

Research Project:

**Cumulative socioeconomic impacts
of CSG Development in Queensland**

DATA REPORT

**INDICATORS OF CHANGE
IN
MORANBAH AND DISTRICT COMMUNITY**

Interviews completed in 2015
Statistical data updated in April 2016

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The Moranbah Story

CSG development has come to Moranbah on the back of a significant coal boom. Recent development has been characterised here with the help of expert knowledge from members* of the Moranbah and district community, e.g., 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 changes, which form the 'Moranbah Story'.

- | | |
|--------------------|---|
| 1. Population | 5. Housing |
| 2. Unemployment | 6. Selected offences recorded by police |
| 3. Income & Wages | 7. Rainfall |
| 4. Business income | 8. Petrol prices |

Moranbah is viewed as a tightly-knit town by those interviewed. However, during the peak-of the 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 (NRW) (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.

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. Local petrol prices were higher than elsewhere due to distance from urban centres and a lack of local competition among petrol stations. When additional petrol stations opened, competition increased, and petrol prices declined.

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 and services in recruiting and retaining staff. Skilled workers left jobs with local businesses to work for the mines, due to the high wages on offer. Nonetheless, new small businesses opened during the 'boom', (ATO data shows 250 more businesses from 2010 to 2013) though many have since closed (total business income for the postcode halved from 2013 to 2014). There are now fewer local job opportunities for young people as the mines reduced their hiring of school-leavers.

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, (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 and overall crime did not increase with the drug use. A spike in thefts was related to a crime racket targeting luxury car accessories purchased by those earning of high wages from the mines.

Now, Moranbah is seeing a baby boom. Since 2014, housing costs have decreased to below the Queensland median. Low-income people are reported to be moving to town due to increased availability of public housing. At the same time, there are conscious efforts to rebuild the town's social fabric as those interviewed state that the community is seeking stability following the peak-boom.

*Indicator trend data from public sources and interviews with 10 key stakeholders in each community identified as having specific knowledge - mayors, school principals, real estate agents, police, community group leaders, hotel owners, chamber of commerce leaders and others in prominent roles. Charts of historical trends in indicators were used to prompt an explanation of what they perceived happened - cause and effect - plus concerns, expectations and recommendations.

This booklet provides detail on the 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 cooperation and the gift of their time. We hope that we have done justice to their contributions to this study.

INTRODUCTION

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. In this document, we present findings on the town of Moranbah.

Research project aims

- **Find key indicators** – we want to identify ways to calculate and report the impact of multiple CSG projects in terms of a few numbers that are important and credible, e.g., weekly rents.
- **Involve people from the community, government, and industry** – we are asking stakeholders to decide which ‘indicators’ are the most important to monitor. In working with stakeholders, we aim to help develop a shared understanding of social and economic development in the community and create a frame of reference for ongoing, collaborative decision-making in the region.
- **Lessons to help other regions** – we want to develop models and approaches that can be used to measure, track and analyse cumulative impacts in other regions.

The research team

- Assoc. Prof. Will Rifkin, Chair in Social Performance, Centre for Coal Seam Gas (CCSG) and Centre for Social Responsibility in Mining (CSRMI).
- Dr Jo-Anne Everingham, Senior Research Scientist, CSRMI.
- Dr Katherine Witt, Postdoctoral Research Fellow, CCSG.
- Ms Sherylee Johnson, Research Technician, CCSG
- Ms Rebecca Colvin, Research Assistant, CSRMI
- Professor David Brereton, Associate Director, Sustainable Minerals Institute.

Funding: The project receives industry funding through the Centre for Coal Seam Gas (CCSG), which is within the University of Queensland’s Sustainable Minerals Institute. CCSG’s industry partners include QGC, Arrow Energy, Santos, and Australia-Pacific LNG. These organisations are providing valuable information on their operations. Researchers are employed by the U of Queensland.

Collaborators: We are getting help from - Queensland government agencies and CSIRO researchers funded by the Gas Industry Social and Environmental Research Alliance (GISERA).

Timeframe: The data collection for the project has been occurring in 2013, 2014, and 2015, with updates planned for 2016 and 2017.

Community participation: In March 2014, a small research team from UQ started to visit communities to introduce the project. We gathered information, mostly from government sources, on impacts that key stakeholders in these communities perceived to be important. We visit each community to discuss that data, to get their insights on what has been occurring.

Reports: Project outcomes, recommendations, and reports have been released periodically 2013-2015, and they will continue to be released in 2016-2018 (i.e., the duration of the project).

Each report contains an updated version of data presented previously. We hope that each page can be read and understood without us being present.

Ethics guidelines we follow: 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, Associate Professor Will Rifkin, Centre for Social Responsibility in Mining, SMI, The University Of Queensland, Brisbane, QLD 4072 , Ph: 0401 701 217, Email: w.rifkin@uq.edu.au, www.csrsm.uq.edu.au. 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.

PRIORITY INDICATORS FOR MORANBAH AND DISTRICT

DEMOGRAPHICS

1. Population

EMPLOYMENT, BUSINESS & INCOME

2. Unemployment
3. Income

HOUSING

4. House prices
5. Weekly rents

WELLBEING

6. Traffic offences
7. Other offences
8. Total offences

EXOGENOUS FACTORS

9. Rainfall
10. Petrol prices

CSG ACTIVITY

Graph/map of CSG development

IMPACTS ON INDIGENOUS MEMBERS OF THE COMMUNITY

Efforts are ongoing to develop key indicators that are agreed as appropriate for measuring impacts on Indigenous residents and businesses. A case study of the Aboriginal employment program of one proponent has been completed by UQ researchers. A UQ specialist has evaluated the Reconciliation Action Plan of a proponent. A UQ team has identified challenges in making and implementing agreements between Aboriginal groups and proponents in the coal seam gas arena (addressing issues like group politics and Native Title claims).

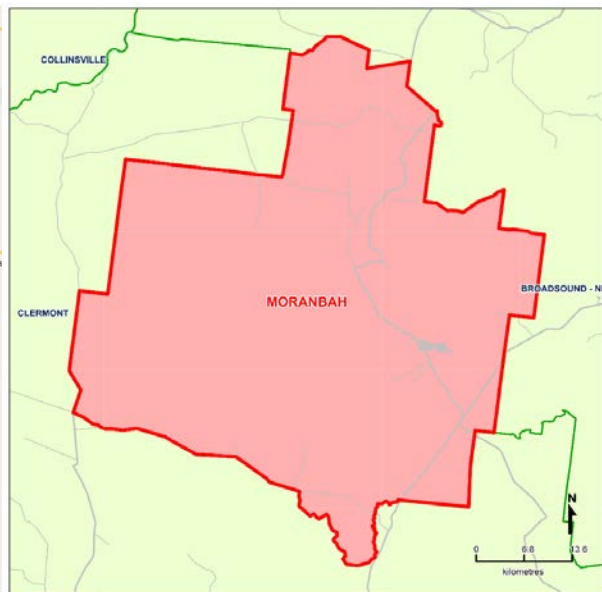
Other Indicators Examined	Indicator-related research being conducted
	<ul style="list-style-type: none"> • Resilience; Community aspirations (CSIRO)
	<ul style="list-style-type: none"> • Public health – PhD study (UQ)
	<ul style="list-style-type: none"> • Demographic & economic trends (CSIRO & UQ)
	<ul style="list-style-type: none"> • Business (women in business) – PhD study (UQ)
	<ul style="list-style-type: none"> • Water Chemistry Atlas (UQ)
	<ul style="list-style-type: none"> • Agriculture & co-existence (UQ & CSIRO)
	<ul style="list-style-type: none"> • Environmental impacts – biodiversity (CSIRO)

The areas for which data in this booklet has been gathered

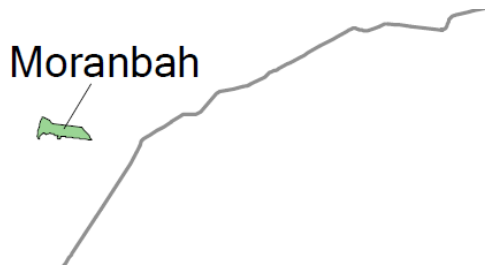
Moranbah 4744 postcode



Moranbah SA2



Moranbah urban centre and locality (UCL)

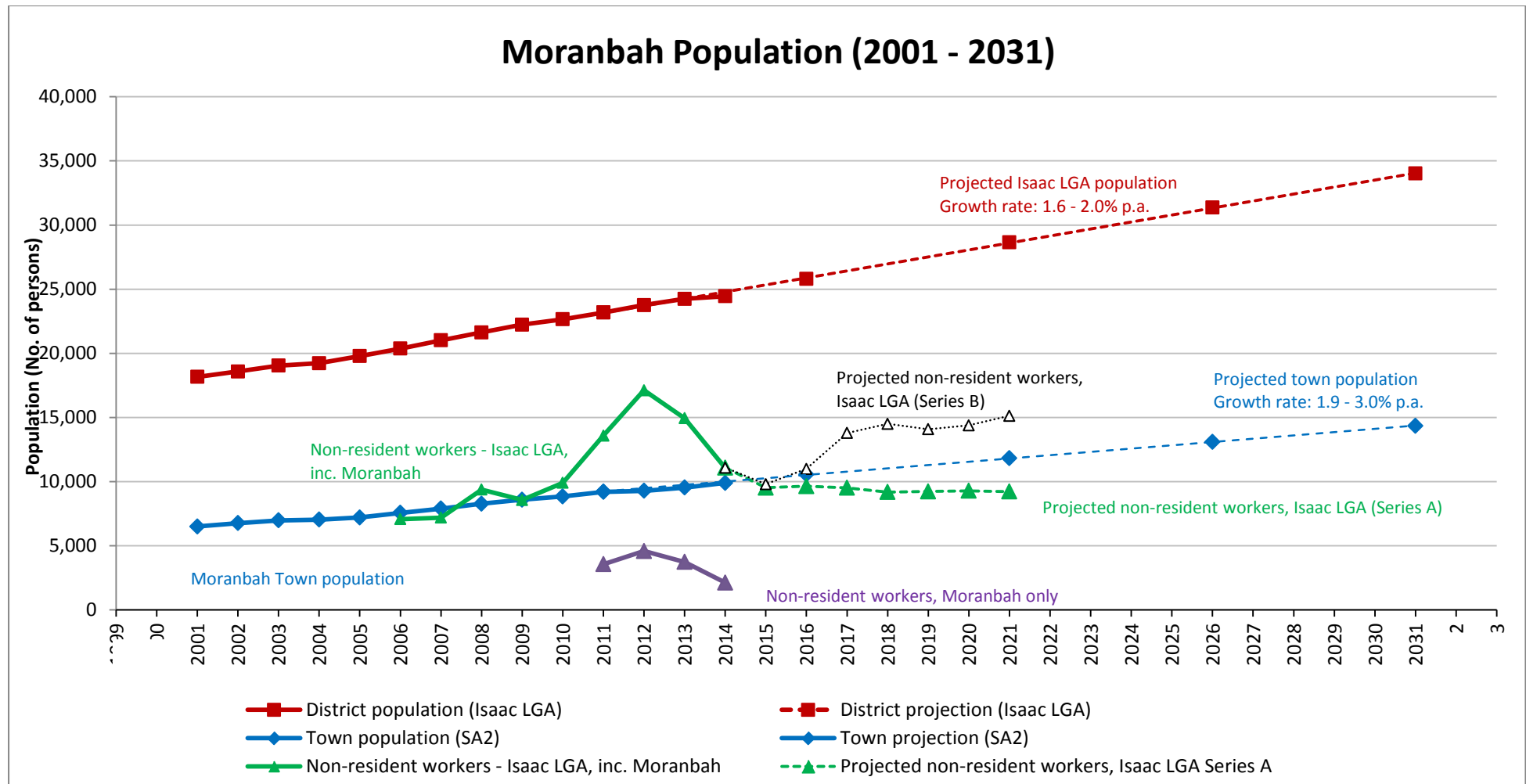


Sources: QGSO (<http://www.qgso.qld.gov.au/products/maps/qld-sa2-asgs-2011/qld-sa2-asgs-2011-moranbah.pdf>)
Google maps- Moranbah 4744

This booklet aims to present town-level data for Moranbah as a relevant and identifiable unit. However, the many sources of information record data according to different, administrative and geographic regions, which cannot always be accurately connected to each other.

A key standard in Australia is the ABS. They employ a hierarchy of statistical areas at various levels. **Statistical Areas Level 2 (SA2s)** are a general-purpose medium sized area. They represent a community that interacts together socially and economically. SA2s generally have a population range of 3,000 to 25,000 persons, and they have an average population of about 10,000 persons. The SA2 is the lowest level of the ASGS structure for which Estimated Resident Population (ERP), Health and Vitals and other non-Census ABS data are generally available. There are 2,196 SA2s covering the whole of Australia. Moranbah is one of these.

We have also based some data on reports for **Moranbah postcode**, on records for **Moranbah urban centre and locality**, or on the administrative **boundaries for a particular government department**, such as Queensland Health, Education Queensland or the Queensland Police Service.

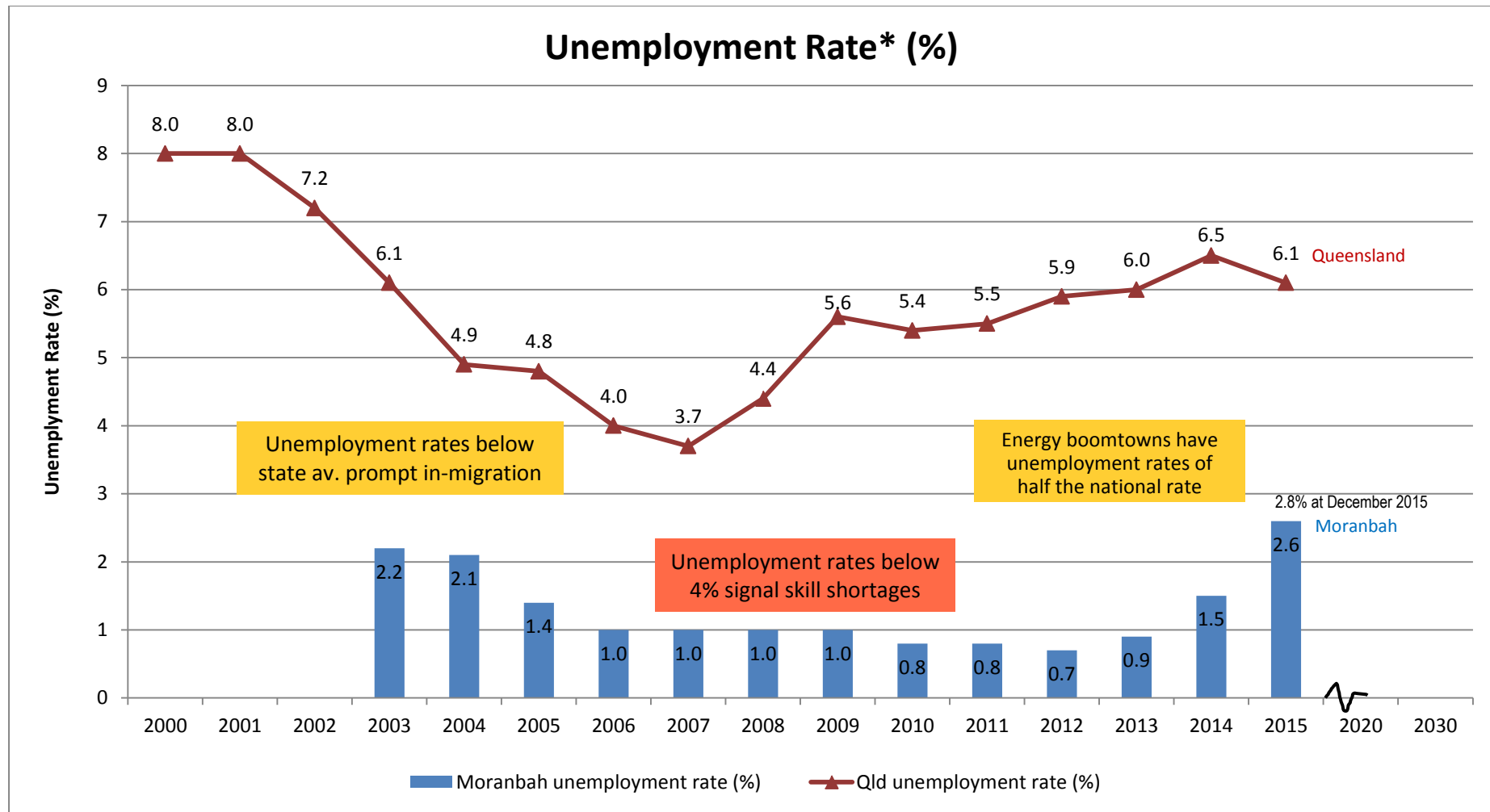


Data sources

- **Historic resident population data:** Queensland Government Statistician's Office (QGSO), www.qgso.qld.gov.au, QRSIS database (based on ABS 3218.0, Regional Population Growth, Australia, 2013-2014)
- **LGA resident population projection:** Queensland Government Population Projections by LGA, 2013 Edition, <https://data.qld.gov.au/dataset/projected-population-for-queensland>
- **Town resident projection:** Projected population (medium series) by SA2, <http://www.qgso.qld.gov.au/subjects/demography/population-projections/tables/proj-pop-medium-series-sa2-sa3-sa4-qld/index.php>
- **Non-resident workers:** QGSO Bowen Basin Population Reports (2011-2014), <http://www.qgso.qld.gov.au/products/reports/surat-basin-pop-report/index.php>
- **Non-resident worker projections:** QGSO Bowen and Galilee Basin non-resident population projections, 2015 to 2021, <http://www.qgso.qld.gov.au/products/reports/bowen-galilee-basins-non-resident-pop-proj/bowen-galilee-basins-non-resident-pop-proj-2015-2021.pdf> Series A: projections based on current projects, Series B: based on current projects and future EIS approved projects

Data & Perceptions about population

- **Indicator:** The number of residents in a town indicates many things, including the levels of certain services and facilities that are needed. A rapid change in a town's population is an indicator of cumulative impacts that can strain local infrastructure, resources and capacities.
- **History:** At the turn of the century (in the year 2000), Moranbah was a small regional town housing mainly mine workers and their families. It had experienced a number of mining booms in its 30 year history.
- **Change:** Continued steady growth in the resident population. The whole LGA has significant numbers of non-resident workers (NRWs). In 2012, NRWs in Moranbah equalled half of the number of residents. Numbers of NRWs have reduced (in 2015) to 50% of their 2012 peak of 4,585.
- **Perceived change:** Moranbah gained new residents and NRWs due to the mining boom, but residents employed outside mining left town due to high costs. Population change led to people no longer knowing their neighbours. Now, the presence of NRWs has visibly decreased. Changes in the town's population mix have resulted in a baby boom and lower-income families moving to town.
- **Expectations:** Support will be needed for low-income residents and young people seeking work. Town population is steady, but there is uncertainty about future growth scenarios. Those interviewed used to expect a population of 10-12,000, which would make a second supermarket viable; they now expect population to stabilise at 8-10,000.
- **Conclusion:** Major change and disruption is in the past; now is the time to regain stability and undergo considerable 're-calibration' of services and facilities to suit the town's new mix of residents.
- **Implications for next project/stage:** Targeting population growth at around 1.5%-2% is ideal, but the town needs to attract families and proactively manage NRW impacts to mitigate local disruptions (e.g., work-camp planning).
- **Community recommendations:** Revise the basis for calculating levels of services and funding to take into account NRW numbers and not just the residential population.



*The unemployment rate represents the number of persons unemployed as a percentage of the labour force, which includes all those persons over the age of 15 years who are employed plus all those who are unemployed but actively looking for work.

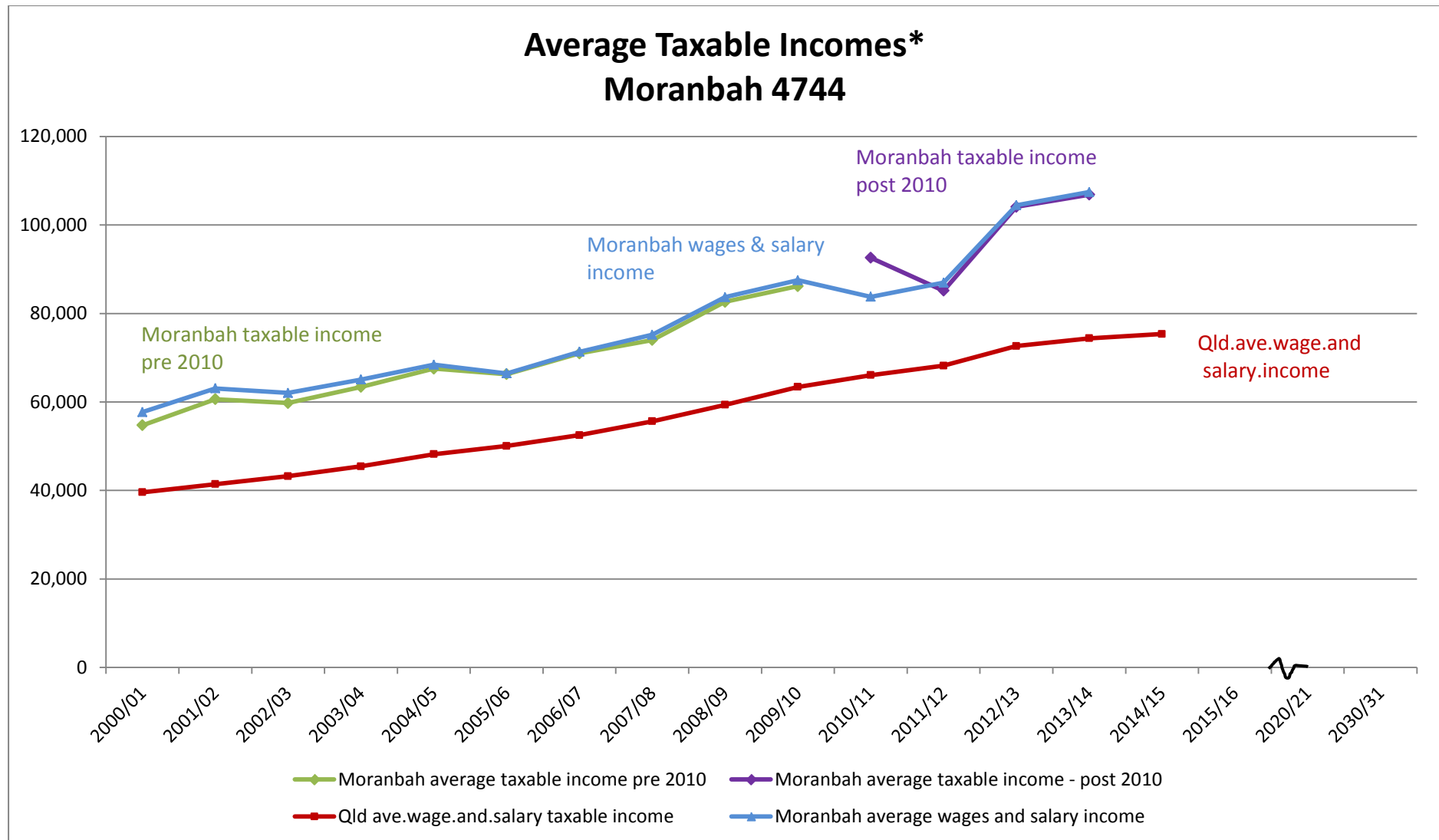
Sources: Queensland Government Statisticians Office, Source: ABS 6202.0 Labour Force, Australia, Jun 2015

DEEWR, Australian Government Department of Education, Employment and Workplace Relations, *Small Area Labour Markets Australia*.

Department of Employment <http://docs.employment.gov.au/node/34691>

Data & Perceptions about unemployment

- **Indicator:** Low levels of unemployment indicate a vibrant economy and good local opportunities. If the rate is very low, many local employers are likely to face skill shortages and difficulties in recruiting. Alternative indicators are job vacancy rates, % of the population that is welfare dependent; % or number of jobs in various sectors; youth unemployment; participation rate (i.e., % working age population in the labour force); participation rate of women in the labour force.
- **History:** Moranbah's unemployment rate has been consistently well under half of the Queensland average. Historically recruited from out-of-town.
- **Change:** Town unemployment, from a low starting point, decreases from 2005 until it increases in 2014. Queensland unemployment started rising from 2008 (following the GFC). Most recent measure of 2.6% unemployment in 2015 is an historical high.
- **Perceived change:** During lowest unemployment, local businesses were experiencing severe labour shortages. The mining industry was seen to be 'poaching' skilled workers. Though overall unemployment is low, women and youth are disproportionately represented among the growing number of unemployed. Some unemployment is 'exported' or not captured in the figures since many who lose jobs relocate (move to another town or city) to seek employment. As well, a proportion of those losing jobs were NRWs. There has also been some 'imported unemployment' with recent inward-movement of supported housing tenants, who are jobless. Perception among those interviewed that local jobs are being replaced by FIFO/DIDO.
- **Expectations:** Many remaining workers are those less skilled who did not leave for better opportunities. Highly qualified people are applying for low-skill jobs. Widespread concern that school leavers have fewer local options for employment and training (fewer apprenticeships and traineeships); they will need to be managed. Public housing will continue to bring unemployed people to town. Women will leave the workforce with the baby boom.
- **Conclusion:** Job seekers leave Moranbah when work is not available; so unemployment is low compared to the Queensland average.
- **Implications for next project/stage:** Considerable flux in resources sector employment lies ahead for Moranbah with signalled changes in the coal businesses, including 'efficiencies' and divestments. The CSG industry could temper the volatility rather than add to it.
- **Community recommendations:** Resource companies should maximise employment of local, family people and support options for school leavers. Track job opportunities and prospects as well as types of jobs.



*Original data - No discounting applied

*Average taxable incomes reported by ATO until 2009 excluded losses. Averages from 2010 include all taxable incomes including incomes of 0 and losses.

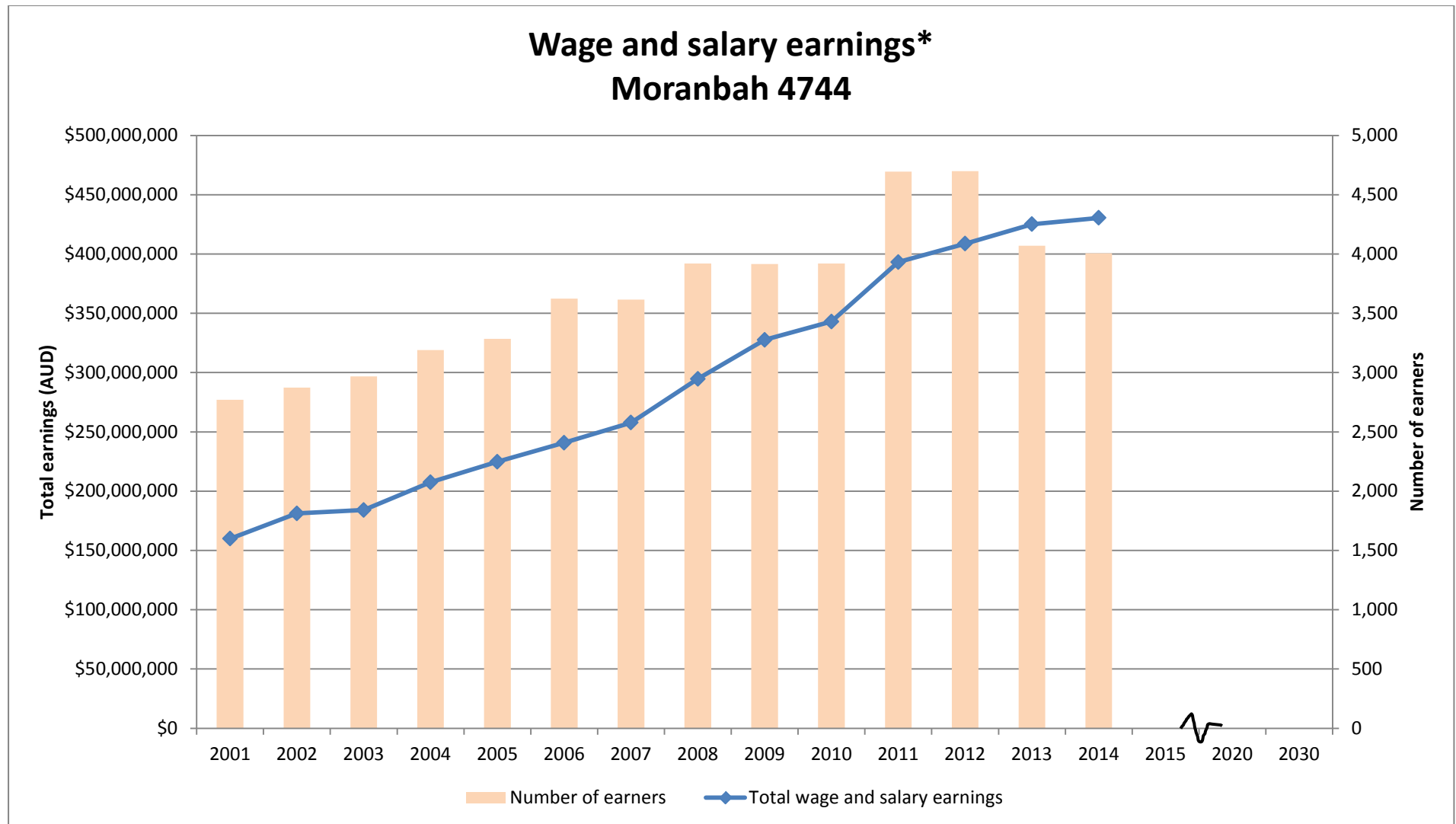
Sources: Australian Taxation Office, Research and Statistics (<https://www.ato.gov.au/>)

**Natural gas extraction has been in the area for decades - 'peak' conditions noticed from 2012.

This information has been compiled for use in consultation with the Roma community

Data & Perceptions about average personal incomes

- **Indicator:** Measures of income are an indicator of the economic well-being and assets of the residents. Using average personal income gives a sense of the overall level, but it masks extremes and inequities. One alternative measure is household income. Another, wage and salary earnings, is examined in aggregate.
- **History:** A high income town, consistently higher than the Queensland average.
- **Change:** Average incomes have grown, with fluctuations. A noticeable dip is evident around 2011/2012 (depending on the measure used).
- **Perceived change:** High wages during the mining boom, but wages were tempered by the high cost of living. Disposable income – a more meaningful indicator – might not be greater than the Queensland average. Non-mining businesses cannot pay the same wages as the mines. Recent changes mean that some people are suffering from a sudden change in lifestyle and financial stress; indebtedness is becoming evident.
- **Expectations:** Average income will plateau or decrease, plus, there will be a loss of benefits such as accommodation and vehicle; so, the decline in material wellbeing (houses, cars, etc.) is greater than the actual decline in income. There is still a way to go down from the peak of the boom. The expanding population of low and fixed income residents will affect the average.
- **Conclusion:** Benefits of high average income are limited by the high cost of living in Moranbah; high averages mean that disparities in personal incomes (difference between highest and lowest) are not visible in these statistics.
- **Implications for next project/stage:** Wage disparities between those in the resources sector and those in non-resources employment are likely to continue.
- **Community recommendations:** Not provided by those interviewed.



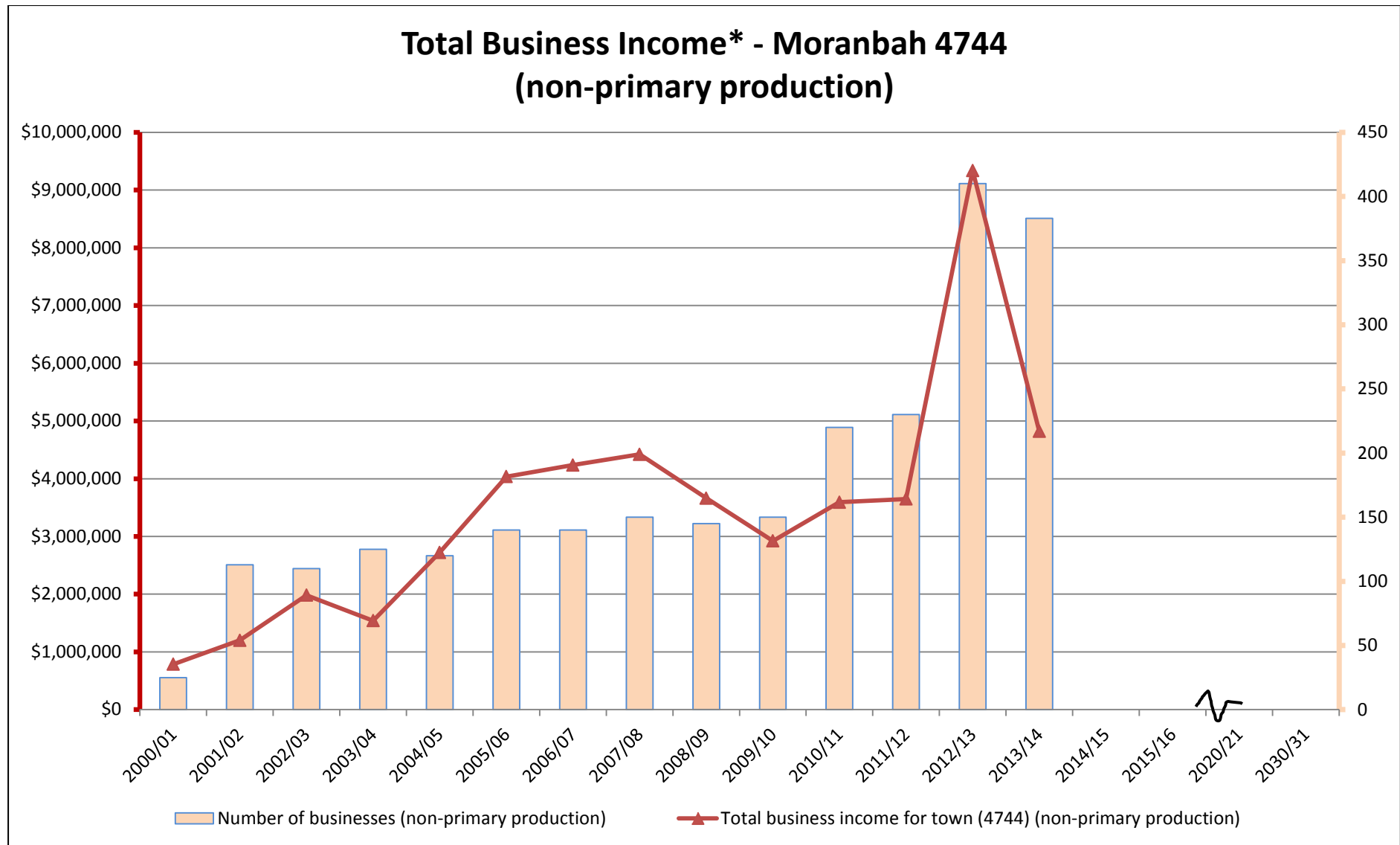
*Original data - No discounting applied

Sources: Australian Taxation Office, Research and Statistics (<https://www.ato.gov.au/>)

This information has been compiled for use in consultation with the Moranbah community

Data & Perceptions about wage & salary incomes

- **Indicator:** Measures of the total number of wage and salary earners and their combined income (for the whole town) are indicators of the potential for economic assets and also the 'human capital' (valued skill sets) of the town. With increases in the number of wage and salary earners, it is expected the total earnings will increase, too. The earnings of FIFO/DIDO workers are not included in these figures.
- **History:** In 2001, the total earnings of Moranbah postcode residents were around \$155,000,000, and the number of earners was around 2,750.
- **Change:** From 2001 to 2013, total wage and salary earnings have increased by a factor of about 2.8. The number of earners has increased by a factor of around 1.7. So, the average wage or salary per worker increased. Since 2011, there have been all-time highs in the number of wage and salary earners.
- **Perceived change:** Despite the overall increase, wages per worker in resources jobs are in decline due to renegotiated enterprise bargaining agreements (EBAs), heavier use of contractors, and reduced hours worked. Many have shifted from highly paid, permanent jobs to lower paid, casual contracts rather than losing their jobs altogether. Valuable workers leave for other opportunities, and those remaining are not the most experienced. Replacement of local jobs by FIFO/DIDO, removes those earnings from the figures (as they are based on income tax returns filed from an address in the town).
- **Expectations:** Wages will decline post-boom with renegotiation of EBAs still to hit, and workers made redundant will be offered contract jobs at lower rates. The industry will become more automated; so it will employ fewer to do the same work. The coal industry is expected by those interviewed to be a less dominant employer in future.
- **Conclusion:** Overall increase in wages and number of earners, while at the same time, there is a perceived loss of wages per worker due to changes in employment conditions.
- **Implications for next project/stage:** High wages at the peak of the boom mean that financial stress is possible when wages decline post-boom. High wages during a boom also mean that it may be necessary to subsidise salaries for some essential service positions (though it can be hard to remove subsidies post-boom).
- **Community recommendations:** No recommendations on this topic were made by those interviewed.



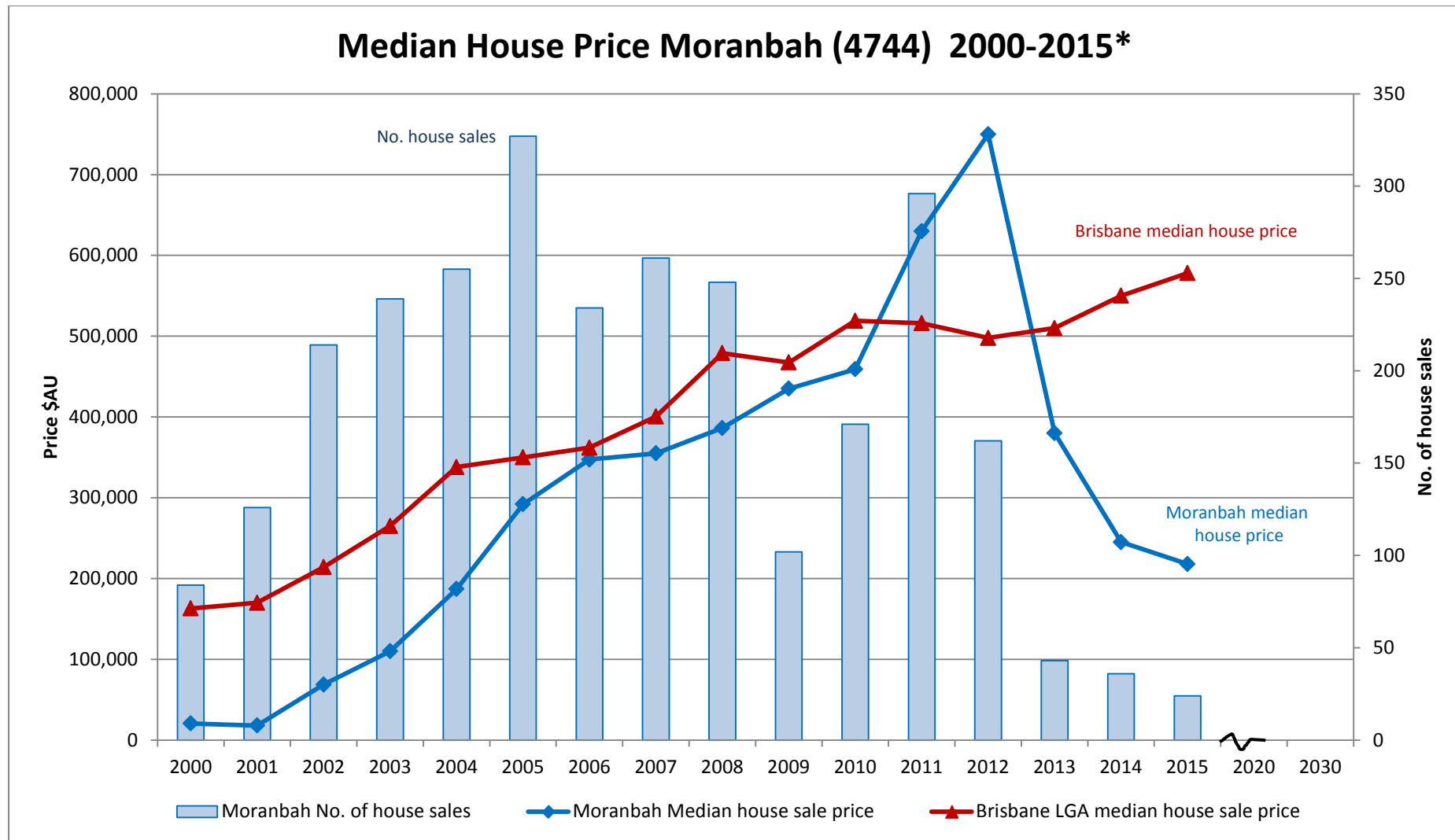
*Original data - No discounting applied

Sources: Australian Taxation Office, Research and Statistics (<https://www.ato.gov.au/>)

This information has been compiled for use in consultation with the Moranbah community

Data & Perceptions about business incomes

- **Indicator:** Businesses report their income to the ATO. Total figures on the numbers of businesses and their income indicate the health of the local economy, the extent of local procurement from major industries, and the amount of local purchasing given the size of the population.
- **History:** At the turn of the century (in the year 2000), Moranbah had fewer than 50 businesses and a relatively low income, compared to later growth.
- **Change:** A steep increase in the number of businesses occurred in 2001/02, and again in 2010/11, then almost doubled in 2012/13 to a total number of 400 businesses. Business income slumped in 2008-2010 (following the GFC), but it spiked in 2012/13 at \$9million – three times the 2009/10 levels. In 2013/14 business income halved.
- **Perceived change:** Businesses struggled at peak-boom to get staff. They have struggled post-boom to retain them for reduced activity. Small businesses opened during boom, but now businesses are closing, and NRW custom is wanted in town.
- **Expectations:** Future benefits will follow diversification and more resources investment. Businesses need to be flexible and strategic about capitalising on future booms or peak growth periods. Uncertainty about the future means that businesses are trying to diversify services or undertake work out of town.
- **Conclusion:** Significant growth in local small businesses during the construction phase of the mines, though a slow-down has been reported since the last figures indicated on these graphs, as the ATO has a several-year delay in reporting summarised income data.
- **Implications for next project/stage:** Moranbah would welcome future resource development (e.g., CSG); Council is planning for growth.
- **Community recommendations:** CSG companies should aim to maximise local supply chain opportunities and keep local businesses well informed of projected needs and opportunities.



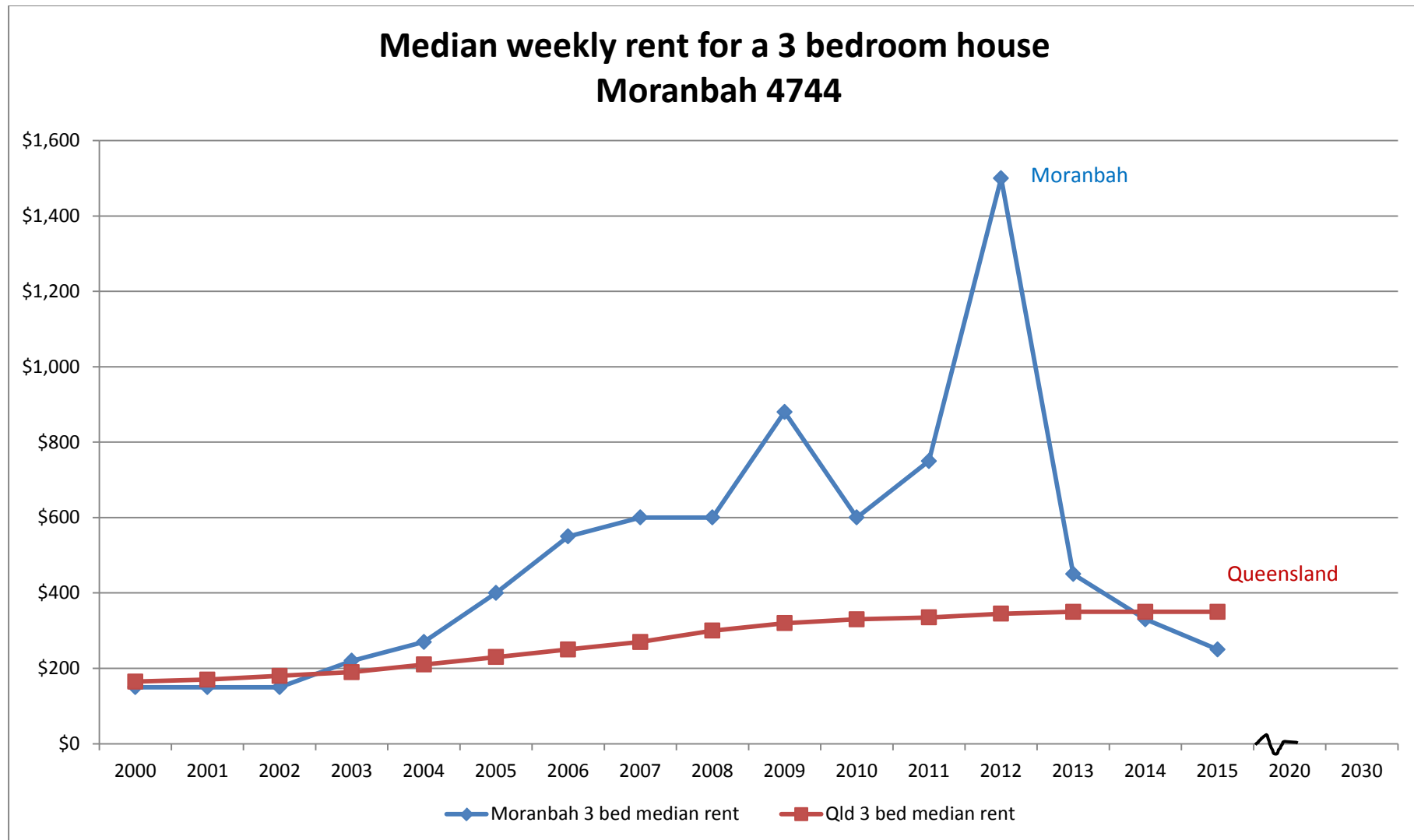
*Measured annually except for 2015, which was measure up to September 2015

Sources: Price Finder (<http://www.pricefinder.com.au/flyover/?locality=4421&propertyType=House>)

This information has been compiled for use in consultation with the Moranbah community

Data & Perceptions about housing: sale prices

- **Indicator:** The number of houses sold and the median price of houses are lagging indicators of the housing market, housing affordability, and accommodation shortages or oversupply. That is, the statistics change after drivers cause the change.
- **History:** Historically, there were low levels of home ownership with high levels of company housing; so a weak housing market existed, with home prices considerably lower than the Brisbane average
- **Change:** As moderately priced company houses came on the market, the number of house sales increased significantly. They peaked in 2005, declined, then reached a lesser peak in 2011, followed by more decline. From 2001, price increased steeply until 2006; they then moved up more steadily until a leap to higher prices than in Brisbane in 2011, peaking in 2012. They have sharply declined since then.
- **Perceived change:** Major peaks in the number of sales are likely due to company housing changing hands and new releases of housing and land for sale. Many local residents chose to sell (and leave town) when the prices were high, due to an economic opportunity and a dislike of changes occurring in the community. Some prices reduced as NRW camps and more housing stock were built. Housing affordability – especially for low-paid and essential workers - was a major concern during the boom. It is no longer an issue.
- **Expectations:** Prices will stay lower than at peak-boom times and lower than the Brisbane average, suggest those interviewed. Some properties are being repossessed as those who bought during the boom have become unable to maintain their mortgage payments.
- **Conclusion:** Influx of NRWs and investor purchasing of properties were major influences, leading to recent price volatility.
- **Implications for next project/stage:** NRW capacity has been much expanded; a future NRW influx is unlikely to have the same impact. There are a lot of empty houses and reserves of land released, zoned, etc. They are 'ready to go' when the next boom comes.
- **Community recommendations:** Avoid having multiple, unrelated NRWs in family homes in town, if possible.



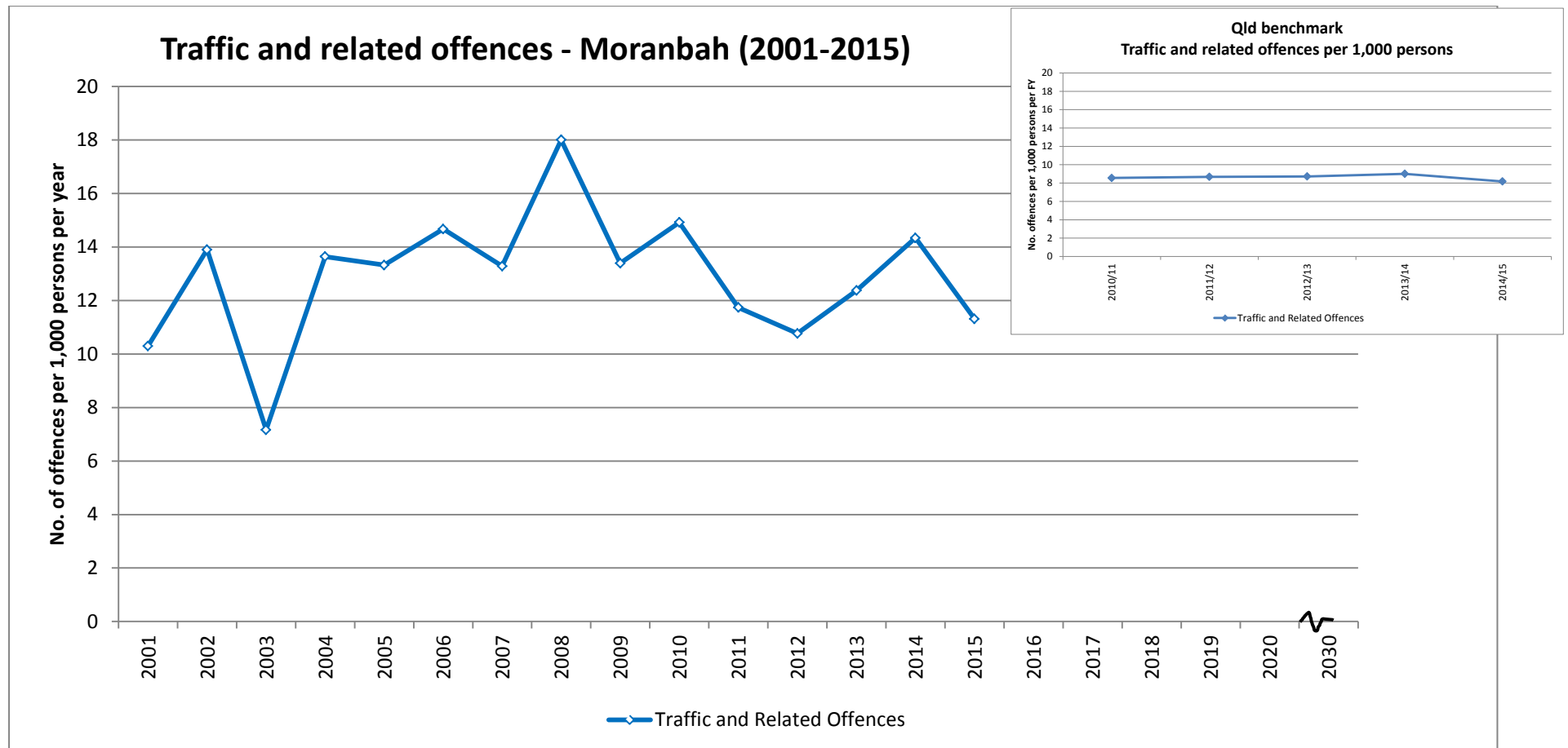
*Measured in the month of June for each year

Source: Queensland Government Statistician's Office 2015

This information has been compiled for use in consultation with the Moranbah community

Data & Perceptions about housing: rents

- **Indicator:** Resource booms bring new residents and temporary residents to a town, thus causing changes in demand for housing and impact on housing markets. There are many indicators of housing costs and of housing stress or diminished affordability. Rents help to gauge the cumulative impact of the changes on residents, and they show the impact relatively quickly as rents can be raised every three months.
- **History:** Moranbah rent was close to the level of Brisbane rent in 2000.
- **Change:** Increases in rent began in 2002; rent rose faster in 2004/05 to double the level in Brisbane, with a dramatic 50% increase to a peak in 2009. They declined (following the GFC), before having a spike in 2012 to 4 times the Brisbane level. A sharp decline followed - to below the Brisbane level by 2015.
- **Perceived change:** As rent increased, local renters left town due to unaffordability. Dips in rent were attributed to the opening of camps for NRWs. There were many NRWs in multi-bedroom dwellings at the time of peak rent. Decrease in rents since 2012 has seen more young families move to town. School enrolments are up as a result.
- **Expectations:** Families will continue to move to Moranbah due to lower rent.
- **Conclusion:** Rent increased due to a high demand from NRWs during the mine's phase of peak activity.
- **Implications for next project/stage:** Rent is unlikely to peak to the same extent due to establishment of NRW camps and housing construction (some from conditions imposed by Coordinator-General's office).
- **Community recommendations:** Affordable housing benefits from joint monitoring and management by local council, resource companies, service-providers, etc., especially at times of transition.



Data source:

Queensland Police Online Crime Statistics: <https://www.police.qld.gov.au/forms/crimestatsdesktop.asp>

Data retrieved for Moranbah Queensland Police Service Area, and then filtered to report Moranbah Suburb only

Crime rates per 1,000 persons calculated using ABS population estimates for Moranbah SA2 (as reported by the Queensland Government Statistician's Office: www.qgso.qld.gov.au)

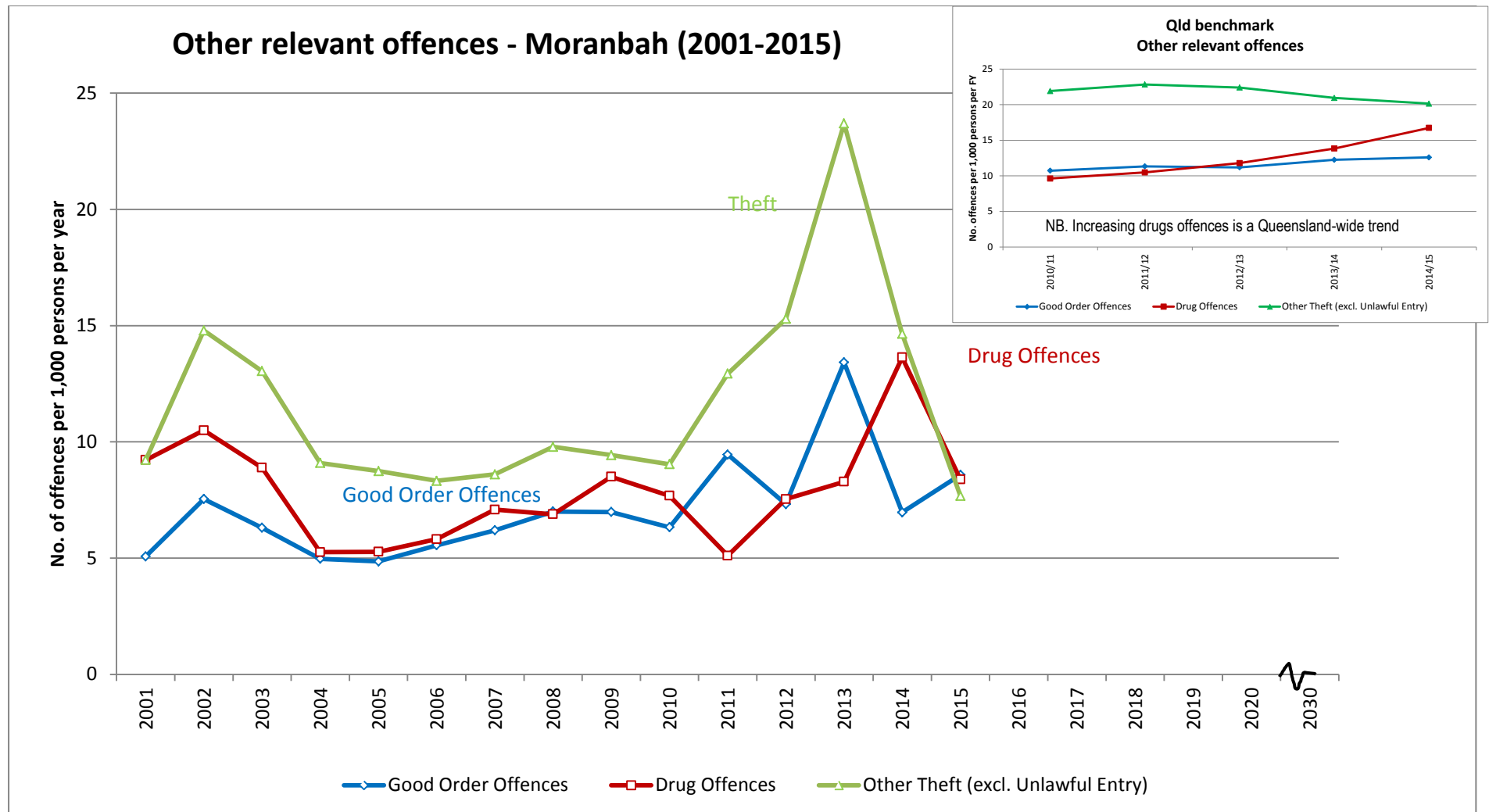
Qld Benchmark statistics sourced from <https://www.police.qld.gov.au/rti/published/about/Crime+Statistics.htm>

*2014 population data was used for 2015 figure as current data not available at time of printing.

This information has been compiled for use in consultation with the Moranbah community

Data & Perceptions about safety & wellbeing: traffic

- **Indicator:** Volumes of traffic (and the number of trucks, for example) can have various effects in a community, including on safety and perceptions of safety. Changes in the number of traffic offences per year can indicate correspondingly increased or reduced levels of risk or greater or less attention by police to traffic infringements.
- **History:** Rates of traffic offences in Moranbah were historically higher than recent Queensland averages.
- **Change:** Traffic offences fluctuate around the level of 12-14 per thousand of population. There was a trough in 2003 and a peak in 2008. All years other than 2003 are higher than Queensland's fairly stable average of 8-9 offences per 1000 population.
- **Perceived change:** The arrival of more people in town were seen, by those interviewed, to cause an increase in traffic offences. However, it took time for the under-resourced local police to be able to enforce traffic laws. Low rates of offences may be due to low detection, and vice versa. Decreases in offences were attributed to use of buses for transporting NRWs, community campaigns, and increased resources for local police.
- **Expectations:** As road use decreases, traffic offences should decrease, but the level of local police resourcing will affect detection and recording of offences.
- **Conclusion:** Fluctuation in offences may be due to a the change in capacity of local police to record them. However, an increase in NRWs is seen to cause traffic problems, with many DIDO workers on the highways, where the majority of offences are recorded.
- **Implications for next project/stage:** Pro-active resourcing for police will allow enforcement to match change. Use of buses for NRWs can limit traffic problems, but standardisation of movement times was not welcomed by all.
- **Community recommendations:** The Peak Downs highway to Mackay is a huge safety concern to people, with a Road Accident Action Group (RAAG) formed to try to reduce injury and death on the roads.



Data source:

Queensland Police Online Crime Statistics: <https://www.police.qld.gov.au/forms/crimestatsdesktop.asp>

Data retrieved for Moranbah Queensland Police Service Area, and then filtered to report Moranbah Suburb only

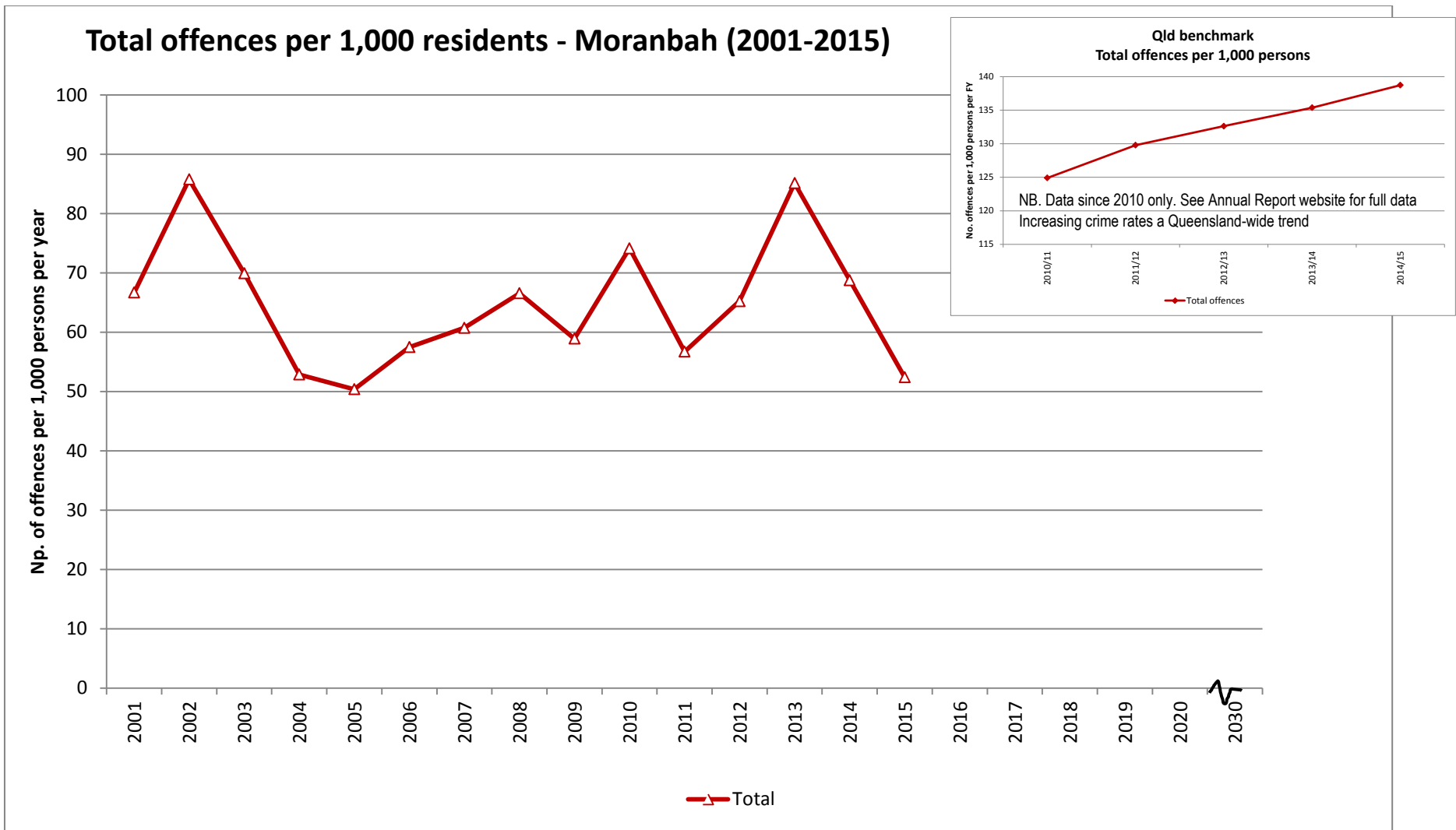
Crime rates per 1,000 persons calculated using ABS population estimates for Moranbah SA2 (as reported by the Queensland Government Statistician's Office: www.qgso.qld.gov.au)

Qld Benchmark statistics sourced from <https://www.police.qld.gov.au/rti/published/about/Crime+Statistics.htm>

*2014 population data was used for 2015 figure as current data not available at time of printing.

Data & Perceptions about safety & wellbeing: other relevant offences

- **History:** There is a lower rate of theft, drug, and good order offences in Moranbah compared to the Queensland average. It is considered a safe town.
- **Change:** There was a small peak in all offences in 2002, a decrease, then a plateau, and an increase begins in 2010, with the highest peak in 2013. Drug offences peak in 2014, whereas theft and good order offences have declined.
- **Perceived change:** A peak in theft in 2013 was due to a vehicle accessories racket, targeting expensive/luxury cars and modifications. High wages have facilitated drug use without attendant crime (that is, people are not stealing to pay for their drugs). More policing has increased crime detection. Domestic violence is a problem. Drug increase in 2014 may correlate with an increase in public housing.
- **Expectations:** As wages decrease, crime rates may change if drugs can no longer be easily afforded. Luxury item theft is less prominent with lower wages.
- **Conclusion:** Drug crimes are seen to be related to high wages. Theft associated with opportunism is related to expensive vehicles and car modifications.
- **Implications for next project/stage:** Understanding spending trends during a peak in resource industry activity, with accompanying high wages, may predict crime (e.g., theft; drug use without associated crime).
- **Community recommendations:** None recommended on this topic by those interviewed.



Data Source:

Queensland Police Online Crime Statistics: <https://www.police.qld.gov.au/forms/crimestatsdesktop.asp>

Data retrieved for Moranbah Queensland Police Service Area, and then filtered to report Moranbah Suburb only

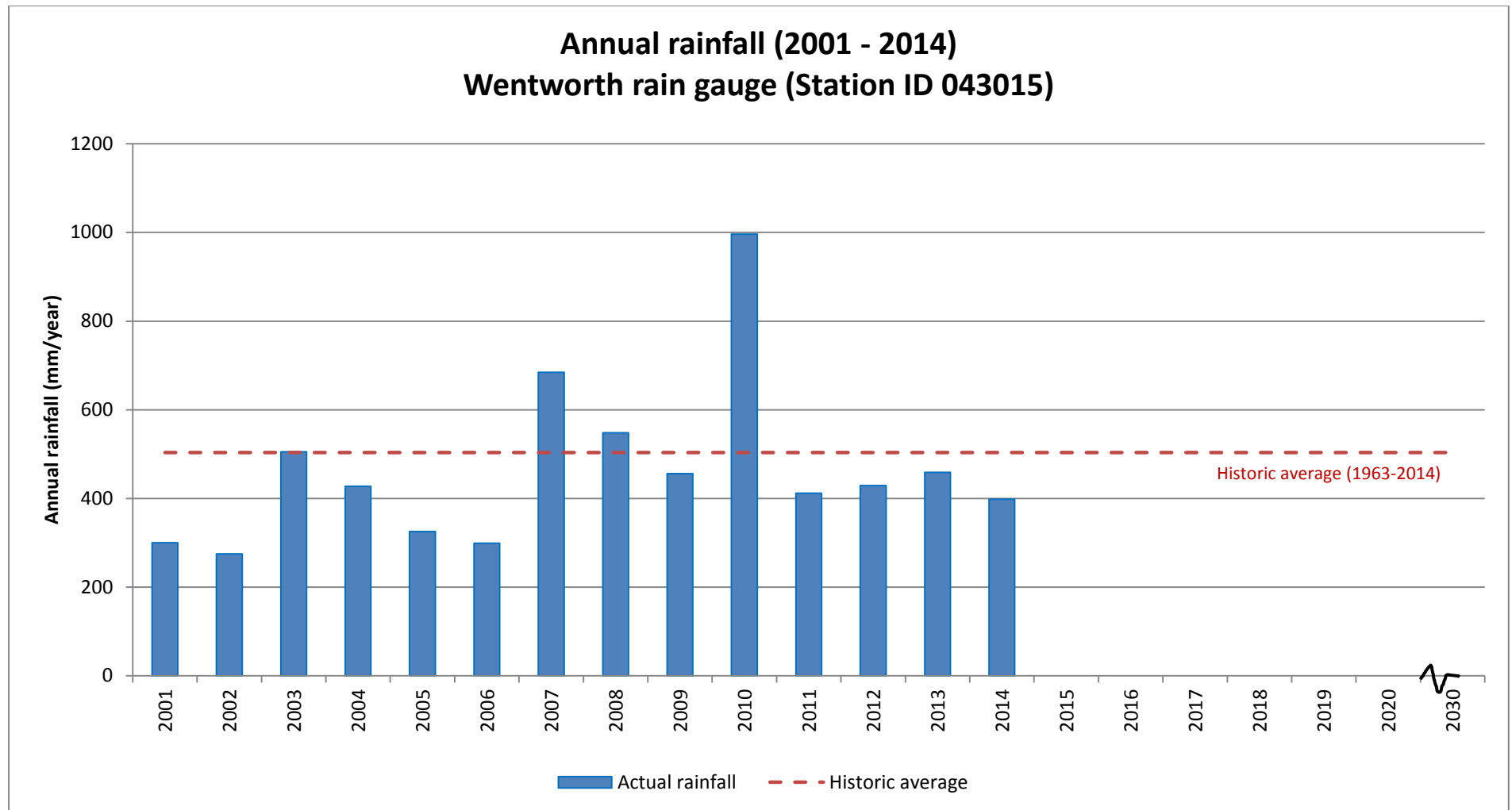
Crime rates per 1,000 persons calculated using ABS population estimates for Moranbah SA2 (as reported by the Queensland Government Statistician's Office: www.qgso.qld.gov.au)

Qld Benchmark statistics sourced from <https://www.police.qld.gov.au/rti/published/about/Crime+Statistics.htm>

*2014 population data was used for 2015 figure as current data not available at time of printing.

Data & Perceptions about safety & wellbeing: total offences

- **History:** Moranbah's crime rate is steady; in recent years, it has ranged from 45% to 65% of the current Queensland rate
- **Change:** The rate fluctuates, with the highest peak in 2002, the lowest trough in 2005, and other peaks in 2010 and 2013.
- **Perceived change:** As the Moranbah population increased, offences increased. There was difficulty in getting adequate police staff during boom. Low rates may be due to low detection, and vice versa. Moranbah is seen to be a safe town, despite a perception of an increase in offences.
- **Expectations:** 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. Offences are trending downward and are expected to continue downward with pro-active policing. Continue to be a safe town.
- **Conclusion:** Overall a safe town (safer than Queensland average). When police are adequately resourced, pro-active policing is effective. Mixed views about future trends, especially related to the impact of low-income residents settling in the town.
- **Implications for next project/stage:** Pro-active resourcing for police will allow enforcement to match change.
- **Community recommendations:** Police partnering with resource companies can reduce crime (one might presume that includes reducing drug use, out of boredom, and opportunities for theft, by equipment left in plain sight).



Data source:

Bureau of Meteorology climate data online service: <http://www.bom.gov.au/climate/data/>

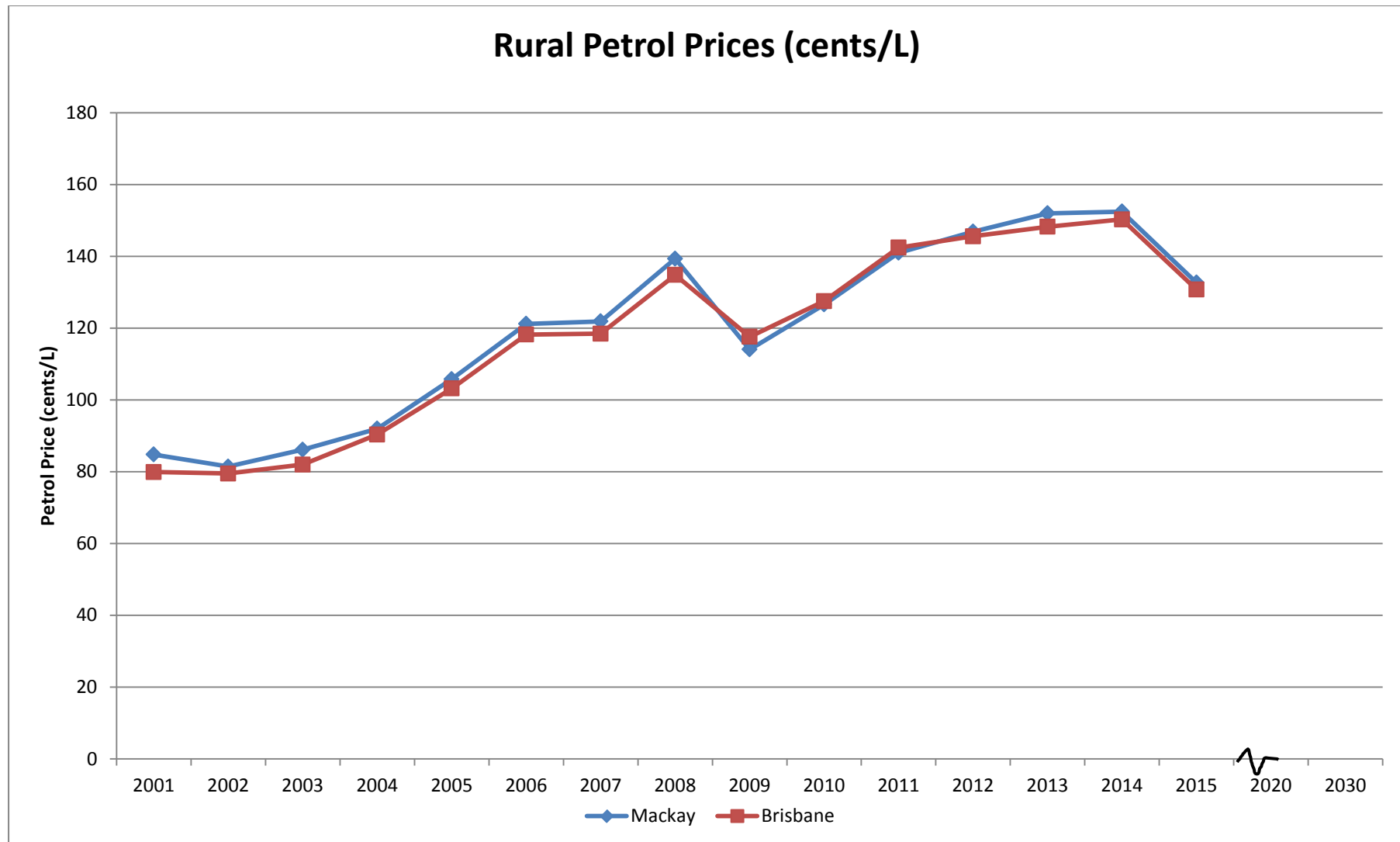
Data retrieved for rainfall station 'Wentworth', Station ID 043015 which is located 21.3 km from Moranbah

Rainfall station was selected based on the closest active rain station with most reliable historic data

This information has been compiled for use in consultation with the Moranbah community

Data & Perceptions about rainfall

- **History:** Low rainfall in 2001 and 2002: lower than historic average and lower than most years following.
- **Change:** Most years below historic average, with lows in 2001/02 and 2005/06, and highs in 2007 and 2008, and peak in 2010.
- **Perceived change:** High rainfall can slow production in mines, leading to more work (e.g., contractors to pump water, fix infrastructure). Floods in 2008 and 2010 slowed production; big rain event in 2010 drove local boom due to extra work required to get coal. No comments garnered on effects on local agriculture.
- **Expectations:** N/A
- **Conclusion:** High rainfall is seen by those interviewed as stimulating the local economy through disruption to mines.
- **Implications for next project/stage:** Major rain events may stimulate local boom in work, with a ripple effect through other factors affected by an upturn in resource industry employment and contracting.
- **Community recommendations:** N/A



Source: Australian Automobile Association (2015) <http://www.aaa.asn.au/aaa-agenda/affordability/latest-fuel-prices/>

This information has been compiled for use in consultation with the Moranbah community

Data and perceptions about petrol prices

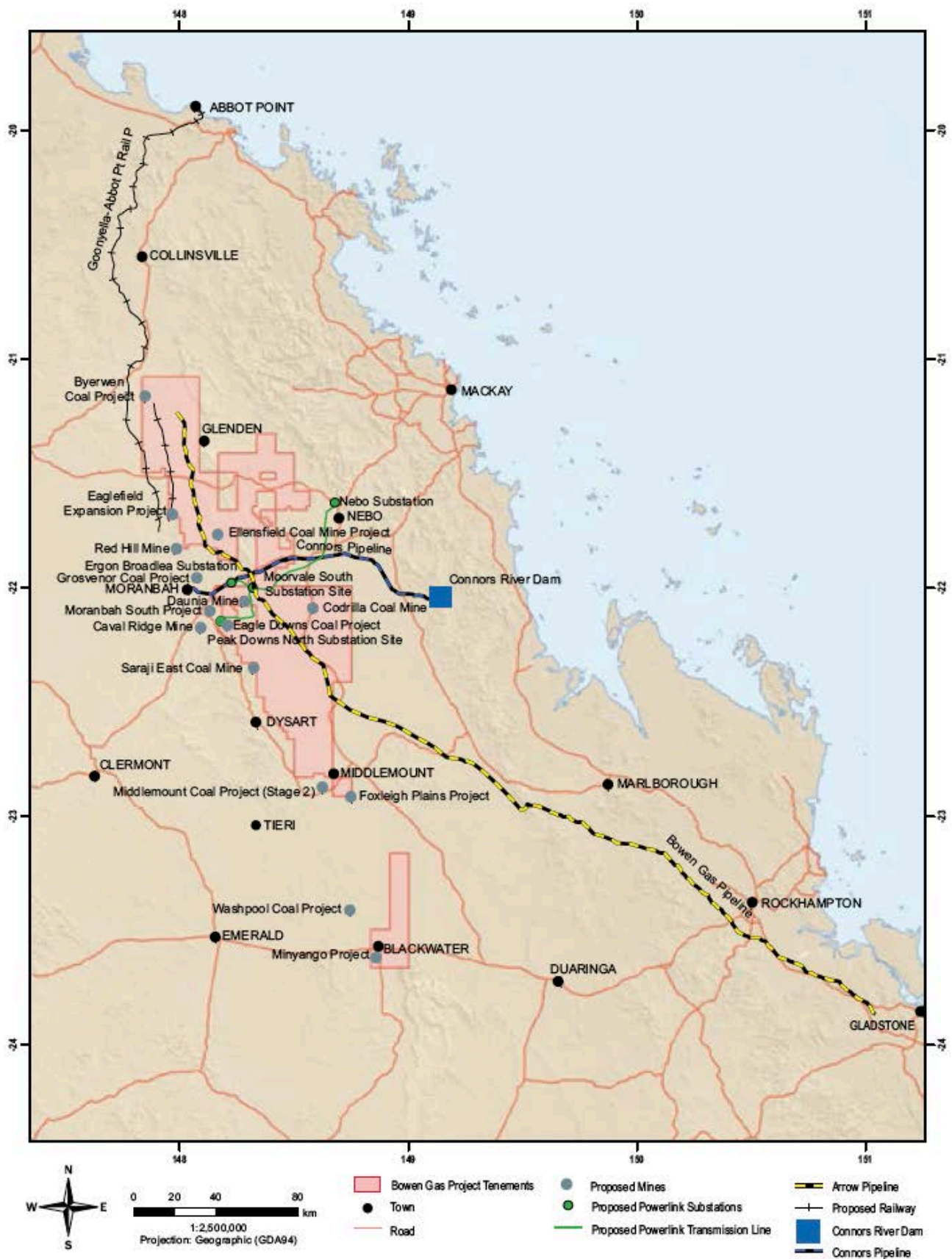
- **Data sources:** Australian Automobile Association
- **History:** Data for Mackay. Prices lowest in 2001, Mackay prices slightly higher than - but close to - Brisbane prices for petrol.
- **Change:** Prices increase to peak in 2008, then trough in 2009, increase again less steeply until highest peak in 2014, then decline in 2015.
- **Perceived change:** Moranbah used to be more expensive than Mackay due to a lack of local competition, said those interviewed; however, they note that recent opening of new petrol stations has increased competition and lowered local prices. Dip in price in 2008 was attributed to GFC.
- **Expectations:** Petrol prices are trending down; more petrol station development will be perceived as good for locals (i.e., continue to decrease prices).
- **Conclusion:** A lack of local competition caused Moranbah to have higher petrol prices than elsewhere, something that was noticed locally.
- **Implications for next project/stage:** Any industry upturns that lead to a significant increase in demand, that is not accompanied by competition in supply, could inflate local prices.
- **Community recommendations:** N/A.

Alignment of Visions - Moranbah

Indicator topic	Community Visions / plans <i>Moranbah Town Centre Revitalisation Plan (2012)</i>	Isaac Regional Council plans <i>2035 Community Strategic Plan; Isaac Region 2020 Vision</i>	State government plans <i>Mackay, Isaac and Whitsunday Regional Plan 2012</i>	Resource company plans <i>Hansen Bailey (2013), GHD & Adani (TBC), Coffey Environments (2012)</i>	Academic studies <i>Ivanova & Rolfe 2011; Rolfe & O'Dea 2007; Rolfe et al. 2007a; Rolfe et al. 2007b</i>	Other sources <i>Moranbah Growth Management Group report</i>
Population	Encourage people to become/remain permanent residents	Population growth, Isaac projected to have 37,000 people by 2035	Population growth, Isaac projected increase of 14,000 by 2031, retain permanent residents	Population growth, encourage young families, permanent residents, limit non-resident workers	Population projected to 11,750 people in town by 2021, encourage permanent residency	Encourage permanent residency
Housing	Increase in diverse, sustainable, affordable housing	Affordable housing and sustainable infrastructure	Affordable, diverse, accessible, & quality housing, high density, projected increase of 5,800 dwellings in Isaac by 2031	Available, affordable & diverse housing for all, impacts of short-term demand minimised	Affordable housing; work-camps for mine workers not encouraged	Urban growth for affordable & diverse housing; maintains town character; not affect future mine prospects
Health and Safety	-	Health, safety, & wellbeing improve, life expectancy increases by 5-10 years; region has adequate health services	Active, healthy, safe lifestyle and transport, access to health facilities and services	Community & industry engaged for safe town: crime, environment, and transport	Town-mine buffer to limit impacts on community health; sustainable water supply	-
Liveability	Heritage; vibrant & active town; sense of place; leisure choices	Strong, harmonious, community with working families; nature flourishing	Inclusive community; active transport; industry impacts on town limited	Attractive & family-friendly; services improved, esp. water	Retail, leisure & services improved; family-friendly	Town centre to be hub for community & commercial services
Income and Equity	-	Increasing regional income	Minimise social and economic inequity, including intergenerational	Increased local income & LGA revenue	Income and expenditure remains in town	-
Employment	-	Increasing employment and job opportunities	Diverse employment opportunities	Increased & diverse local employment opportunities	Diverse job opportunities; shift-work reduced	-
Business/ Economy	Attract commercial and retail investment	Sustainable, resilient, vibrant, diverse economy; strong business partnerships; high GRP contribution	Opportunities for new industries; state investment; economic sustainability	Increased economic activity; support for local business adaptation to FIFO/DIDO	Mining occurs away from town	Town is regional centre for mining industry
Skills and education	-	Diverse skills; educated community, including disaster management, conservation, health	Diverse learning opportunities for all, especially post-secondary; meet skill requirements of industry	Enhanced & equitable access to education & training, especially for mining sector	Better educational facilities; attract & retain skilled workforce	-
What are the main goals for the town/ region?	-	Diverse economy, improved infrastructure; active, healthy & engaged communities; environment is protected	Consolidated growth & planning for diverse & robust economy; high-quality lifestyle; protected environment; good services & infrastructure; cumulative social impacts of industry, especially mining, managed	Maintain skilled workforce and permanent residents; industry impacts on housing, services minimised; industry benefits to community maximised	-	-

This information has been compiled for use in consultation with the Moranbah community

Figure 15. Projects Considered in Cumulative Impacts Assessment



Source: Arrow Bowen Gas Project: Environmental Impact Statement: Executive Summary, "Cumulative Impacts", p.48, https://www.arrowenergy.com.au/data/assets/pdf_file/0016/3823/Executive-Summary-Booklet_Interactive.pdf - accessed 7/5/16