

Research Project:

Cumulative socioeconomic impacts of CSG Development in the Western Downs

DATA REPORT

INDICATORS OF CHANGE IN MILES AND DISTRICT COMMUNITY

Interviews completed in mid-2014 Statistical data updated in April 2016 VERSION 6 – April 2016

Contact:

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The Miles CSG Story

Changes in Miles accompanying coal seam gas development have been characterised with the help of key members of the Miles and district community*— community and business organisations, real estate agents, motels and other local businesses (including some with contracts with coal seam gas companies), police, schools, welfare agencies, and local and state government staff. They have identified the following as the most important 'indicators' of impacts from CSG development to track locally:

- 1. Population
- 2. Affordable housing
- 3. Youth employment in the CSG sector
- 4. Income
- 5. Infrastructure condition
- 6. CSG company-funded youth training

- 7. Number of enquiries for assistance at the community centre
- 8. Top 3 offences recorded by police
- Staff availability / skills shortages for local businesses
- 10. Available tourist beds.

In these areas, we attempted to source statistical data. We shared it with the key community members to assess the data's accuracy from a local point of view and to garner further insight into the 'Miles CSG story'. Interviews were conducted in 2013 during the peak of the construction phase of CSG development. The data has been updated in 2016 and an interpretation of the changes noticed by the researchers provided.

Miles is seen as a family-friendly town by those interviewed. In 2013, one interviewee noted that "9 out of 10 people they see on the street seem to be strangers". CSG development has brought a marked increase in population, with 1 CSG worker for every 4 residents in Miles in 2013. The influx of mostly male CSG workers is reported to have affected feelings of wellbeing and to have caused a shift in town identity. Interviewees noted that women changed their socialising and exercise regimes. People drove their children to school instead of having them walk or ride, they said, due to the presence of many strangers and added heavy vehicle traffic.

House prices and rents in Miles have traditionally been notably lower than the median for the state or Brisbane. Increased demand from the CSG sector boosted rents past the state median in 2012-13, with rents being the highest in the state in 2013. Some local residents were reported to take advantage of the escalating prices, and they sold or subdivided their block. Departures of older, civically involved residents were said to contribute to a loss of social capital in the town. Volunteer numbers dropped. The higher rents were observed to cause residents with lower income levels to leave town. The quality of the housing stock has risen, but interviewees commented that there are now a lot of empty houses.

Reported good order offences and drug offences rose significantly in the Miles Police District. New policing methods introduced in anticipation of impacts from CSG development may have contributed to this upsurge, as police were more vigilant. Alternatively, or in addition, the rise could be attributed to the increase in the number of CSG sector workers in town. A rise in reported traffic offences might be due to the additional CSG vehicles and/or to greater police vigilance.

Interviewees expressed the view that not many businesses had benefited from the 'boom' as Miles was competing with nearby larger towns for CSG business. Businesses were also said to have lost workers to the boom, with skills shortages rising from 39% to 61% between 2009 and 2013. Unemployment, already low in Miles, dropped further.

This booklet provides the 'Miles CSG story' based on the range of priority indicators that we tracked. We would like to thank members of the Miles community for their warm welcome and the gift of their time. We hope that we have done justice to their contributions to this investigation.

The UQ 'Cumulative Impacts' Research Team, January 2016

^{*} 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.



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 Miles.

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 (CSRM).
- Dr Jo-Anne Everingham, Senior Research Scientist, CSRM.
- Dr Katherine Witt, Postdoctoral Research Fellow, CCSG.
- Ms Sheryllee Johnson, Research Technician, CCSG.
- Ms Humaira Malik, PhD candidate, Sustainable Minerals Institute.
- Professor David Brereton, Associate Director, Sustainable Minerals Institute.
- Dr Vikki Uhlmann, Research Manager, CSRM (2013 -2014).
- Ms Kylie May, Research Analyst, CSRM (2013 2014).
- Ms Sarah Worthing, Research Analyst, CSRM (2014).
- Ms Kylie Bourne, Research Assistant, CSRM (2014).

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 206-2018 (*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: www.csrm.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 MILES AND DISTRICT

DEMOGRAPHICS OF MILES

Map of Town and District

1. Population

EMPLOYMENT, BUSINESS & INCOME IN MILES

- 2. Unemployment
- 3. Income

HOUSING IN MILES

- 4. Median house prices
- 5. Median rents

WELLBEING IN MILES

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

EXOGENOUS FACTORS

- 9. Rainfall
- 10. Petrol prices

CSG

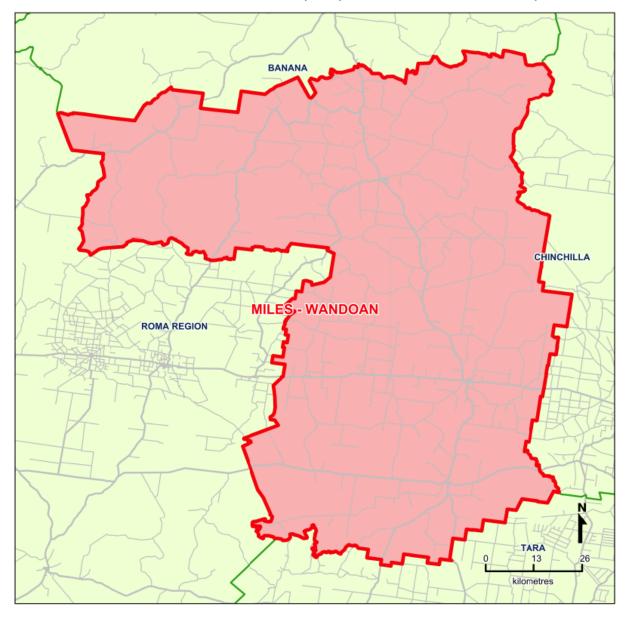
Graph of CSG wells drilled in Murilla Shire LGA

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 in the Western Downs. 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 for Miles	Indicator-related research being conducted		
% 65 year olds & over, % youth in Miles, No.	Resilience; Community aspirations (CSIRO)		
primary school students & teachers, No. high	Public health – PhD study (UQ)		
school students & teachers			
Rental vacancy rates, No. applicants on Q	Demographic & economic trends (CSIRO & UQ)		
Dept. of Housing waitlist			
Post high school destinations, % traineeship	Business (women in business) – PhD study (UQ)		
completions, % apprenticeship completions			
Businesses with CSG contracts, Skills	Water Chemistry Atlas (UQ)		
shortages in business, Tourist accommodation			
Governance: Responses on housing, Council	Agriculture & co-existence (UQ & CSIRO)		
amalgamation, DA approval times, Roadside	Environmental impacts – biodiversity (CSIRO)		
litter			

Queensland Statistical Areas, Level 2 (SA2), 2011 - Miles - Wandoan (ASGS Code 307011175)





LEGEND



SELECTED REGION

SA2 REGION BOUNDARY

— Road Network

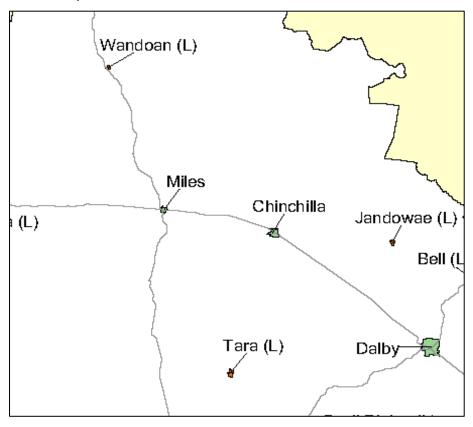
Cities/Towns



Map produced by Office of Economic and Statistical Research, Queensland Treasury (www.oesr.qld.gov.au/rnaps). Data sourced from Australian Bureau of Statistics, Australian Statistical Geography Standard (ASGS), 2011 (cat. no. 1270.0.55.001) Queensland Government, State Digital Road Network (SDRN)

© The State of Queensland (Queensland Treasury) 2011

Miles UCL Map



Source:

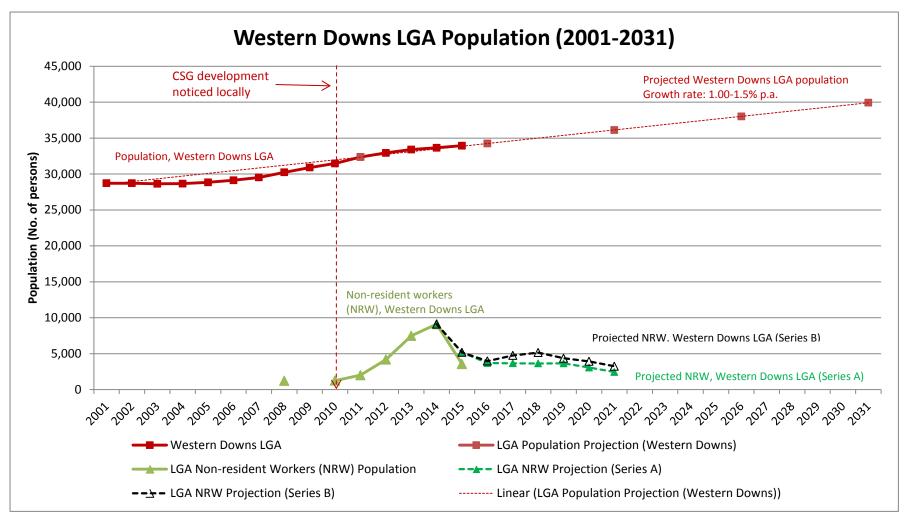
http://abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/1270.0.55.004July%202011?OpenDocument

Miles postcode boundary 4415



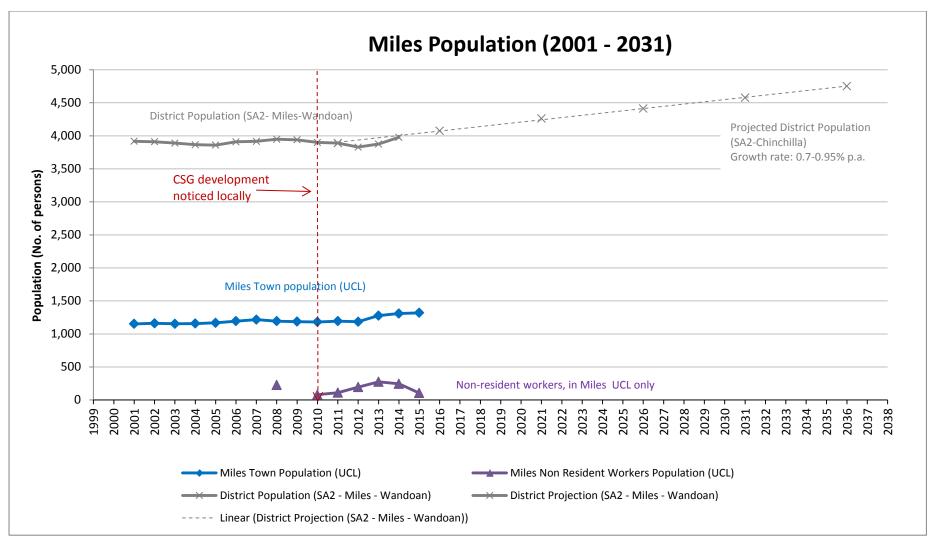
Source:

 $\frac{https://www.google.com.au/maps/place/Miles+QLD/data=!4m2!3m1!1s0x6bbea19301a2}{1619:0x400eef17f20a7a0?sa=X&ved=0ahUKEwimouuC3e7KAhXHmpQKHRXUAYYQ8gEIGj}{\underline{AA}}$



Data sources

- <u>Historic resident population data:</u> Queensland Government Statistician's Office (QGSO), <u>www.qgso.qld.gov.au</u>, 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
- Non-resident workers: QGSO Surat Basin Population Reports (2008, 2010-2014), http://www.ggso.gld.gov.au/products/reports/surat-basin-pop-report/index.php
- Non-resident projections: QGSO Surat Basin non-resident population projections, by local government area (LGA), 2015 to 2021, http://www.qgso.qld.gov.au/subjects/demography/population-projections/tables/surat-basin-non-resident-pop-proj-lga/index.php
- Series A: based on projections for current projects; Series B: based on projections for current projects plus projects with EIS approved.

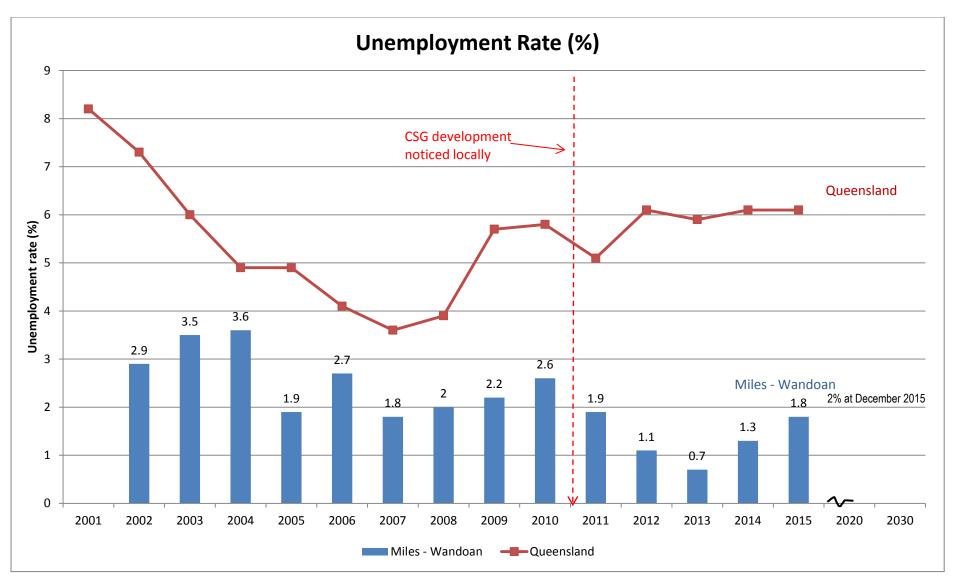


Data sources

- 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
- Non-resident workers: QGSO Surat Basin Population Reports (2008, 2010-2014), http://www.ggso.qld.gov.au/products/reports/surat-basin-pop-report/index.php
- <u>Non-resident projections:</u> QGSO Surat Basin non-resident population projections, by local government area (LGA), 2015 to 2021, http://www.qgso.qld.gov.au/subjects/demography/population-projections/tables/surat-basin-non-resident-pop-proj-lga/index.php

Data (2015) & Perceptions (2014) about population

- **History and Trend:** Miles has historically had a stable population. Miles was previously the seat of government for Murilla Shire, which included Wandoan.
- **Change:** From 2013, the town population has increased. In 2013, there was approx. 1 CSG worker for every 4 Miles residents. Most non-resident workers (NRWs) were in camps outside town. In 2015, resident population levelled off, and NRWs in the town and region decreased. NRWs number decreased more than projected.
- **Perceived change:** Most of the people interviewed viewed the resident population as around 2,500 in 2013. In 2013, an interviewee noted that "9 out of 10 people on the street are strangers".
- **Expectations:** In 2013, those interviewed expected that population would gently and steadily increase.
- **Conclusion**: An approved 3,000-bed camp would result in a rapid increase in NRW population in proportion to town centre population (about 1,200) is likely to qualify Miles as a 'boom town" (Jacquet 2009) with greater than 5%-15% population increase in a single year.
- *Implications for next project/stage*: Interviewee expectations for a gentle, steady population increase differ from the WDRC projections of a district population increase to almost 5,500 by 2020.
- **Community recommendations:** Opinion among those interviewed is divided on whether it is best to locate camps near to or away from the town.
- **Update:** The 3,000-bed camp was never constructed although several accommodation facilities were. Resident population increased slightly.



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.

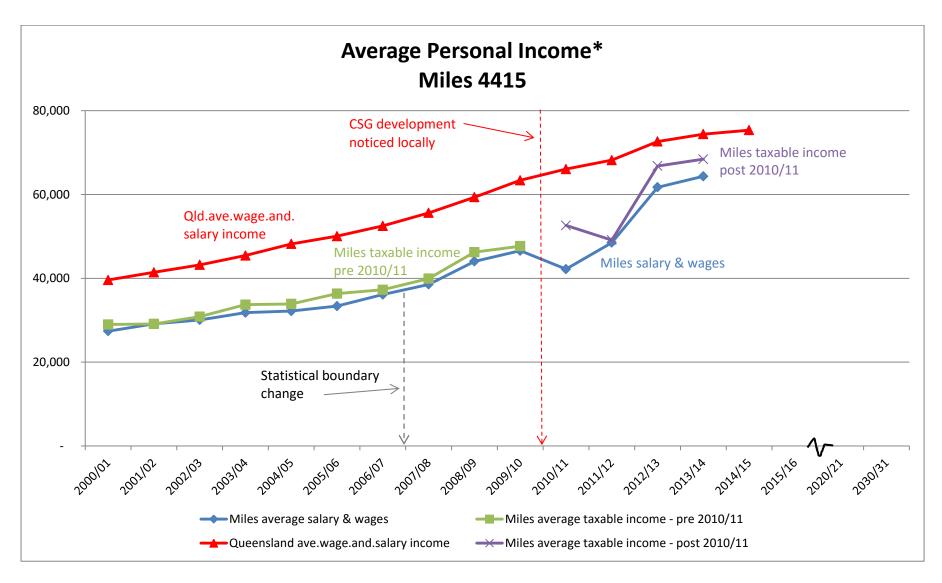
Sources: Queensland Government Statisticians Office, Source: ABS 6202.0 Labour Force, Australia, Jun 2015

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 (2015) & Perceptions (2014) about unemployment

- History and Trend: Miles has a low unemployment rate, and over time, the rate does not seem to follow state-wide trends.
- **Change:** Unemployment was lowest in 2012 and 2013. Since then, it has risen again although it still remains low.
- **Perceived change**: "Very low unemployment" made it difficult for local employers to keep staff or recruit new staff. Those interviewed say that, during the CSG construction period, youth did not have to leave town to find work. WDRC had to undertake workforce planning and local business capability studies due to a labour and skills shortage.
- Caveat: Many jobs seen as 'unskilled.'
- **Expectations**: Those interviewed believe unemployment will begin to rise as CSG activity appears to have slowed.
- Conclusion: Skills shortages were experienced. Youth stayed during the CSG construction period as jobs were available.
- Implications for next project/stage: Concern about rising unemployment.
- Community recommendations: Not provided.
- **2016 Update**: As interviewees anticipated, since 2013, unemployment has begun to rise. It still remains low compared to the Queensland rate.



^{*}Original data - No discounting applied

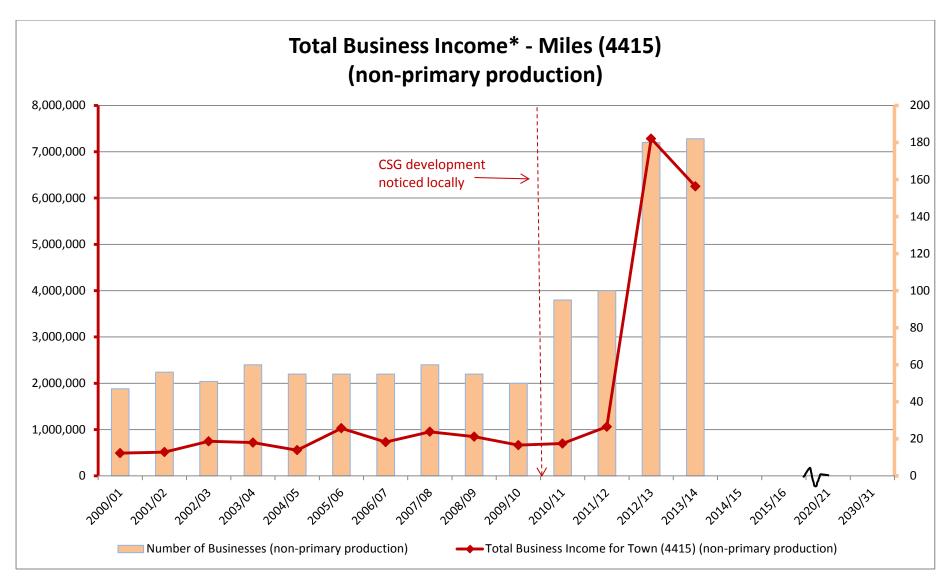
Sources: - Australian Taxation Office, Research and Statistics (https://www.ato.gov.au/)

Queensland taxable income - ABS 6302.0, Average Weekly Earnings, Australia, May 2015

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



^{*}Original data - No discounting applied Sources: Australian Taxation Office, Research and Statistics (https://www.ato.gov.au/)

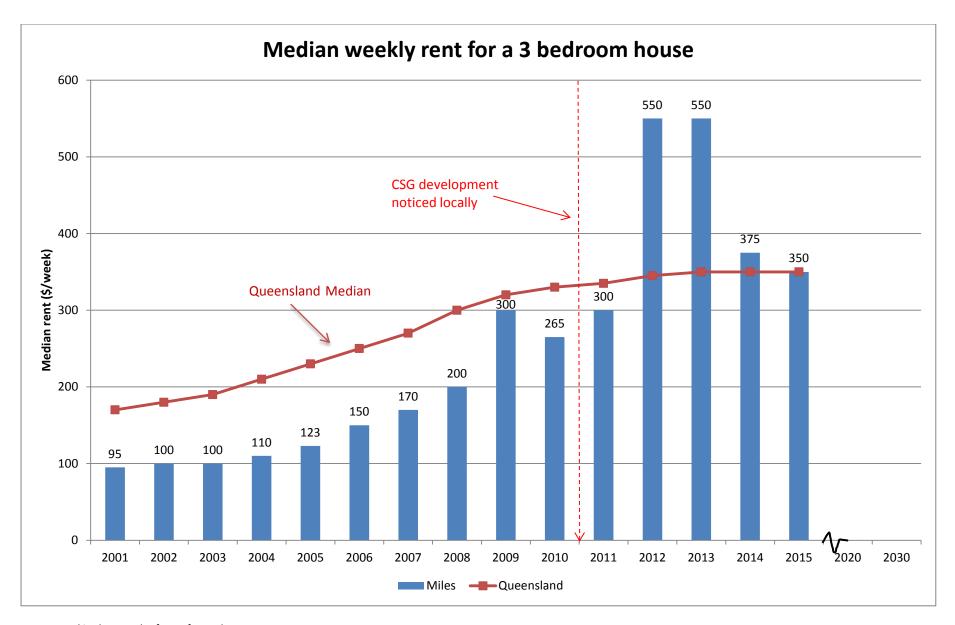


^{*}Original data - No discounting applied

Sources: Australian Taxation Office, Research and Statistics (https://www.ato.gov.au/); income levels for 2013, 2014, 2015 not yet released by ATO, as at March 2016.

Data (2015) & Perceptions (2014) about incomes

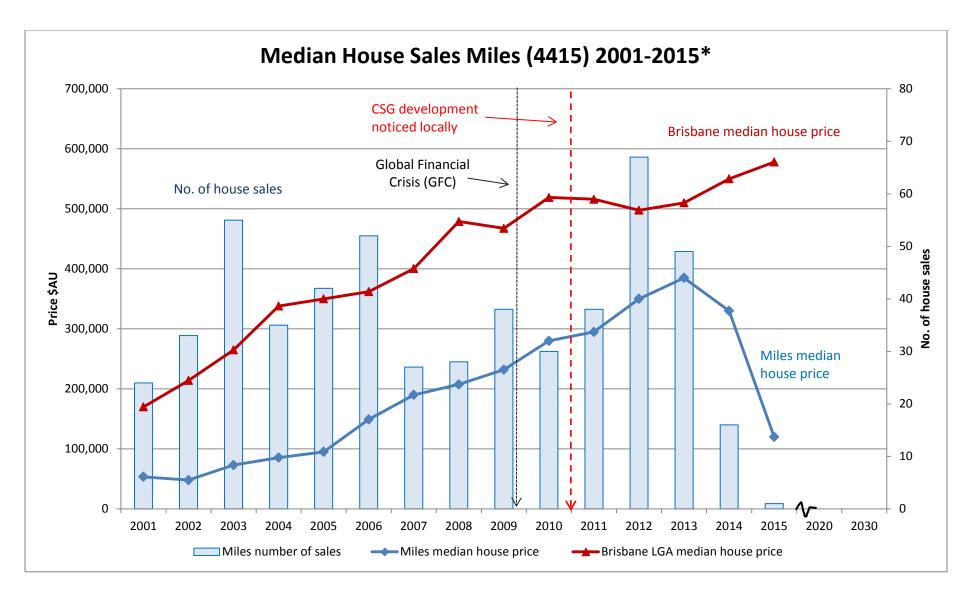
- *History and Trend*: Personal income in Miles is consistently below the Queensland average. It increased in line with the Queensland trend until 2011-12. Businesses (non-primary production) in the Miles postcode had a steady combined income of between \$500,000- \$1M annually from 2001-2012.
- **Change**: Average taxable personal income increased significantly in the 2012-13 financial year, bringing Miles closer to the Qld average. Business income for the town as a whole increased seven-fold from \$1M in 2012 to over \$7M in 2013. The number of businesses doubled from around 50 in 2010 to around 100 in 2012 and then almost doubled again to 180 in 2013.
- **Perceived change:** "Wages have boomed in last 5 years". "Now a more formal way of doing business". "Some small businesses have closed". Some local businesses have obtained CSG contracts; however, most local businesses were seen by those interviewed as "not benefiting".
- Expectations: Local content spending seen to be in Chinchilla and Toowoomba and not in Miles.
- **Conclusion**: While data shows that total income for local businesses (and average personal incomes) did increase substantially, people thought that most businesses "did not benefit".
- Implications for next project/stage: Expectations did not match reality.
- Community recommendations: CSG companies should define "local content" clearly, so as not to unduly raise expectations.
- **2016 update:** Recent data shows clear increases in both personal and business income. Business income increased seven-fold in the 2012/13 fiscal year but declined in 2013/14. Those interviewed did not report seeing the effects of increased wealth in the community.



Measured in the month of June for each year.

Sources: Queensland Government Statistician's Office 2015

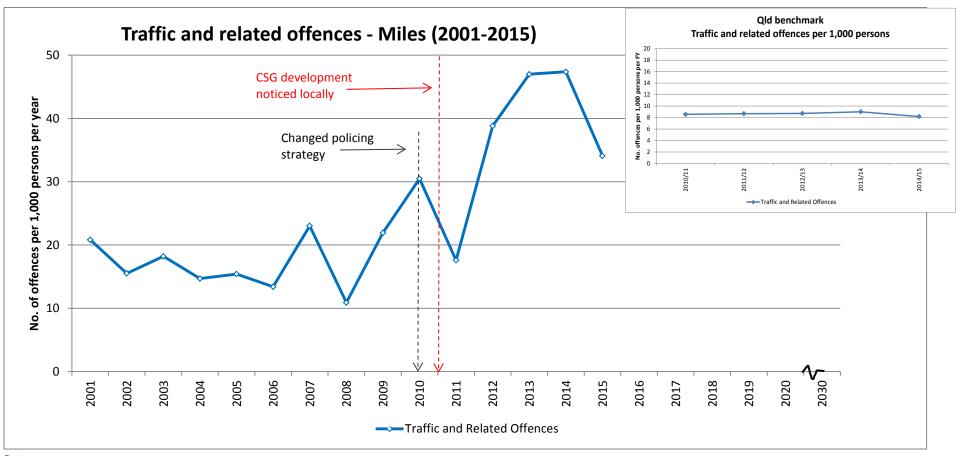
Residential Tenancies Authority, Rental Bonds data (Queensland Government Statistician's Office derived).



^{*}Measured annually except for 2015, which was measure up to September 2015
Sources: Price Finder (http://www.pricefinder.com.au/flyover/?locality=4415&propertyType=House)

Data (2015) & Perceptions (2014) about housing

- **History and Trend:** Traditionally older, low cost housing available. House prices were increasing in line with Brisbane trends.
- **Change**: From 2011, house prices continued to increase strongly when Brisbane prices were falling. Prices reached well above the Qld median in 2012-13. Strong demand in 2012 with 67 houses listed as sold. From 2013, house prices have fallen dramatically, and in 2015, only 1 house was listed as sold, fetching a price lower than the 2006 median. Rents increased to well above the Qld median in 2012-13 and remain at the Qld median in 2015.
- **Perceived change:** CSG development caused prices to increase significantly driven by "southern speculators", "ridiculous prices". "Severe lack" of affordable housing "caused lower socioeconomic families to leave town". Housing Trust seen as "too slow" with little impact noted to date.
- **Expectations**: **(2013)** Rents are coming down now toward "more affordable levels". Sale prices stable in 2013-14; many new houses remain empty, causing concern.
- *Conclusion*: Housing impacts were significant. Responses to housing impacts were too slow.
- Implications for next project/stage: How to avoid or manage housing "over-supply"?
- **Community recommendations**: Ratio of investors to local buyers would be "good indicator of housing impacts" because investors "willing to pay higher prices" causing externally driven, upward pressure on prices.
- 2016 update: House prices have fallen, but rents have remained higher than pre-CSG.



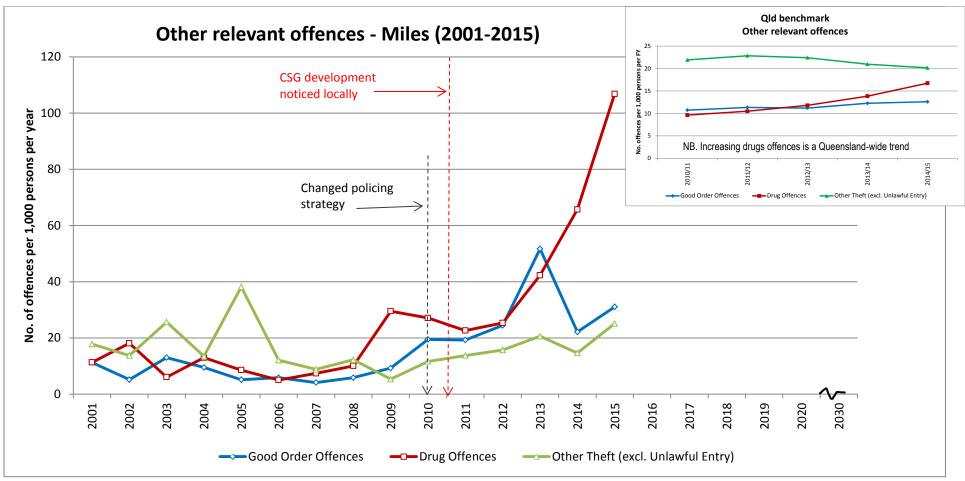
Data source:

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

Data retrieved for Miles Queensland Police Service Area. Graphs represent data post-filtered for Miles Suburb only which best matches the Miles UCL population estimates.

*Crime rates per 1,000 persons calculated using ABS population estimates for Miles UCL (as reported by the Queensland Government: https://data.qld.gov.au/dataset/erp-ucl-qld/resource/86230aac-cf9e-436a-8050-96032824848a), which is the town centre and approximately a 5km radius.

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

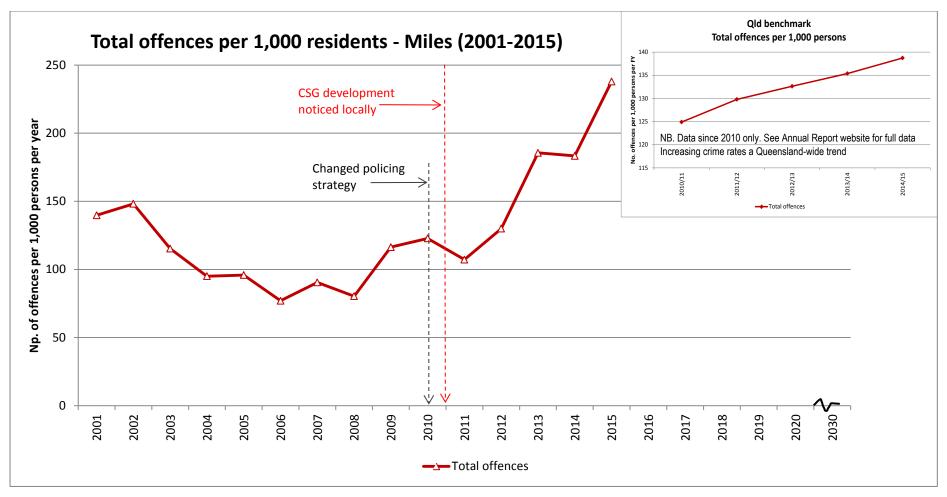


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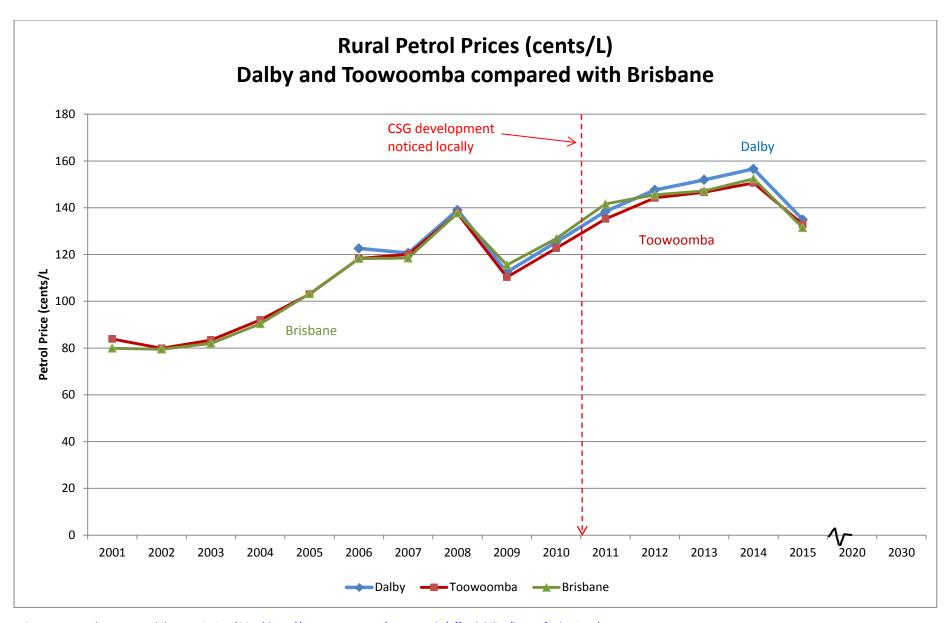
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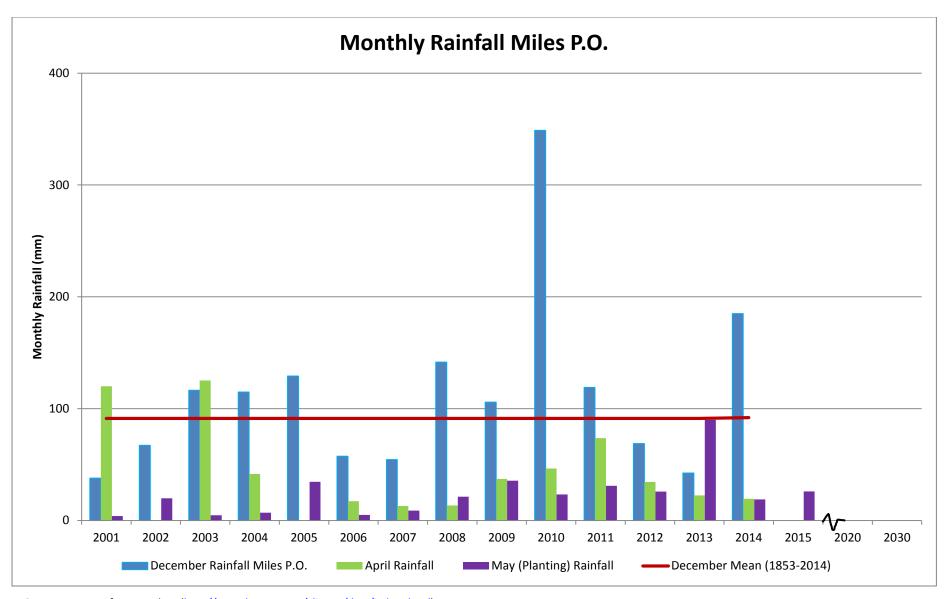
Qld Benchmark statistics sourced from https://www.police.gld.gov.au/rti/published/about/Crime+Statistics.htm

Data (2015) & Perceptions (2014) about safety & wellbeing

- *History and Trend*: Miles used to be "born here, live here, die here" agricultural town; it is now undergoing cultural change. Traditionally low rate of offending and old-style policing methods.
- **Change:** Since 2011, total offences have increased significantly. A spike in Good Order offences in 2013. Traffic offences also spiked in 2012 and remained high in 2013-14, before declining again in 2015. Drug offences increased in 2013 and continue to rise.
- Perceived change: Town identity has changed with new policing methods driven by "expectations of CSG impacts". Sub-contractors are seen by interviewees as "main offenders". Has been a "them & us" mentality. Women and girls reported not to jog in isolated areas or socialise in hotels during the CSG construction period. Longer queues at doctor reported. Increasing road-side litter noticed. Loss of social capital possible with reportedly fewer volunteers available.
- **Caveat:** Council amalgamation "had a big impact" on the way that the council managed impacts. One interviewee stated that Powerlink projects had a "bigger impact than CSG".
- Expectations: Concern about the rising housing market soon faltering.
- Conclusion: Well-being has been impacted both positively and negatively.
- Implications for next project/stage: None noted.
- **Community recommendations:** CSG companies should work with key local community groups from the beginning to "prevent or reduce impacts".
- 2016 Update: Drug offences continue to increase. "Fear of crime" seems to have abated.



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



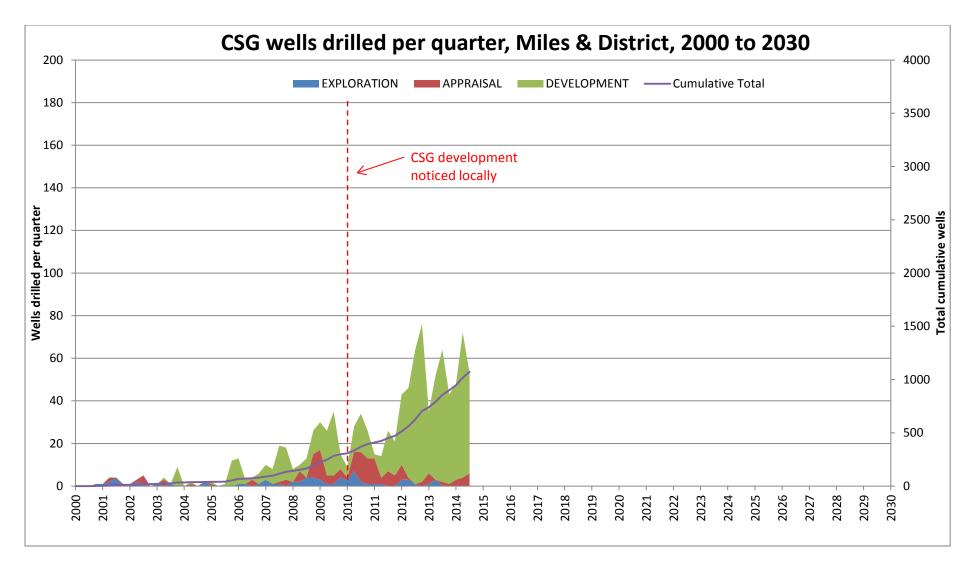
Source: Bureau of Meteorology (http://www.bom.gov.au/climate/data/index.shtml)

Miles Alignment of 'visions'

Category / Study ->	Chamber	WDRC	CSIRO	UQ
Population	Doubling in size	2% av growth p.a. 2010- 2031		
Wellbeing	Attractive Main St. Volunteering Families		Community spirit, social fabric, respect	Greater certainty
Housing	Sustainable property market	Strong demand for rural lifestyle	Affordability	More housing
Employment	Maximising growth		Opportunities	'Have-nots' benefit too
Business	Tourism gateway, vibrant retail Resource sector service centre	Miles as logistics hub	Sustainability	Distribution of benefits from resources
Educ./Training	Youth entrepreneurs, families			Skilled immigration
Governance	Adaptable planning scheme Community champions improved services		Collaboration, handle rapid change	Reduced social divisions, improved services







Source: Dept. Natural Resources and Mines 2014