

Annual Report: Moranbah

Social and economic changes in Queensland's gasfield communities in 2017



Report published: 30 June 2018

Research Team

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Acknowledgements

This research report was prepared by the Centre for Coal Seam Gas, The University of Queensland.

The research team would like to acknowledge the assistance from Queensland regional community members who participated in research interviews as part of the research process.

Disclosure/Disclaimer

This research was funded during Term 1 of the UQ Centre for Coal Seam Gas. During Term 1 the Centre was funded by The University of Queensland and the industry members— Arrow Energy, APLNG, Santos and Shell (QGC). Additional funding was also provided by industry members for research infrastructure costs. The Centre conducts research across Water, Geoscience, Petroleum Engineering and Social Performance themes. For more information about the Centre's activities and governance, see: http://www.ccsq.centre.ug.edu.au/

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Report published: 30 June 2018 CLX System ID: 149 365

ISBN: 978-1-74272-220-7

The Moranbah CSG Development Story

Moranbah has experienced a number of mining booms in its 50-year history. CSG development has come to Moranbah on the back of a significant recent coal boom. Recent development has been characterised in this report with the help of expert knowledge from members of the Moranbah and district community; these include: real estate, hospitality and other local businesses, police, schools, welfare agencies, unions, and local and state government. These individuals were presented with statistical data on the following indicators of social and economic changes, to assess the data's accuracy from a local point of view and to gather further insight about interconnections between the changes.

1. Population

4. Housing

2. Employment

5. Crime

3. Income and business

Moranbah is viewed as a tight-knit town by those interviewed. However, during the peak of the recent resources boom, this sense of community was challenged due to population and social changes. These changes included local residents leaving town due to rises in the local cost of living, an influx of new workers, and the presence of a large number of non-resident workers (NRWs) (in 2012, the number of NRWs was equal to half the permanent population). The tight-knit community was seen to change, becoming a place where people did not know their neighbours. In 2017, the number of NRWs equated to one worker for every four residents. The population is now perceived by the community to be steadying, and a "warm up" is expected as new residents gradually move to town.

The increase in the number of mine workers in Moranbah put pressure on local accommodation. Median rents more than doubled and house prices increased by 70% in 2012. Some locals benefitted significantly by collecting high rents and by selling properties. However, some who invested later have been unable to maintain expensive mortgages, and since 2013, both house prices and the number of sales have fallen dramatically. Renters who were not employed on the high wages of the mining industry were unable to stay in Moranbah as rents became unaffordable. The housing market is perceived by residents to be steadying and picking up in 2017; the town saw a strong increase in number of sales (115), and modest growth in house values—the first increase since 2012.

The high local cost of living, countered by higher than average personal incomes, meant that people without work did not stay in Moranbah. Their departure compounded difficulties for local businesses in recruiting and retaining staff. Skilled workers left jobs with local businesses to work for the mines, due to the high wages on offer. In 2015, a slowdown in the resources industry saw many contracts terminated, and the rest were renewed at lower rates (30-60% cuts to hourly rates were reported). Short-term and contractor positions became the norm. However, in 2017 individual incomes have reportedly begun to increase, and more locals have secured high-paying work in mining (e.g. as truck drivers and heavy machinery operators).

Moranbah saw strong growth in business activity in 2013; businesses nearly doubled in number (to 410), and total income increased by 156% over 12 months. This boost was attributed to a large number of contractors getting work during the mining construction boom. By the end of the boom period, income had sharply dropped back in line with the historic trend, as many businesses reportedly downsized or relocated to survive. However, in 2015, Moranbah's two significant changes occurred: total business income tripled to

reach a historic high, while the number of businesses nearly halved (to 204). This divergence suggests that the dramatic increase in business income was attributed to a small number of businesses having exceptionally high turnover that year. In 2017, interviewees described a "cautiously optimistic" picture: business confidence in Moranbah is improving, and long-term contracts with mines are becoming available to local suppliers.

The additional population in Moranbah during the "boom" was associated with increased traffic. Local police were under-resourced due to rapid growth in the mining industry. As a result, recorded rates of offences fluctuated, reflecting the enforcement capacity of the local police. Traffic offences declined in 2012 (although remain well above the Queensland rate), which was attributed to the use of buses for transporting NRWs. Drug use increased as wages rose, but was not above the Queensland rate; overall crime did not increase with the drug use. A spike in thefts in 2013 was related to a crime racket targeting luxury car accessories purchased by those earning of high wages from the mines. In 2017, crime in Moranbah has returned to historic levels, at around 60 offences per 1,000 people—well below the Queensland average. The town's strong sense of community safety is expected to continue.

This booklet provides detail on aspects of the 'Moranbah Story', based on the range of priority indicators that we tracked. We would like to thank members of the Moranbah community for their assistance and the gift of their time. We hope that we have done justice to their contributions to this study.

The UQ 'Cumulative Impacts' Research Team, June 2018.

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Introduction

The University of Queensland commenced research into the social and economic impacts of coal seam gas (CSG) development in 2013. This research focused on the combined impacts of the multiple CSG developments in the Western Downs region of Queensland as an initial case study, and has now expanded to include other local government areas—Maranoa, Toowoomba, and Isaac. The research team uses publicly available statistical information regarding a number of key indicators that were selected in consultation with community members at the commencement of research. These statistics are combined with additional data gained through interviews with key community members, which provide insight into the factors that are influencing changes in the community. This information is gathered each year, and findings are reported for each town, sub-regions and the region as a whole. More information about the methodology is contained in Appendix D to this report. In this document we present the findings on the town of Moranbah.

The following acronyms are used throughout this report:

CSG Coal seam gas

DIDO Drive-in drive-out

FIFO Fly-in fly-out

FTE Full-time equivalent

LGA Local Government Area

NRW Non-resident worker

QLD Queensland

SA2 Statistical Area Level 2

SA3 Statistical Area Level 3

SLA Statistical Local Area

UCL Urban Centre & Locality

General community insights

2017 summary

Coal seam gas (CSG) is not perceived to have had a significant presence in Moranbah, in the past or present; instead, mining is the dominant driver of social and economic dynamics locally. Particularly in the last 18 months, CSG is reported to have "completely vanished" in Moranbah; it is "not visible, and not spending money locally". While the town experienced turbulent change during the recent mining construction "boom", in 2017 there is a general sense that things (e.g. population, housing, business activity, incomes, employment rate) are starting to look up. There is "cautious optimism" looking forward.

Community spirit:

- Factors perceived to influence social cohesion include mining shift work, the significant FIFO and DIDO workforce, population turnover, prevalence of vulnerable individuals and groups (e.g. due to mental health, drugs, and financial stress).
- There is perceived to be a strong emphasis on families. It was suggested that youth, singles, childless couples, and those not into competitive team sports may be less well catered for.

Changed capability:

- Business capability is believed to have increased as a result of the recent (ca. 2012) mining construction "boom". For example, one mining company has invested directly in building local business capability, particularly, but not only, for businesses who may be able to participate in the mining industry supply chain.
- The combination of irrigation agriculture and mining industries is seen to nurture technology innovation and business entrepeneurship.
- CSG activity is perceived to have had very little, if any, effect on capabilities in Moranbah.

Lessons learned:

- It was suggested that targeting population growth at around 1.5% to 2% is ideal, but the town needs to attract families and proactively manage NRW impacts to mitigate local disruptions (e.g. work camp planning).
- Forecasting of service demands and funding (e.g. police, health, education, and public infrastructure) should take into account NRW numbers and not just the residential population.
- High wages at the peak of a boom means that financial stress is likely when wages decline post-boom.
- One interviewee suggested that high wages in mining jobs may mean that it is necessary to subsidise salaries for some essential service positions (although they acknowledged that it can be hard to remove subsidies post-boom).
- Businesses need to be flexible and strategic about capitalising on future booms or peak growth periods.
- Extractive industry companies should aim to maximise local supply chain opportunities and keep local businesses well informed of projected needs and opportunities.
- Proactive resourcing for police will allow enforcement to match changes in crime rate.
- The use of buses for NRWs can limit traffic problems, but standardisation of movement times was not welcomed by all.

1. Population

2017 summary

The downwards trend in resident population since 2011/12 has continued, at an average rate of -0.7% per annum. In 2016/17, NRWs remain at one worker for every four residents. The population is perceived by the community to be steadying, and a "warm up" is expected as new residents gradually move to town.

Trends reflected in the data

Historical trend: At the turn of the century, Moranbah was a small regional town housing mainly mine workers and their families.

Population growth followed the same steady upwards trend of the Isaac local government area (LGA). However, the growth rate of Moranbah was higher, averaging 4.1% per annum between 2000/01 to 2010/11, compared to 2.8% for the wider LGA. There has been a strong presence of non-resident workers (NRWs) in the whole Isaac LGA since at least 2005.

During CSG construction period (2011 – 2014):

Moranbah's resident population plateaued and began a very slow decline in 2011/12, at approximately 0.6% per annum. NRWs peaked in the same year, with one NRW for every two residents in Moranbah. The presence of NRWs had declined to one NRW for every four residents by 2013/14.

Since CSG construction period (2015 – 2017):

The downwards trend in residents has continued at a similar rate (0.7% per annum). While the NRW population has seen some fluctuations, in 2016/17 they remain at approximately one worker for every four residents. This is less than half of the peak of 4,585 in 2011/12.

Community insights and perceptions

During CSG construction period (2011 – 2014):

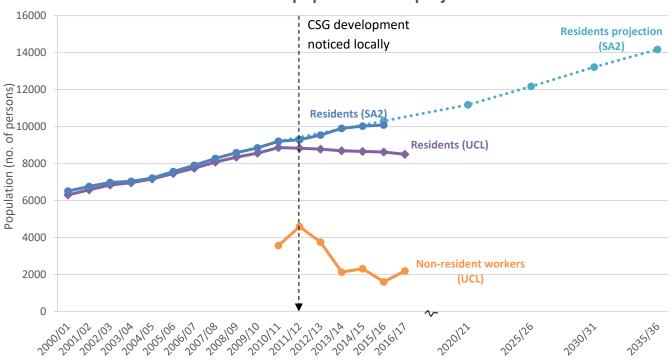
Moranbah gained new residents and NRWs due to the coal mining boom, but residents employed outside mining left town due to the increased cost of living. The change in population dynamics led to people "no longer knowing their neighbours".

Since CSG construction period (2015 – now): The decline in resident population was attributed to workers leaving town as employment opportunities in CSG and mining industries decreased with the transition to operation phases. However, the downturn has reportedly brought in many new residents of a new demographic—such as single parents—attracted by low cost housing. Demand pressure on childcare is strong, and is exacerbated by coal company policies to improve gender balance in the workforce and target local women. The presence of NRWs visibly decreased from 2014, but is now observed to be rising again; residents have recently noticed "a lot of new faces" at weekend community events. There is a recent trend of older residents deciding to stay and age in place, now that the original miners who have lived in Moranbah for decades are retiring. There is currently no aged care facility in town (and only one small complex of 'pensioner' units for over 55's); one interviewee raised this as a potential future concern.

Future expectations: The town population is perceived to be steadying, and a "warm up" is expected as new residents gradually move to Moranbah. In 2017, coal mining activity is perceived to be expanding; this is expected to drive an increase in NRWs in the foreseeable future.

1. Population

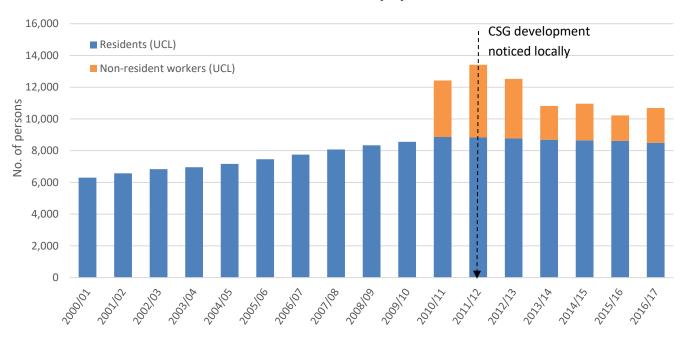
1a. Moranbah population and projection



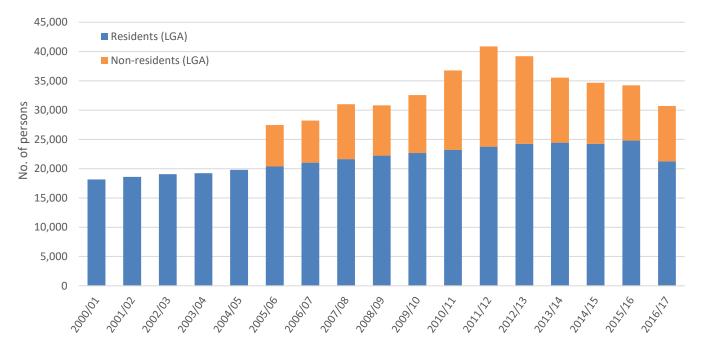
- UCL non-resident workers population estimate from QGSO 'Bowen Basin Population Report' (ASGC 2016); 2017 version available here: http://www.qgso.qld.gov.au/products/reports/bowen-basin-pop-report/bowen-basin-pop-report-2017.pdf
- UCL resident population estimate from the QGSO table 'Estimated resident population (a) by urban centre and locality (b),
 Queensland, 2006 to 2016pr' (ASGS 2016), http://www.qgso.qld.gov.au/products/tables/erp-ucl-qld/index.php
- SA2 (Moranbah) population estimate from the QGSO table 'Estimated resident population by statistical area level 2 (SA2), Queensland, 2006 to 2016pr' (ASGS 2016), http://www.qgso.qld.gov.au/subjects/demography/population-estimates/tables/erp-sa2-qld/index.php
- Population projection (2015 edition) from QGSO table 'Projected population (medium series), by statistical area level 2 (SA2), SA3 and SA4, Queensland, 2011 to 2036' (ASGC 2001), http://www.qgso.qld.gov.au/subjects/demography/population-projections/tables/proj-pop-medium-series-sa2-sa3-sa4-qld/index.php
- NRW estimates do not include the many NRWs in camps outside town

1. Population

1b. Resident vs. non-resident population - Moranbah



1c. Resident vs. non-resident population - Isaac LGA



Data notes

Source: Population and non-resident worker population estimates for UCL and Isaac LGA from the QGSO 'Bowen Basin
Population Report' (ASGC 2016); 2017 version available here: http://www.qgso.qld.gov.au/products/reports/bowen-basin-pop-report-2017.pdf

2. Employment

2017 summary

Unemployment in Moranbah has declined for the last two years, reaching 1.8% in 2017. This remains well below the Queensland rate of 6.1%. In the last six months, interviewees have observed a scaling up of short-term employment and contract jobs with coal mining operations; this is expected to continue.

Context

- Job seekers leave Moranbah when work is not available, so unemployment is low compared to the Queensland average.
- Australian Government's *Relocation Assistance* program remains active, providing financial incentive to long-term unemployed job seekers to move to regional towns with low unemployment rates.

Trends reflected in the data

Historical trend: Moranbah's unemployment rate has been consistently well under half of the Queensland average; however, it has historically followed a similar trend.

During CSG construction period (2011 – 2014):

Unemployment in Moranbah reached a historic low from 2011 to 2013, at less than 1%. In 2014 this increased to 1.5%; still well below the Queensland average of 6%.

Since CSG construction period (2015 – 2017):

In 2015, unemployment continued a three-year upwards trend, to rise to a relative high of 2.6%. This has since decreased; in 2017, the unemployment rate in Moranbah is 1.8%.

Community insights and perceptions

During CSG construction period (2011 – 2014):

During this period of very low unemployment, local businesses were experiencing severe labour shortages. The mining industry was seen to be "poaching" skilled workers.

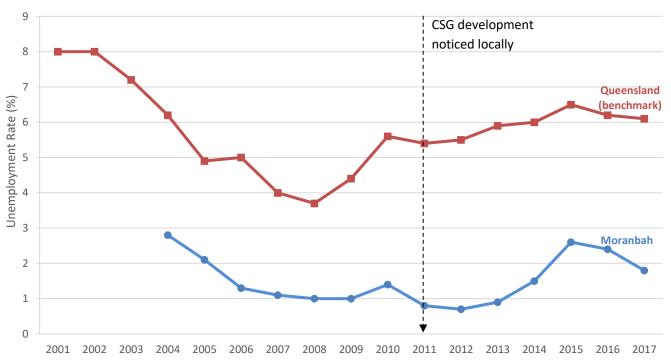
Since CSG construction period (2015 – now):

Although overall unemployment is low, women and youth are disproportionately represented. Some unemployment is "exported" or not captured in the figures, since many who lose jobs relocate to other towns to seek employment. Furthermore, a proportion of those who lost their jobs during the mining downturn were NRWs (who are not captured in local labour statistics). There has also been some "imported" unemployment, with a recent inmigration of long-term unemployed people. Job security in mining and CSG industries is low, with most remaining jobs reportedly short-term and contract positions. Some interviewees perceive that local jobs are being replaced by FIFO/DIDO workers. A skills shortage has been recently observed, and there is concern that school-leavers now have fewer local options for employment and training.

Future expectations: In the last six months, interviewees have observed a scaling up of short-term employment and contract opportunities with coal mining operations. This is expected to continue.

2. Employment

2a. Unemployment rate



- 2001-2008 based on SLA statistical boundary; Source: QGSO Regional Database Archived dataset 'Labour Force Small Area (Qtr Ended 31 Dec 2002 to Qtr Ended 31 Dec 2008) [DEEWR, Small Area Labour Markets Australia] (ASGC 2001)', http://www.qgso.qld.gov.au/products/tables/qld-regional-database/index.php
- 2009-2010 data from DEEWR file 'Unemployment salm_data_files_2008-2013'
- 2010-2017 based on SA2 (Moranbah) statistical boundary; Source: QGSO Regional Database dataset 'Labour Force Small Area (Qtr Ended 31 Dec 2010 to Qtr Ended 31 Dec 2017) [Department of Jobs and Small Business] (ASGS 2016)', http://www.qgso.qld.gov.au/products/tables/qld-regional-database/index.php
- Prior to 2017, unemployment data is reported for financial years; e.g. FY2016 corresponds to July 2015 to June 2016

3.1 Individual income

2017 summary

In 2015/16 (most recent available data), average income in Moranbah dropped by ~5%, corresponding to a significant decrease in total individual earnings for the township. However, observed recent movement in the mining industry is expected to drive an increase in wages and disposable income in the near future.

Context

 Moranbah is a purpose-built resource town, with more than 37% of the town's labour force employed in the mining sector.¹

Trends reflected in the data

Historical trend: Moranbah is historically a high income town. Average taxable income is consistently higher than the Queensland benchmark. The number of wage earners increased consistently between 2000/01 and 2009/10, along with total individual earnings.

During CSG construction period (2011 – 2014):

Individual income continued to rise, although with more significant fluctuations in growth rate. Overall, average taxable income increased by 24% over this four-year period. The number of wage earners spiked in 2010/11 and 2011/12 around 4,700, coinciding with peak construction activity in local mining projects. This returned to the historic trend (~4,000) in 2012/13.

Since CSG construction period (2015 - 2017):

In 2014/15, average taxable income reached a historic high of ~\$109,000; more than 50% higher than the Queensland benchmark. This dropped by ~5% in 2015/16 (most recent available data), corresponding to a significant decrease in total individual earnings for the township.

Community insights and perceptions

During CSG construction period (2011 – 2014):

Wages were high during the mining boom, but interviewees emphasised that this growth was offset by the high cost of living. They suggested that disposable income (a more meaningful indicator) might not be greater than the Queensland average. High averages mean that disparities in personal incomes (i.e. the difference between highest and lowest) are not visible in these statistics.

Since CSG construction period (2015 – now): Mining and CSG industries moved into "low cost operating mode" in 2015. Many contracts were terminated, and the rest were renewed at lower rates (30-60% cuts to hourly rates were reported). Short-term and contractor positions became the norm. Hence, many workers shifted from highly paid, permanent jobs to lower paid, casual contracts rather than losing their jobs altogether. However, in 2017 individual incomes have reportedly begun to increase, and more locals have secured high-paying work in mining (e.g. as truck drivers and heavy machinery operators).

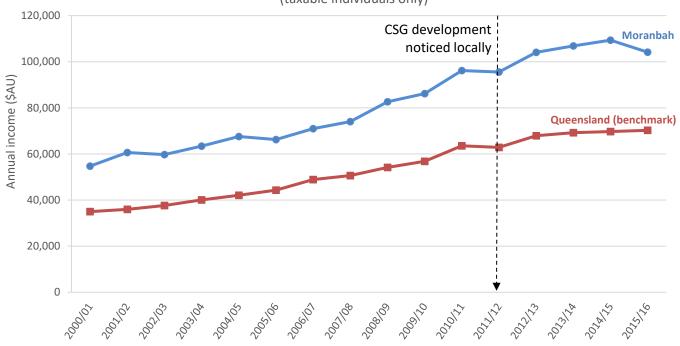
Future expectations: "Recent movement in the mining industry"—such as acquisitions—"indicates that new activity is coming." Wages and disposable incomes are expected to increase in the near future. Some interviewees suggested that the mining industry will become more automated, employing fewer to do the same work.

 $^{{\}color{blue} {}^{1}} \underline{\text{https://training.qld.gov.au/site/docs-data/Documents/statistics/research/school-local-labour-profiles/moranbah-school-local-labour-profile.pdf}$

3.1 Individual income

3a. Average taxable income

(taxable individuals only)



3b. Total individual earnings



- Source: Australian Taxation Office (ATO), Research and Statistics, https://www.ato.gov.au/
- Average taxable incomes reported by ATO until 2009 excluded losses. Averages from 2010 include all taxable incomes including incomes of zero and losses.
- Data relates to Moranbah postcode 4744
- Original data no discounting applied
- Due to ATO data publishing cycles, 2016/17 data will be included in the 2018 Moranbah booklet

3.2 Business income

2017 summary

In 2015/16 (most recently available data), Moranbah saw a decrease in both number of businesses and total income, although income remains at a historically elevated level. In 2017, interviewees described a more positive picture than that of the previous two years (following the mining slowdown): business confidence is improving, and long-term contracts with mines are becoming available to local suppliers.

Context

• Business and individual income data lags a year behind other data due to ATO data reporting cycles.

Trends reflected in the data

Historical trend: In 2001/02, Moranbah had 113 non-primary production businesses, and total income of \$1.2 million. The number of businesses grew steadily to 150 by 2009/10. However, total income growth was more tempered and volatile, largely due to a slump from 2007/08 to 2009/10 (associated with the global financial crisis).

During CSG construction period (2011 – 2014):

Moranbah saw strong growth in the number of businesses and total business income until 2012/13. That year, both indicators spiked significantly (at the height of the contruction boom); businesses nearly doubled in number, and total income increased by 156% that year. By the end of the boom period, income had sharply dropped back in line with the historic trend.

Since CSG construction period (2015 – 2017):

In 2014/15, two significant changes occurred simultaneously—Moranbah's total business income tripled to reach a historic high, while the number of businesses nearly halved. This divergence suggests that the dramatic increase in business income was attributed to a small number of businesses having exceptionally high turnover that year. In 2015/16, Moranbah saw a decrease in both number of businesses and total income, although income remains at a historically elevated level.

Community insights and perceptions

During CSG construction period (2011 – 2014): Local businesses struggled to get staff, due to high labour competition. Non-mining businesses could not pay the same wages as the mines. The significant increase in the number of businesses in 2012/13 and 2013/14 was attributed to a large number of contractors (sole traders) getting work during the mining construction boom.

Since CSG construction period (2015 – now):

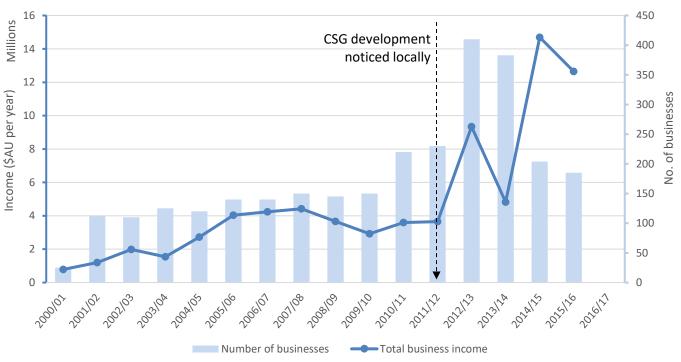
Interviewees attributed the 2014/15 dramatic drop in business numbers to two factors: contractors losing work following the mining slowdown; and closures of industrial and support services for mining, as the industry established those services in-house. Many businesses reportedly downsized, diversified or relocated to survive. In 2017, interviewees described a more positive picture: business confidence is improving, and long-term contracts with mines are becoming available to local suppliers. However, with Qantas Link now the only airline operating services out of Moranbah (since July 2017), inflated flight prices are said to be impacting businesses that need to transact business out of town.

Future expectations: Interviewees expect the observed 2017 upwards trend to continue, with modest increases in business activity and incomes into the foreseeable future. The anticipated increase in disposable incomes is also expected to be a positive boost to business confidence and revenue.

3.2 Business Income

3c. Total business income

(non-primary production)



- Source: Australian Taxation Office, Research and Statistics, https://www.ato.gov.au/
- Data relates to Moranbah postcode 4744
- Original data no discounting applied
- Due to ATO data publishing cycles, 2016/17 data will be included in the 2018 Moranbah booklet

4.1 House price

2017 summary

In 2016/17, Moranbah saw a modest growth (3%) in house values—the first increase since 2012. This coincided with a strong increase in number of house sales; 115, compared to <50 in the previous three years. The housing market is perceived to now be steadying and picking up; this is expected to continue.

Trends reflected in the data

Historical trend: Historically, there were low levels of home ownership in Moranbah, due to high levels of company housing. Consequently, a weak housing market existed, with home prices considerably lower than the Brisbane average. As moderately priced company houses came on the market, the number of house sales increased significantly. From 2001/02—when the median sale price in Moranbah was one tenth of the Brisbane benchmark—house values grew strongly; by 2010/11, they had almost levelled with Brisbane.

During CSG construction period (2011 – 2014):

At the height of mining construction in 2012, the median house price in Moranbah increased by \$230,000 (48%) in a single year, putting it well above the Brisbane benchmark. This historic price peak coincided with a spike in demand, with 329 sales. This unprecedented growth was short-lived; the following year (2012/13) sales dropped to 67, and median price declined by 32%. That same year, the number of new building approvals jumped from a historic annual average of 60, to 361.

Since CSG construction period (2015 – 2017):

House values continued a dramatic decline until 2015/16, when the median sale price levelled out at \$160,000 (compared to \$710,000 at the height of the housing boom in 2012). Sale numbers remained low (under 50) until 2016/17. This year saw a strong increase in number of sales (115), and modest growth in house values—the first increase since 2012.

Community insights and perceptions

During CSG construction period (2011 – 2014): Many local residents chose to sell (and leave town) when the prices were high in 2012, due to an economic opportunity and a dislike of changes occurring in the community. Some long-term mine workers sold their house and moved to Mackay, transitioning to Moranbah's DIDO workforce. Development approvals came too late, one year after peak demand in 2012. Prices reduced as NRW camps, public housing, and private developments were built. Housing affordability was a major concern during the boom, especially for low-paid and essential workers.

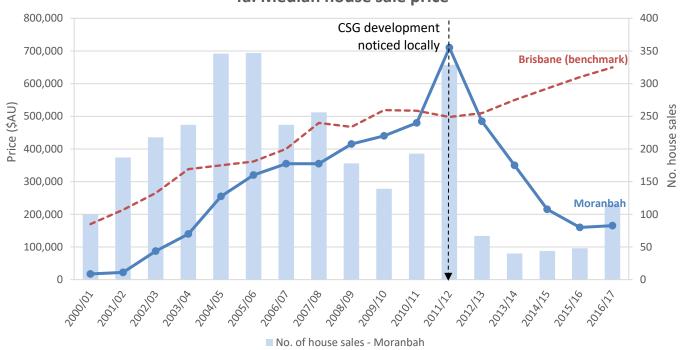
Since CSG construction period (2015 – now):

Housing affordability is no longer a concern; "you can purchase a good house now for less than \$200K". Empty houses are not uncommon in older parts of town. Some properties are being repossessed, as those who bought during the boom have become unable to maintain their mortgage payments. One interviewee suggested that the 2016/17 spike in number of sales may be due to these foreclosures, as few sales were visible (advertised) that year.

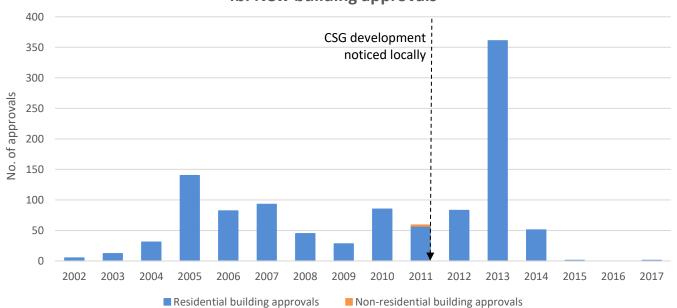
Future expectations: The housing market is perceived to now be steadying and picking up; this is expected to continue, with the market "just ticking along". Some interviewees suggested that prices will stay lower than at peak-boom times and lower than the Brisbane average. NRW capacity in mining camps has been expanded; a future NRW influx is unlikely to have the same impact. There are reportedly many empty houses and reserves of land released and zoned; these are "ready to go" when the next boom comes.

4.1 House price





4b. New building approvals



- 4a source: QGSO Regional Database dataset 'Residential land and dwelling sales (Year Ended 30 Sep 2000 to Year Ended 30 Sept 2017) [DNRM] (ASGS 2016)', http://www.qgso.qld.gov.au/products/tables/qld-regional-database/index.php
- 4b source: QGSO Regional Database dataset 'Building Approvals (Jul 2001 to Dec 2017) [ABS 8731.0] (ASGS 2016)', http://www.qgso.qld.gov.au/products/tables/qld-regional-database/index.php
- Data based on SA2 (Moranbah) statistical boundary
- Approvals shown for private buildings only; public developments are excluded
- Prior to 2017, building approvals are reported for financial years; e.g. FY2016 corresponds to July 2015 to June 2016

4.2 Rent

2017 summary

Median rent in Moranbah has continued to decline to \$220 per week in 2016 and 2017—a level not seen since 2003. Rent has stayed below the state benchmark since 2014. One interviewee suggested that average rents in 2017 are closer to \$300 (based on observed local rental ads). Residents have a sense that Moranbah's housing situation is "equalizing" and "picking up"; steady growth is expected.

Trends reflected in the data

Historical trend: From 2003, the median rent in Moranbah surpassed the Queensland benchmark; three years later, it was more than double the state average. The town saw significant rent growth from 2002 to 2007, increasing by a factor of four over this five-year period (from \$150 to \$600 per week). Median rent spiked to \$880 in 2009—despite the global financial crisis—before returning to \$600.

During CSG construction period (2011 – 2014):

At the height of mining construction in 2012, median rent doubled from \$750 to a historic high of \$1,500 per week. At that time, Moranbah rent was four times greater than the Queensland benchmark. However, as with house prices, rents in Moranbah crashed in 2013. By 2014, it had reached \$330 per week—just below Queensland.

Since CSG construction period (2015 – 2017):

Median rent in Moranbah has stayed below the state benchmark. It has continued to decline to \$220 per week in 2016 and 2017—a level not seen since 2003.

Community insights and perceptions

During CSG construction period (2011 – 2014): Rent increased due to a high demand from NRWs during peak mining activity. As rent increased, local renters left town due to unaffordability; housing affordability was a major concern during the boom, especially for low-paid and essential workers. Interviewees emphasised that median rent data does not depict the extent of the affordability issue; for example, in 2012 three houses rented by a mining company were priced at \$3,125 per week. There were many NRWs sharing multi-bedroom dwellings at the time of peak rent. Subsequent dips in rent were attributed to the opening of camps for NRWs.

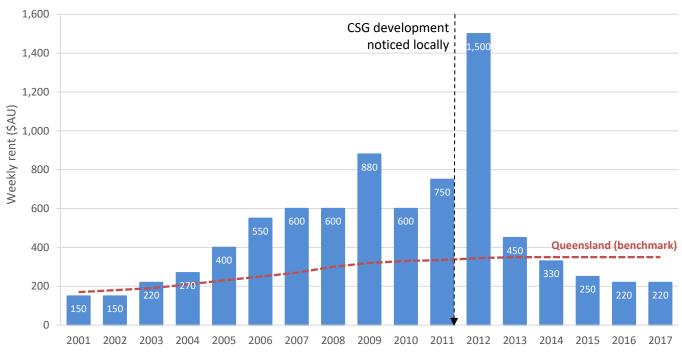
Since CSG construction period (2015 – now): The biggest perceived change in Moranbah in the last three years is the decrease in the cost of housing, which is now "quite affordable". The decrease in rents since 2012 has seen more young families move to town, and school enrolments have reportedly increased as a result. One interviewee suggested that average rents in 2017 are around \$300 (based on observed local rental ads), compared to the \$220 shown in the median rent chart.

Future expectations: Residents have a sense that Moranbah's housing situation is "equalizing" and "picking up"; steady growth is expected. Families will continue to move to Moranbah due to lower rent. Rent is unlikely to peak to the same extent as in 2012, due to the expansion of NRW camp capacity and construction of new housing stock (some reportedly due to conditions imposed by the Coordinator-General's office).

4.2 Rent

4c. Median weekly rent

(3-bedroom house)



- Source: QGSO Regional Database dataset 'Median rent (Year Ended 30 Sep 1990 to Year Ended 31 Dec 2017) [RTA] (ASGS 2016)', http://www.qgso.qld.gov.au/products/tables/qld-regional-database/index.php
- Data based on SA2 (Moranbah) statistical boundary
- Prior to 2017, rent data is reported for financial years; e.g. FY2016 corresponds to July 2015 to June 2016

5. Safety & wellbeing

2017 summary

Crime in Moranbah has returned to historic levels, at around 60 offences per 1,000 people—well below the Queensland average. High wages are perceived to have facilitated drug use without attendant crime, and domestic violence is seen a significant issue. Despite this, the town's strong sense of community safety is expected to continue.

Context

• Crime statistics can be subject to significant variation based on factors such as police resourcing, enforcement and prevention strategies, and community awareness and reporting.

Trends reflected in the data

Historical trend: The overall crime rate in Moranbah has stayed well below the Queensland benchmark, at around 60 offences per 1,000 people. However, traffic offences have historically been above the state average; for example, the historic peak in 2009 reached ~16 offences per 1,000 people, compared to the Queensland rate of ~10.

During CSG construction period (2011 – 2014): In 2012, at the height of the mining boom, the overall crime rate in Moranbah was low. In particular, reported traffic, drug and good order (e.g. disorderly behaviour) offences fell below the respective historic averages. However, offences steadily increased over the following two years; most notably, the intensity of reported thefts increased by 70% in 2013. In 2014, Moranbah's overall crime rate reached a historic high of 90 per 1,000 people, almost in-line with the Queensland average.

Since CSG construction period (2015 – 2017):

The crime rate in Moranbah has returned to historic levels, at around 60 offences per 1,000 people. Offences against property (including theft) have declined, and drug offences have fluctuated. Traffic offences have seen little change, and are consistent with the historic rate.

Community insights and perceptions

During CSG construction period (2011 – 2014): The traffic offence rate in Moranbah is attributed to the high number of DIDO workers, and the young, male demographic associated with extractive industries. The low crime rate in 2012 was suggested to be partially due to low detection. A decrease in traffic offences was attributed to the use of buses for transporting NRWs, community campaigns, and increased resources for local police. A peak in theft in 2013 was attributed to a vehicle accessories racket, targeting luxury and modified cars.

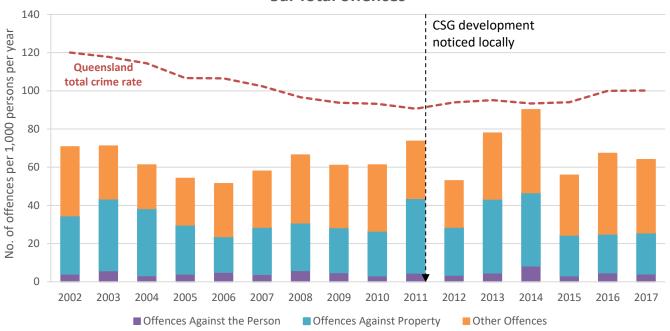
Since CSG construction period (2015 – now):

Moranbah is perceived to be a safe town; for example, one person said they feel safe leaving their house unlocked and keys in the ignition. An increase in the arrival of low income residents is seen by some to be behind the increase in offences, but no evidence was offered for this conclusion. High wages have facilitated drug use without attendant crime (that is, people are not stealing to pay for drugs). Domestic violence is perceived as a significant issue. The Peak Downs Highway to Mackay is a major safety concern, with a Road Accident Action Group formed to try to reduce injury and fatalities on the roads.

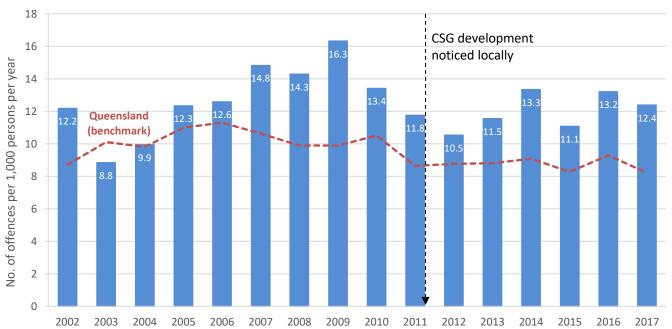
Future expectations: Moranbah's positive sense of community safety is expected to continue. Traffic offences will likely decrease as road use decreases, but the local police resourcing will affect detection and recording of offences. As wages decrease, crime rates may change if drugs can no longer be afforded.

5. Safety & wellbeing

5a. Total offences



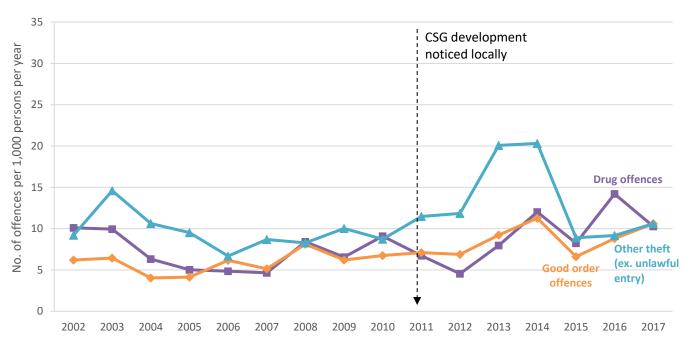
5b. Traffic and related offences



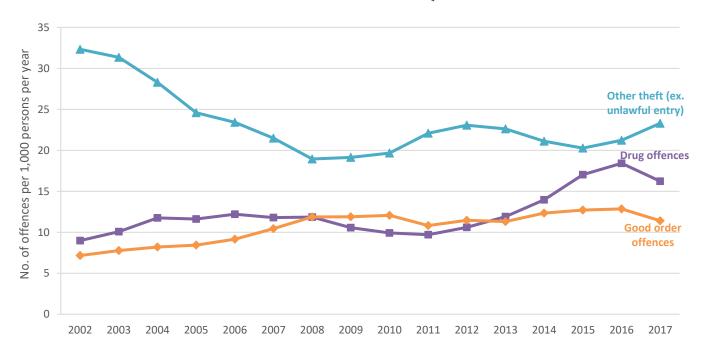
- Source: Queensland Police Service (QPS), https://www.police.qld.gov.au/online/data/
- Crime rate data (per 100,000 people) obtained by QPS Division and Queensland State; data was adjusted to be presented as number of offences per 1,000 people per year

5. Safety & wellbeing

5c. Other relevant offences - Moranbah

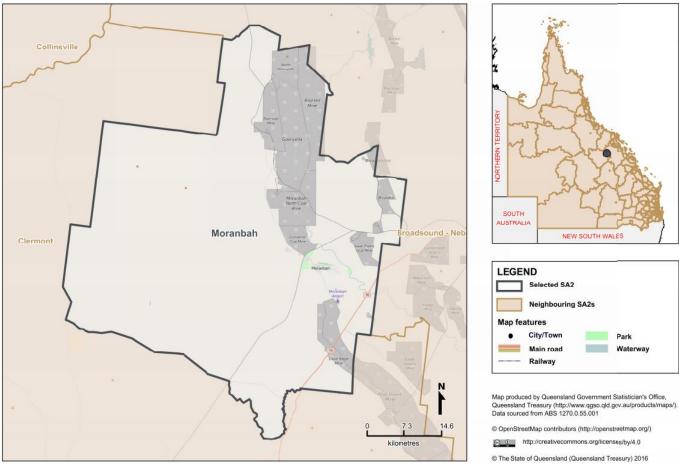


5d. Other relevant offences - Queensland



- Source: Queensland Police Service (QPS), https://www.police.qld.gov.au/online/data/
- Crime rate data (per 100,000 people) obtained by QPS Division and Queensland State; data was adjusted to be presented as number of offences per 1,000 people per year

Appendix A: Spatial boundary maps (SA2, UCL and postcode)



Moranbah statistical area 2 (SA2) boundary (2016, ASGS Code 312011341)



Moranbah urban centre and locality (UCL) boundary



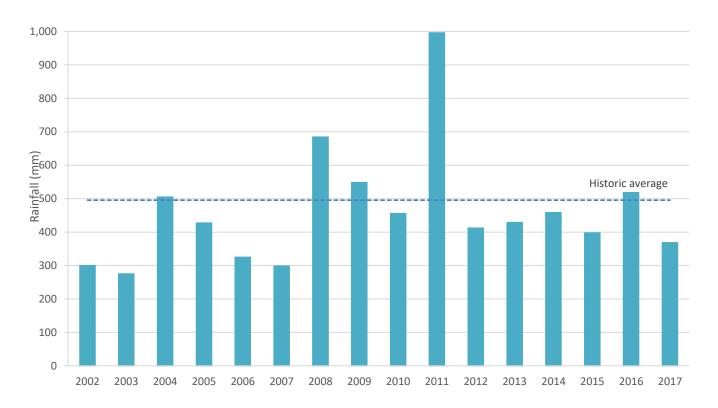
Moranbah postcode boundary 4744

Appendix B: Non-resident population projections - Isaac Region



- Non-resident worker estimates by LGA from the QGSO 'Bowen Basin Population Report, 2017' (ASGC 2016), http://www.qgso.qld.gov.au/products/reports/bowen-basin-pop-report/bowen-basin-pop-report-2017.pdf
- Non-resident worker projections (2018) by LGA from QGSO table 'Bowen Basin: Non-resident population projections, by local government area (LGA), 2018 to 2024' (ASGS 2016), http://www.qgso.qld.gov.au/subjects/demography/population-projections/tables/bowen-basin-non-resident-pop-proj-lga/index.php
- Non-resident workers projections (2014) by LGA from QGSO report 'Bowen Basin non–resident population projections: 2014 to 2020', http://www.qgso.qld.gov.au/products/reports/bowen-basin-pop-report/bowen-basin-pop-report-2016.pdf
- Series A projection is based on the number of non-resident workers on-shift who were engaged in existing resource operations
 and associated infrastructure activities in the area at June 2014. The projection takes into account future changes to those
 operational workforces as advised by resource company sources, as well as the estimated construction and operational
 workforces of Category A projects (i.e. those that are approved and have reached a financial close).
- Series **B projection** includes the Series A projection plus projected growth in the non-resident population arising from Category B projects (those that are approved but have yet to reach a financial close).

Appendix C: Moranbah rainfall (2002 – 2017)



- Source: Bureau of Meteorology Climate Data online, http://www.bom.gov.au/climate/data/
- Rainfall observations reported for Wentworth Rainfall Station

Appendix D: Project Information

The University of Queensland is conducting research into the social and economic impacts of coal seam gas (CSG) development. The project has focused on the combined impacts of the multiple CSG developments in the Western Downs region of Queensland as an initial case study. That focus has now expanded to include other local government areas – Maranoa, Toowoomba, and Isaac.

Research project history

- **Engagement:** People from the community, government and industry worked with researchers to identify the most important 'indicators' to monitor. This consultation process helped to develop a shared understanding of social and economic development in the community and created a framework for reporting and discussion.
- *Indicator monitoring:* The team identified ways to calculate and report the impact of multiple CSG projects against the agreed set of indicators.

The research team

Dr Kathy Witt, Centre for Coal Seam Gas, The University of Queensland has led this research since May 2017 and joined the original project team in 2014.

A large team of researchers has contributed to this project since 2013, including:

- Assoc. Prof. Will Rifkin, University of Newcastle (previously led this project while working at The University of Queensland from April 2012 – April 2017)
- Dr Jo-Anne Everingham, Senior Research Scientist, Centre for Social Responsibility in Mining, The University of Queensland (CSRM).
- Ms Sarah Choudhury, Research Assistant, CSRM (2017) and Bec Colvin, (2016).
- Ms Sheryllee Johnson, Research Technician, CCSG (2013-2016).
- Professor David Brereton, Associate Director, Sustainable Minerals Institute (2012-2016).
- Dr Vikki Uhlmann, Research Manager, CSRM (2013 -2014).
- Ms Kylie May, Research Analyst, CSRM (2013 2014).

Reporting timeframes: The data collection for the project has been occurring annually since 2013. Project outcomes, recommendations, and reports have been released periodically. The timeframe for some datasets, such as those from the Australian Taxation Office, lags behind the main data used in this report—this is due to unique data collection and reporting requirements of this agency.

Ethics approvals: This study has been cleared by the human research ethics committee of The University of Queensland in accordance with the National Health and Medical Research Council's guidelines (Research Ethics clearance approval no. 2013000587).

Questions: Contact the lead researcher, **Dr Katherine Witt**

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If you would like to speak to an officer of the University not involved in the study, you may contact the Ethics Officer on 07 3365 3924.