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Macarthur Regional Organisation of Councils
Camden, Campbelltown, Wollondilly

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Macarthur Region

Economic key findings report

2014/15

May 2016

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1. economy.id – an introduction

This document examines the economic characteristics and workplace role and function of the Macarthur Region, New South Wales. The Macarthur Region comprises the Local Government Areas of Campbelltown, Camden and Wollondilly. This document has been prepared for MACROC – the Macarthur Regional Organisation of Councils.

Understanding the economic and demographic processes at work in Macarthur provides a framework for understanding what role the industries and workforce of the area play in the context of Greater Sydney. This is intended to guide economic development in understanding what policy responses to put in place to enhance the local economy.

A sustainable economy is based on the interplay between the industries and the workforce located in the area, the economic role of the wider region, and the demographic role of the community. Strong economies draw heavily on their local population as a source of workers, a market for goods and services, and support for industry, while also playing a wider role as exporters of goods and services, or specialists in a particular industry sector. Economic development is focussed on fostering this relationship between population and economy, ensuring that the area is attractive to businesses of a type supported by the local community, and contribute to the prosperity of that community.

The focus of this paper is a summary of the key points of the Macarthur Region economy, main industries and characteristics of the workforce, and how they are changing over time.

1.1 Data sources

The information presented is publicly available from the Macarthur Region's online economic website:

- Economic profile – www.id.com.au/economy/macroc

Further demographic information may be found in the Macarthur Region profile.id site:

- Community Profile – www.id.com.au/profile/macroc

And the economy and profile sites of the individual Macarthur Region councils. Links to the relevant pages of these online resources are provided throughout this report.

1.2 Definition of terms

“Workforce” – refers to the people who *work* within the local government area, regardless of where they live. For example, someone who works in Macarthur but lives in Bankstown would be included in the workforce.

“Resident employment” – refers to the people who *live* within the local government area and are employed, regardless of where they work. For example, someone who lives in Macarthur but works in the City of Sydney would be an employed resident.

“Employment self-containment” – measures the proportion of employed residents who work locally. For example, 27.5% of MACROC’s employed residents work in MACROC.

“Employment self-sufficiency” – measures the proportion of the workforce who live locally. For example, 58.0% of MACROC’s workforce is made up of MACROC residents.

“Employment Capacity” – Measures the number of local jobs as a ratio to the number of employed residents. This is the theoretical proportion of residents who could work locally if they chose to do so.

2. Executive summary

2.1 Summary of economic characteristics

- The Macarthur Region's Gross Regional Product in 2014/15 was $9.7 billion, about 2% of New South Wales State Product.
- Economic growth has been solid for the past 4 years, averaging 3-4% per year, and matching residential growth.
- The residential economy and local industry economy have grown at about the same rate, though the residential economy is just over 50% larger than the local industry economy
- The largest value-added industry is Manufacturing
- Specialised local industries include Coal Mining, Plastic and Rubber Manufacturing, Construction Services and Machinery and Equipment Manufacturing.
- All industries increased in value add over the last 5 years, except for Mining and Professional Services which showed small declines.
- There are 17,100 businesses and active for GST (in 2015) in Macarthur, dominated by the construction sector
- The Macarthur Region's workforce has both an older and a younger age structure than the Greater Sydney average.
- Education and occupation levels indicate a mix of blue and white collar workforce.
- While hours worked varies greatly by industry, the region tends to have a higher proportion of part-time workers than the Sydney average. A total of 35.7% were part-time in 2011. This is despite the dominance of Manufacturing, normally a full-time industry.
- Most industries, have lower incomes in Macarthur compared to the Sydney average for those industries
- There were two industries with a small excess of jobs over residents, Mining and Agriculture, Forestry and Fishing. All other industries have more employed residents than jobs in the local area, which means workers need to commute out of the area to find employment.
- The Macarthur region contributes workers to areas right across Sydney and beyond. In 2011, the level of self-containment was 42.4%.
- The level of self-sufficiency was 73.7%, so just under three quarters of all workers were sourced from within Macarthur, which is a high rate for a metropolitan area.

2.2 Key economic indicators

The following table contains key economic indicators for the Macarthur Region, benchmarked to Greater Sydney as at the latest Census (2011) or modelled data from 2013-14, unless otherwise stated.

Indicator	Macarthur Region	Greater Sydney
Population in June 2014 (ERP)	279,194	4,921,000
Gross Regional Product (2013/14)	$9.74 billion	$364.2 billion
Largest industry (value-add 2013/14)	Manufacturing	Finance and Insurance
Number of businesses (June 2013)	17,100	463,789
Number of businesses with at least one employee	7,757	189,257
Size of the workforce (2014 modelled)	85,535	2,527,141
Workers living in Macarthur (% 2011)	73.7%	N/A
Workers aged over 55	17.7%	16.7%
Part-time workers	35.7%	31.4%
Workers with a university degree	42.0%	35.2%
Workers on $1,500 per week or more	18.4%	27.8%
Number of residents employed (2013 modelled)	129,948	2,401,507
Employed residents working in Macarthur (% 2011)	42.4%	N/A
Employment capacity	63.0%	103.2%
Unemployment rate (December 2014)	5.5%	5.1%

3. Introduction to the Macarthur Region

The Macarthur Regional Association of Councils (MACROC) area is located in Sydney's outer south-western suburbs, between 30-75 kilometres south of the Sydney CBD. MACROC is made up of Camden Council, Campbelltown City and Wollondilly Shire. The Macarthur Region is bounded by Blue Mountains City, Penrith City and Liverpool City in the north, Sutherland Shire and Wollongong City in the east, Wingecarribee Shire in the south, and Upper Lachlan Shire and the Oberon Council area in the west.

The original inhabitants of the Macarthur Region were the Dharawal and Gundungurra Aboriginal people. European settlement dates from the early 1800s, with land used mainly for agriculture, particularly wheat farming, sheep grazing and dairy farming. Population was minimal until the 1840s when land was subdivided. Some growth took place in the late 1800s, spurred by the construction of the railway line. Significant development did not occur until the post-war years, aided by the opening of coal mines. Substantial residential and industrial development took place from the 1960s, with rapid growth during the 1970s and 1980s. The population continued to increase from the early 1990s, rising from about 190,000 in 1991 to nearly 245,000 in 2011. Most of the recent growth has been focussed on new suburbs in the Camden area – Camden is now one of the fastest growing areas in NSW. Areas such as Harrington Park, Oran Park and Spring Farm have seen an explosion of growth. After a period of population decline, the City of Campbelltown is also increasing in population, with a combination of infill and greenfield developments leading the growth of the area. The whole region includes a significant part of the South-West growth corridor of Sydney, which impacts on Campbelltown and Camden, and is expected to have significant residential growth over the coming decade.

The Macarthur region encompasses a total land area of about 3,100 square kilometres, including national parks, bushland and water catchments. Rural land is used largely for agriculture, including market gardens, orchards, dairy farms, poultry farms and grazing. Coal mining is also a major industry in Wollondilly Shire, and one of the main specialty industries of the region.

Campbelltown is the main regional centre, with a major transport node, several shopping centres, and large established industrial areas. Camden has a growing industrial base too, and is expanding with residential service industries as well (eg. Retail Trade). Wollondilly Shire is more rural, with many small towns and considerable rural-residential development as people move there for a semi-rural lifestyle within reach of the Sydney jobs market. Mining and Agriculture are Wollondilly's main industries but most residents commute out to work.

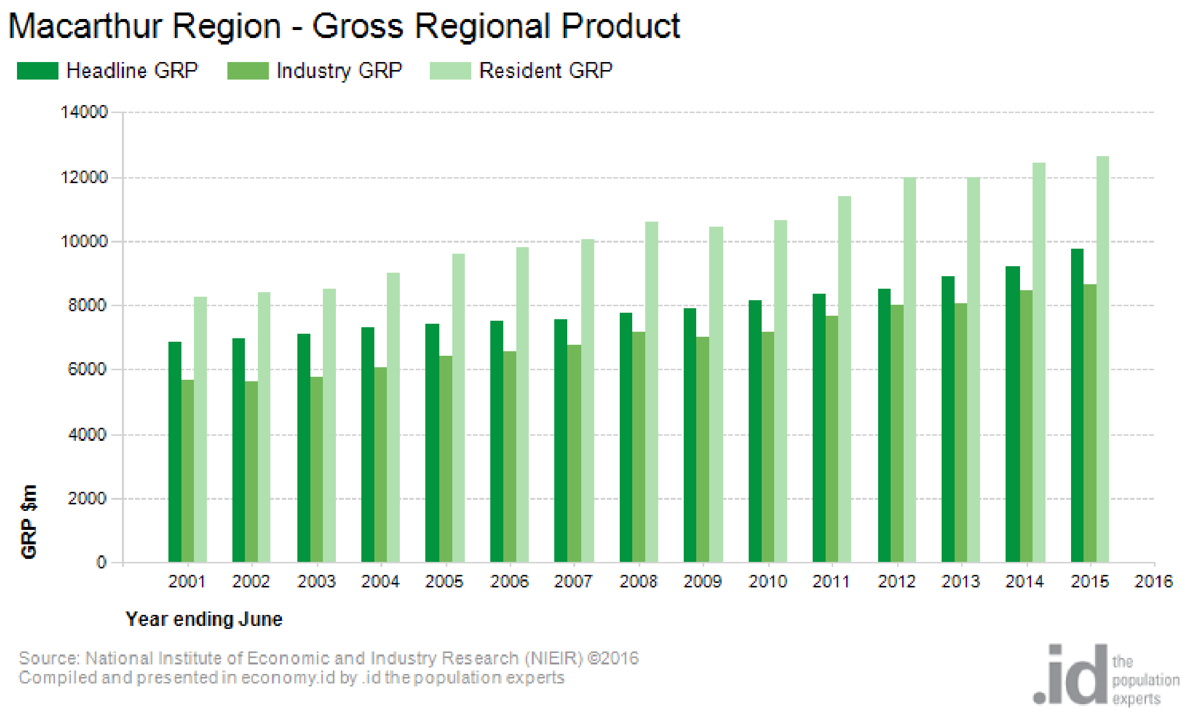
4. Size of the economy (Gross Regional Product)

KEY RESULTS

- The Macarthur Region's Gross Regional Product in 2014/15 was $9.7 billion, about 2% of New South Wales State Product.
- Economic growth has been solid for the past 4 years, averaging 3-4% per year, and matching residential growth.
- The residential economy and local industry economy have grown at about the same rate, though the residential economy is just over 50% larger than the local industry economy

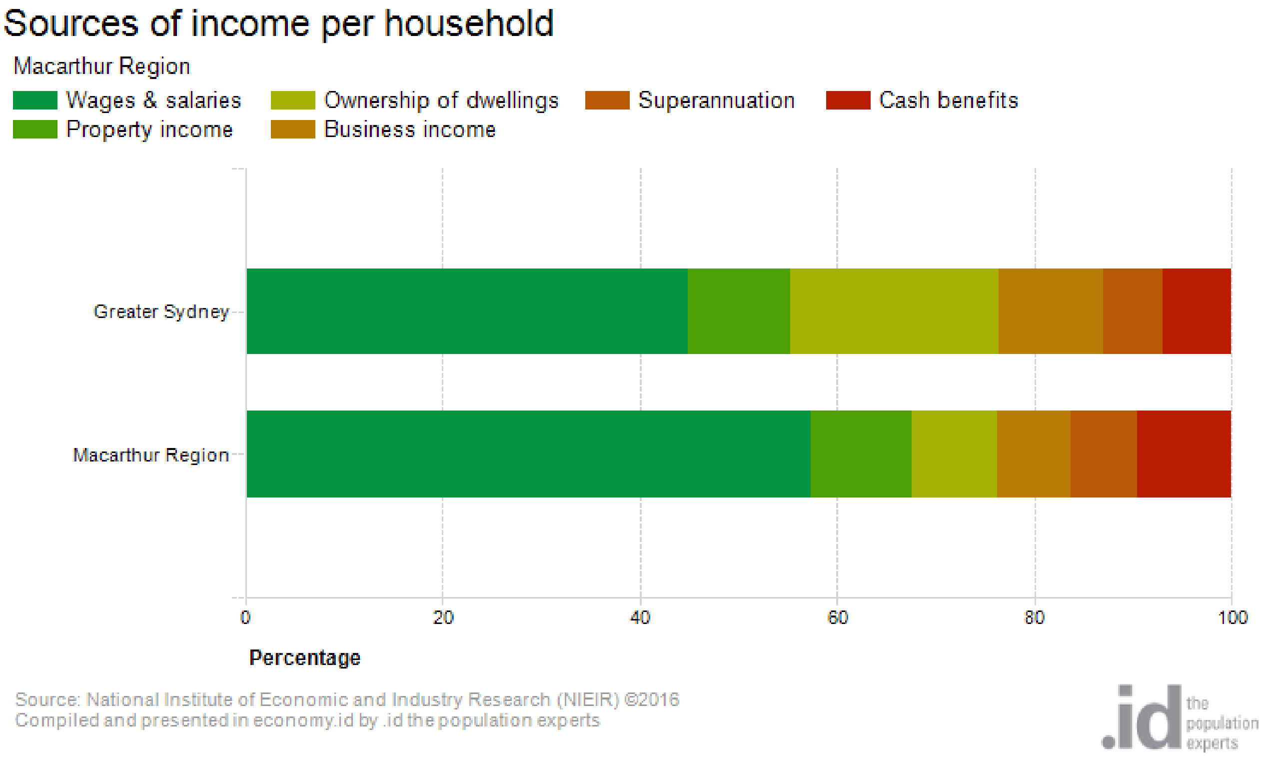
According to the economic modelling developed by the National Institute for Economic and Industry Research (which uses 8 major data inputs to model national accounts to the local industry level), the Gross Regional Product of the Macarthur Region in 2015 was approximately $9,737 million, or about $9.7 billion. This comprises 2.67% of the Greater Sydney economy and 1.99% of the New South Wales state economy.

The graph below shows the growth in GRP for Macarthur between 2001 and 2015.



Two other measures of economic size are included in the chart. The local "Industry GRP" is a measure of the value of the economy after company dividends have been distributed. It is a little lower than the headline number indicating some large companies with ownership predominantly outside the area.

Macarthur is predominantly a wage and salary earning area, with a relatively low percentage of total income coming from business or property income, when compared to the Sydney average.



The "Resident GRP" indicates the economic contribution of the residents, including those working outside the area. In 2014/15 this stood at just over $12.6 billion, and the ratio of industry to residents GRP has been very consistent at approximately 0.67 for the last decade. This indicates that the residential economy is growing at about the same rate as local industry. Nevertheless, the fact that the residential economy is just over 53% larger than the local economy indicates that a lot of economic productivity leaves the area via residents commuting out.

More information is available in http://economy.id.com.au/macroc/gross-regional-product

5. Key industries

KEY RESULTS

- The largest value-added industry is Manufacturing
- Specialised local industries include Coal Mining, Plastic and Rubber Manufacturing, Construction Services and Machinery and Equipment Manufacturing.
- All industries increased in value add over the last 5 years, except for Mining and Professional Services which showed small declines.
- There are 17,100 businesses and active for GST (in 2015) in Macarthur, dominated by the construction sector

5.1 Value-Add by industry

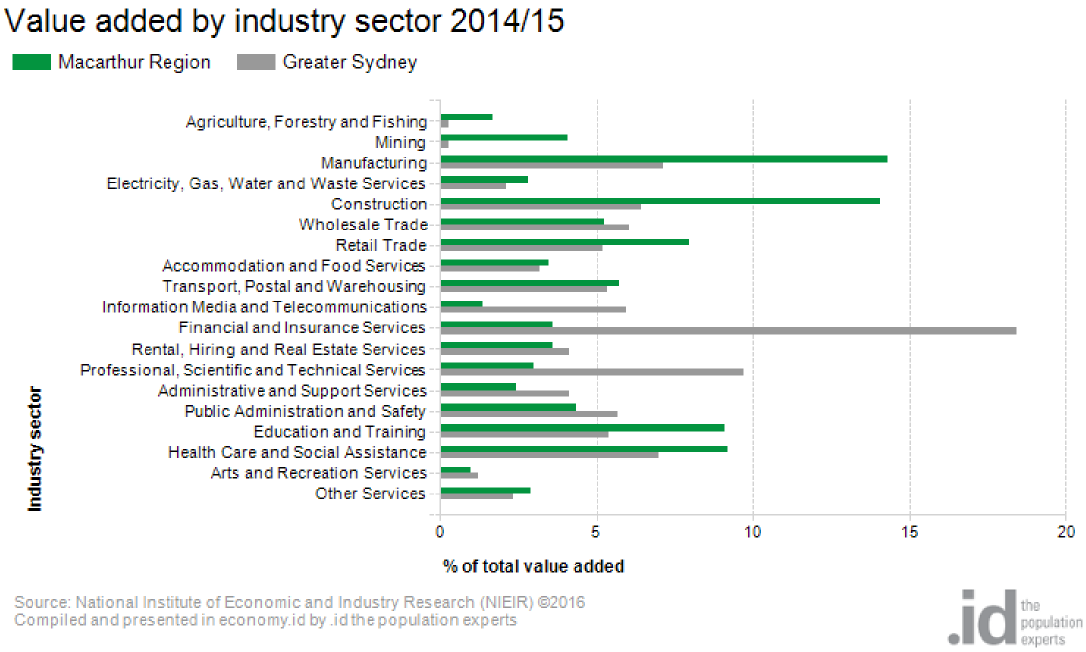
In relative size or value-added terms, the largest industry in the Macarthur Region in 2014/15 was Manufacturing, worth $1.17b, or 14.3% of the MACROC's total value-add. There is a degree of diversity in MACROC's economy, but only one other industry, Construction, has a value add of over $1b.

This chart shows the relative sizes of industries compared to the Greater Sydney total. A "Location Quotient" of 2 or more indicates an industry specialisation (that is, more than twice the percentage as the benchmark). This is clearly visible for Manufacturing (2.01), Construction (2.2), and Agriculture, Forestry and Fishing (6.45). Mining has an incredibly high location quotient of 13.77. This is not surprising as the majority of Greater Sydney is Urban, and the Macarthur Region includes some semi rural areas. However, many of these location quotients have decreased since last year's report.

Drilling down further, there is significant specialisation in sub-industries such as

- Coal Mining (25.97)
- Polymer Product and Rubber Product Manufacturing (4.07)
- Building construction (2.37)
- Agriculture (7.22)

These industries have all increased in value in the past 5 years, in the case of the construction sector, the increase is considerable, due to considerable housing growth in the region.

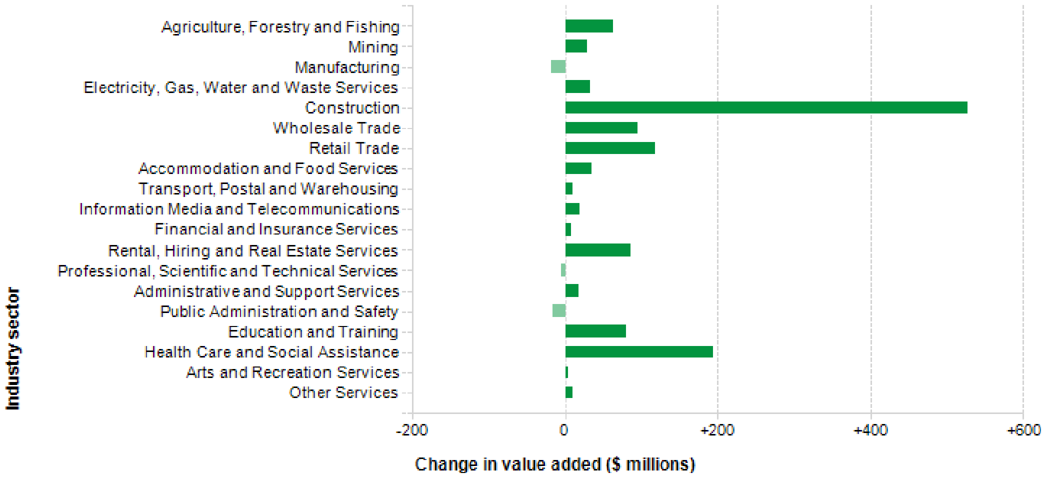


Over the past 5 years, most industry sectors have grown, but Manufacturing, Public Administration and Safety, and Professional, Scientific and Technical Services experienced small declines.

The increase in construction is likely to be due to building activity happening in the area. Because the value of construction in the model is imputed to the area in which the construction occurs, when construction finishes this usually shows a large downturn. Construction is currently worth just over $1b per year in value-add to Macarthur's economy.

Change in value added by industry sector, 2009/10 to 2014/15

Macarthur Region

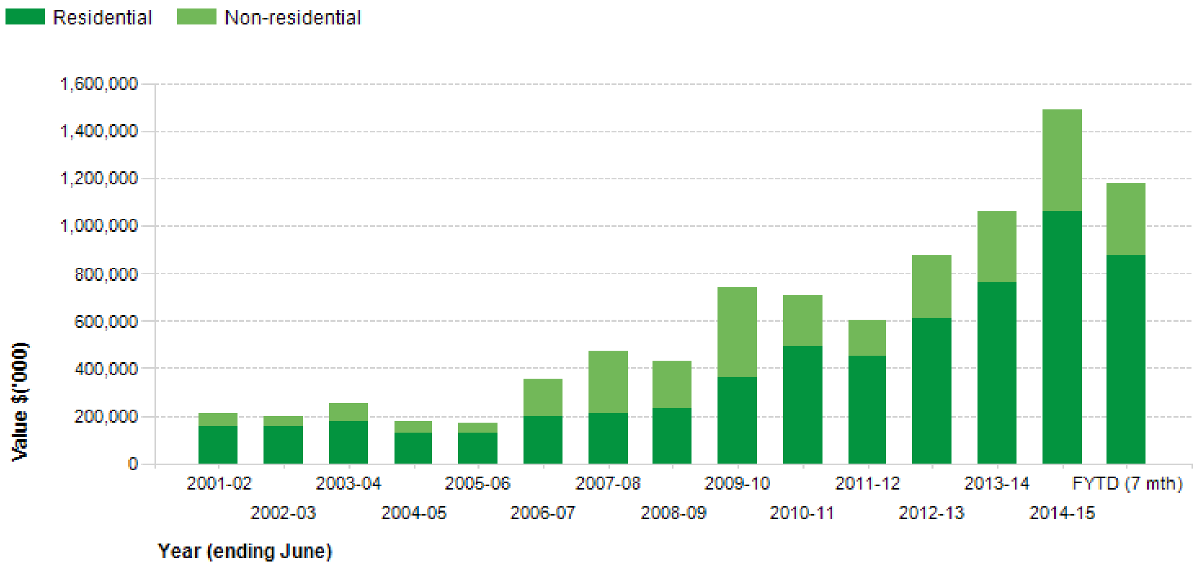


Source: National Institute of Economic and Industry Research (NIEIR) ©2016
Compiled and presented in economy.id by .id the population experts

This is consistent with a very large increase in both residential and non-residential building approvals over the past few years.

Value of total building approvals

Macarthur Region



approvals link" target="_blank">Building Approvals, Australia, catalogue number 8731.0. Compiled and presented in economy.id by <a href="http://home.id.com.au/about-us/" target="_blank">.id<span class="hidden">(opens a new window)</span

More information is available in http://economy.id.com.au/macroc/value-add-by-industry

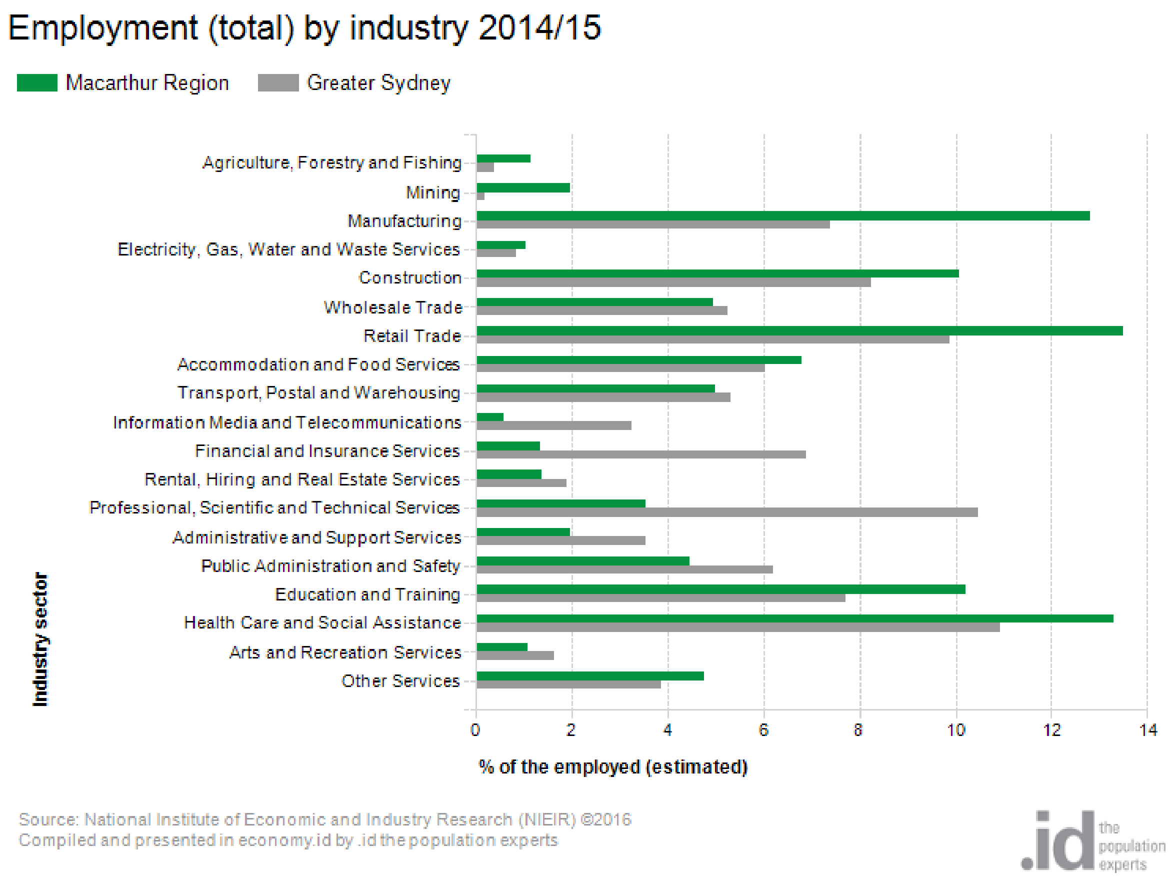
5.2 Employment by industry

Employment can paint a different picture to value-added, with some industries having relatively high productivity per worker, and others fairly low.

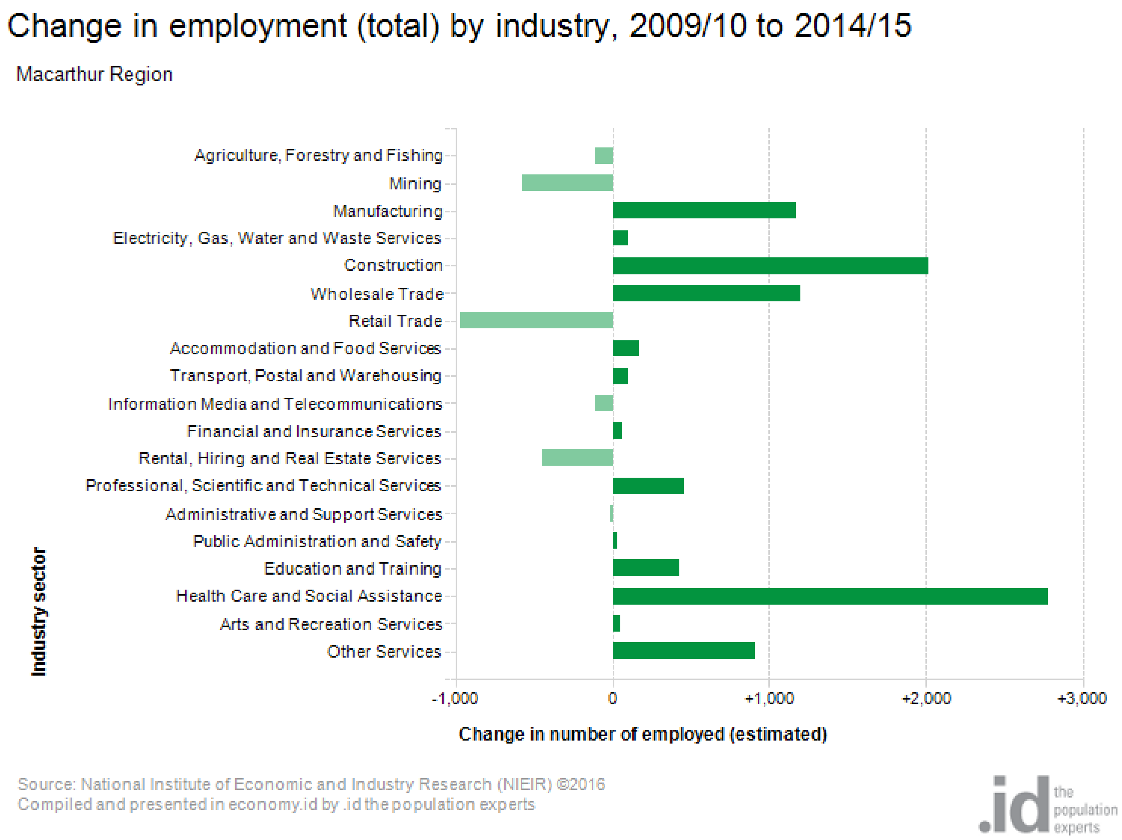
In 2014/15, there were 85,535 workers in the Macarthur Region, based on economic modelling of ABS labour force datasets. This was an increase of just over 7,000 workers since 2009/10.

The largest employer is Retail Trade, employing 11,557 people in 2014/15, or 13.5% of the total workforce.

This was followed by Health Care and Social Assistance (13.3%) and Manufacturing (12.8%). These top 3 industries are all very close together in total employment, however, when looking at it on a Full-Time Equivalent basis, Manufacturing is the largest, at 9,703 FTEs.

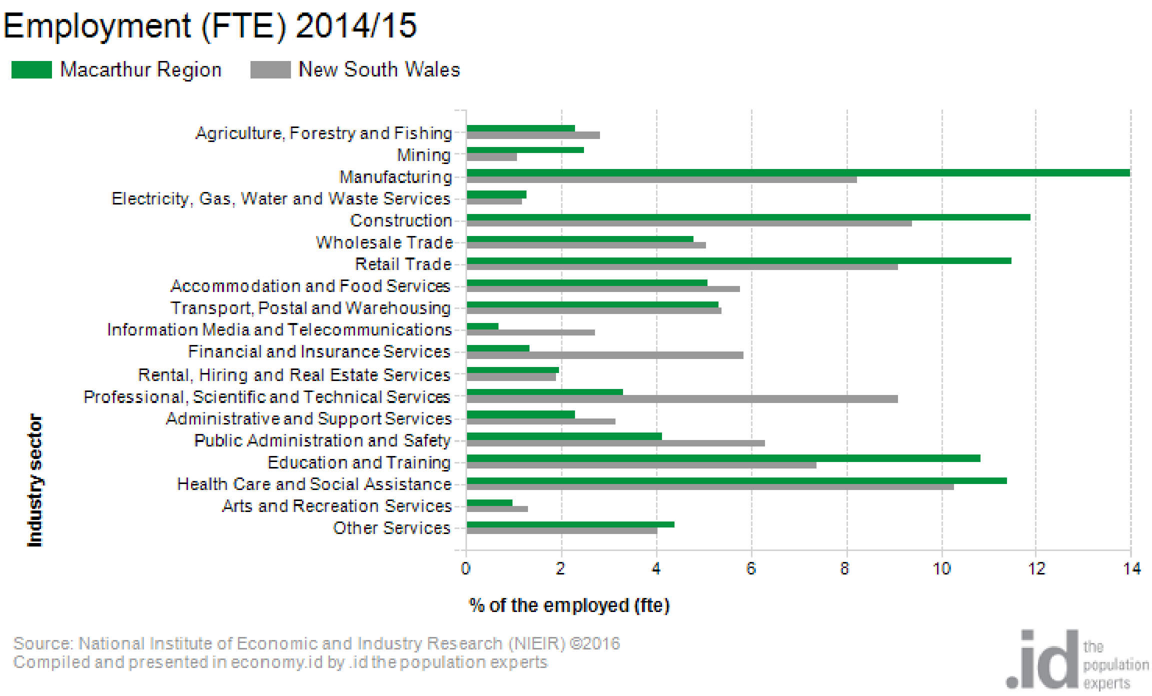


However, over 5 years, declines in jobs were recorded in almost half of all industries including Retail, Mining, Information Media and Technology and Agriculture, but large increases in Health Care, Wholesale Trade and Construction.



The largest decline is in Retail Trade employment, down by 968 jobs over 5 years. This is part of a statewide trend, and has mainly occurred in the “Other store-based retailing” sector with the boom in internet shopping. This leads to a decline in employment without a corresponding decline in value-added. The sector still recorded an increase in value-added between 2009/10 and 2014/15.

Looking at employment in Full-Time Equivalent terms, the dominant industries are Manufacturing and Construction.



When looking at worker productivity for the region, some interesting trends emerge. The top employing industries in the region are not the most productive. The most productive industries in the Macarthur Region are Financial and Insurance Services ($257,090), Electricity, Gas, Water and Waste Services ($256,922), and Rental Hiring and Real Estate Services ($248,033). The lower productivity in the higher employing industries is nothing to be concerned about, as the levels of productivity are on par with, if not higher than the rest of Greater Sydney. Mining workers had a particularly low productivity per worker compared with miners across NSW – however still higher than many other industries in Macarthur.

More information is available in http://economy.id.com.au/macroc/employment-by-industry

5.3 Number of businesses by industry

In June 2015, there were 17,100 registered businesses (active and registered for GST) located in the Macarthur Region. Many of these were micro-businesses, with 9,343 (54.6%) having no employees.

Construction had the largest number of both employing and non-employing businesses, with over one in five (23.7%) of all businesses being in this industry.

There was a small decrease in the number of businesses between 2012 and 2015, with 360 fewer businesses registered over the time period.

More information is available in http://economy.id.com.au/macroc/number-of-businesses-by-industry

5.4 Focus on agriculture

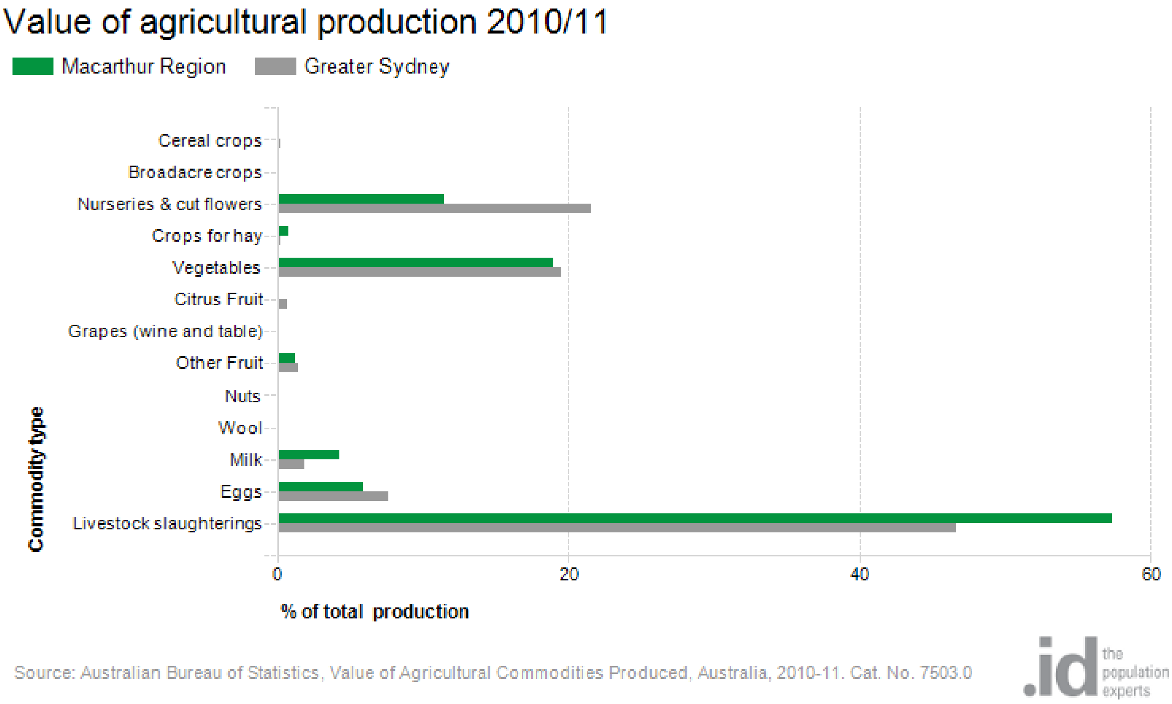
The value of Agriculture in the local Macarthur economy in 2014/15 is estimated at $136m per year. While this is only 1.7% of the total economy, it is an important export industry, and the region supplies a lot of Greater Sydney's agricultural production.

The 2010-11 Agriculture Census showed a total agricultural output (raw sales) of $153m, an increase of $23m from 2006.

There are three key sectors to Macarthur's agriculture.

- Poultry – Particularly poultry meat – which accounted for half of all agriculture output in 2011 – worth $81m, and almost doubling in 5 years. There was also $9m worth of eggs produced.
- Vegetables – worth $29m all up – particularly Mushrooms and Lettuce. The region accounted for 15.5% of the state's Lettuce output, and 43% of Sydney's. These market gardens are mainly in an area earmarked as a residential growth corridor, so protecting them from development may be a challenge.
- Nurseries, Cut Flowers and Cultivated Turf, which was worth $17.6m and 12.0% of Sydney's output in this area (the other key player in this area being Hawkesbury Shire).

It is important to maintain and grow agricultural output close to key markets such as the Sydney metropolitan area, and Macarthur plays a key role here.



Source: Australian Bureau of Statistics, Value of Agricultural Commodities Produced, Australia, 2010-11. Cat. No. 7503.0

6. Workforce characteristics

KEY RESULTS

- MACROC's workforce has both an older and a younger age structure to the Greater Sydney average
- Education and occupation levels indicate a mix of blue and white collar workforce.
- While hours worked varies greatly by industry, MACROC tends to have a higher proportion of part-time workers than the Sydney average. A total of 35.7% were part-time in 2011
- Most industries, even those known for having higher incomes, had lower incomes in MACROC compared to the Sydney average for those industries

There are three ways of measuring the Macarthur Region workforce.

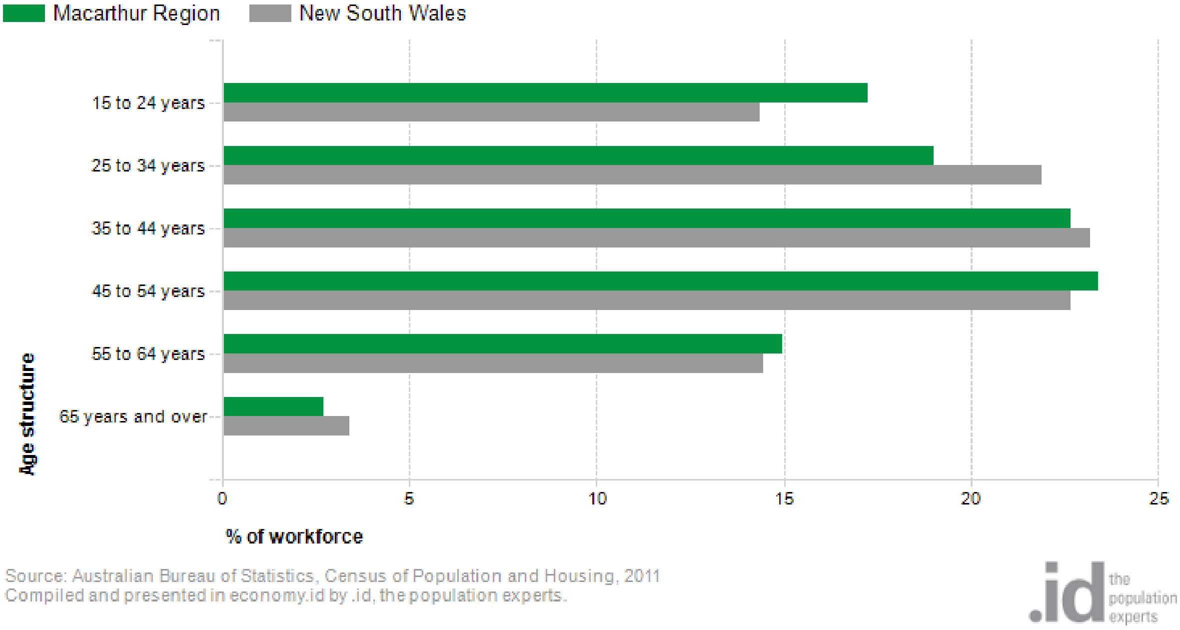
1. Estimated total employment (85,535 averaged across 4 quarters of 2013/14). Derived from economic modelling this is an estimate of the total number of jobs regardless of whether they are full-time or part-time.
2. Full-Time Equivalent employment (69,422 averaged across 4 quarters of 2013/14). Derived from economic modelling this divides the total hours worked by 38 hours per week to provide an estimate of full-time equivalent workforce. A lower number means more part-time workers.
3. Census counts of workers with a work destination in MACROC (66,350). Derived from the 2011 Census. The Census count, while not as accurate or up-to date as the modelled employment estimates, nevertheless provides a useful breakdown of the characteristics of the workforce which are not available via estimates. These figures are only updated every 5 years. The rest of this section is based on the Census count.

6.1 Age structure of the workforce

The Macarthur Region's workforce has an age structure broadly similar to the Greater Sydney average. There is a higher percentage of 15-24 year olds in the workforce, comprising 17.3% of the workforce. This is due to the large number of teenagers living in the area. Part-time jobs in retail trade and food services account for nearly half of these young workers.

Workforce age structure, 2011

Macarthur Region - All industries

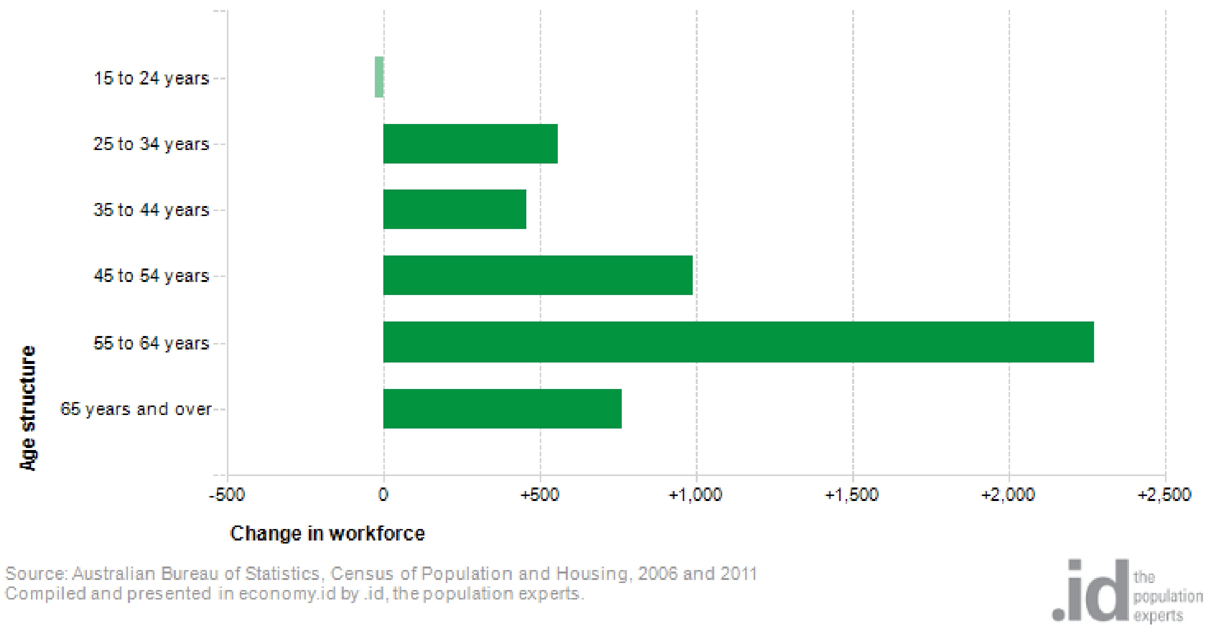


Source: Australian Bureau of Statistics, Census of Population and Housing, 2011
Compiled and presented in economy.id by .id, the population experts.

Generally the workforce aged between 2006 and 2011, with the largest increases being in 55-64 year old workers. This is consistent with an ageing of the population of the region overall.

Change in workforce age structure, 2006 to 2011

Macarthur Region - All industries



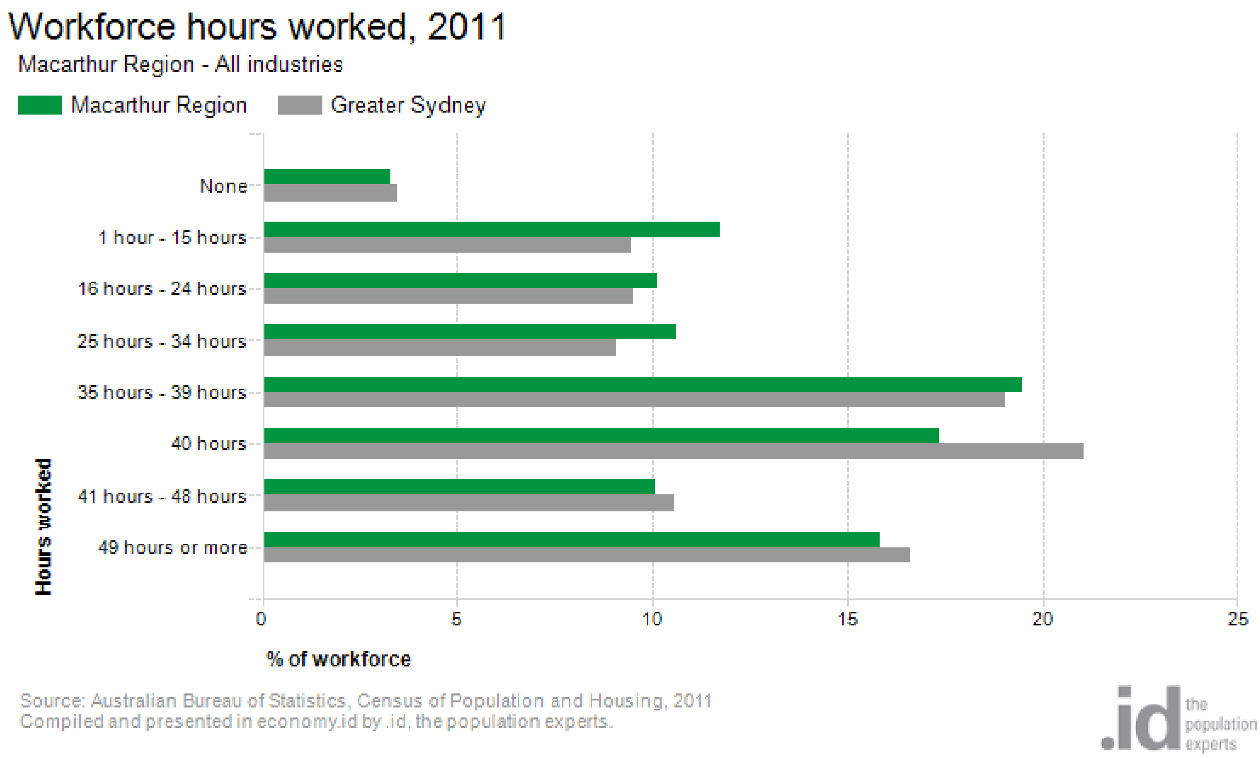
Source: Australian Bureau of Statistics, Census of Population and Housing, 2006 and 2011
Compiled and presented in economy.id by .id, the population experts.

More information is available in http://economy.id.com.au/macroc/workers-age-structure

6.2 Hours worked (full/part time)

While hours worked varies greatly by industry, the Macarthur Region tends to have a higher proportion of part-time workers than the Sydney average. A total of 35.7% were part-time in 2011, compared to 31.5% across Greater Sydney. This high level of part-time work is due to a high proportion working in *Retail Trade* and *Health Care and Social Assistance.* In Retail, 51.7% of workers were part-time, and 24.5% worked less than 15 hours per week. The largest industry, Manufacturing, is generally full time (only 16.6% part-time, less than the state average).

Between 2006 and 2011 all hours worked categories increased, with the largest growth being in full-time work. There has not been a significant shift to part-time work in Macarthur.

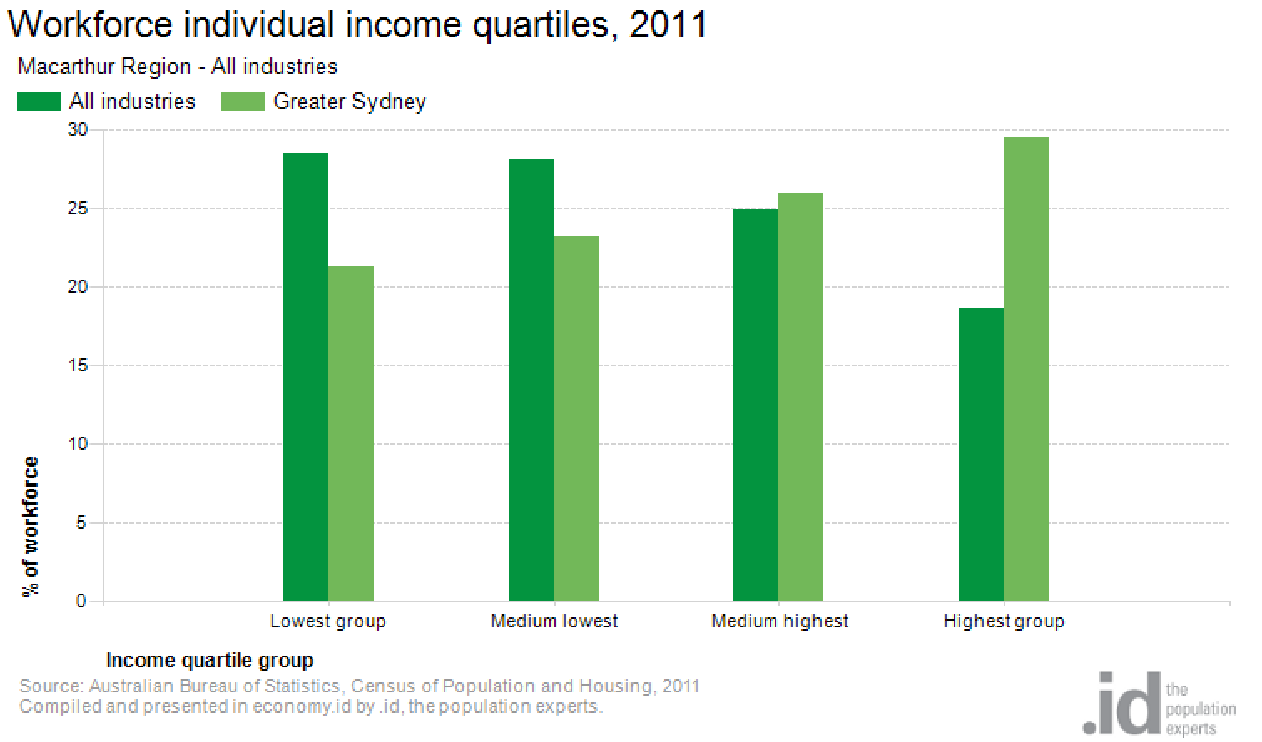


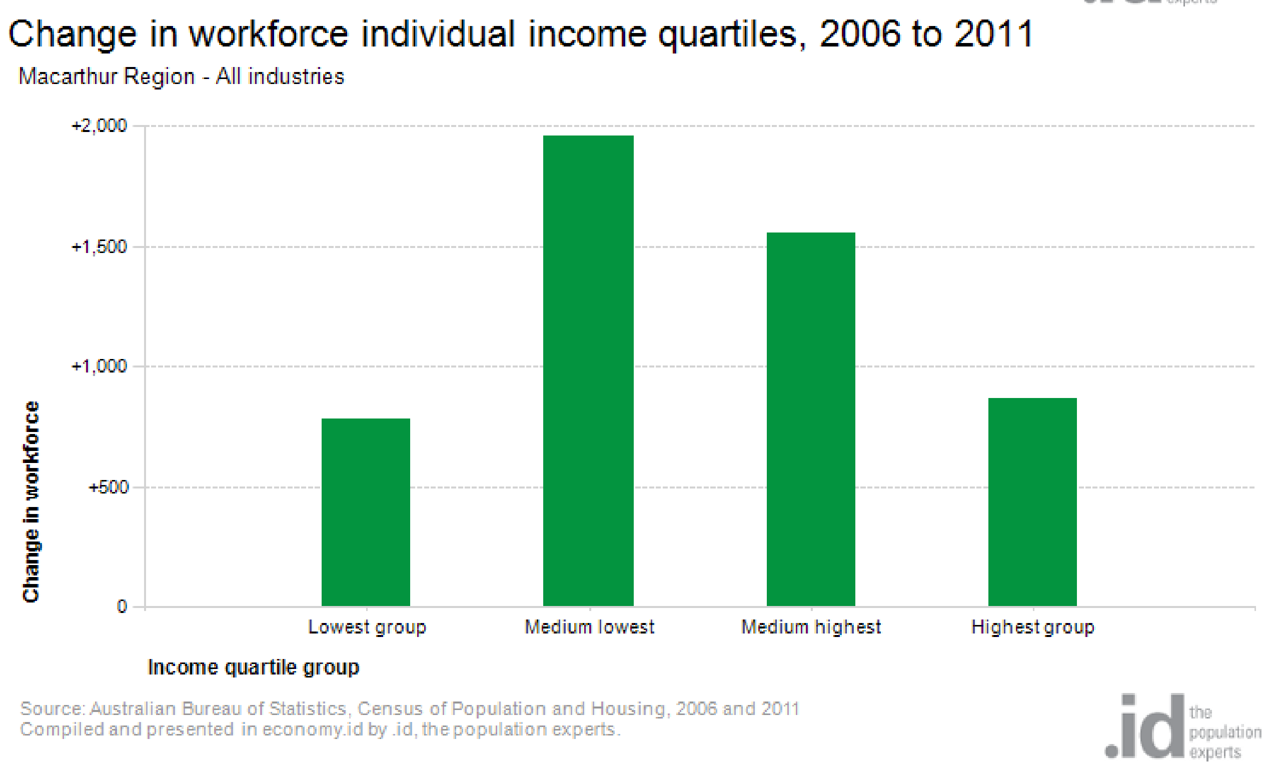
More information is available in http://economy.id.com.au/macroc/workers-hours-worked

6.3 Workforce incomes

The median income for the workforce of Macarthur was $810/week compared to $1,007 for Greater Sydney.

Most industries had lower incomes in Macarthur compared to the Sydney average for those industries in Census 2011.





Since 2006, most of the increase in workers has been located in the middle quartiles, which represents a slight increase in incomes relative to the state.

Among the key industries, Manufacturing workforce have incomes clustered in the middle, but still skewed a little lower than the Sydney average. Construction workers have mainly upper middle incomes, so are relatively well off, but there are significantly less construction workers with incomes in the highest income quartile than the Sydney average. Incomes for Retail Trade are low across the state, and particularly low in MACROC, with 49.0% falling into the bottom income quartile (43.6% across Sydney).

Incomes show some regional variation within the Macarthur Region – Wollondilly has the highest incomes, with 25.7% in the top income quartile – probably due to the large employment in Coal mining. There is still a higher proportion at the bottom end of the income scale too. Camden has particularly low incomes for its workers, though residents incomes are much higher.

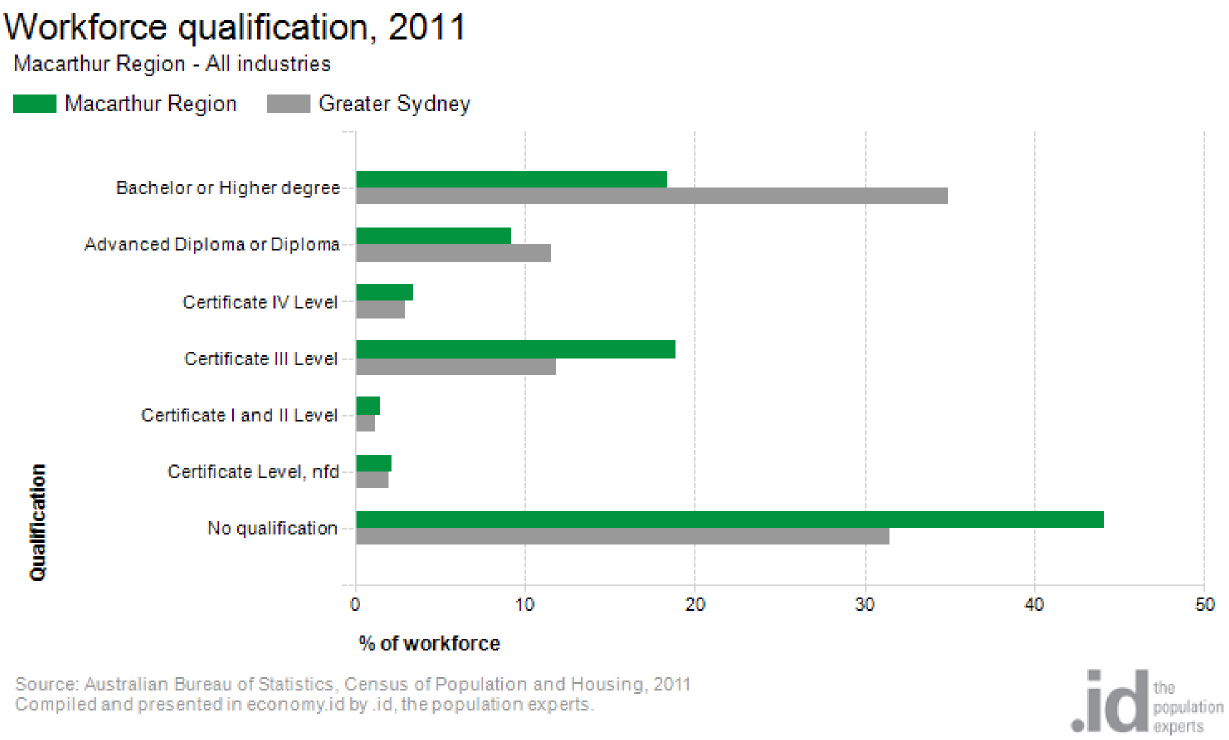
More information is available in http://economy.id.com.au/macroc/workers-income

6.4 Workforce education and occupations

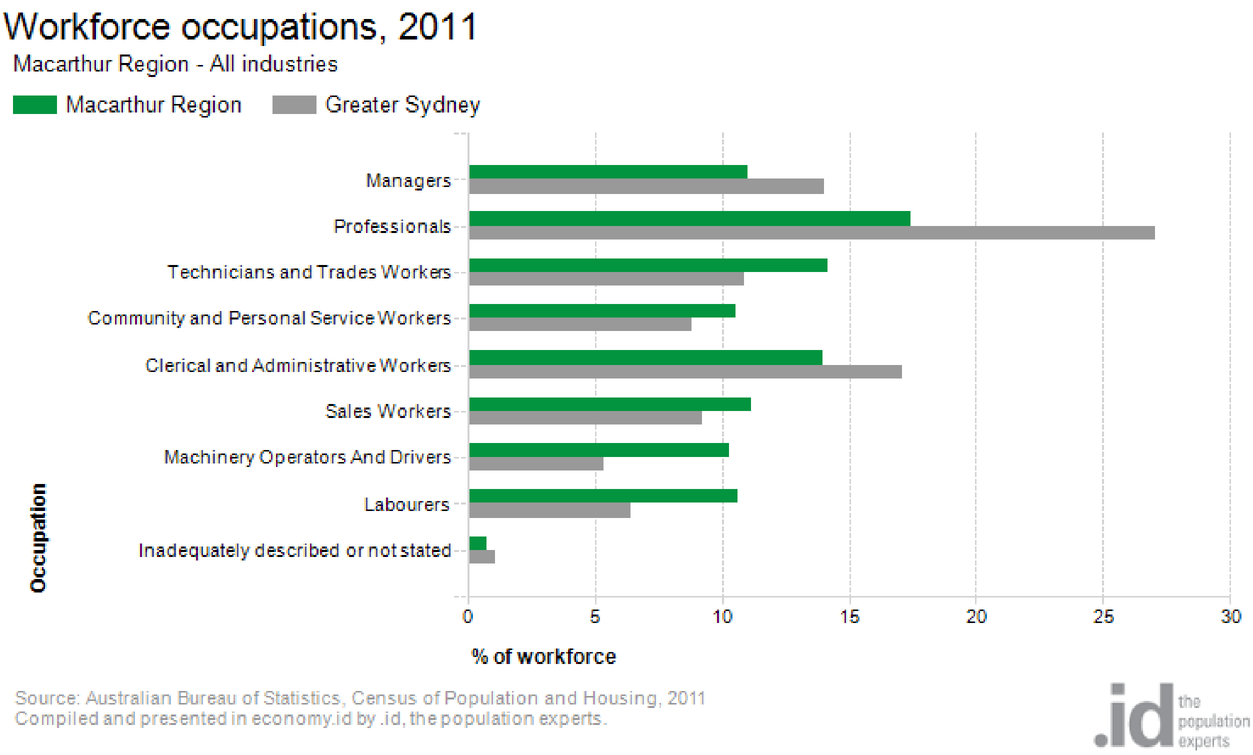
The Macarthur Region has a very low proportion of workforce with university qualifications, about half that of Greater Sydney (18.4% to 35.2%). They have a higher proportion of Certificate III attainment (18.9% to 11.8%), and a much higher proportion of no qualifications (44.1%). These levels are consistent with a manufacturing-based economy (often referred to as “blue collar”).

The employed residents have slightly higher levels of qualifications than this, with Certificate III at 20.2% - far higher than the Sydney average. There is a lower level of university qualifications though.

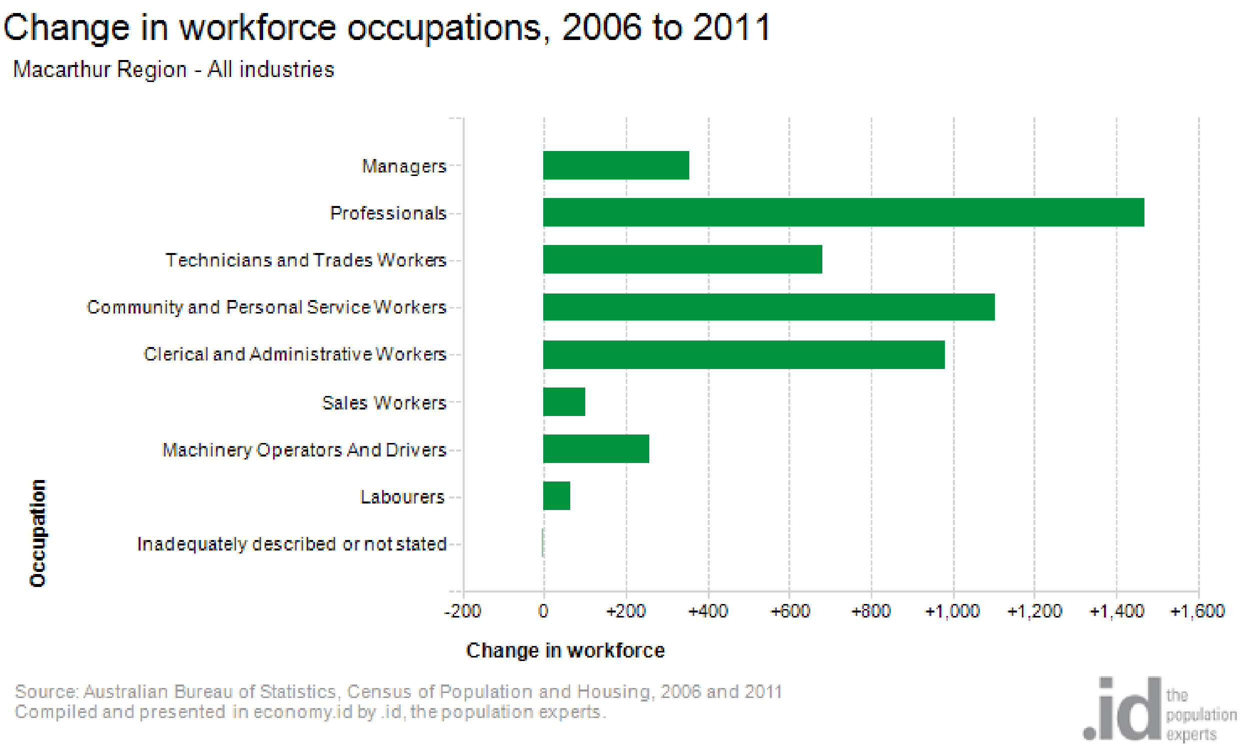
Like most areas, MACROC has had an increase in both the number and proportion of degree qualified population over 5 years.



The occupation profile of the area shows higher proportions (compared to Sydney) in a number of occupations including Machinery Operators and Drivers and Labourers. There are generally less managerial and professional occupations in the area.



Nevertheless, the largest increase between 2006 and 2011 was in the Professionals category.



More information is available in http://economy.id.com.au/macroc/workers-occupations

7. Work destinations and self-containment

KEY RESULTS

- Overall, there are 63 local jobs in Macarthur for every 100 residents employed.
- There are two industries with a small excess of jobs over residents, Mining and Agriculture, Forestry and Fishing.
- All other industries have an excess of employed residents over jobs. There is a particularly large mismatch in Finance and Insurance and Public Administration and Safety.
- The level of self-containment in 2011 was 42.4% (residents working in Macarthur) But the majority of workers either work within the region or in nearby parts of South-Western Sydney, like Liverpool and Fairfield. Only 7.3% of employed residents work in the City of Sydney.

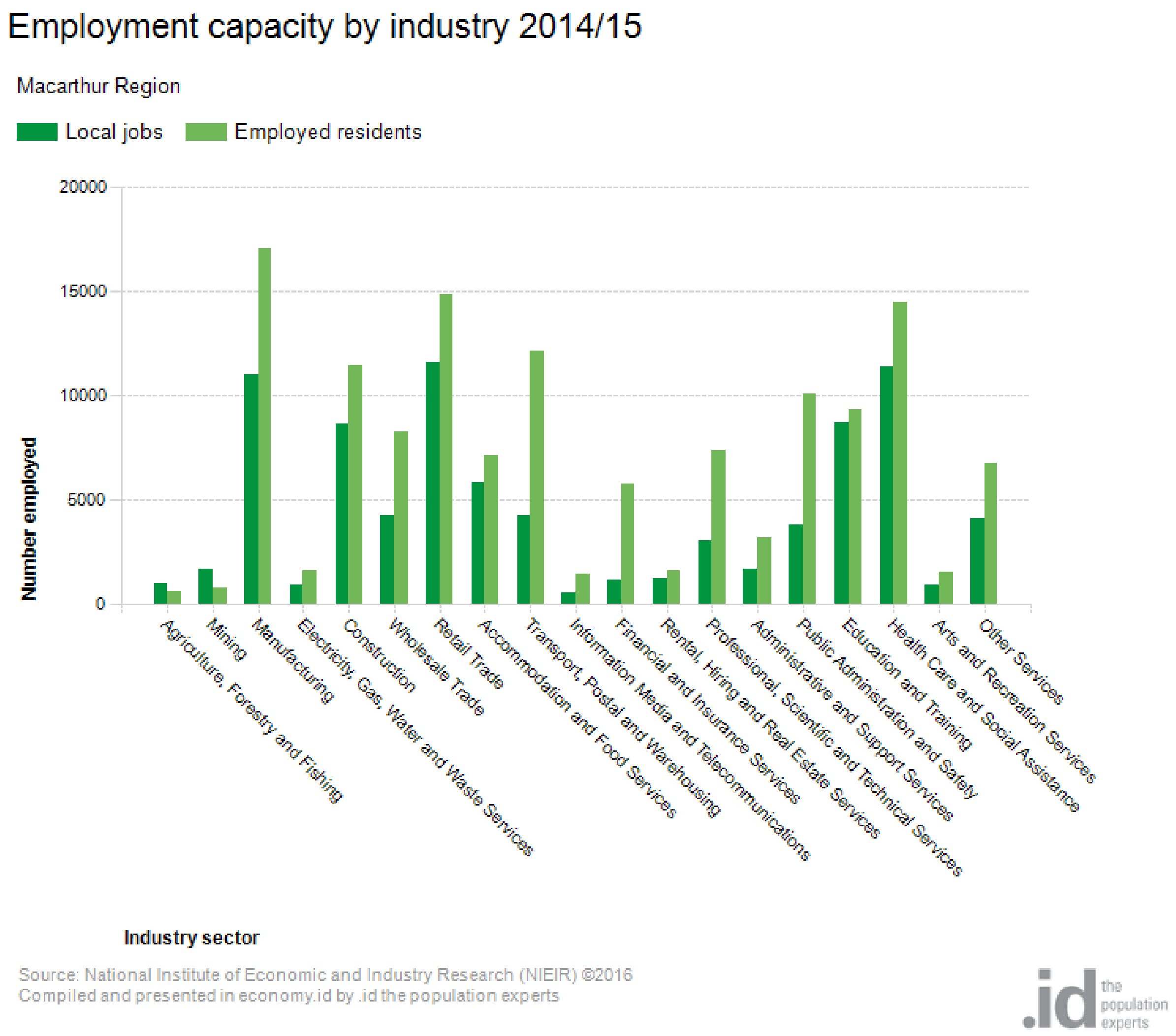
Overall, the Macarthur Region has significantly more employed residents than jobs. Modelled data shows that in 2014/15, an estimated 135,216 residents were employed, but there were only 85,535 jobs. This is a ratio of jobs to residents of 0.63 – that is, for every 100 employed residents there were 63 jobs. This doesn't include the unemployed who are looking for work.

What this means is that even if all the local jobs were filled by local residents, a substantial proportion would still need to leave the area for work.

This ratio varies by industry. There is an excess of jobs over residents in just two industries – Mining (2.33) and Agriculture, Forestry and Fishing (1.69). These are both relatively small industries, with less than 5% of combined jobs being in these industries. Mining is very important to the local economy, however, contributing over $400m. Despite significant residential growth, the ratio has remained stable since 2008/09.

Other industries with relatively high ratios of jobs to residents are Accommodation and Food Services (0.82) and Education and Training (0.94). The former has relatively low paid part-time jobs which are generally filled by locals, while the latter includes all schools and the UWS campus, so there are quite a lot of jobs in this sector. Financial and Insurance Services had the lowest employment capacity, at 0.20, with most people working in the CBD of Sydney.

Industries with large numbers of residents employed, but quite low jobs to residents ratios include Public Administration and Safety (0.38) and Transport, Postal and Warehousing (0.35).



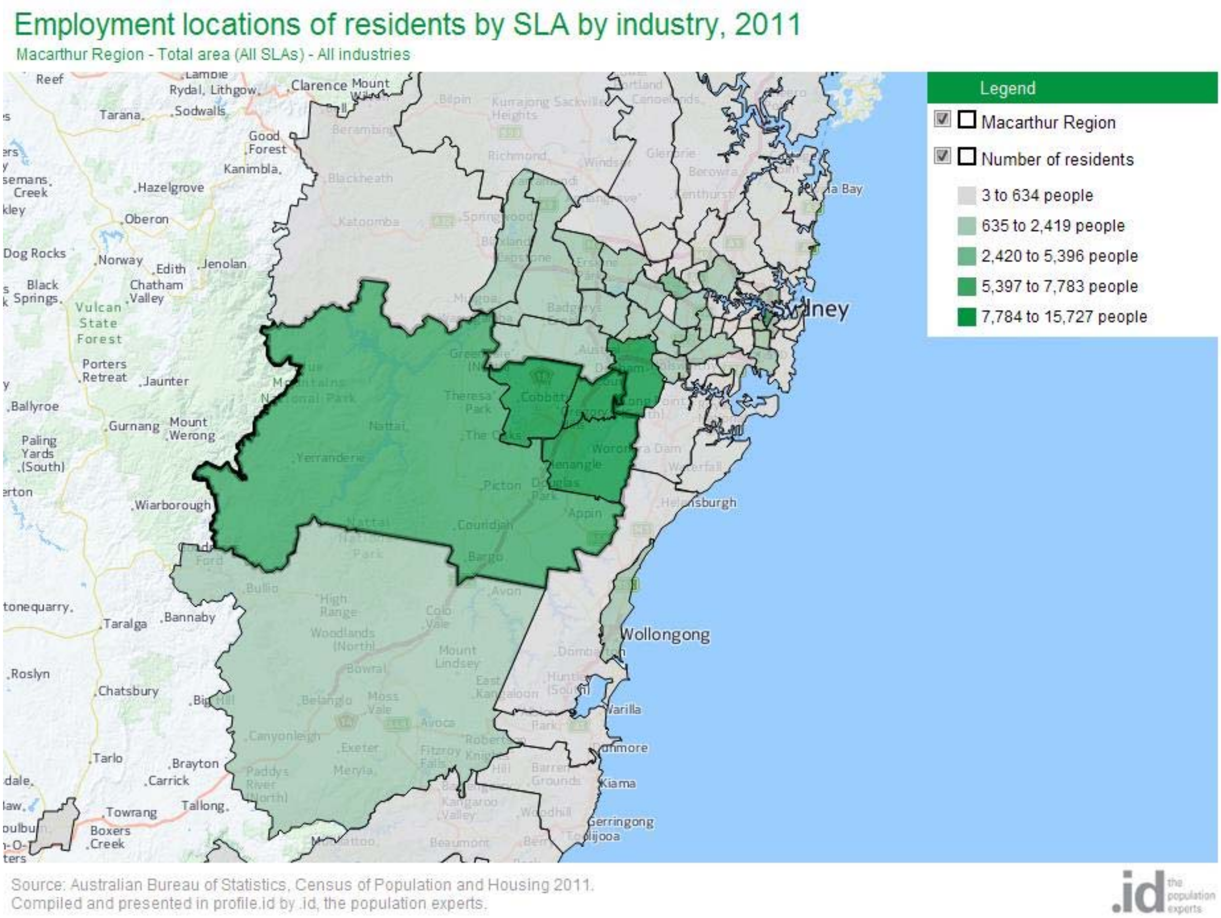
More information is available in http://economy.id.com.au/macroc/Employment-capacity

In terms of actual self-containment (the proportion of MACROC region residents who actually do work in the local area), the highest proportions are Agriculture, Forestry and Fishing (73.8%), Mining (64.7%), Accommodation and Food Services (63.2%), Education and Training (59.6%), Retail Trade (57.0%), Health Care and Social Assistance (51.2%) and Rental, Hiring and Real Estate Services (50.9%). All other industries had an excess of 50% of residents commuting out to work. The lowest self-containment was in Financial and Insurance Services (19.9%).

Across all industries, the most common work destinations were:

1. Campbelltown – 24.7%
2. Camden (11.7%)
3. Liverpool (8.7%)
4. Sydney City (7.3%)
5. Wollondilly (6.0%)
6. Fairfield (3.1%)
7. Parramatta (2.5%)

The map shows, however, that the Macarthur Region (with its large residential population) contributes workers to areas right across Sydney and beyond. There is a focus on the local area, the transport corridor towards the city, and up to Parramatta and Western Sydney.



The level of self-containment was 42.4% overall, but varied from a low of 19.9% for Financial and Insurance Services to a high of 73.8% for Agriculture, and 64.7% for Mining.

More information is available in http://economy.id.com.au/macroc/residents-place-of-work-industry

On the other hand, Macarthur's significant number of local jobs is reasonably self-sufficient. Ie. the majority of the people who work in the Macarthur Region also live there.

Overall, the level of self-sufficiency was 73.7%, so just under three quarters of all workers were sourced from within the MACROC councils.

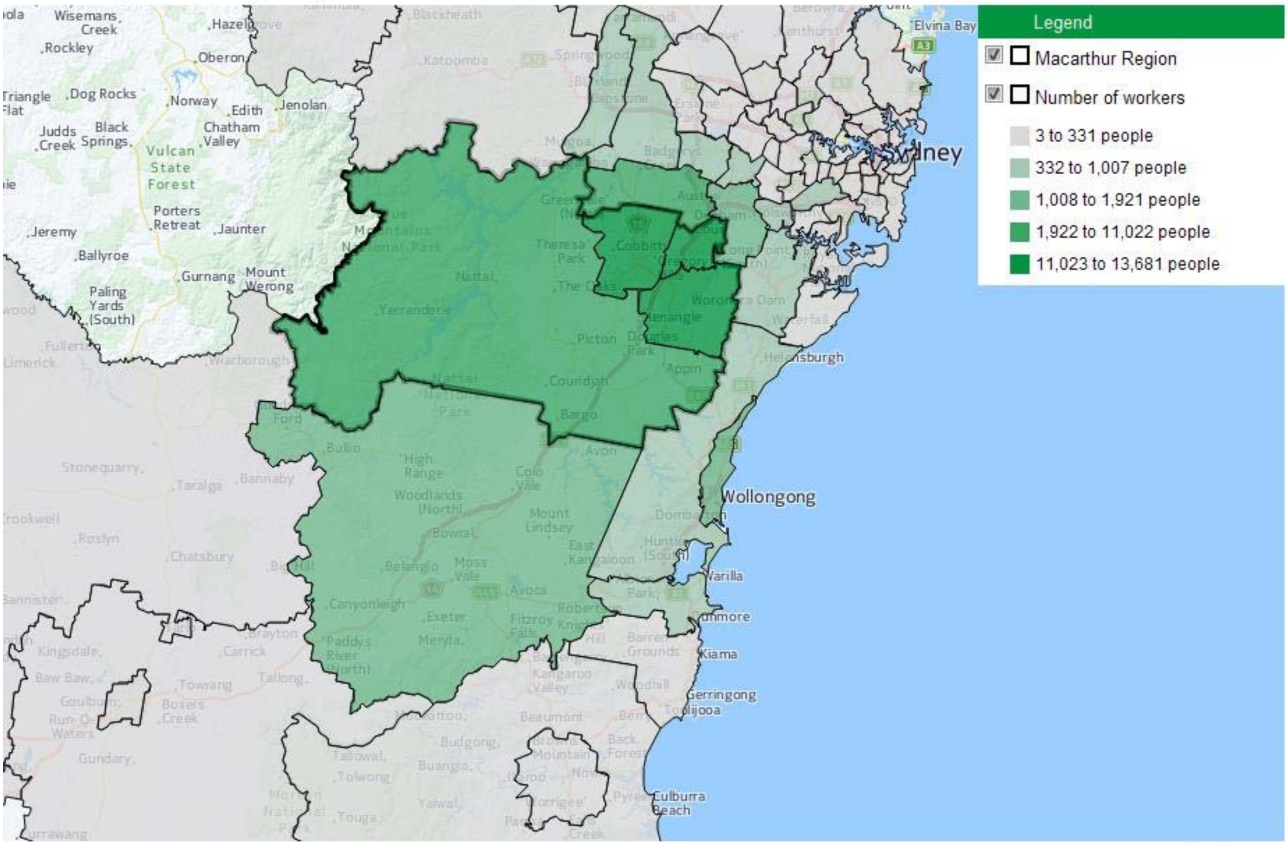
There was a wide variety of levels of self-sufficiency, from a low of 31.2% in *Mining*, to a high of 86.5% for *Accommodation and Food Services*. The largest employing industries are near the middle. Mining workers largely come from Wollongong, as the mines are relatively close to that area. Accommodation and Food Services is very low paid, and so people generally wouldn't travel too far to work in it.

The top LGAs of origin for Macarthur Region workers in 2011 were:

1. Campbelltown – 37.2%
2. Camden – 20.1%
3. Wollondilly – 16.3%
4. Liverpool – 5.8%
5. Wollongong – 3.4%
6. Fairfield – 2.4%
7. Wingecarribee – 1.5%
8. Sutherland –1.4%

Residential locations of workers by SLA by industry, 2011

Macarthur Region - Total area (All SLAs) - All industries



Source: Australian Bureau of Statistics, Census of Population and Housing 2011. Compiled and presented in profile.id by .id, the population experts.

More information is available in http://economy.id.com.au/macroc/workers-place-of-residence-industry

7.1 Work destinations within Macarthur region

The location of the workforce within Macarthur is quite dispersed across the region. There are several major employment centres, such as central Campbelltown, Macarthur Square, Ingleburn Industrial Area, Smeaton Grange and the coal mines in Wollondilly.

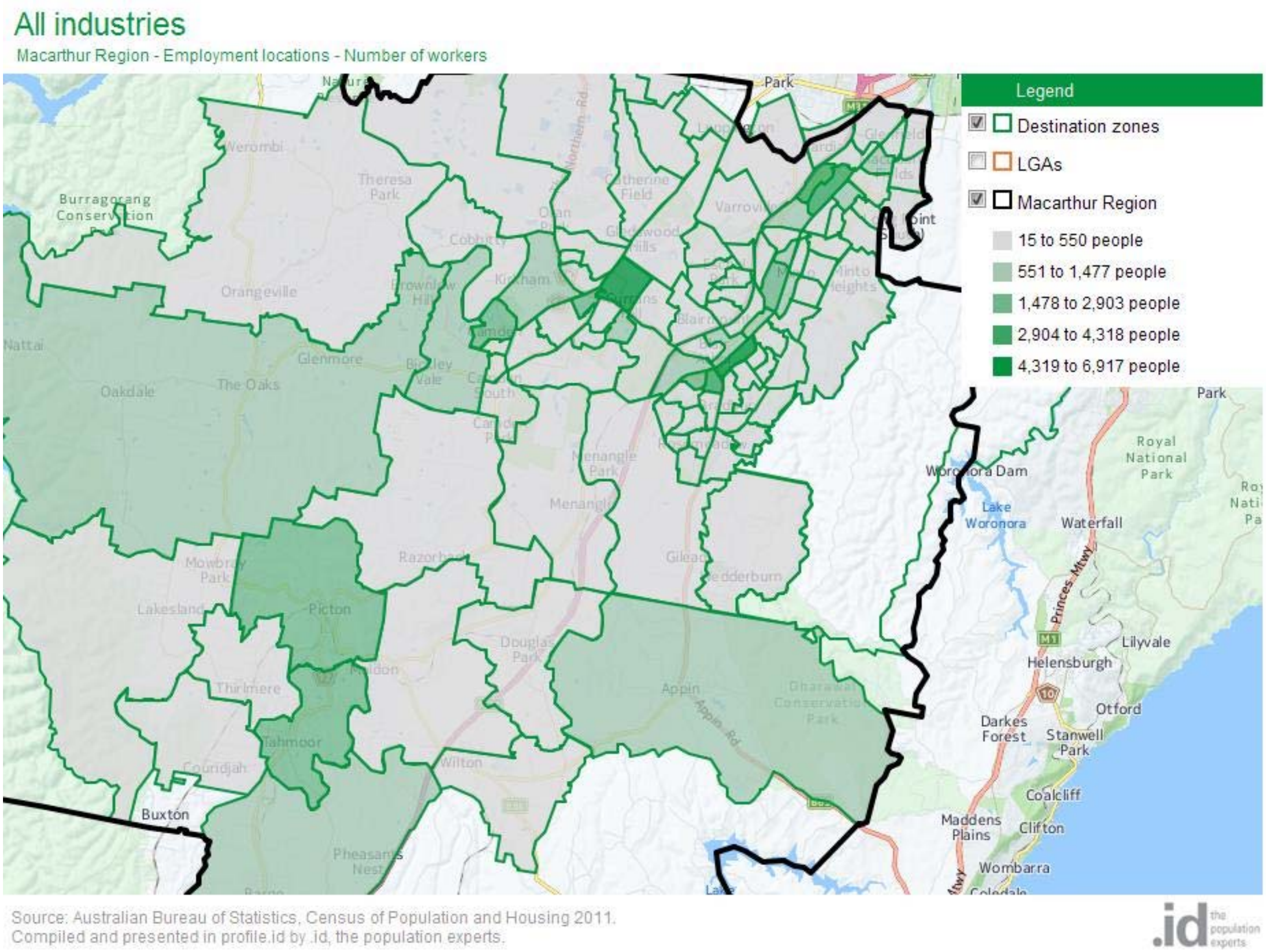
The centres listed below have been defined as a best fit of Census Work Destination Zones to the major centres. They don't include the whole suburbs named, but the major employment node or industrial area only. This is not an exhaustive list of the Macarthur Region's centres, but only the larger ones. There are many smaller suburban centres and residential areas with a few hundred jobs each.

Centre	Employment number (2011 Census)	Employment percent (2011 Census)	Main industries
Campbelltown CBD, and Macarthur Square and surrounds	12,779	20.1%	Retail Trade, Health Care, Education
Ingleburn Industrial Estate	6,967	10.9%	Manufacturing, Wholesale Trade
Smeaton Grange	3,772	5.9%	Manufacturing, Transport & Postal, Retail Trade
Narellan	2,694	4.2%	Retail, Food Services, Manufacturing
Camden	2,173	3.4%	Mixed – old town centre
Picton	2,013	3.2%	Mixed – old town centre
Appin/Coal Mines	1,101	1.7%	Mining, Manufacturing
Tahmoor	1,083	1.7%	Retail, Manufacturing, Education

Note that the total for calculation of percentages is 63,676 – this is the number of workers who were coded by the ABS to a specific destination zone. This is an undercount due to the large number of people with no usual workplace address, and those who could be coded to an area within the region but not a specific destination zone.

This map shows the full distribution of work destinations within the Macarthur Region.

Map of work destination zones by total employed persons, Macarthur Region, 2011 Census



For information on the distribution of industries by zones within MACROC, please refer to economy.id.
http://economy.id.com.au/macroc/employment-locations

8. Conclusion and challenges for economic development

The Macarthur Region is a stable economy with some growth in particular sectors. It is predominantly "blue collar" reflecting the residential population of the area and historic concentration of particular industries.

Industry specialisations are mainly in the Manufacturing sector, including Food Product and Plastics manufacturing. Mining in Wollondilly is also a significant contributor to the economy. There is also a large agricultural sector, particularly poultry and vegetables. Other sectors are mainly involved in serving the local population, such as Construction, Retail Trade and Food Services. Service sectors are growing, and Manufacturing is still relatively strong, and not seeing the big declines of some other areas.

Macarthur Region is largely self-sufficient in workers for local industries, but it is primarily a residential area, with a majority of residents leaving the area to work. Less than 10% travel into the City, but many go to other parts of Western Sydney.

Key challenges and opportunities for economic development:

1. Maintaining economic growth to provide local jobs with the expected large increase in residential population over the next 2 decades. Camden's population alone is expected to triple.
2. Providing a diverse range of jobs within the local economy, attracting higher value-add "primary" jobs in industries which are not primarily focussed on serving the local population.
3. Diversifying from the manufacturing sector which is declining nationwide, into service sectors which nevertheless have a full-time role.
4. Engaging the disadvantaged population of the area (particularly in Campbelltown) in the growth of the local economy.
5. Maintaining the vibrant agricultural sector and protecting it from residential development.

9. Further information

For further information, please refer to the Macarthur Region's online information tools:

profile.id- http://www.id.com.au/profile/macroc

economy.id– http://www.id.com.au/economy/macroc

.id's landing page gives access to all these resources in one place:

http://www.id.com.au/macroc