800), down from a high of 50.2% in June 2004;
- The Western Sydney strata dwelling median price rose slightly less than the Rest of Sydney price between 2012 and 2014 (21.7% vs 23.0%); and
- The Western Sydney strata median price was equivalent to 61% of the Rest of Sydney price in December 2014, down from a high of 71.1% in March 2004.

As with dwelling prices, median rents in Western Sydney have been very similar to average NSW median rents (Figure 105). In March 2015, the Western Sydney median rent was $435/week, up from $157/week in March 1990. In comparison, Rest of Sydney median rents were $573/week, up from $196/week in March 1990. Rest of Sydney median rents have risen faster than Western Sydney median rents; Western Sydney median rents were equivalent to 75.9% of Rest of Sydney median rents in March 2015, down from a high of 83.5% in September 1992 (Figure 106).

Figure 105: Median dwelling rents (March 1990 to March 2015)

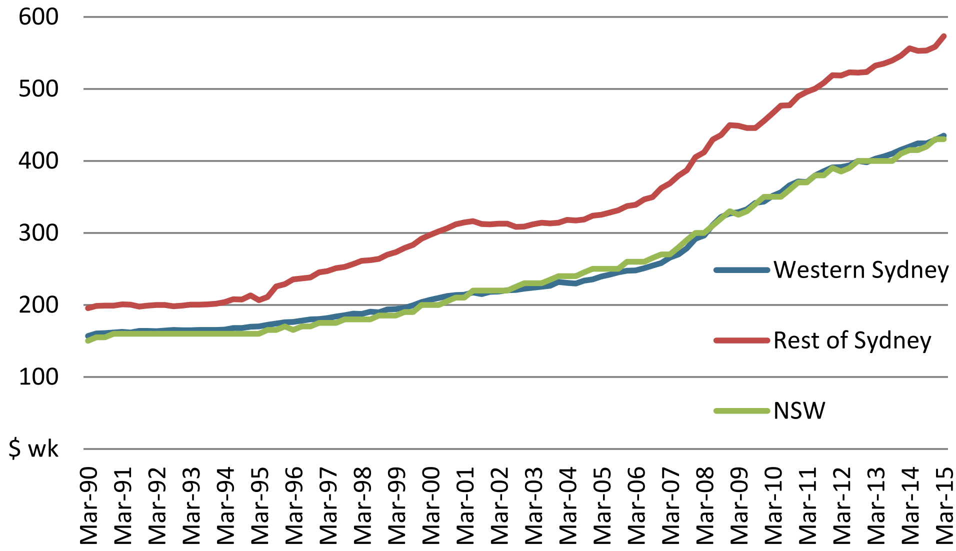
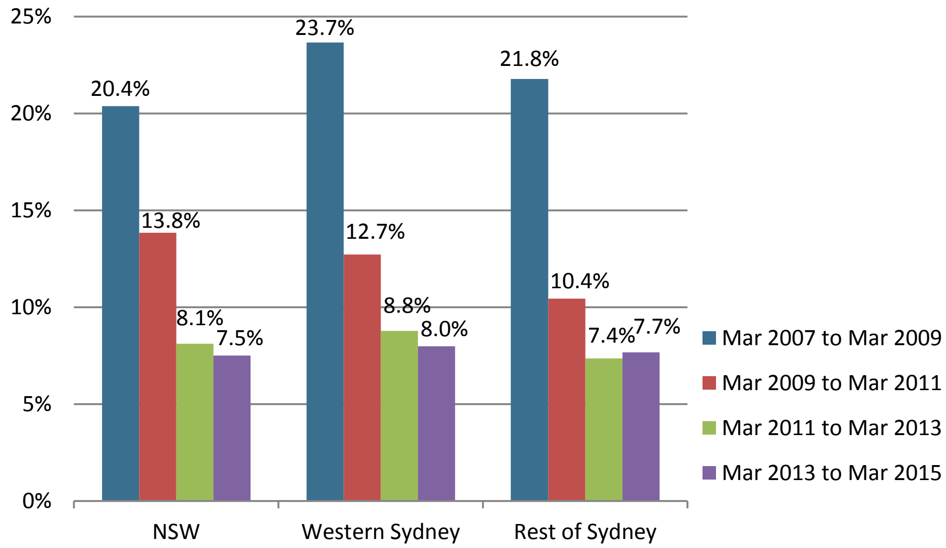


Figure 106: Western Sydney median dwelling rents as a percentage of Rest of Sydney median dwelling rents

Rent growth has trended downwards between March 2007 and March 2015 (Figure 107). Between March 2007 and March 2009, the Western Sydney median rent grew by 23.7%. Two-year growth figures progressively fell, reaching 8.0% between March 2013 and March 2015. This trend also occurred in the Rest of Sydney.

Figure 107: Median dwelling rent growth: 2007 to 2015



The trends are generally similar when considering houses and units. The main differences between Western Sydney and the Rest of Sydney are as follows:

- The Western Sydney median house rent was 54.6% of the Rest of Sydney median house rent ($469/week vs $859/week);
- The Western Sydney median house rent grew by 8.2% between March 2013 and March 2015, faster than the Rest of Sydney median house rent (5.5%);
- The Western Sydney median unit rent was 69.1% of the Rest of Sydney median unit rent ($360/week vs $521/week); and
- The Western Sydney median unit rent grew less than the Rest of Sydney median rent between March 2013 and March 2015 (6.7% vs 7.4%).

14. GOVERNMENT POLICIES

14.1 NSW Government

A 2012 NSW Parliamentary Research Service Briefing Paper, *Western Sydney: An economic profile*, covers government policies such as the Employment Lands Development Program and NSW 2021 regional action plans. Policy developments of relevance not considered in this Chapter include: the *NSW Long Term Transport Master Plan* (2012), *NSW Freight and Ports Strategy* (2013), *South West Rail Link Extension: Public transport corridor protection* report (2014), *State Infrastructure Strategy Update 2014: Recommendations to the NSW Government* (2014), the *Glenfield to Macarthur Urban Renewal Corridor Strategy* (2015), the ongoing *Outer Sydney Orbital Corridor Preservation Study*, the Knowledge Hubs initiative and the Smart Work Hub pilots.

14.1.1 Industry action plans (2012 to 2014)

Since the publication of the Research Service Briefing Paper, *Western Sydney: An economic profile*, the NSW Government has finalised industry action plans for the agriculture, creative industries, digital economy, international education and research, manufacturing, professional services, and visitor economy industries. Given the importance of manufacturing to Western Sydney's GRP and employment, key aspects of the *NSW Manufacturing Industry Action Plan* are set out below.

The Plan has three objectives:

- Sustaining the existing manufacturing capability in this State;
- Urgently developing new competitive strengths for current and future success; and
- Growing competitive advantage using innovation and collaborative supply chains.[43]

The Plan makes ten recommendations intended to deliver tangible benefit to the competitiveness, viability and future prosperity of the NSW manufacturing sector:

1) Establish the NSW Agility Program and Manufacturing Innovation Awards;
2) Promote manufacturing as the engine of innovation in NSW;
3) Utilise procurement to develop the NSW manufacturing industry;
4) Address Workforce Development Requirements across the Manufacturing Sector;

[43] NSW Government, *NSW Manufacturing Industry Action Plan*, Prepared by the Manufacturing Industry Taskforce, 25 September 2012, p.1

5) Implement a NSW Government Infrastructure Development and Planning System that supports business growth;
6) Encourage significantly greater collaboration between research bodies and NSW industry and the clustering of sector-specific manufacturing firms;
7) Reduce the cost burden of uncompetitive taxes and inefficient regulation;
8) Support access to finance for SME manufacturers;
9) Promote the use of design as a key innovation and competitiveness strategy for NSW manufacturers; and
10) Implement a strategic approach to promoting exports, by identifying particular country / regional opportunities.[44]

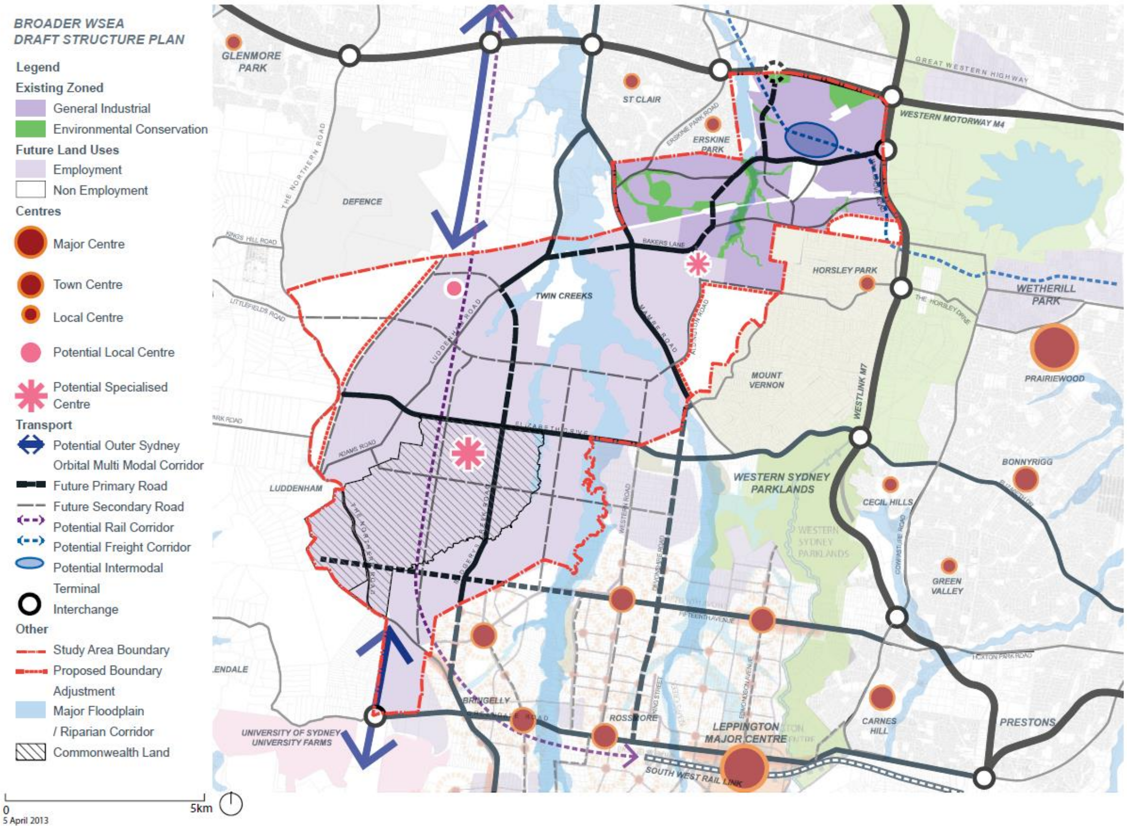
14.1.2 Broader Western Sydney Employment Area Draft Structure Plan (2013)

In 2012, the then NSW Department of Planning & Infrastructure commissioned a study on the Broader Western Sydney Employment Area (Figure 108) that examined the economic impacts and drivers associated with the planning and future development of the Area. This study informed development of the June 2013 *Broader Western Sydney Employment Area Draft Structure Plan*. The Draft Structure Plan:

> … sets out the NSW Government's vision for economic and infrastructure growth for an area covering more than 10,000 hectares – equivalent to four times the size of the City of Sydney council area. This area stretches from the corner of the M4 and M7 motorways at Eastern Creek for some 20km through to Bringelly in the south.
>
> It is a long-term development framework and is expected to become the largest employment land area in NSW. The structure plan will take some time to deliver but it is important to get the big picture planning right.
>
> The draft Structure Plan will provide some 6,300 hectares of additional employment lands.
>
> About 57,000 new jobs are expected to be located at the employment area over the next 30 years, with a total of 212,000 new jobs when the area is fully developed beyond 2046, including both office based jobs and those in the industrial sector.
>
> This plan reflects the government's priority to ensure land release will be fully integrated with transport and infrastructure. The draft Structure Plan identifies major transport, water and utility infrastructure required to support development. The final Structure Plan will include a detailed staging and sequencing strategy to ensure key infrastructure is provided to enable growth of the area.[45]

[44] Ibid., pp2-6
[45] NSW Government, *Broader Western Sydney Employment Area Draft Structure Plan:*

Figure 108: Broader WSEA Draft Structure Plan[46]



In 2013, the Broader Western Sydney Employment Area (WSEA) was dominated by low intensity rural activities and intermittent rural-residential areas and serviced by minimal infrastructure. Also found within the area is the Commonwealth-owned land designated for the Badgerys Creek airport, portions of the South West Growth Centre and the existing Western Sydney Employment Area.

The purpose of the draft Structure Plan is to provide a framework for land use, transport and infrastructure planning at a strategic level. It does not rezone land; rather, it is intended to provide a direction for land use and transport planning at a strategic level. Key elements of the Draft Structure Plan include:

- Identification of 6,300 hectares of new employment land;
- Initial demand within the Broader WSEA will remain directed towards employment uses within the freight and logistics areas. Factors such as population growth, transport infrastructure improvements and market conditions may drive other forms of employment in the future;
- The Broader WSEA may not be required in its entirety to support employment lands growth over the next 30 years; however, reservation

Securing long-term employment for Western Sydney, June 2013, p.1

[46] NSW Department of Planning & Infrastructure, *Broader Western Sydney Employment Area draft Structure Plan map*, 5 April 2013

of the bulk of these lands is recommended;

- There will be additional demand for 2,100 hectares for employment lands within the Broader WSEA to 2046;
- The Outer Sydney Orbital is a potential future corridor that can cater for a mix of transport modes. Further studies will be required to determine the alignment of the corridor;
- Identification of primary road connections, as well as two potential freight rail corridors, two potential intermodal terminals and a potential passenger rail corridor; and
- Identification of the opportunity for two specialised centres and one local centre.

With the decision to build a second airport at Badgerys Creek, the release date of the Final Structure Plan has been pushed back to the close of 2015.

14.1.3 NSW Economic Development Framework (2014)

In 2014, the NSW Government released its *NSW Economic Development Framework*. The five key principles of the Framework are intended to support industry growth in all the major sectors of the NSW economy. The five key principles, together with relevant subsidiary objectives, are as follows (bold in original):

1) Demonstrate leadership
    - Promote **tourism, events and conference opportunities in Western Sydney** by working with local stakeholders to leverage tourism, sport and recreation assets, and developing a packaged tourism offering
2) Make it easier to do business
    - Investigate options to expand **business advisory services**, particularly in Western Sydney, including targeted support for multicultural businesses
3) Collaborate to drive innovation & competitiveness
    - State-wide roll-out of a **Supply Chain Accelerator** program to encourage NSW companies to work together and build the skills they need to access major project opportunities. This will include an Advanced Manufacturing pilot in Western Sydney
    - Investigate opportunities to **link research and industry** in partnership with the NSW Business Chamber, including a focus on advanced manufacturing in Western Sydney
4) Invest in critical infrastructure
    - Roll-out **Smart Work Hub** teleworking pilots in the Central Coast and Western Sydney to increase availability of alternate workplaces

5) Raise the global profile of Sydney and NSW

Implementation of the Framework as of 2014 is set out in the NSW Government October 2014 publication, *Progressing the NSW Economic Development Framework: Report on 2014 Priority Actions and Economic Performance Indicators*.

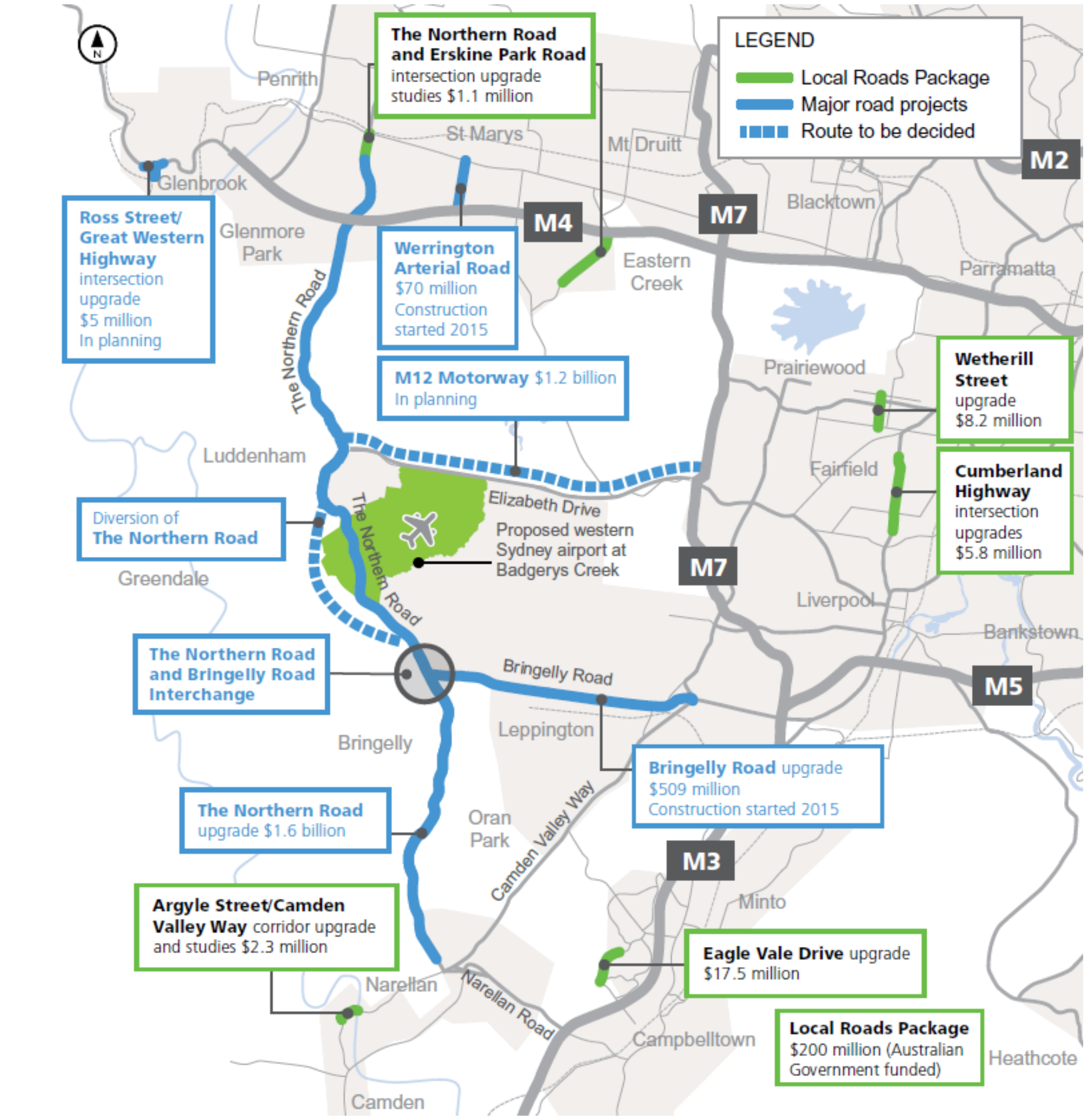
14.1.4 Western Sydney Infrastructure Plan (2014)

The *Western Sydney Infrastructure Plan* is a 10 year, $3.6 billion road investment program for Western Sydney (Figure 109). According to the *January to March 2015 Report Card*:

> The Western Sydney Infrastructure Plan will provide improved road transport capacity ahead of future traffic demand and act as a catalyst for significant employment and residential development in western Sydney and the Broader Western Sydney Employment Area (BWSEA). The Australian and NSW governments are improving the road network before a western Sydney airport is operational creating thousands of direct and indirect jobs.
>
> Western Sydney is expected to undergo unprecedented growth with about one million additional people living in the region by 2031. It is vital to ensure the road infrastructure supports transport connections, moves freight, eases congestion, provides more reliable travel times and makes roads safer.
>
> The plan upgrades major corridors including Bringelly Road (construction underway) and The Northern Road, and upgrades existing roads between the M4 Motorway and the Great Western Highway to form the Werrington Arterial Road (construction underway). It will also deliver a new $1.2 billion M12 Motorway providing direct airport access.
>
> These new and upgraded roads will be safer and will generally feature four lanes with capacity for six lanes in the future, central medians to separate traffic, wide shoulders and improved street lighting, particularly at intersections. They will also improve bus priority and will provide off road paths for cyclists and pedestrians.
>
> As part of the plan, the Australian Government is also investing $200 million in a Local Roads Package, enabling western Sydney councils to deliver improved road connections to support the Western Sydney Infrastructure Plan objectives.[47]

[47] NSW Roads & Maritime Services, *Western Sydney Infrastructure Plan Report Card January to March 2015*, Australian Government and NSW Government 2015

Figure 109: Western Sydney Infrastructure Plan[48]



14.1.5 A Plan for Growing Sydney (2014)

In December 2014, the NSW Government released *A Plan for Growing Sydney*, its new metropolitan strategy. According to the Plan, Western Sydney is "key to Sydney's success". The Plan includes:

> … a vision for Western Sydney that will secure the city's productivity into the future – so that Western Sydney can meet its full potential, build strong centres and be an even greater place to live. Western Sydney will drive the future productivity of Sydney and NSW.[49]

The Plan has four goals:

[48] NSW Government, *Western Sydney Infrastructure Plan map*, 2015
[49] NSW Government, *A Plan for Growing Sydney*, December 2014, p.16

1) A competitive economy with world-class services and transport;
2) A city of housing choice, with homes that meet our needs and lifestyles;
3) A great place to live with communities that are strong, healthy and well connected; and
4) A sustainable and resilient city that protects the natural environment and has a balanced approach to the use of land and resources.

11 Directions are set out under the first goal, many of which are particularly relevant to Western Sydney.

Direction 1.2: Grow Greater Parramatta – Sydney's Second CBD

- Grow Parramatta as Sydney's second CBD by connecting and integrating Parramatta CBD, Westmead, Parramatta North, Rydalmere and Camellia.
- Grow the specialised health and education precincts at Westmead and Rydalmere.
- Renew Parramatta North to create a vibrant mixed-use precinct.

Direction 1.3: Establish a new priority growth area – Greater Parramatta to the Olympic Peninsula

- Establish a new partnership to manage renewal of the Greater Parramatta to Olympic Peninsula Priority Growth Area.
- Identify and deliver enabling infrastructure to support growth and urban renewal.
- Deliver priority revitalisation precincts.
- Grow the knowledge economy as part of the extension of the Global Economic Corridor.

Direction 1.4: Transform the productivity of Western Sydney through growth and investment

- Improve transport links and create a new services centre and industrial precinct to support the growth of Badgerys Creek Airport.
- Develop new strategic employment corridors along transport infrastructure investments that will service Badgerys Creek Airport.

Direction 1.5: Enhance capacity at Sydney's gateways and freight networks

- Develop and implement a strategy for the Sydney Airport and Port Botany precincts to support their operation, taking into account land uses and the proposed road transport investments.
- Support the productivity of the freight network by identifying

buffers around key locations on the freight network.

Direction 1.6: Expand the global economic corridor

- Grow high-skilled jobs in the Global Economic Corridor by expanding employment opportunities and mixed-use activities.
- Invest to improve infrastructure and remove bottlenecks to grow economic activity.

Direction 1.7: Grow strategic centres – providing more jobs closer to home

- Invest in strategic centres across Sydney to grow jobs and housing and create vibrant hubs of activity.
- Improve councils' access to data on the demand and supply of homes, office and retail space.
- Work with the Greater Sydney Commission to develop job targets for strategic centres.
- Continue to grow Penrith, Liverpool and Campbelltown-Macarthur as regional city centres supporting their surrounding communities.

Direction 1.9: Support priority economic sectors

- Support the growth of priority industries with appropriate planning controls
- Support key industrial precincts with appropriate planning controls

Direction 1.10: Plan for education and health services to meet Sydney's growing needs

- Assist the Department of Education and Communities, the Catholic Education Commission and the Association of Independent Schools of NSW to identify and plan for new school sites throughout Sydney.
- Support the growth of complementary health and tertiary education activities in strategic centres.
- Plan for expansion of health facilities to service Sydney's growing population.

Direction 1.11: Deliver infrastructure

- Preserve future transport and road corridors to support future growth.
- Secure Sydney's water supplies.
- Undertake long-term planning for social infrastructure to support growing communities.
- Commence planning and the development of a business case for new sports facilities for Western Sydney.

- Deliver long-term planning for cemeteries and crematoria infrastructure.
- Prepare Infrastructure Plans for subregional planning.

14.1.6 2015 Budget

The NSW Government's 2015 Budget allocated funding to Western Sydney across the health, education, roads and transport portfolios. Funding included:

- $45 million for stage 1B of the Westmead Hospital redevelopment;
- $30 million towards commencing stage two of the Blacktown and Mount Druitt Hospitals redevelopment;
- $27.6 million towards the continued redevelopment of Blacktown and Mount Druitt Hospitals;
- $23.2 million to continue redeveloping Westmead Hospital;
- $19 million in 2015 to progress planning of the new Parramatta Light Rail;
- $37 million to improve network efficiency on the Western train line;
- $684 million to upgrade and repair roads in Western Sydney, including $180 million towards easing Sydney's congestion which will deliver additional clear ways and fix notorious traffic pinch points ($62 million), planning for the Smart Motorways program ($15 million) and delivering real time travel information for motorists ($9 million);
- $167 million for continued upgrades to support population and economic growth in Western Sydney, including completing the final section of Camden Valley Way ($16 million) and ongoing upgrades of Schofields ($44 million), Richmond ($30 million) and Old Wallgrove ($30 million) roads;
- $164 million in joint funding with the Federal Government to upgrade roads to help support Sydney's second airport at Badgerys Creek, including continuing construction on Bringelly Road ($50 million) and Werrington Arterial Road ($30 million);
- $25 million on new services on the Parramatta River, including $2 million in 2015 to commence the delivery program of an extra four ferry vessels;
- $20 million to establish an Aboriginal Centre of Excellence in Western Sydney to improve learning outcomes and job opportunities for Aboriginal people;
- $10 million towards moving the Powerhouse Museum from Ultimo to Parramatta;
- New schools at Bella Vista, on the Old Kings School site and at Narellan; and
- $60 million supporting infrastructure for new homes in The Hills and

Blacktown local government areas.

14.2 Commonwealth Government

Relevant Commonwealth Government policies and developments include Priority Employment Areas, the Western Sydney airport at Badgerys Creek and the Moorebank Intermodal Terminal, which will be jointly developed and operated by the Moorebank Intermodal Company and the Sydney Intermodal Terminal Alliance. Briefly reviewed below is the Regional Development Australia Sydney (RDA Sydney) *Regional Plan for Sydney 2013 – 2016*. The 2011 RDA Sydney Plan was reviewed in the Research Service Briefing Paper, *Western Sydney: An economic profile*.

Regional Development Australia (RDA) is a partnership between the Commonwealth, State and Local Governments created to strengthen regional communities. The *Regional Plan for Sydney 2013 – 2016* has the following vision:

> An innovative, accessible, liveable, productive and globally sustainable metropolitan region, with vibrant interconnected regional centres, governed by an integrated, collaborative urban development planning model which seeks to create more jobs closer to home.[50]

The Plan:

> … is based on a framework that identifies the Sydney Metropolitan Region's strengths, challenges, needs and opportunities. Priorities for the region are then determined from an analysis of the framework, resulting in a set of key activities to be implemented by RDA Sydney with its partners and stakeholders over the next three years[51]

The Plan sets out priorities for Sydney under four key themes:

Human capital – education and skills

- Build the capacity of Sydney's working age residents to attain the appropriate qualification and skills in order to adapt to the changing work environment and future opportunities
- Through appropriate planning and partnership ensure all working age residents have access to a diverse range of vocational and higher education institutions throughout their working life
- Engage with industry on an ongoing basis to develop appropriate vocational and higher order education courses

Sustainable communities and population growth

[50] Regional Development Australia Sydney, *Regional Plan for Sydney 2013 – 2016*, August 2013, p.8

[51] Ibid., p.2

- Jobs closer to home
- Creating a 40 year long-term vision for Sydney
- Whole-of-government planning which encompasses utilities, roads, transport, health, employment and education
- The key priority for Sydney is to maintain and strengthen its role as an economic driver of the national economy, providing diverse employment opportunities for its population within a sustainable economic development framework
- Seek out the economic opportunities created through population growth, NBN rollout and increasing demand for goods and services from Asia
- Continue to develop innovative goods, services and processes through its education and research institutions and networks, and from its existing industry base
- Using Sydney's current expertise, develop a renewable energy source that is economically and environmentally sustainable
- Plan and develop fully serviced employment lands with access to public transport and road infrastructure
- Ensure skill sets and qualifications of migrants are not underutilised through poor pathways to sustainable and productive employment
- A strategic response to population growth and demographic changes for health and ageing services
- Support employment growth in the South-West and North West growth areas by developing attractive employment lands and through the development of new strategic centres

Access to international, national and regional markets

- Expand and develop Sydney's capacity as a global city attracting investment and sustainable development
- Seek out opportunities created by Asia for goods and services particularly in industry sectors such as professional services, advanced manufacturing, education and research, ICT, clean technology, mining, agribusiness and tourism
- Strategic implementation of the NSW Freight and Ports Strategy
- Establish Badgerys Creek as the site of Sydney's second airport
- Minimise congestion by creating new ways of working and living that can help reduce our dependence on the motor vehicle e.g. smart work centres
- Support of health, research and education precinct development strategies to realise local economic development potential

Comparative advantage and business competitiveness

- Transition to the green economy in such sectors as emissions trading, sustainable building and infrastructure, renewable energy sectors, research and development clusters and specialised manufacturing
- Grow and add economic and social value from Sydney's sometimes fragmented creative industries sector
- Develop arts and cultural precincts at the subregion level to enhance liveability and drive economic development
- Given the rapid population growth of Western Sydney (both past and planned) as well as the incredible diversity of the population, a balanced access to relevant arts facilities and programs for the region should be a priority
- Ensure sustainable agribusiness and food security.[52]

14.3 Local Government

The 14 LGAs that make up Western Sydney each have policies aimed at strengthening their respective economy. Two regional local council organisations cover Western Sydney: the Western Sydney Regional Organisation of Councils (WSROC) and the Macarthur Regional Organisation of Councils (MACROC). The Research Service Briefing Paper, *Western Sydney: An economic profile*, briefly summarised WSROC's 2012 report, *Future Directions Western Sydney 2030: Next Steps*. Since then, the only report either WSROC or MACROC have published of relevance has been WSROC's *State Election Issues Brief March 2015*.

The Brief contains Action plans with points of action relevant to the topic at hand under a series of headings, including development and planning, public transport, Western Sydney airport, sustainable urban management and growth, agricultural management and food security, education, early intervention and childcare, arts and cultural development, housing affordability, and population growth and diversity. Two of the most relevant Action plans are replicated below:

Employment and population growth

- Fund the development of new environmental and high technology industry clusters, located close to where workers with relevant or transferable skills currently live, close to existing public transport infrastructure, and on existing dedicated employment lands under the State Government's A Plan for Growing Sydney;
- Assist businesses and other high value service enterprises to establish or relocate their operations to Western Sydney's existing

[52] Ibid., pp24-25

major commercial centres and business parks, close to where workers with relevant skills currently live;

- Provide necessary enhancements to public transport infrastructure connecting people to the industry clusters from where they live;
- Co-locate tertiary educational facilities in or near the new industry clusters;
- Give priority to the new high technology industry clusters for the roll out of the National Broadband Network (NBN);
- Support these initiatives by funding the immediate commencement of construction of the Parramatta light rail, the extension of the North West Rail Link, the duplication of the Western Line and implementation of local government integrated land use and transport strategies in Western Sydney;
- Work with local TAFE colleges and University of Western Sydney to develop a skills base to fill demand from new industries;
- Establish ‘smart work hubs’ to increase workplace flexibility and reduce commuting time;
- Revitalise town centres to encourage local entrepreneurs and small businesses to flourish;
- Move more public service positions west; and
- Build greater Aboriginal workforce participation in Western Sydney by improving links between the private sector and Aboriginal communities to increase employment, business and economic development opportunities, including promoting the Western Sydney Job Compacts.[53]

Youth unemployment

- Fund a youth transitions scheme to assist young people build basic employability skills, find work experience, vocational guidance and training opportunities;
- Create opportunities for meaningful work experience for young people, including increased use of intermediate labour market programs and social enterprise;
- Provide more intensive, youth-focussed assistance for young people within the employment service system, to ensure their needs are met early and job outcomes improve;
- Establish programs that link schools, TAFE and universities with local businesses; providing a strong pathway for graduates;
- Build and diversify the Western Sydney economy to create a

[53] Western Sydney Regional Organisation of Councils, *State Election Issues Brief March 2015*, March 2015, p.33

greater range and quality of job opportunities;

- Commit to a greater focus on job readiness and soft skills in schools to improve employment outcomes for students entering the workforce;
- Increase incentives for employers to hire under 25s and offer on-the-job training opportunities;
- Encourage school children from years 10 upwards to be actively engaged in examining career choices and taking up work experience;
- Establish programs that target key transition periods between school, tertiary study and first jobs; and
- Ensure state schools maintain an equal focus on all work pathways including on the job training, TAFE or university studies as suits each individual student.[54]

[54] Ibid., p.38

15. CONCLUSION

This paper has surveyed the complex Western Sydney economy which has experienced and is experiencing significant change. The Western Sydney economy is spatially diverse; Appendix 2 lists a number of papers that examine the economic features of the 14 LGAs that constitute Western Sydney. In this paper, focus has been given primarily to Western Sydney as a whole, with brief mention of the constituent LGAs at certain points. Current data on a range of indicators has been presented, together with recent trends and, where available, projections. Relevant Commonwealth, NSW and Local Government economic plans and policies have also been set out.

Over the past decade the Western Sydney population has grown faster than the Rest of Sydney population. Conversely, the economy of Western Sydney has recorded slower growth than that of the Rest of Sydney on at least three indicators: Gross Regional Product (GRP); the number of employed residents; and the number of jobs located in the region. The Western Sydney *resident labour force* generally records worse labour force indicators than the Rest of Sydney: it has higher total and youth unemployment rates and lower total and youth participation rates. Some of the most notable recent trends include an increasing proportion of employed people in part-time employment, a rising long-term unemployment rate, a declining male participation rate and declining numbers of full-time employed youth.

Manufacturing is currently the largest industry in Western Sydney in terms of contribution to GRP and employment. Other significant industries include health care & social assistance, financial & insurance services and retail trade. However, significant shifts are taking place in the Western Sydney economy: manufacturing has been in decline in terms of GRP and employment, while service industries such as health care & social assistance, financial & insurance services, professional, scientific & technical services and education & training have experienced the largest growth.

Already Australia’s third largest economy, the Western Sydney economy is expected to start catching up to the Rest of Sydney economy in the coming decades, with job growth projected to be almost double that of the Rest of Sydney between 2011 and 2041. Key drivers of this economic growth include projected higher population growth and a number of infrastructure and policy developments, notably the Western Sydney airport at Badgerys Creek, the Moorebank Intermodal Terminal and further development and expansion of the Western Sydney Employment Area. Recent changes and proposed developments in Western Sydney have brought it to the point where, as noted in the NSW Government’s *A Plan for Growing Sydney*, it “will drive the future productivity of Sydney and NSW”.

APPENDIX 1: NSW ELECTORATES IN WESTERN SYDNEY

The Table below sets out which NSW electorates are located wholly or partly within each definition of Western Sydney.

Table: NSW electorates in Western Sydney

	Western Sydney (LGA)	Western Sydney (SA4)
Wholly located	• Auburn • Bankstown • Baulkham Hills • Blacktown • Blue Mountains • Cabramatta • Camden • Campbelltown • Castle Hill • East Hills • Fairfield • Granville • Liverpool • Londonderry • Macquarie Fields • Mount Druitt • Mulgoa • Parramatta • Penrith • Prospect • Riverstone • Seven Hills	• Auburn • Baulkham Hills • Blacktown • Blue Mountains • Cabramatta • Camden • Campbelltown • Castle Hill • Fairfield • Granville • Hawkesbury • Liverpool • Londonderry • Macquarie Fields • Mount Druitt • Mulgoa • Parramatta • Penrith • Prospect • Riverstone • Seven Hills
Partly located	• Epping (14%) • Hawkesbury (98%) • Heathcote (0.3%) • Holsworthy (94%) • Lakemba (38%) • Ryde (2%) • Wollondilly (61%)	• Bankstown (22%) • Epping (48%) • Holsworthy (95%) • Hornsby (11%) • Wollondilly (61%)

APPENDIX 2: KEY WESTERN SYDNEY SOURCES

C Angus, *NSW rail freight transport and infrastructure*, Briefing Paper 9/2015, 2015

B Beard, *Where do people who live in Greater Western Sydney (GWS) work and how do they get there?* WESTIR, March 2015

BITRE, *Cities: Population growth, jobs growth and commuting flows in Sydney*, Research Report 132, October 2012

BITRE, *Major transport employment hubs*, Information Sheet 58, November 2014

BITRE, *Changes in Australia's industry structure: cities and regions, 2006-2011*, Information Sheet 57, January 2015

Committee for Economic Development of Australia, *Advanced manufacturing: Beyond the production line*, April 2014

Committee for Economic Development of Australia, *Australia's future workforce?* June 2015

Consult Australia, *Sydney 2051: A greater global city report*, Prepared for Regional Development Australia Sydney, August 2012

Deloitte, *Building Western Sydney's Cultural Arts Economy – a key to Sydney's success*, Sydney Business Chamber, 2015

Deloitte, *Restarting Sydney's Heart: Light rail the engine of change – examination of a proposed light rail through the Olympic corridor*, Prepared for the WestLine Partnership, February 2015

Grattan Institute, *Mapping Australia's economy: cities as engines of prosperity*, July 2014

A Haylen, *A second Sydney airport: Policy developments, reports and key findings*, NSW Parliamentary Research Service, Issues Backgrounder 4, April 2014

A Haylen, *Sydney Airport: performance and potential competition from a second airport*, Briefing Paper 2/2014, 2014

A Haylen, *Sydney's road network: plans and prospects*, Briefing Paper 8/2015, 2015

Hill PDA, *Employment prospects for South West Sydney*, Prepared for MACROC, Updated 2013

G J Hugo and K R Harris, *An analysis of demographic processes which presently represent important policy areas in Australian cities and regions*, Australian Population and Migration Research Centre, The University of Adelaide, Prepared for the National Growth Areas Alliance, August 2013

.id, *Greater Western Sydney Region Community Profile*, 2015

.id: Individual economic profiles of the fourteen Western Sydney LGAs, 2015

Institute for Sustainable Futures, *Smart Work Centres: An analysis of demand in Western Sydney*, Report for Regional Development Australia Sydney, the Western Regional Organisation of Councils and Penrith Business Alliance, January 2014

IRIS Research Ltd, *2014 Survey of Businesses in Camden, Campbelltown and Wollondilly*, Prepared for MACROC, November 2014

A Junor and D Fraser, *South Western Sydney Manufacturing and Engineering Task Force Skills Survey 2013-14*, IRRC UNSW Business School, Final Report to South Western Sydney Manufacturing and Engineering Skills Task Force, February 2015

J D Kasarda, *A Western Sydney Aerotropolis: Maximising the benefits of Badgerys Creek*, Center for Air Commerce, UNC Kenan-Flagler Business School, Report for Sydney Business Chamber, April 2015

P O'Neill and B Fagan, *Work, Places and People in Western Sydney*, The Centre for Western Sydney, University of Western Sydney, February 2015

PwC, *Big City Analytics: Identifying Sydney's economic, employment and population Centres of Gravity*, Issues Paper 5, Report for The Committee for Sydney, April 2015

PwC, *Understanding the economy from the ground up: A granular look at Australia's economic future beyond the resources investment boom*, June 2015

Regional Development Australia Sydney, *RDA Sydney Metropolitan Region Economic Baseline Assessment Report 2015*, 2015

Strategic Economics and SGS Economics and Planning, *Liverpool Health and Education – Precinct Development Strategy: Stage 1*, A report to Regional Development Australia Sydney and Liverpool City Council, February 2013

William Buck, *Making Western Sydney Greater*, 2015

APPENDIX 3: DEFINING WESTERN SYDNEY GEOGRAPHICALLY

Western Sydney (SA4) consists of 6 SA4s:

- Baulkham Hills & Hawkesbury;
- Blacktown;
- Outer South West;
- Outer West & Blue Mountains;
- Parramatta; and
- South West.

The Table below sets out how much of each LGA and electorate in Western Sydney is found in Western Sydney (SA4), according to Census 2011 population counts.

Western Sydney (SA4)

Local Government Area	Total population	Population in Western Sydney (SA4)	% in Western Sydney (SA4)
Auburn	73,739	73,743	100.0%
Bankstown	182,352	17,355	9.5%
Blacktown	301,098	301,120	100.0%
Blue Mountains	75,942	76,285	100.5%
Camden	56,720	56,724	100.0%
Campbelltown	145,970	145,973	100.0%
Fairfield	187,767	187,932	100.1%
Hawkesbury	62,354	62,070	99.5%
Holroyd	99,164	99,241	100.1%
Liverpool	180,142	180,497	100.2%
Parramatta	166,859	157,193	94.2%
Penrith	178,467	178,093	99.8%
The Hills	169,873	169,574	99.8%
Wollondilly	43,262	43,274	100.0%
Western Sydney (LGA)	1,923,709	1,749,074	90.9%
Electorate			**% in Western Sydney SA4**
Auburn	87,017	87,017	100.0%
Bankstown	78,430	17,342	22.1%
Baulkham Hills	71,887	71,887	100.0%
Blacktown	79,983	79,983	100.0%
Blue Mountains	69,841	69,841	100.0%
Cabramatta	77,220	77,220	100.0%
Camden	66,535	66,535	100.0%

Campbelltown	76,062	76,062	100.0%
Castle Hill	72,165	72,165	100.0%
Epping	73,471	35,228	47.9%
Fairfield	80,926	80,926	100.0%
Granville	82,029	82,029	100.0%
Hawkesbury	71,652	71,652	100.0%
Holsworthy	77,411	73,376	94.8%
Hornsby	75,908	8,650	11.4%
Liverpool	82,521	82,521	100.0%
Londonderry	77,767	77,767	100.0%
Macquarie Fields	75,898	75,898	100.0%
Mount Druitt	83,100	83,100	100.0%
Mulgoa	71,517	71,517	100.0%
Parramatta	88,898	88,897	100.0%
Penrith	73,910	73,910	100.0%
Prospect	75,737	75,737	100.0%
Riverstone	73,734	73,734	100.0%
Seven Hills	78,346	78,345	100.0%
Wollondilly	67,553	41,464	61.4%

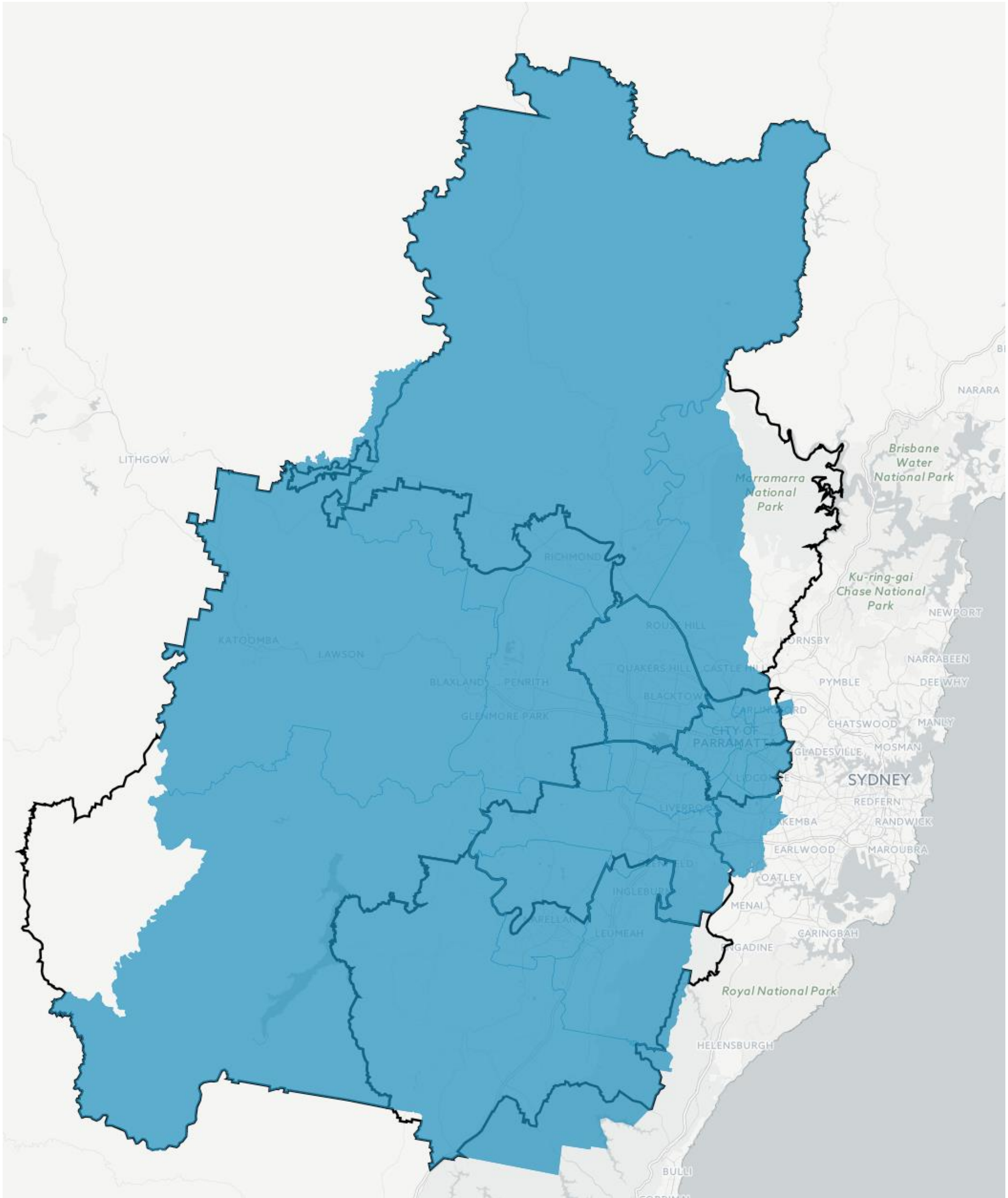
Western Sydney (LGA) consists of 14 LGAs:

- Auburn
- Bankstown
- Blacktown
- Blue Mountains
- Camden
- Campbelltown
- Fairfield
- Hawkesbury
- Holroyd
- Liverpool
- Parramatta
- Penrith
- The Hills
- Wollondilly

Western Sydney (LGA)

SA4	Total population	Population in Western Sydney (LGA)	% in Western Sydney (LGA)
Baulkham Hills & Hawkesbury	210,411	173,426	82.4%
Blacktown	303,531	303,541	100.0%
Outer South West	235,804	235,752	100.0%
Outer West & Blue Mountains	288,191	288,159	100.0%
Parramatta	394,709	388,580	98.4%
South West	360,166	359,616	99.8%
Western Sydney (SA4)	1,792,811	1,749,074	97.6%
Electorate			% in Western Sydney (SA4)
Auburn	87,017	87,017	100.0%
Bankstown	78,430	78,430	100.0%
Baulkham Hills	71,887	71,887	100.0%
Blacktown	79,983	79,983	100.0%
Blue Mountains	69,841	69,841	100.0%
Cabramatta	77,220	77,220	100.0%
Camden	66,535	66,535	100.0%
Campbelltown	76,062	76,062	100.0%
Castle Hill	72,165	72,165	100.0%
East Hills	71,847	71,847	100.0%
Epping	73,471	10,531	14.3%
Fairfield	80,926	80,926	100.0%
Granville	82,029	82,029	100.0%
Hawkesbury	71,652	69,877	97.5%
Heathcote	74,372	259	0.3%
Holsworthy	77,411	72,785	94.0%
Lakemba	84,566	32,073	37.9%
Liverpool	82,521	82,521	100.0%
Londonderry	77,767	77,767	100.0%
Macquarie Fields	75,898	75,898	100.0%
Mount Druitt	83,100	83,100	100.0%
Mulgoa	71,517	71,517	100.0%
Parramatta	88,898	88,897	100.0%
Penrith	73,910	73,910	100.0%
Prospect	75,737	75,737	100.0%
Riverstone	73,734	73,734	100.0%
Ryde	81,461	1,724	2.1%
Seven Hills	78,346	78,345	100.0%
Wollondilly	67,553	41,475	61.4%

Comparing Western Sydney (LGA) and Western Sydney (SA4)



© OpenStreetMap contributors © CartoDB CartoDB attribution

The above Figure shows Western Sydney (LGA) in blue, with Western Sydney (SA4) represented by the black boundaries. The most significant differences are that Western Sydney (SA4) includes part of the Hornsby LGA, and that Western Sydney (LGA) includes part of the Inner South West SA4 (near Bankstown). The three other major boundary differences encapsulate relatively unpopulated areas (Kanangra Boyd National Park on the left; an area just downstream of Cataract and Cordeaux dams on the bottom right; and an area just below Woronora Dam on the lower right).

APPENDIX 4: REST OF SYDNEY LGAS AND SA4S

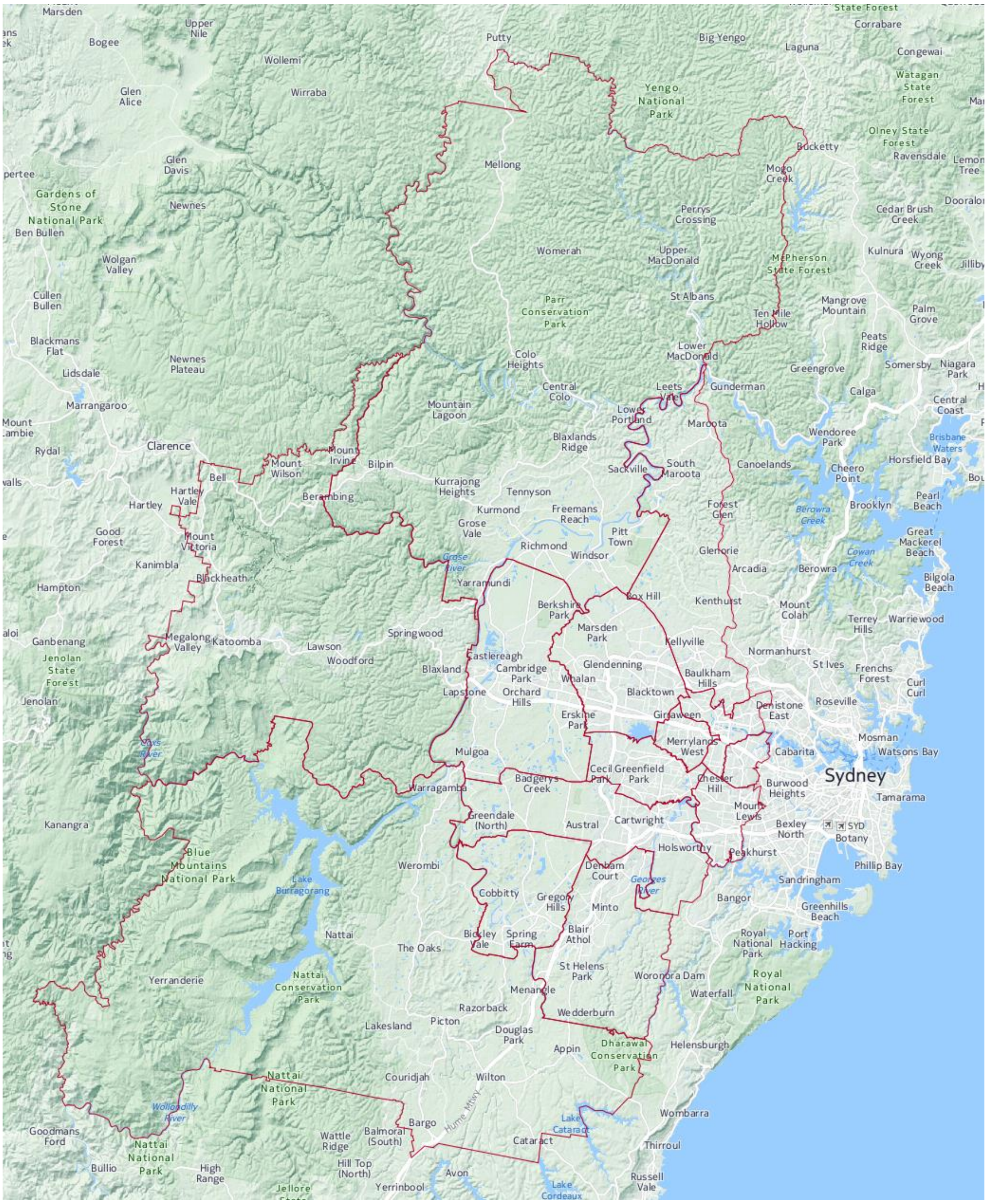
In some cases, the Central Coast LGAs and SA4s are included in Greater Sydney (for example by the ABS Statistical Geography). However, they have been excluded in this case as the NSW Government does not include them in Sydney when defining it for the purposes of the Metro Plan

Table: Rest of Sydney LGAs and SA4s

LGAs	SA4s
Ashfield	City & Inner South
Botany Bay	Eastern Suburbs
Burwood	Inner South West
Canada Bay	Inner West
Canterbury	North Sydney & Hornsby
Hornsby	Northern Beaches
Hunters Hill	Ryde
Hurstville	Sutherland
Kogarah	
Ku-ring-gai	
Lane Cove	
Leichhardt	
Manly	
Marrickville	
Mosman	
North Sydney	
Pittwater	
Randwick	
Rockdale	
Ryde	
Strathfield	
Sutherland Shire	
Sydney	
Warringah	
Waverley	
Willoughby	
Woollahra	

APPENDIX 5: NATIONAL PARKS IN WESTERN SYDNEY

Western Sydney (LGA): terrain



© OpenStreetMap contributors © CartoDB CartoDB attribution