

What will Mackay be like in 5 years time?

Information booklet



**Presentation to Mackay Region Chamber of Commerce
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What will Mackay be like in 5 years time?

Key points

Current economic trends place Mackay as a thriving town (growth in population and business) but also a mining 'muscle town' with growth concentrated around a small number of industries linked to mining and meaning that its economic diversity is in fact narrowing.

Population growth has been high, above the State average

- Especially in middle working age groups 35 to 54
- Mackay has a lower percentage of retirees (people over 65) than State average
- While the size of the total labour pool (people aged 15 to 64) is increasing, as a percentage of the population the labour pool peaked in 2011 and will shrink into the future as the overall population of Mackay ages.

Mackay has a highly mobile population

- There is a particularly high turnover of 20-40 year olds (over 40% are new to the area each 5 years)
 - Most come from regional Qld (not Brisbane) and some from NSW, and there is a similar pattern for outflow
- More young people are staying in Mackay post school now than a decade ago

Typical for 'boom times', household income growth has been very high, and business formation rates have been high too as business owners seek to capitalise on the boom. Underlying questions for the business community are:

- How's profitability? Are prices inflated?
- How's product and service quality?
- Have there been too many opportunistic new entrants?

Issues to watch ...

Avoiding the 'Dutch Disease' of high local prices due to inflated resident numbers (dormitory town – 6,000 Mackay residents work outside Mackay) and high spending power. During a boom prices for things like accommodation, hire cars etc often surge making normal tourism operations unviable.

Becoming a mining service and dormitory town, how can Mackay capture the best of the extra spending that the residents working elsewhere bring to the economy, without compromising the consumer experience for all the other residents?

Post boom hangover - what to do about the wind down in infrastructure investment which is well underway in the Basin? How will Mackay deal with the side effects of rapidly falling employment in one industry (or two, mining plus construction) both of which have highly mobile workforces. What will happen when they move on somewhere else?

In the 2013-14 edition of *State of the Regions*, authors National Economics point out that as the construction peak passes, the mining boom will shift to production volumes which will increase (taking advantage of the increased capacity bought by the construction phase). This is already clear in Mackay as shipped coal volumes are still trending up even as the labour force shrinks. With other resource exporting countries going through a similar cycle, metal and coal prices are likely to fall as global production ramps up. Mining industry profitability will then be driven by volumes and economies of scale (ie less labour, more capital equipment) rather than by peak commodity prices.

Mackay Region

Population

Mackay is the largest of three local government areas in the Mackay-Isaac-Whitsunday Region, accounting for 68% of the Region's population.

Local Government Area	2001	2006	2011	2001-2011		2001-2011pa
	no.	no.	no.	%	no.	%
Isaac (R)	18,524	21,113	23,212	25.3	4,688	2.3
Mackay (R)	91,084	107,332	115,677	27.0	24,593	2.4
Whitsunday (R)	27,931	31,355	32,408	16.0	4,477	1.5
Region	137,539	159,800	171,297	24.5	33,758	2.2
TOTAL QUEENSLAND	3,628,946	4,090,908	4,474,098	23.3	845,152	2.1

Source: ABS Estimated Resident Population

The Regional Report Card 2012 prepared by the three Councils noted strong economic and population performance in recent years:

Economy

Among the signs of economic prosperity in the region is the rise in Gross Regional Product (GRP) from \$13.3 billion in 2007 to \$20.6 billion in 2012. This is despite the occurrence of the Global Financial Crisis in 2008. Mackay-Isaac-Whitsunday is the largest regional economy in Queensland, having the third largest GRP in Queensland behind Brisbane and the Gold Coast.

Population

The population of the region grew over 25% from 2001 to 2011, including growth of 7.2% between 2006 and 2011. This population growth does not include any non-resident Fly-in Fly-out (FIFO) workers who often spend up to 50% of their time residing in the region. In the longer term the Region's population is projected to grow at a faster rate than the State average, ultimately putting more pressure on the need for infrastructure and services. Adequate planning is essential if the region is support the predicted growth over the next 10 years.

Employment

There has been significant growth in employment numbers within the mining, transport, postal and warehousing, construction and manufacturing sectors between 2006 and 2011. There was a decrease in the number of people employed by the Agriculture, Forestry and Fishing industry (-13.2%); however the sector has increased its contribution to the region's Gross Regional Product (GRP) by 22.7%, indicating strong productivity gains. The competition for skills from the large mining sector is a factor which has impacted not only on the agricultural sector, but all other sectors' ability to attract and retain staff in this period.

Educational Qualifications

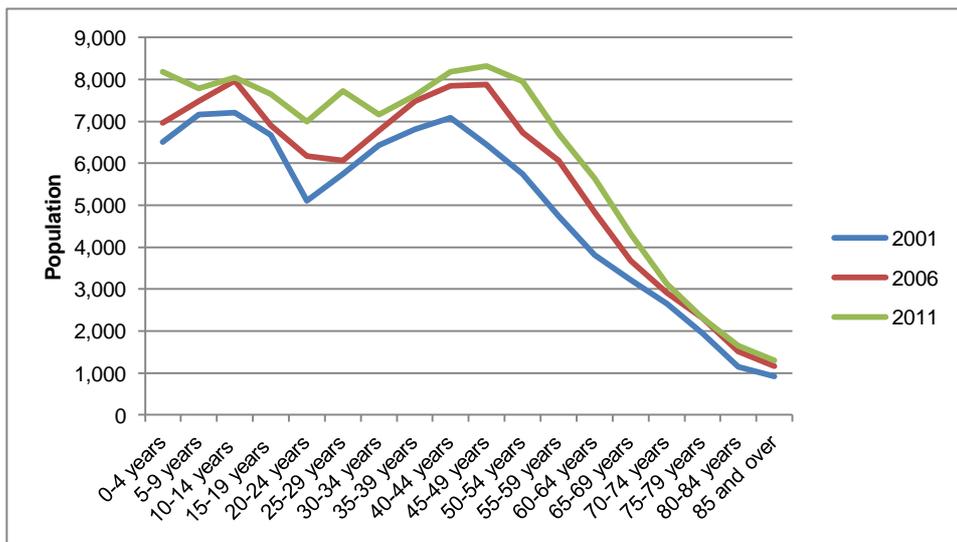
Strong growth in the number of people with post-school qualifications was also seen during this period with an increase of 6 percentage points. This figure is an improvement; however Mackay-Isaac-Whitsunday is still 4 percentage points below the State average. During this period the region has seen significant investment from CQUniversity with a number of new courses being introduced and new facilities built on the Mackay campus.

Mackay Economic Profile

Population and Migration

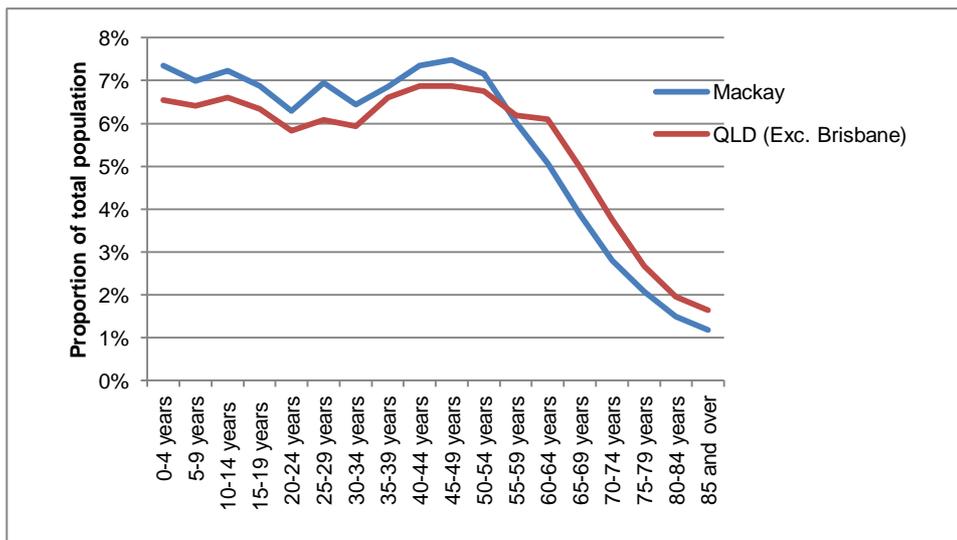
The population of Mackay Local Government Area (LGA, also geographically identical to Mackay Statistical Area Level 3) is 112,798 people, based on the 2011 ABS Census. The population of Mackay LGA has increased by over 20,000 people since 2001, and the table below shows that this increase has occurred across all age groups, particularly those of working age (15 to 64 years old). Mackay also has a younger population than that of QLD (excluding Brisbane), with a higher proportion of its population below 59 years of age (see figure 2).

Figure 1 Population by age group in Mackay, 2001-11



Source: ABS 2011 Census

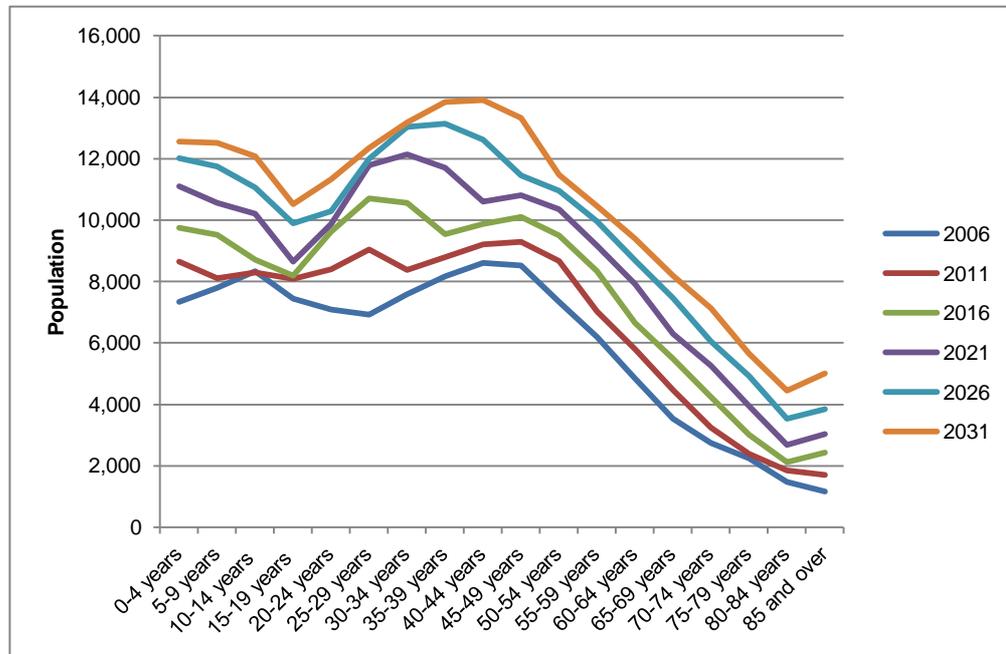
Figure 2 Population of Mackay and QLD (excluding Brisbane), 2011



Source: ABS 2011 Census

Mackay LGA's population is expected to continue growing, as shown below in the 'medium series' of the QLD Government's population projections. By 2031, over 65 year olds are expected to be a larger proportion of the population (about 16% compared to 11% in 2011) and those of working age (15 to 64 years old) will remain at approximately 65% of the population.

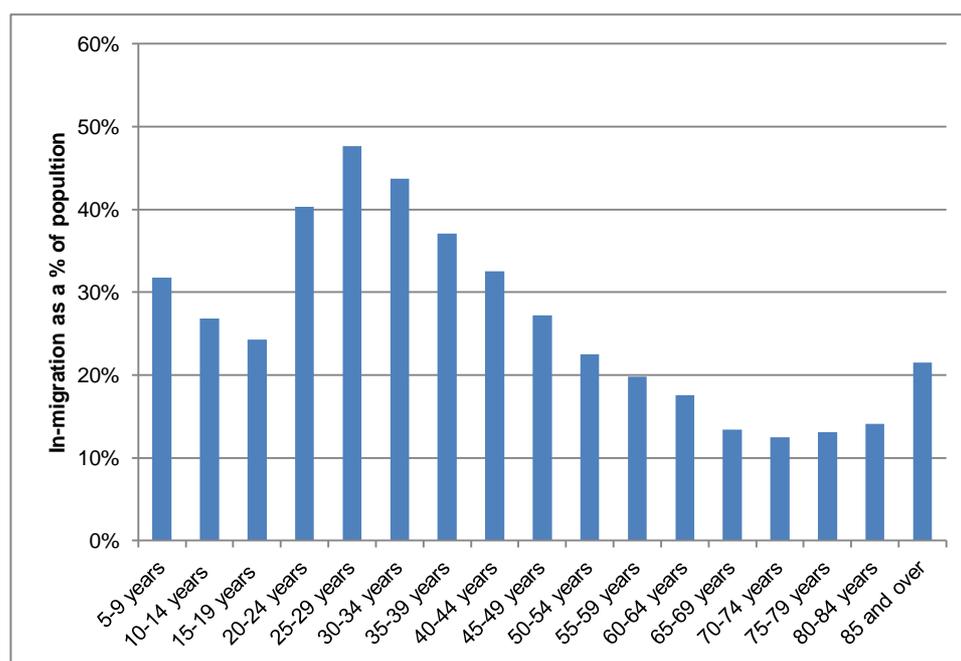
Figure 3 Mackay LGA Population Projections, 2006-31



Source: QLD Government Treasury, Office of Economic and Statistical Research

Population stability is also an important factor in the economic and social resilience of a given area. The chart below shows the population 'churn', or the percent of each age group that has arrived in Mackay LGA in the 5 years between 2006 and 2011. It can be seen that at least 15% of the population in most age groups are recent arrivals. In addition, there is a much higher rate of recent arrival for those aged 20 to 39 years of age (over 40%). This underlying volatility in the population has significant implications for 'social capital' and employee/customer turnover.

Figure 4 Population 'Churn', 2006-11



Source: ABS 2011 Census

The next two tables show the migration of the population in and out of Mackay LGA between 2006 and 2011, respectively. For those moving to Mackay between 2006 and 2011, most people came from QLD (including over 1000 from Brisbane) or from overseas. A relatively large number of people also moved from New South Wales and Victoria.

Table 1 Mackay in-migration, 2006-11

Place of Residence in 2006	Lived in Mackay in 2011
Mackay	73995
Brisbane	1375
Rest of QLD	11247
New South Wales	2586
Victoria	1208
South Australia	432
Western Australia	680
Tasmania	264
Northern Territory	335
Australian Capital Territory	78
Other Territories	0
Overseas	4242
Not Stated	8230

Source: ABS Census 2011

In terms of those moving out of Mackay between 2006 and 2011, most moved to Brisbane or to somewhere else in QLD. A relatively large number of people also moved to NSW or Western Australia.

Table 2 Mackay out-migration, 2006-11

Place of Residence in 2011	Lived in Mackay in 2006
Mackay	73995
Brisbane	2023
Rest of QLD	9713
New South Wales	1442
Victoria	726
South Australia	293
Western Australia	592
Tasmania	200
Northern Territory	199
Australian Capital Territory	65
Other Territories	3

Source ABS Census 2011

Business Counts

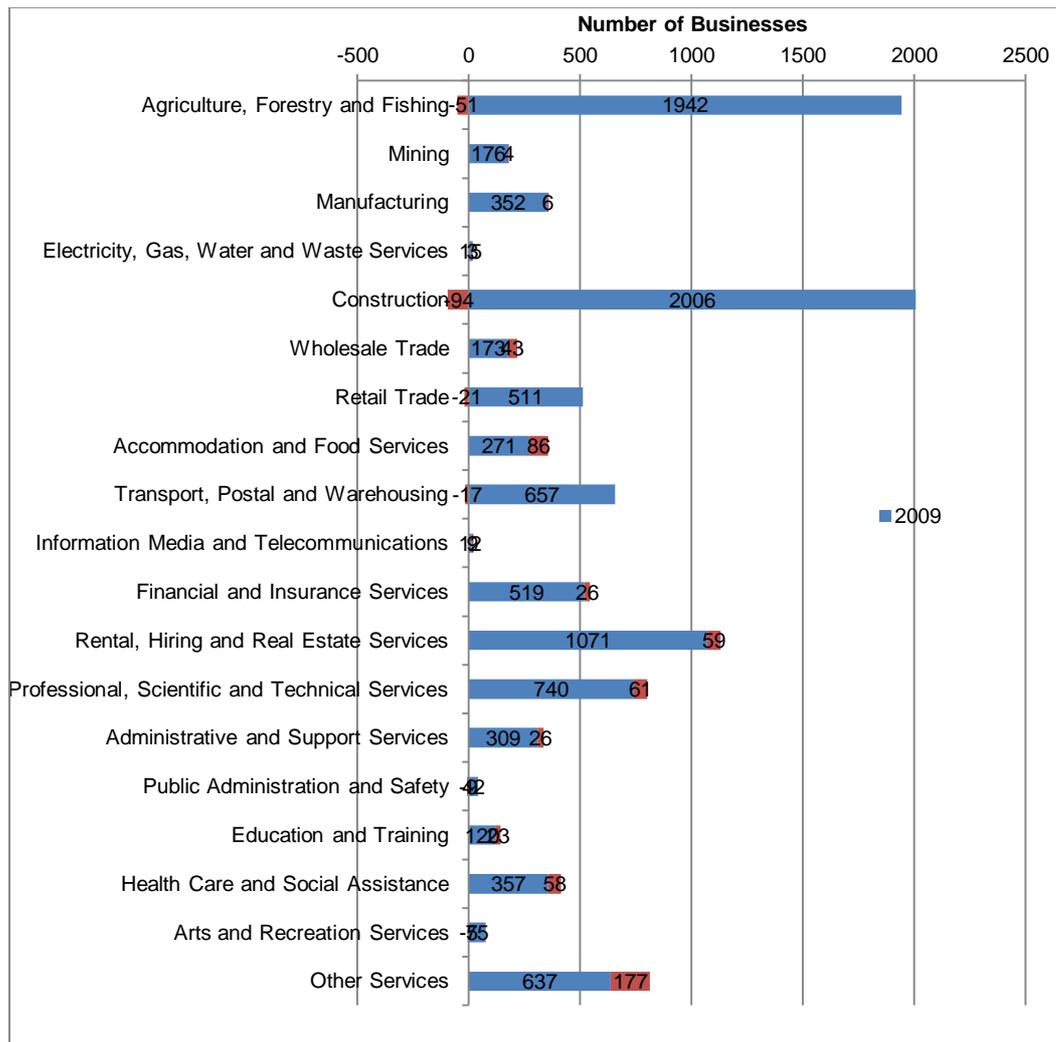
The table below shows the business counts for the Mackay LGA (made up of data from SA2s: Mackay, Mackay Harbour, North Mackay, South Mackay, East Mackay, West Mackay, Ooralea - Bakers Creek, Andergrove – Beaconsfield, Mount Pleasant – Glenella, Slade Point, Eimeo - Rural View, Shoal Point – Bucasia, Seaforth – Calen, Walkerston – Eton, Sarina and Pioneer Valley). In total there were 10,369 businesses in the area in June 2012. It can be seen that the number of businesses employing between 5 and 19 people has decreased slightly since 2009, but that all other business types have increased. By industry, the majority of businesses are in 'construction', 'agriculture, forestry and fishery' and 'rental hiring and real estate services'. Since 2009, business numbers have increased for 'other services' (177), 'accommodation and food services' (86), 'healthcare and social assistance' (58), 'professional, scientific and technical services' (61), 'rental, hiring and real estate services' (59) and 'education and training' (23). There have been decreases in the number of businesses in 'construction' (-94), 'agriculture, fishery and forestry' (-51) and 'retail trade' (-21).

Table 3 Business counts (including entries and exits) for Mackay, 2009-12

	2009	2011	2012	Change 2009-12
Non employing	5,813	6,122	6,041	228
1-4 employees	2,424	2,364	2,504	80
5-19 employees	1,230	1,194	1,224	-6
20-199 employees	494	533	569	75
200+ employees	24	36	31	7
Total	9,985	10,249	10,369	384

Source: ABS Counts of Australian Businesses

Figure 5 Change in number of businesses by industry in Mackay, 2009-12

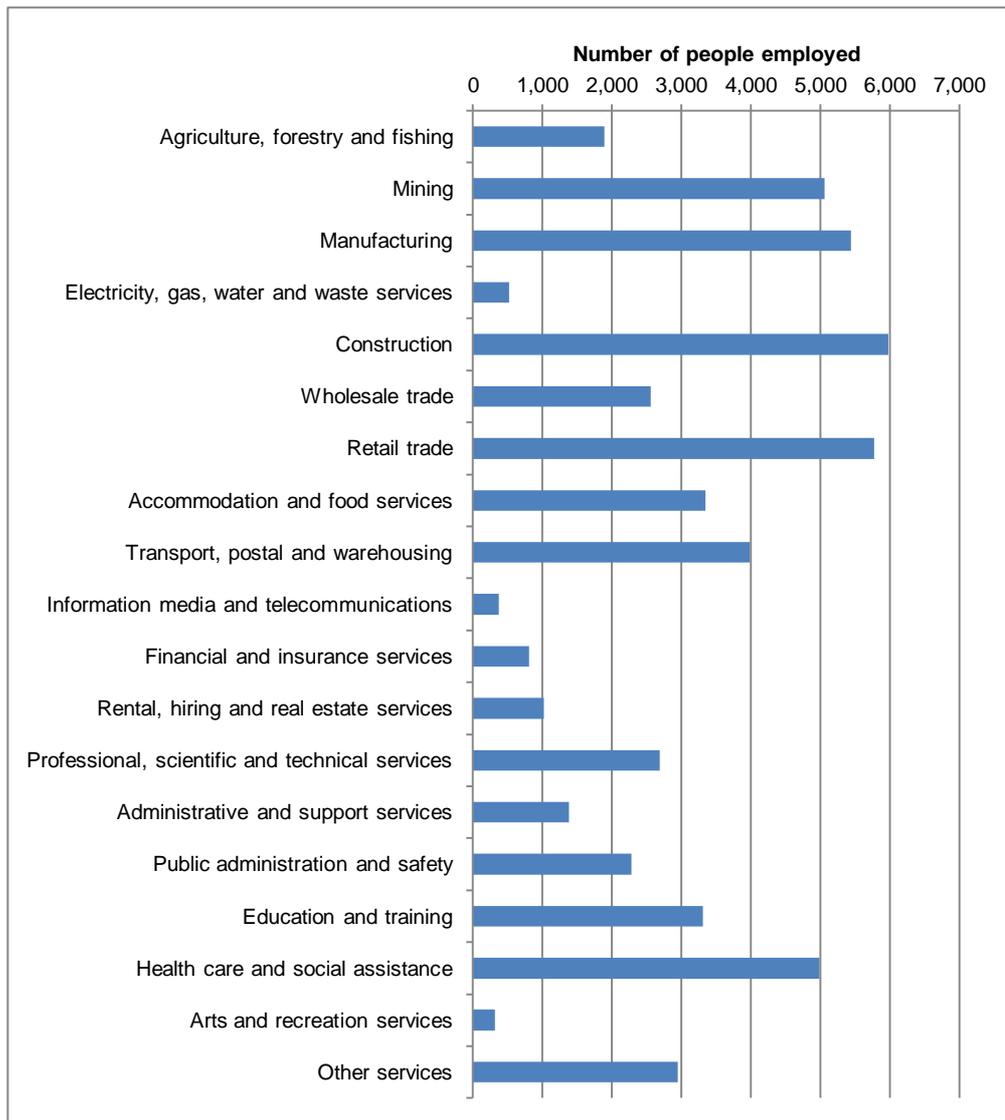


Source: ABS Counts of Australian Businesses

Employment by Industry

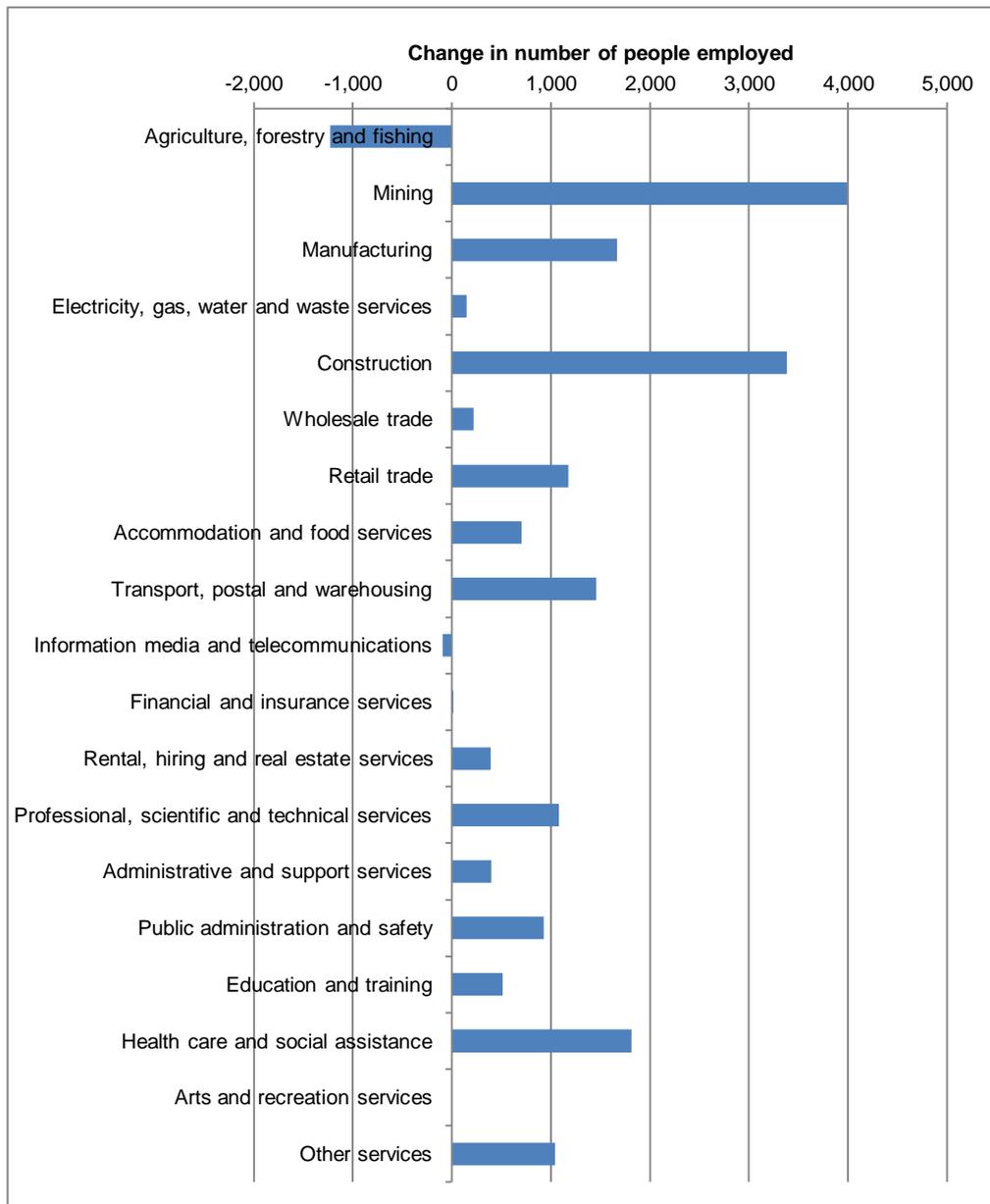
The next two figures show the number of people employed by industry in Mackay LGA in 2011 and the change in employee numbers from 2001 to 2011, respectively. It can be seen that 'construction', 'retail trade', 'mining', 'manufacturing' and 'health care and social assistance' are currently the major employers in Mackay LGA with over 5,000 workers each. These industries have also all grown by over 1,000 employees between 2001 and 2011, and 'mining' and 'construction' have shown the largest growth with between 3,000 and 4,000 people each. In contrast, 'agriculture, fisheries and forestry' lost over 1,000 employees in the same time period.

Figure 6 Employment by industry in Mackay, 2011



Source: ABS 2011 Census

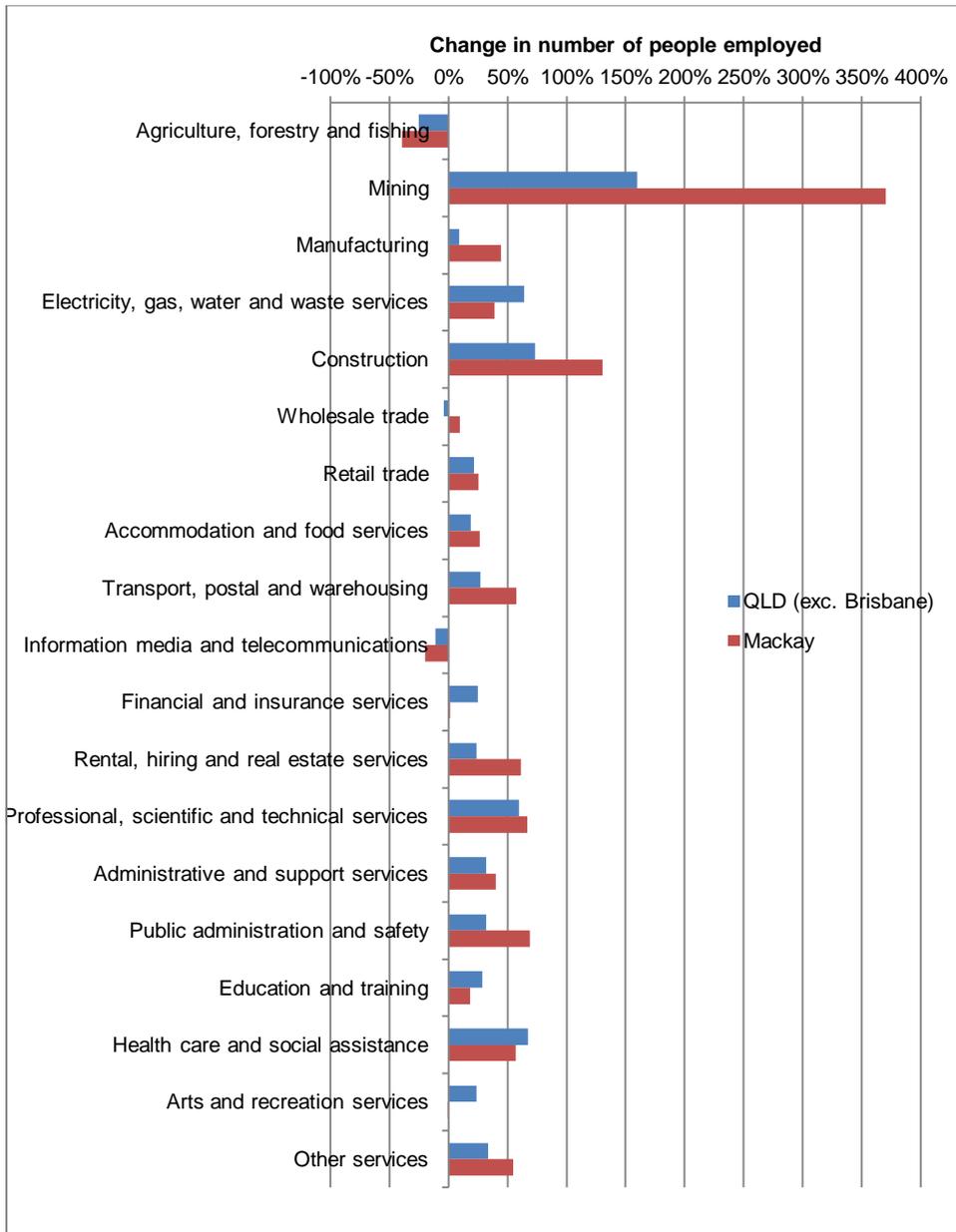
Figure 7 Change in employment by industry in Mackay, 2001-11



Source: ABS 2011 Census

Comparing Mackay's employment trends with those of QLD (excluding Brisbane), Mackay has shown high employment gains in 'mining', 'manufacturing', 'construction', 'transport postal and warehousing', 'rental, hiring and real estate services' and 'public administration and safety'. Mackay has not shown comparable employment growth to the rest of QLD (excluding Brisbane) in 'arts and recreation services' and 'financial and insurance services'.

Figure 8 Change in employment by industry in Mackay and QLD (excluding Brisbane), 2001-2011



Source: ABS 2011 Census

As well as gauging employment changes in individual industries, it is important to measure total employment diversity. The Herfindahl index can be used to measure industry concentration, and a higher score indicates a higher concentration of employment in a few industries, while a lower score suggests lower concentration and a greater diversity of employment. Typically, a score more than 30 would indicate a high concentration of employment in a small number of industries. The Herfindahl index score for Mackay in 2011 was 27.3, while for QLD (excluding Brisbane) in 2011 it was 27.0 (indicating similar industry diversity in the State and Mackay). Mackay's Herfindahl index score in 2001 was 27.0, indicating that employment diversity has lessened. QLD's (excluding Brisbane) score was also lower in 2001 at 26.9.

Based on the typology in figure 9, Mackay’s local economy can be summarised as “Employment diversity decreasing and working population is increasing”. These are the hallmarks of an economy that is growing around its dominant industries, in this case mining. It is important to note though that the change in employment diversity was slight, and that Mackay also probably exhibits characteristics of the ‘thriving/reviving town’.

Figure 9 Typology of Australian regions

Working population	Increasing	Growing around dominant industries, exposure to external shocks <i>Muscle town</i>	Growing and diversifying <i>Thriving/reviving town</i>
	Decreasing	Consolidating around dominant industries – no structural adjustment <i>Dying town</i>	Effective ‘structural adjustment’ <i>Turnaround town</i>
		Decreasing	Increasing
		Employment diversity	

Source: *Characteristics of economic sustainability in regional Australia* (Houghton and Fell, 2012)

The table below shows a comparison of the number of people who work in Mackay LGA in a given industry (place of work) and those who work in a given industry and also live in Mackay LGA (place of usual residence). A positive ‘difference’ indicates that there are residents travelling out of the LGA to work in a given industry, whereas a negative ‘difference’ indicates that there are people commuting into the LGA to work in a given industry. It can be seen that very large numbers of mining employees leave Mackay LGA to work (4,671). It is likely that many of these work in the neighbouring LGA of Isaac, which imports over 6,000 mining employees. A relatively large number of workers also leave the shire to work in construction, and there isn’t any industry that imports workers into Mackay LGA. In total, 11,160 residents commute out of the shire to their place of work.

Table 4, Commuting from Mackay LGA, 2011

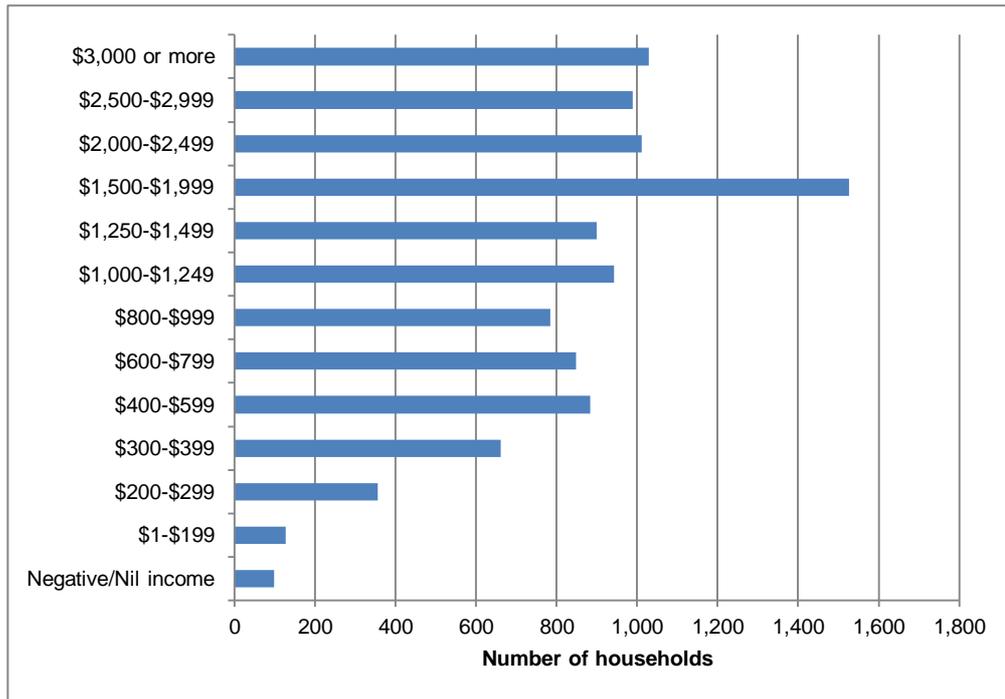
	2011 Place of Work	2011 Place of Usual Residence	Difference
Agriculture, forestry and fishing	1,565	1,832	267
Mining	1,702	6,373	4,671
Manufacturing	4,816	5,425	609
Electricity, gas, water and waste services	461	501	40
Construction	4,127	5,909	1,782
Wholesale trade	2,352	2,559	207
Retail trade	5,242	5,810	568
Accommodation and food services	2,946	3,388	442
Transport, postal and warehousing	3,238	3,880	642
Information media and telecommunications	330	364	34
Financial and insurance services	739	790	51
Rental, hiring and real estate services	978	1,036	58
Professional, scientific and technical services	2,508	2,691	183
Administrative and support services	1,072	1,422	350
Public administration and safety	2,082	2,309	227
Education and training	3,079	3,315	236
Health care and social assistance	4,589	4,979	390
Arts and recreation services	268	283	15
Other services	2,671	3,059	388
TOTAL	44,765	55,925	11,160

Source: ABS 2011 Census

Household Income

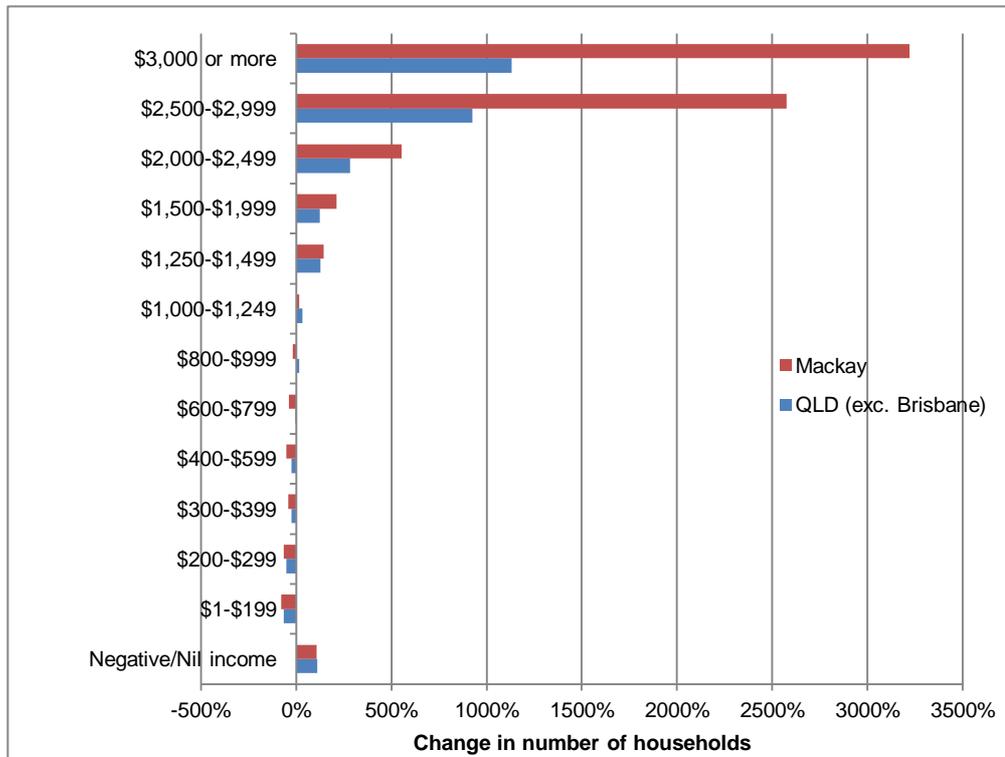
The tables below show the weekly income by household in Mackay LGA in 2011 and the trend in income by household between 2001 and 2011 for Mackay LGA and QLD (excluding Brisbane) respectively. It can be seen there were between 800 and 1,000 households in most income brackets in Mackay LGA in 2011. There were fewer households than this with income below \$400, and more (about 1,500) with an income between \$1,500 and \$1,999. In terms of income growth, it can be seen that Mackay has had a far larger proportional increase in the number of households earning over \$2000 than QLD (excluding Brisbane).

Figure 10 Weekly income by household in Mackay, 2011



Source: ABS 2011 Census

Figure 11 Trend in weekly household by income for Mackay and QLD (excluding Brisbane), 2001-11

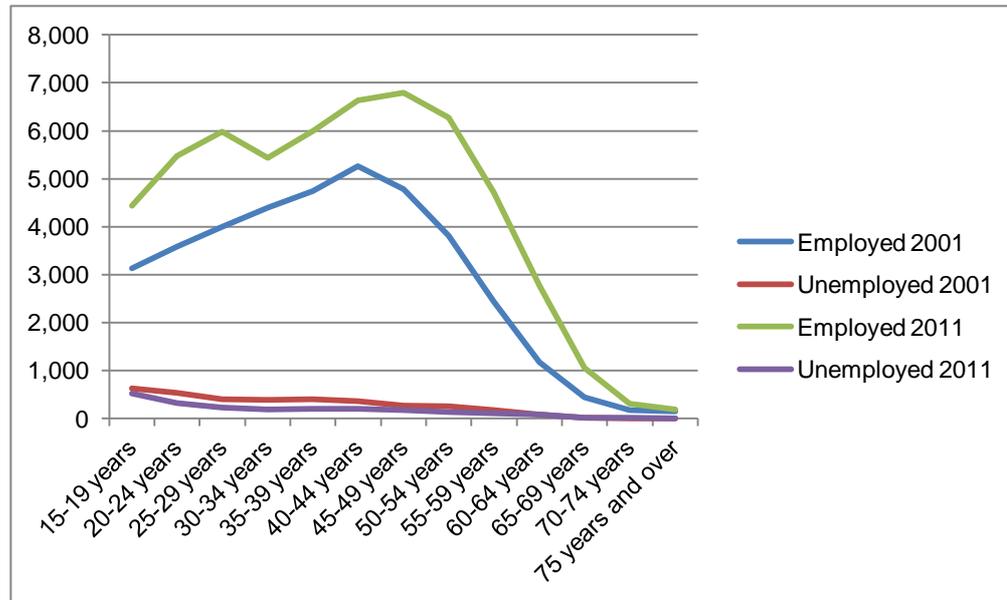


Source: ABS 2011 Census

The Labour Market

The figure below shows the historical trend in the age of the labour force between 2001 and 2011 in Mackay LGA. It can be seen that while the workforce has increased across all age groups, there has also been an increase in the proportion of older workers (those aged between 45 and 59 years of age). Whilst not shown on this graph, the trend for QLD (excluding Brisbane) is very similar.

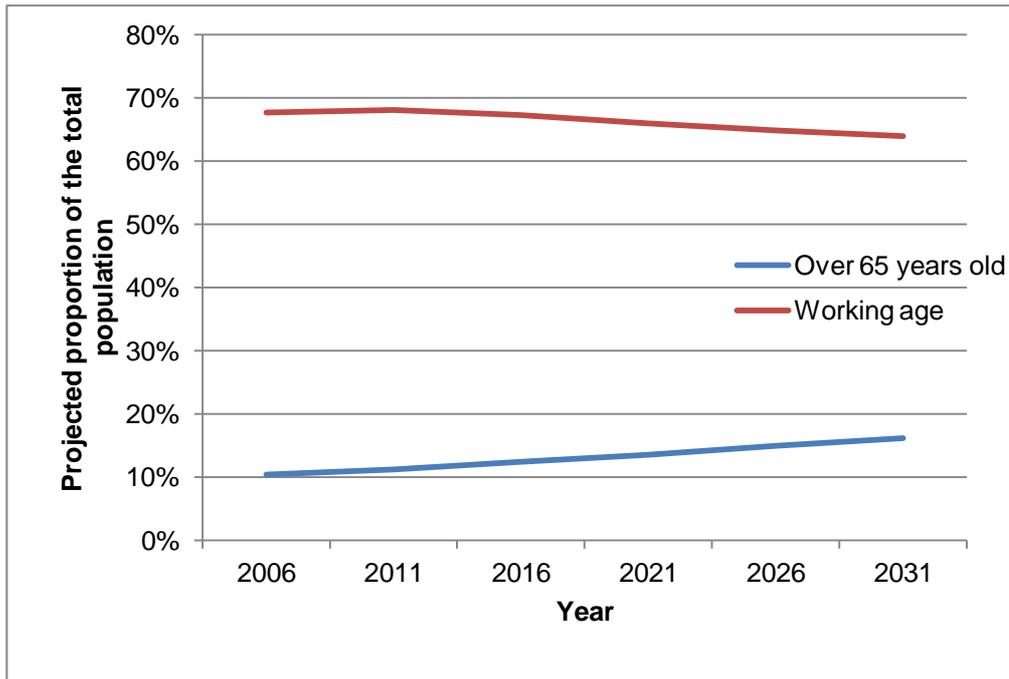
Figure 12 Trend in the age of the labour force in Mackay LGA, 2001-2011



Source: ABS 2011 Census

The trend above is expected to continue, as shown by QLD Government population projections in the figure below. Over the coming decades, the proportion of over 65 year olds will increase in Mackay LGA's general population, while the proportion of 'working age' people (15 to 64) will decrease.

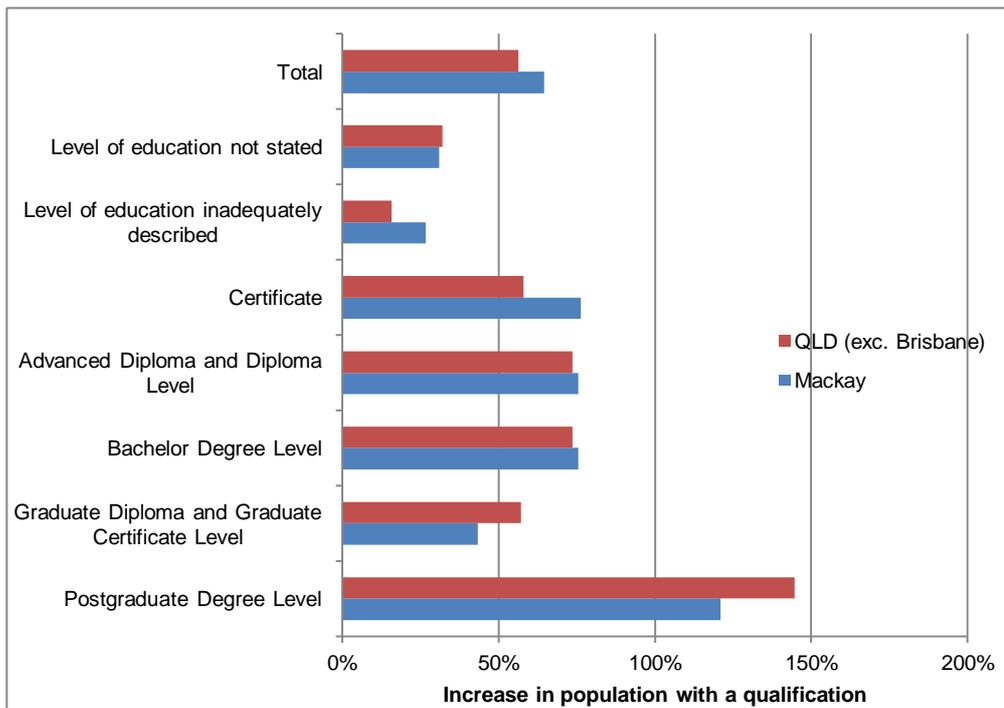
Figure 13 Workforce trends in Mackay LGA, 2006-31



Source: QLD Government Treasury, Office of Economic and Statistical Research

Despite its ageing workforce, in general the percent increase in the number of people with tertiary qualifications between 2001 and 2011 has been better in Mackay LGA when compared with the rest of QLD (excluding Brisbane).

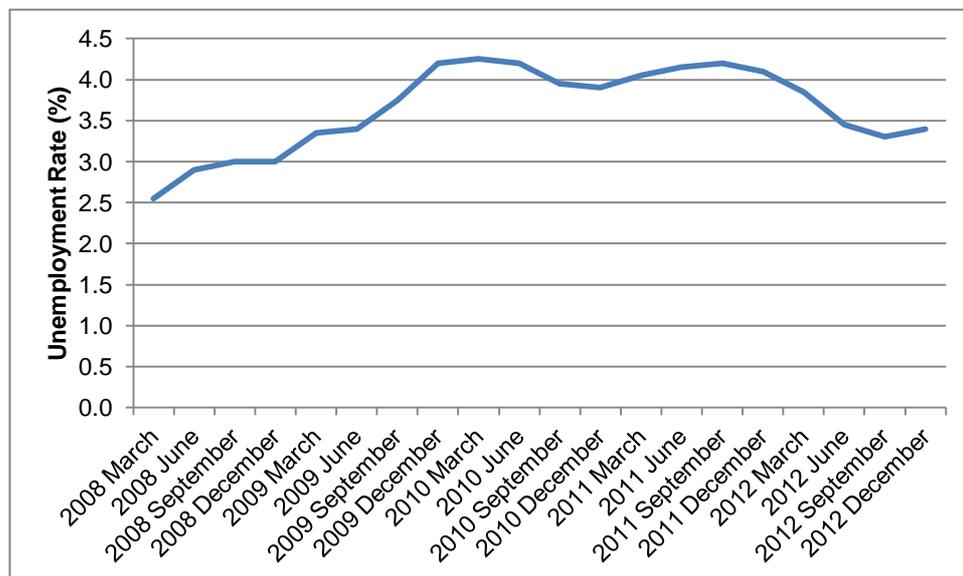
Figure 14 Increase in population with tertiary qualifications, 2001-11



Source: ABS 2011 Census

Finally, unemployment has increased but remained relatively stable in the four years up to 2012. A high of 4.3% was reached in 2009 and in December 2012 the rate was 3.4%.

Figure 15 Unemployment in Mackay, 2008-12



Source: DEEWR Small Area Labour Markets

Some Implications

Mining clearly continues to be an important industry in the Bowen Basin and Mackay. Mining and associated industries (such as construction, manufacturing and real estate) in Mackay have been growing faster in terms of employment numbers than in QLD as a whole. In 2011-12, mining made up 15% of the Gross Regional Product of Mackay LGA.¹

At June 2012, the Bowen Basin had 33 open cut and 12 underground coal-mines in production. These numbers exclude BHP Billiton Mitsubishi Alliance (BMA) Coal's Norwich Park mine, which closed in May 2012, and include BMA's Gregory mine, which subsequently closed in October 2012. Two new mines were also under construction (Daunia and Caval Ridge, BMA) while preliminary works had started on a further two (Eagle Downs and Grosvenor (Anglo American)). Significant expansions were under way at Lake Vermont (Jellinbah Group) and Kestrel (Rio Tinto Coal Australia).²

However, the signs of cyclical change and a potential mining 'hangover' for Mackay are also apparent. Employment diversity has decreased over the last ten years, with consolidation around mining and related industries. In addition, the number of households with income above \$2000 dollars per week has increased by a far greater margin than in QLD as a whole, and there is high turnover in the general population.

A number of reports have pointed out changing conditions for the resources sector in Mackay and the Bowen Basin. For example, the *Mackay Regional Council Economic Profile (2013)* acknowledges that conditions have worsened in 2013: 'Since the data was gathered for this report, the economic situation has altered due to a retraction in the mining sector brought on by the high Australian dollar, declining commodity prices and issues with cost of production.'

This statement is supported by several recent news stories. ABC Rural (*Free Rentals in Mining Towns*, 22 May 2013) reported that real estate prices in Queensland's Bowen Basin mining towns have fallen drastically, with some rentals going for free. The ABC (*Mining services industry forced to adapt to end of coal boom in Queensland's Bowen Basin*, July 9 2013) also reported that the Queensland Resources Council says about \$50 billion worth of coal projects, or more than a dozen projects, have been put on hold. A major mining services firm (Thomas and Coffey) reflected on its outlook in a statement to the ASX saying "The company's engineering and project management services business is experiencing a significant decline in the number of committed projects due largely to the continued slowdown in capital investments for mining infrastructure projects in the Bowen Basin by the major miners."

Now that the construction peak has passed, Mackay will face some significant changes over the next phase as high growth gives way to a more sustainable growth path. Business and government alike will need to stay ahead of the game in order to navigate this next phase successfully.

¹ *Mackay Regional Council Economic Profile (2013)*, Mackay Regional Council

² *Bowen Basin Population Report 2012*, QLD Govt. Treasury and Trade