Australia Pacific LNG Project

Volume 5: Attachments

Attachment 42: Social Baseline Assessment - Gas Fields, Pipeline and LNG Facility

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Contents

Figures

Tables

1. Social baseline summary – Gas Fields

1.1 Policy review

Key policies, programs and strategies relevant to the Australia Pacific LNG study area are summarised in this section along with the implications for the development of the socio-economic environment.

1.1.1 State Government

Department of Premier and Cabinet

The Queensland government's plan for Queensland in 2020 is outlined in *Toward Q2: Tomorrow's Queensland*. The plan is framed around five ambitions for the State, covering the economy, environment and lifestyle, education and skills, health and community.

Targets of Toward Q2 include:

- Queensland is Australia's strongest economy, with anticipated growth in infrastructure.
- Increase by 50% the proportion of Queensland businesses undertaking research and development or innovation.
- Cut by one-third Queenslanders' carbon footprint with reduced car and electricity use.
- Protect 50% more land for nature conservation and public recreation.
- All children will have access to a quality early childhood education so they are ready for school.
- Three out of four Queenslanders will hold trade, training or tertiary qualifications.
- Cut by one-third obesity, smoking, heavy drinking and unsafe sun exposure.
- Queensland will have the shortest public hospital waiting times in Australia.
- Halve the proportion of Queensland children living in households without a working parent.
- Increase by 50% the proportion of Queenslanders involved in their communities as volunteers.

Toward Q2 would be expected to promote government investment in the region to meet the targets. There is also an opportunity for the Project to contribute to some of these outcomes by facilitating training and employment opportunities for local residents and other people throughout Queensland and encouraging and supporting employees to volunteer in the community.

Department of Employment, Economic Development and Innovation

The *Blueprint for Queensland's LNG Industry* provides an outline of how the Queensland Government will facilitate the development of the LNG industry in Queensland and work with local communities to ensure that any development of LNG resources is beneficial. To co-ordinate government activities and facilitate ease of access to information, the government has established the LNG Industry Unit within the Department of Employment, Economic Development and Innovation. The unit is responsible for policy development, industry assistance and commercial negotiations for LNG projects.

With regard to workforce planning and development, a specialist energy and resource sector employment company, Energy Skills Queensland and the LNG industry, have formed the CSG/LNG

Training Steering Committee. This committee has been tasked with providing recommendations to the Queensland Government regarding workforce planning and development for the LNG industry. The committee will detail skill requirements, number of workers required to be trained and the location of the training. Following its completion, it is anticipated that Energy Skills Queensland and the LNG industry will develop a CSG/LNG training facility in Queensland. Australia Pacific LNG will work with the committee to discuss opportunities for partnership to support the training and development of local residents to gain employment within the industry.

Department of Communities

The *Sustainable Resource Communities Policy: Social Impact Assessment in the Mining and Petroleum Industries* (Department of Employment, Economic Development and Innovation 2008) is focused on communities where rapid development, brought about by the resources boom, is having significant impacts to communities. Key areas which experience the greatest impact include infrastructure and services and the social structure of local and regional communities that support the new or expanded mining and petroleum developments. Government is implementing the following initiatives to continue to build equitable and sustainable resource communities by:

- Strengthening the government's co-ordination role.
- Improving linkages between social impact assessment and regional planning.
- Fostering partnerships with Local Government, industry and community.
- Providing an enhanced regulatory environment for social impact assessment.

The framework identifies potential impacts of mining industry expansion and key planning issues; many if not all of which are relevant to this EIS. The likely areas which may be impacted by mining industry expansion identified by the framework include:

- Local and regional economic development
- Employment and skills
- Government co-ordination and service provisions
- Housing demand and supply
- Housing choice
- Housing affordability
- Short-term accommodation
- Strategic planning and infrastructure

The framework also notes that planning considerations are critical and identified the following key planning issues:

- Cumulative social, economic and environmental impacts
- Managing the urban lifecycle stages of growth, decline and renewal
- Managing risks
- Cultural impacts
- Capacity for economic diversification

- Balancing productive mining industry and sustained and vibrant communities

These issues provide a framework to guide this social impact assessment.

Blueprint for the Bush (Department of Communities 2006) is a 10-year plan to build a strong rural Queensland of sustainable, liveable and prosperous communities. It is the culmination of a partnership between the Queensland government, AgForce Queensland and the Local Government Association of Queensland. The Blueprint introduces new strategies for rural infrastructure and services and strengthens existing measures that are working well. There are two funding programs within the blueprint. The first supports local transport initiatives and the second supports initiatives which increase the capacity of communities to own and manage their future. There may be opportunities for Australia Pacific LNG to further support Blueprint for the Bush initiatives through financial and in-kind support. This could include assisting organisations with their funding applications, contributing funds to a partnership project or resourcing the implementation of community capacity building strategies identified through a Blueprint for the Bush initiative.

Department of Health

The *Queensland Health Strategic Plan 2007-2012* (Queensland Health 2007) identifies the strategic directions for Queensland Health between 2007 and 2012. Key challenges identified in the Strategic Plan of particular relevance to the study area are:

- Meeting the demand for health services of a rapidly growing population while maintaining adequate services in existing rural, remote and regional locations.
- Maintaining services, particularly in rural, remote and regional areas, given ongoing difficulty for recruiting and retaining health care workers and providers.

Initiatives identified to address the above challenges include:

- Implementing community-based models of service delivery where a range of services and providers are located together to support the shift of services closer to communities.
- Increasing and improving technology to support specialist services to rural and remote communities.
- Building capacity in community-controlled Aboriginal and Torres Strait Islander health services, where appropriate.

The initiatives identified in the Strategic Plan are being implemented by Queensland Health and will assist with informing the development of the Project's mitigation measures and strategies and may provide guidance for community investment initiatives.

Department of Emergency Services

The *Department of Emergency Services Strategic Plan 2008 to 2012* (Department of Emergency Services 2008) covers the three operational arms of this department; Queensland Ambulance Service, Emergency Management Queensland and Queensland Fire and Rescue Service. The goals of the Strategic Plan are to:

- Focus on front-line service delivery.
- Strengthen community capability and resilience.
- Support volunteer emergency service organisations.
- Build organisational capability and resilience.

Strategies particularly relevant to the socio-economic environment of the study area include recruitment and retention of volunteers, leveraging strategic partnerships with businesses and developing partnering opportunities with communities. Australia Pacific LNG intends to support this plan through encouraging and facilitating volunteering opportunities for its employees.

Department of Education and Training

The *Queensland Skills Plan 2008* (Department of Education and Training 2008a) has been developed in response to the challenges and opportunities posed by a strong and dynamic economy and labour market. It contains measures to alleviate skill shortages at all occupational levels. A key measure relevant to the study area is the 'focus on regional planning to build the capacity of the vocational education and training sector'. The development of local and regional Skills Formation Strategies will help align skills supply, workforce development and business strategy. This is achieved through the collaborative action of industry, government and the education and training sectors. It will be important for Australia Pacific LNG to work with TAFE and Education Queensland to identify its skill requirements and provide opportunities for trainees and apprentices.

The purpose of the *Department of Education, Training and the Arts Strategic Plan 2008 to 2012* (Department of Education and Training 2008b) is to build the knowledge, skills and creativity of Queenslanders to drive economic prosperity, build strong and vibrant communities and enhance lifelong well-being. Key strategies of particular relevance to the socio-economic environment of the study area include:

- Develop a new regional arts and cultural strategy to enable people across Queensland to enjoy high quality, inspiring arts and cultural experiences.
- Strengthen regional services to better meet the needs of regional clients.

Cultural experiences and services can play a role for improving the liveability of regional areas and through this make the locations more attractive places to live. The 'Dogwood Crossing @ Miles' facility is an example of such a cultural facility.

Department of Infrastructure and Planning

The Maranoa–Balonne Regional Plan (2009) was developed as a result of the Blueprint for the Bush initiative and is the primary plan for the region and includes land use policies and aligned strategies that address the Maranoa Regional Council and Balonne Shire Council regions':

- Natural environment
- Natural resources
- Strong communities
- Urban development
- Economic development
- Infrastructure

The Plan was formulated in recognition of the challenges being faced by the region, including population reductions in smaller centres, water shortages and developments of significant energy projects. The Plan is a statutory document outlining a five-year implementation strategy. Similar to the *Blueprint for the Bush*, the plan was developed in consultation with community members, AgForce, the Regional Coordination Committee, Regional Councils and State and Commonwealth agencies.

Key strategic directions of the plan are to:

- Address key economic, social and environmental issues.
- Prioritise infrastructure and service needs.
- Maximise benefits and manage the impacts of major projects.
- Drive innovation and productivity.
- Mobilise the public, private and community sectors.
- Align efforts across agencies and all levels of government.

These strategic directions will assist Australia Pacific LNG to identify areas for community assistance and capacity development as part of the SIMP.

1.1.2 Local Government

The *Toowoomba Regional Council Corporate Plan 2009 to 2014* (Toowoomba Regional Council 2009) provides a clear framework to guide Council activities, from planning for the long-term future, to day-to-day operations and service delivery. The Corporate Plan outlines 50 strategic actions to be implemented to achieve the nominated goals and outcomes, of which many are relevant to the socio-economic environment of the Study area. Examples of strategic outcome include:

- Ensure cultural facilities and services, such as theatres, art galleries and museums, meet the needs of the growing and diverse community.
- Strengthen social networks and provide appropriate social infrastructure to build resilience and connectivity of the community.
- Promote a sense of community among young people and encourage them to participate and remain in their community.
- Facilitate the development of an integrated transport system for the Region.
- Facilitate the development of activity centres that meet community and business needs.

The *Western Downs Regional Council Corporate Plan 2009 to 2013* (Western Downs Regional Council 2009) recognises the significant opportunities and challenges faced by the Western Downs region as one of Queensland's fastest growing economies. Managing the social and economic impact of this growth as well as ensuring infrastructure and services keep pace with growing demand are key future planning issues addressed in the Corporate Plan. Some of the main issues identified in the Western Downs Regional Council Corporate Plan include:

- Lack of affordable housing and competing access for land as a result of unprecedented growth of industrial projects which will see the number of transient miners increase from 4,000 to 15,000 by 2015.
- Pressure on road safety and road condition, resulting from increased traffic flows.
- Ability to meet the growing demand for health and education services.
- Ability to meet the growing demand for regional transport infrastructure (air, rail and road).

The Western Downs Regional Council is preparing a *Western Downs 2050 Community Plan* which guide the future planning of the Council area. Western Downs Regional Council is undertaking community consultation to inform the development of the plan. The Western Downs Regional Council website explains that the Plan focuses on:

> *"…how to get the best results for our communities from resource development activity and how to ensure that community services and facilities, health education, sport and recreation continue to meet our needs".*

The *Maranoa Regional Council Corporate Plan 2009 to 2013* (Maranoa Regional Council 2009) identifies and articulates the strategies that have been established as the most important by the Maranoa Regional Council. Some of the main issues identified in the Corporate Plan are detailed below.

- The need for sustained and positive economic growth - overall the Roma region has experienced relatively limited growth with some specific areas of the region experiencing negative growth.
- Ageing infrastructure may present funding difficulties if appropriate asset management practices are not implemented, which may include some rationalisation of assets.
- Lack of housing accessibility and affordability is a major impediment and is further compounded by the lack of land for urban development.
- Ageing population creates higher demand for aged care accommodation, of which the region is deficient.
- Social development such as limited availability of child care and day care centres; need for improved youth activities and recognition and provision of services for the disabled etc.

Maranoa Regional Council has also recently launched (20 November 2009) the Maranoa Regional Economic Development Strategy. The strategy aims to facilitate investment, business growth and employment opportunities in the region. The strategy recognises that the Maranoa community is experiencing growth pressures which are placing a higher demand for social infrastructure. The strategy also takes into account the CSG to LNG projects being developed in the region.

Mitigation measures and strategies addressed through the Project's Social impact Management Plan will be developed to complement the strategies set out in the Council's plans.

1.2 Regional studies

Surat Basin Scoping Study: Enhancing Regional and Community Capacity for Mining and Energy Driven Regional Economic Development – CSIRO 2008.

In 2008, the CSIRO was commissioned by the Southern Inland Area Consultative Committee (now known as Regional Development Australia – Darling Downs and South East) and supported by the Australian Government Department of Infrastructure, Transport and Regional Development to undertake a scoping study, enabling practical, evidence-based interventions aimed at addressing key local and regional sustainability issues. The specific goals of the scope study were to:

- Provide insights about change dynamics and possible impacts within the Surat Basin.
- Provide a preliminary assessment of the external and internal regional drivers and dynamics affecting change within the region.
- Explore possible impacts of change in the area at regional and community scale.
- Map existing institutional dynamics and identify synergies and barriers.

Based upon a literature review and consultation with communities in the Surat Basin (Roma, Chinchilla, Dalby and Toowoomba) and Bowen Basin (to gauge impacts experienced in relation to resource developments), the study provided a range of recommendations as detailed below.

- Information sharing, communication and transparency are critical for enabling good governance and change management at the community level.
  - Establish a tripartite institutional arrangement between the Surat Basin regional councils, State and Federal governments and mining companies to facilitate ongoing dialogue, strategic planning and revenue sharing.
  - Consider establishing mining town growth management groups.
  - Build capacity for Regional Councils and communities to allow for effective regional representation.
  - Establish a mediating body that operates in situations where consensus is not possible.
- Gain and revenue sharing is essential to increase the social acceptability of mining operations and to increase the local economic opportunities from mining in the Surat Basin region.
  - Consider establishment of a trust fund that builds on financial basis for investment today and in the future.
- Economic diversification leveraged from the energy boom is essential to the long term well-being of the region.
  - Maintain and enhance existing economic diversity.
  - Explore new ways to use natural resources in the production of goods and services.
  - Creation and fostering of industrial networks.
- Investment for hard and soft infrastructure will be crucial to meet the demands of an increased population.
  - Allow for timely land release and encourage corporate housing initiatives to improve housing affordability.
  - Benefit from both an increase in resident population and retained workforce, particularly in mining and energy production activities as a result of improved soft and hard infrastructure.
- Information is critical for effective ongoing management of regional opportunities from the energy boom.
  - Develop an agreed set of indicators for the region.
  - Improvement of the EIS process to allow for institutionalised impact assessment procedures, taking account of all relevant social and environmental impacts at community level.

The terms of reference for the scoping study did not include the development of a process for implementing the recommendations. To date, it is not known if any of the recommendations have been implemented and if so, to what extent (Darbas, *pers comm* 2009). The recommendations above and findings from this study have provided a platform from which potential impacts have been assessed. Furthermore, information gained from this study has been drawn upon when developing mitigation and enhancement strategies for the Project.

1.3 Town profiles

The gas fields' study area for the Project incorporates a range of large and medium towns and small rural communities. The larger communities which are expected to experience the greatest impact, due to population and industry growth, are Chinchilla, Dalby, Miles and Roma. These towns have been profiled to present a snapshot of the current situation and therefore inform the basis of the impact assessment. Smaller towns located in the study area which may be impacted include Condamine, Dulacca, Drillham, Jackson, Kogan, Yuleba and Wallumbilla. Smaller towns outside of the EIS study area boundary that may also be impacted include (but are not limited to): Brigalow, Cecil Plains, Millmerran, Tara and Turallin. Many of these towns are captured within the studied statistical local areas (SLAs), as outlined throughout this section of the report. Data presented in this section was predominately gathered from the Australian Bureau of Statistics (ABS) 2006 and desktop research (including council websites and tourism websites).

1.3.1 Chinchilla

Chinchilla is a small rural town located on the Warrego Highway between Dalby and Roma in Queensland's Western Downs region. Originally a sheep grazing area, the town was established in 1878 when the western railway was built. Today, it is the commercial centre for surrounding rural communities and smaller townships, villages and settlements. The community has progressed from a rural- based economy which was reliant mainly upon cattle, cotton and grain crops, to a diversified economy which includes the development of coal, gas and power station projects. Other local industries include timber, grapes, strawberries and melons. Known as the "melon capital", Chinchilla produces a quarter of Australia's rockmelons, watermelons and honeydews and celebrates this biannually with the Chinchilla Melon Festival, of which Origin is one of the major sponsors.

Table 1.1 Key Characteristics

Characteristic	Chinchilla	Gas field	Queensland
Population, 2006	4,067a	22,889	4,091,546
Average age, 2006	40.5	38.5	37.2
Population AAGR, 1996 to 2006	2.2%b	2.6%	2.1%
Estimated population AAGR, 2009 – 2031	1.5%	0.7%	1.7%
Indigenous population, 2006	3.5%	3.5%	3.3%
Unemployment rate, Sept Quarter 2008	1.3%c	1.5%	4.1%
Average weekly household income, 2006	$1,094	$966	$1,202
Education completed up to Grade 12, 2006	26.90%	26.4%	41.3%
Median dwelling price, 2009	$235,000	NA	$414,000d
Average weekly rent, 2006	$180	$108	$213

Source: ABS 2006

[a] 2008 population estimate; [b] AAGR 1996 to 2008

[c] based upon Chinchilla SLA estimate as data at the town level were not available for Chinchilla; [d] Brisbane only

AAGR – Aggregated Annual Growth Rate

Key observations and issues

- Of the ten Surat Basin towns surveyed in 2008, Chinchilla had the second highest number of non-resident workers (318), accounting for 7.3% of the population and taking-up 53% of hotel/motel beds.
- Between 1996 and 2008 the population of Chinchilla grew at a faster rate than all other studied towns (AAGR 2.2%), driven mainly be strong construction and mining sectors.
- As at 2006, Chinchilla had a relatively high proportion of homes owner-occupied (66%) compared to other studied towns (ranging from 42% in Gladstone to 65% in Dalby).

1.3.2 Dalby

Dalby is a large country town located on the Warrego Highway and serves as the administration centre of the newly amalgamated Western Downs Regional Council. The prominent agricultural sector is dominated by grain, cotton, livestock and timber production. Dalby is home to one of the largest grain receiving centres in Queensland. The largest one-day livestock market in Australia also takes place at Dalby. The south-east Queensland power generation industry is underpinned by the gas and coal reserves which are located in Dalby and the surrounding regions.

Queensland Level 5 Water Restrictions were introduced to Dalby in late November 2009 to reduce consumption and allow storage reservoirs to refill. The Western Downs Regional Council is also currently constructing a Recycled Water Treatment Plant which is anticipated to supply recycled water to Dalby Bio Refinery in early 2010.

Table 1.2 Key Characteristics

Characteristic	Dalby	Gas field	Queensland
Population, 2006	10,546[a]	22,889	4,091,546
Average age, 2006	36.1	38.5	37.2
Population AAGR, 1996 to 2006	1.0%[b]	2.6%	2.1%
Estimated population AAGR, 2009 – 2031	0.9%	0.7%	1.7%
Indigenous population, 2006	6.1%	3.5%	3.3%
Unemployment rate, Sept Quarter 2008	3.1%[c]	1.5%	4.1%
Average weekly household income, 2006	$1,070	$966	$1,202
Education completed up to Grade 12, 2006	29.30%	26.4%	41.3%
Median dwelling price, 2009	$260,000	NA	$414,000[d]
Average weekly rent, 2006	$165	$108	$213

Source: ABS 2006

[a] 2008 population estimate; [b] AAGR 1996 to 2008.

[c] based upon Wambo SLA estimate as data at the town level were not available for Dalby; [d] Brisbane.

AAGR – Aggregated Annual Growth Rate.

Key observations and issues

- Dalby is a large regional centre with a population of 10,546 in 2008, accounting for almost half of the population of the gas fields' area.
- In 2006, the dominant employer in Dalby was the retail trade and manufacturing sectors, employing 13.9% and 11.3% of workers, which is indicative of its role as a major service centre for the region.
- Of the ten Surat Basin towns surveyed in 2008, Dalby had the highest number of non-resident workers (491), accounting for 4.4% of the population and accounting for 33% of hotel/motel beds.

1.3.3 Miles

Miles is a small country town located in the heart of the gas fields study area. It was the administrative and commercial centre for the former Murilla Shire Council and now forms part of the Western Downs Regional Council. Originally named 'Dogwood Crossing' after a nearby creek, Miles is now referred to as the "crossroads of the golden west" and supports a diverse array of industries, including dairying, fruit growing, wheat, sheep, cattle, timber and bentonite clay mining.

Table 1.3 Key Characteristics

Characteristic	Miles	Gas field	Queensland
Population, 2006	1,296[a]	22,889	4,091,546
Average age, 2006	41.5	38.5	37.2
Population AAGR, 1996 to 2006	1.5%[b]	2.6%	2.1%
Estimated population AAGR, 2009 – 2031	0.4%	0.7%	1.7%
Indigenous population, 2006	7.3%	3.5%	3.3%
Unemployment rate, Sept Quarter 2008	1.1%[c]	1.5%	4.1%
Average weekly household income, 2006	$789	$966	$1,202
Education completed up to Grade 12, 2006	27.70%	26.4%	41.3%
Median dwelling price, 2009	$175,000	NA	$414,000[d]
Average weekly rent, 2006	$119	$108	$213

Source: ABS 2006
a 2008 population estimate; b AAGR 1996 to 2008.
c based upon Murilla SLA estimate as data at the town level were not available for Miles; d Brisbane only.
AAGR – Aggregated Annual Growth Rate.

Key observations and issues

- The average age of residents in Miles (41.5 years in 2006) was the highest of all studied towns.
- In comparison to towns elsewhere in the gas fields, Miles has a very low average weekly household income ($789), which could be in part due to the small proportion of people employed in higher paying sectors such as mining (4.5%) and construction (6.9%), however this is most likely related to the higher proportion of people aged 65 and above (22.5%), i.e. of retirement age.

- Of the ten Surat Basin towns surveyed in 2008, Miles had 228 non-resident workers, accounting for 15.0% of the total population and 12% of the hotel/motel beds.

1.3.4 Roma

Roma is a prominent country town situated on Bungil Creek to the west of the Darling Downs region of Queensland. It is the administrative and commercial centre for the Maranoa Regional Council, an area rich in sheep and cattle grazing. Named after the wife of Queensland's first Governor, Sir George Bowen, Roma is a town of many firsts. It was the first gazetted town after Queensland separated from New South Wales; location of the first wine-making venture in Queensland and the site of Australia's first oil and gas strike. Roma is a dominant urban centre and acts as the region's primary hub for commerce, education, health, transport, government, retail and financial services. Roma is home to the largest cattle sales in Australia: Roma Saleyards sold 409,169 cattle through the yards in 2008.

Table 1.4 Key Characteristics

Characteristic	Roma	Gas field	Queensland
Population, 2006	6,438[a]	22,889	4,091,546
Average age, 2006	34.4	38.5	37.2
Population AAGR, 1996 to 2006	0.6%[b]	2.6%	2.1%
Estimated population AAGR, 2009 – 2031	0.2%	0.7%	1.7%
Indigenous population, 2006	8.9%	3.5%	3.3%
Unemployment rate, Sept Quarter 2008	2.1%	1.5%	4.1%
Average weekly household Income, 2006	$1,155	$966	$1,202
Education completed up to Grade 12, 2006	33.70%	26.4%	41.3%
Median dwelling price, 2009	$235,000	NA	$414,000[c]
Average weekly rent, 2006	$143	$108	$213

Source: ABS 2006.
a 2008 population estimate; b AAGR 1996 to 2008; c Brisbane only.
AAGR – Aggregated Annual Growth Rate.

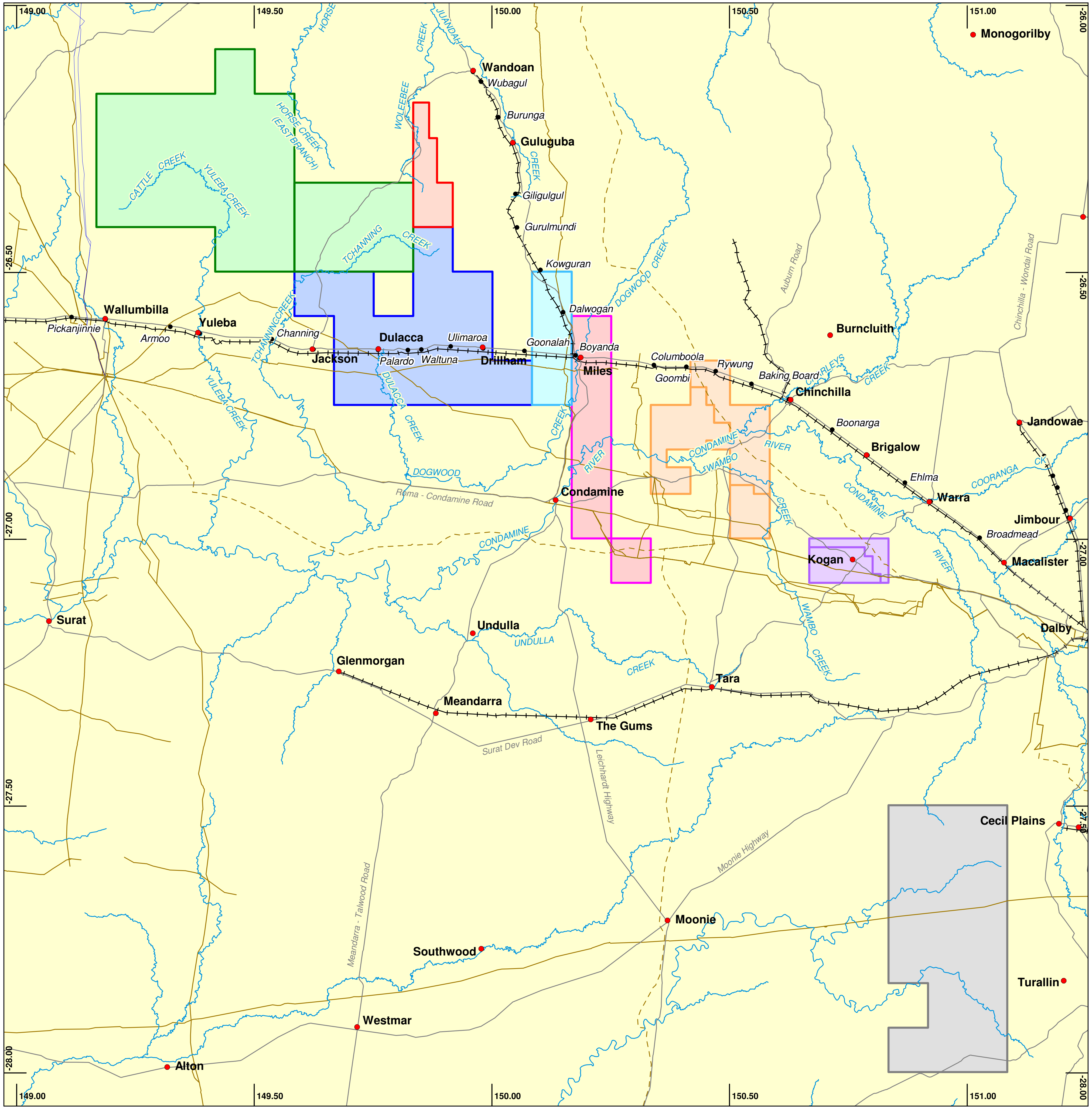
Key observations and issues

- In 2006, Roma had the second highest proportion of Indigenous peoples (8.9%) as a proportion of the total population compared to other studied towns.
- Roma's population is relatively young, with an average age of 34.4 years in 2006 and experienced minimal growth in population (AAGR 0.6% between 1996 and 2008) compared to other studied towns.
- Roma's significance as a regional hub is demonstrated by comparatively high levels of employment in the retail trade (14.2%), health care and social services (12.0%) and public administration and safety (10.2%) sectors.
- Housing in Roma is relatively affordable (median dwelling prices of $235,000 in 2009) which may be a driving influence for the number of people undertaking a 'tree change' and buying in Roma.

1.3.5 Other affected communities

In addition to the larger affected communities, there are a number of other smaller towns and villages located within or adjacent to the gas fields' study area which could potentially be impacted by the Project. These towns are illustrated in Figure 1.1. Impacts could be associated with proximity to gas wells, processing plants or major transport routes.

- **Condamine** – Condamine is located 34 kilometres south of Miles, on the Leichhardt Highway. The town stands on the banks of the Condamine River and is known for good fishing locations and the Condamine Rodeo held annually in October.
- **Dulacca** – Dulacca is a small community on the Warrego Highway, 43 kilometres west of Miles. Cattle and grain farming are key industries in the area. Dulacca is also known as the site where the push to eradicate the Prickly Pear began.
- **Drillham** – Drillham lies on the Warrego Highway, 22 kilometres due west of Miles. The town originated as a steam locomotive service town in the 1878. Today a variety of grain crops and some of Australia's best livestock are produced here (including Herefords – one of which won the interbreed bull title at the Beef 2009 competition).
- **Jackson** – Situated 23 kilometres east of Yuleba on the Warrego Highway and the western rail line, the town of Jackson's population has, in recent years, declined to less than 50 residents. The previous Bendemeer Shire Council has stated that this is owing to the rationalisation of Queensland Rail services and improved road services.
- **Kogan** – Kogan is a small community located about 53 kilometres north-west of Dalby on the Condamine Highway.
- **Yuleba** – Located 60 kilometres east of Roma, Yuleba is a small rural community. Yuleba is supported by the production of beef, cropping and in recent years, mining since the opening of Yuleba Minerals silicon mine.
- **Wallumbilla** – Wallumbilla is situated on the Warrego highway between Roma and Yuleba. Traditionally a dairy and beef cattle community, today the town mainly produces cropping and beef.
- **Cecil Plains** – Cecil Plains is located 45 kilometres north of Millmerran. Cotton is the town's primary crop and is a major employer in the area.
- **Millmerran** – Situated 80 kilometres south west of Toowoomba on the Gore Highway, Millmerran is a rural primary production area. The main crops grown are barley, wheat, sorghum and small grains. Gilbert Gully is the closest development area to Millmerran.
- **Tara** – Tara is a small rural town situated approximately 40 kilometres south west of Dalby on the resource rich western Darling Downs. Tara is the former administrative centre for Tara Shire Council and now forms part of the amalgamated Western Downs Regional Council. Tara is located at the southern end of the gas fields study area.



LEGEND

- Town
- Railway stop point
- Pipeline licence (Application)
- Pipeline licence (Granted)
- Existing railway
- Road
- Major watercourse

Walloons Gasfield Development Areas

- Combabula / Ramyard
- Woleebee
- Carinya
- Condabri
- Talinga / Orana
- Dalwogan
- Kainama
- Gilbert Gully

0 25 50km

N W E S

SCALE - 1:850,000 (at A3)

Latitude / Longitude
Geocentric Datum of Australia 1994

Rev	Date	Revision Description	ORIG	CHK	ENG	APPD
0	20/03/2009	Issued for use	DH	NA		RB

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AUSTRALIA PACIFIC LNG PROJECT EIS

Figure 1-1: Walloons Project Area

Project No: 301001-00448 | Figure: 00448-00-EN-DAL-0043 | Rev: 0

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1.4 Land tenure and use

The Walloons Gas Fields are located within three Local Authority Areas and include the Maranoa Regional Council, the Western Downs Regional Council and the Toowoomba Regional Council.

The predominant land tenure in the Walloons Gas Fields development area is freehold. The tenure applying to each individual gas field development area is summarised in the below table.

Table 1.5 Land tenure

Tenure category	Gas field development area (%)							
	Combabula /Ramyard	Woleebee	Carinya	Condabri	Talinga/ Orana	Dalwogan	Kainama	Gilbert Gully
Area (km^2)	1847	154	1075	460	518	230	153	1292
Freehold	72.5	70.9	90.7	82.6	94.7	95.2	94.3	39.5
Leasehold	20.2	12.7	6.5	10.2	1.1	0.4	0.01	0.8
Reserve	0.25	0.4	0.1	0.5	0.2	0.3	0.3	0.3
National Park	-	1.6	-	-	-	-	-	-
State forest	5.35	4.5	0.3	2.9	0.4		-	57.1
Unallocated state land	-	-	-	0.1	0.01	0.5	0.02	0.03
Roads, easements, watercourses	1.7	9.9	2.4	3.7	3.6	3.6	5.4	2.3

Source: Cadastre and Casements Database, Department of Environment and Resource Management, Queensland, September 2009

The predominant land use for the Australia Pacific LNG gas fields' development area is cattle grazing. Various forms of cropping are found in areas of more fertile soil, where the use of machinery is not constrained. The predominant fodder crops are sorghum and millet. The dominant human food crops are wheat, oats, chickpeas and sunflower seeds. There are also small pockets of horticultural cropping throughout the area.

Other land uses include forestry, nature conservation, resource extraction and urban activities. Several State forests are located in part within the gas fields' development area, as follows:

- Combabula State Forest
- Condamine State Forest
- Dinoun State Forest
- Dunmore State Forest
- Emu State Forest

- Gurulmundi State Forest
- Kumbarilla State Forest
- Western Creek State Forest
- Woodduck State Forest

These production forests form part of the State’s hardwood and cypress pine timber resource. Apart from the State forests, the main conservation resource is the Stones Country Resources Reserve, located in the Woleebee tenement area.

The gas fields’ development area contains substantial reserves of coal and coal seam gas which are currently being investigated by a number of exploration and production companies. The area also contains betonite deposits, two of which are being mined by Unimin Australia Limited and Bioclay Pty Ltd. These are located 29 kilometres to the south-west of Wandoan and five kilometres to the south-west of Miles.

The main concentrations of rural-residential properties are located at the fringes of Miles and in the south-eastern corner of the Gilbert Gully gas field tenement within the Cypress Gardens/Millmerran Downs localities.

Further information regarding the land use and tenure in the gas fields’ Project development area can be found in Volume 2, Chapter 6.

1.5 Population demographics

1.5.1 Population size and distribution

The SLAs covering the gas field are rural in character with relatively small populations. As detailed in Section 1.2 of Gas Fields Social Impact Assessment (Volume 2, Chapter 20), the population of the study area is made-up of six SLAs (Chinchilla, Murilla, Tara, Wambo, Bendemere and Millmerran). At the time of the 2006 Census, the total resident population of the gas fields study area was 22,890. In the ten-year period from 1996 to 2006, the gas fields’ population grew modestly from 21,650 to 22,890.

The population growth rate between 1996 and 2006 was low across all SLAs, with an annual average growth rate (AAGR) between 0.1% (Bendemere SLA) and 1.1% (Millmerran). Only two SLAs recorded population growth rates close to the State average (1.2%), namely Millmerran SLA (1.1% pa) and Chinchilla SLA (0.8% pa).

Urban localities

The Queensland Office of Economic and Statistical Research published more recent population estimates for urban localities. The 2008 estimated population figures for the urban localities within the gas fields are shown in Figure 1.2 below.

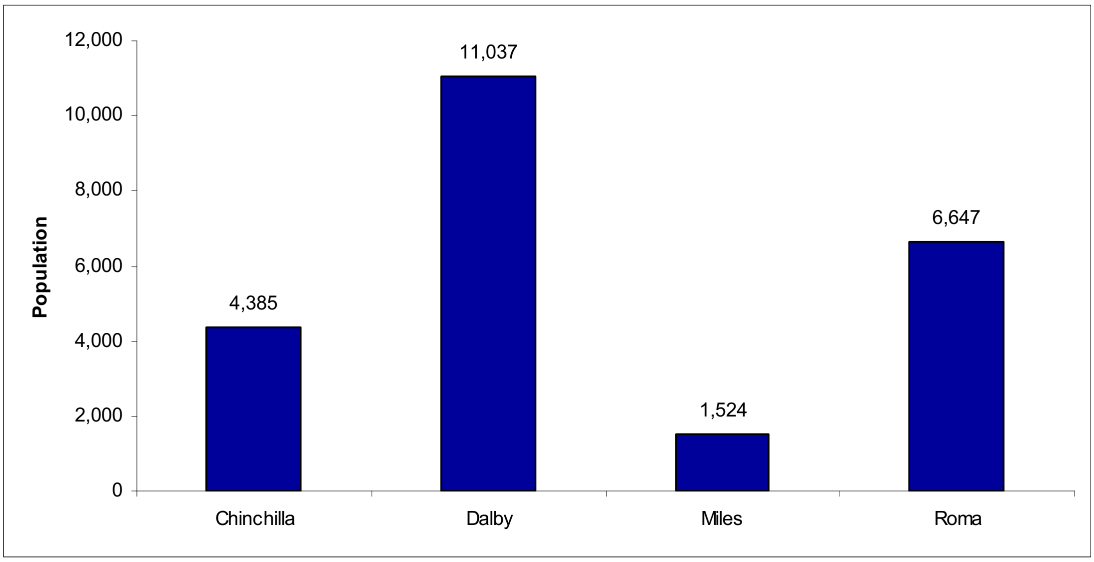

Figure 1.2 Population statistics, urban localities, 2008

Source: ABS 2006a and Department of Infrastructure and Planning 2008b

Chinchilla recorded the strongest population growth between 1996 and 2008 (AAGR 2.2%) which was similar to the average rate of growth for Queensland. Growth rates in the urban localities was much greater between 2006 and 2008 than in 1996 and 2006, which represents recent developments in the coal seam gas and other resource sectors during this period. Of the other urban localities, Miles had the greatest rate of population growth during the period.

Australia's Commonwealth Scientific and Industrial Research Organisation (CSIRO) report detailed in Section 1.2 notes that the increase in mining and construction activity in recent years is putting significant pressure on services and infrastructure in these towns, notably Chinchilla, Dalby and Miles.

1.5.2 Non-resident workers

Non-resident populations have differing needs in terms of social and community services and infrastructure (for example, recreational facilities and transportation services). In 2008, the Department of Infrastructure and Planning (DIP) undertook a study into the non-resident worker population of the Surat Basin. The information presented below has been sourced from this DIP report.

The proportion of non-resident workers as a percentage of total population within selected urban localities in the study area is illustrated in Figure 1.3. Miles recorded the highest proportion of non-resident workers, 15.0% of the total population. Overall there are large numbers of non-resident workers in the study area, with the highest being in Dalby (491), Chinchilla (318), Miles (228) and Roma (209).

Maranoa Regional Council anecdotally reported that Roma has a history of hosting transient workforces, with short-term residents living in the area for up to two-and-a-half years. The Council reported that the community is facing challenges in encouraging long-term residents to mix with the short-term residents.

A summary of the types of accommodation used to house these non-resident workers is provided in Section 1.10.7.

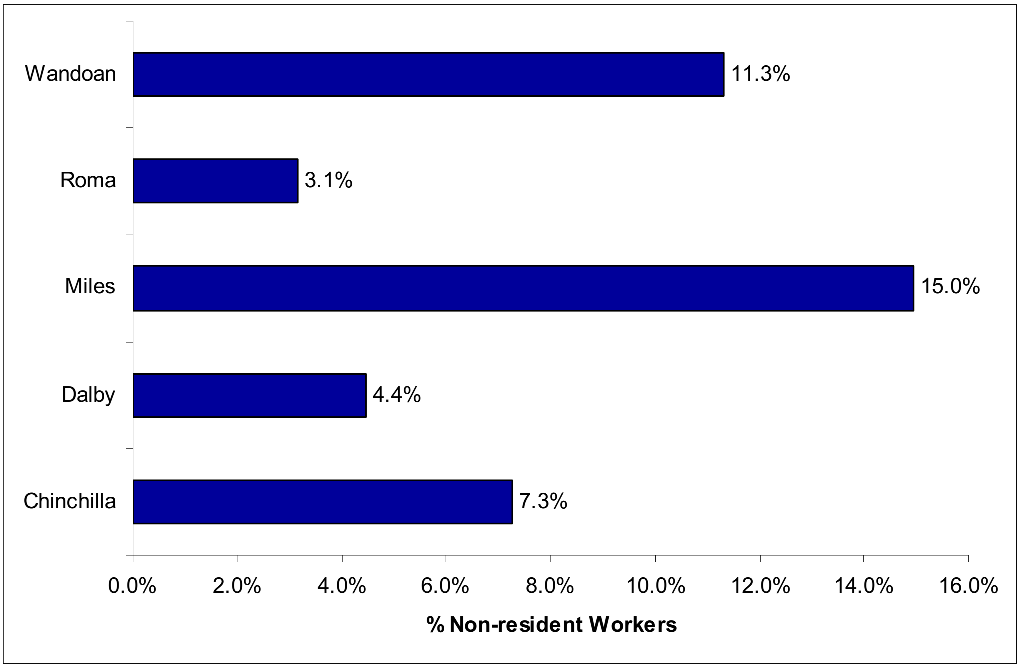

Figure 1.3 Percentage of non-resident workers, selected urban localities in the gas fields' study area 2008

Source: DIP 2008b

1.5.3 Population projections

The resident population of the gas fields' study area is projected to grow by 0.7% per annum, equating to an estimated population of approximately 27,500 by 2031. This is a considerably lower growth rate than the projected State and national averages of 1.7% per annum and 1.3% per annum respectively. It should however be noted that the data were based upon the latest available Department of Infrastructure and Planning – Planning Information and Forecasting Unit (PIFU) projections, which at the time of writing, did not take into account expected population increases associated with proposed resource developments.

Based upon these projections, by 2031 Chinchilla would account for more than one-third of the population growth within the gas fields study area (34.4%). The areas of Wambo and Murilla would also account for significant proportions of growth at 26.2% and 17.6%, respectively. Tara SLA is anticipated to record a significantly lower average annual growth rate (0.2%) than the other SLAs.

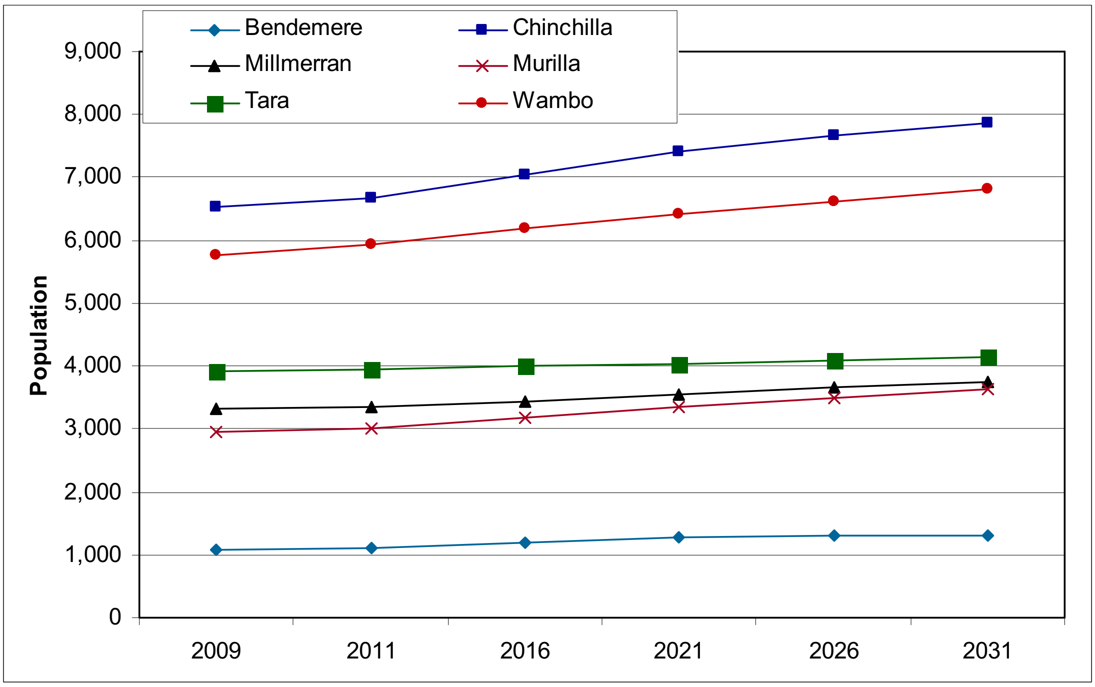

Figure 1.4 Population projections, gas fields SLAs, 2009 to 2031

Source: Based on DIP 2006 and DIP 2008a: SLA projections estimated by Economic Associates (2009)

The estimated growth in population has the potential to place further pressure on services and infrastructure in towns that, according to the CSIRO report, are already struggling to cope with the increased demand being experienced in recent years.

1.5.4 Prevalence of disability in the population

The ABS reports on 'Unpaid Assistance to a Person with a Disability'. This data set records people aged 15 years and over who, in the two weeks prior to Census night, spent time providing unpaid care, help or assistance to family and can provide an indication of the prevalence of disability within a community. In the gas fields study area, 1,744 people, or 10.5% of the population aged over 15 years reported that they had provided unpaid care to a person with a disability. This is slightly higher than the Queensland average of 9.5%. Within the study area, Tara has the highest prevalence of carers, with 12.1% of the population, followed by Millmerran (10.4%).

1.5.5 Age and gender distribution

In 2006, the average age of residents in the gas fields' SLAs (38.5 years) was marginally higher than the Queensland and Australian averages. The trend between 1996 and 2006 shows an ageing population with the proportion of males in the 20-34 years age cohort decreasing from 18.1% to 15.4%. The proportion of females in this age category, for the same period, decreased from 18.6% to 15.8%. When compared to the age distribution of the Australian population for 2006, the most significant difference is the considerably lower proportion of 15-29 year olds in the gas fields' SLAs (14.9% compared to the national 20.1%). This may be indicative of a 'brain drain', which is a common trend in regional Australia and involves the movement of young adults into larger centres and cities to gain further education and employment opportunities not available locally.

The change in age/sex distribution between 1996 and 2006 is illustrated in Figure 1.5 below.

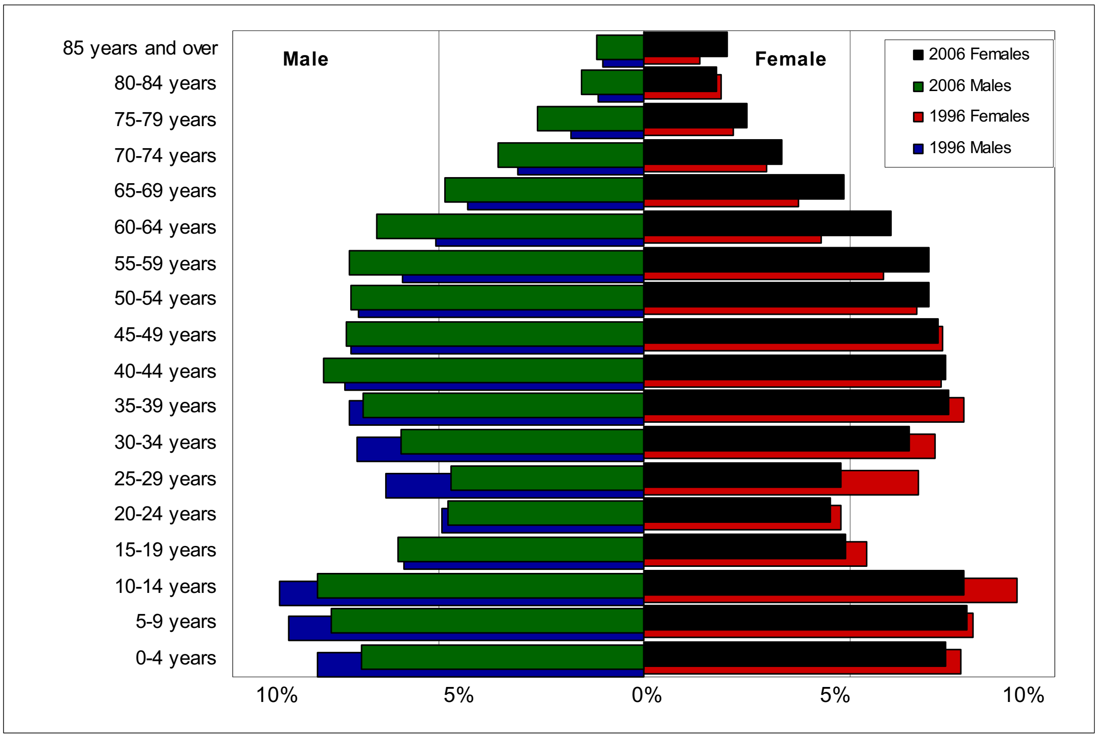

Figure 1.5 Population distribution by age and sex, gas fields' SLAs , 1996 and 2006

Source: ABS 1996 and ABS 2006a

An important factor to note is that the prime working age cohort (20-34 years) experienced a decline in absolute numbers during the period from 1996 to 2006. This could have implications for Australia Pacific LNG's ability to source employees from the local population. The Project may however attract people originally from the gas fields region who have moved away to take-up other opportunities and previously haven't been available in the region.

Urban localities

In 2006 the average age of the population of Miles (412 years) and Chinchilla (401 years) was significantly higher the other urban localities and also higher than the Queensland average of 36 years. Roma and Dalby reported lower average ages which may be associated with a higher proportion of families and the availability of a wider variety of education opportunities and community services. The urban localities trended towards an ageing population with comparatively few people in the 15-34 age cohort. The lack of young people in the region may be due to the quality or quantity of education, recreational and cultural infrastructure and services currently available in the region. This may present a challenge for the attraction and retention of staff with families, however current regional planning processes taking place are seeking to respond to these challenges. Australia Pacific LNG will continue to work closely with these processes to identify opportunities where the Australia Pacific LNG Project can add value and/or provide support.

The older and ageing population of Chinchilla and Miles may impact aged care services and accommodation requirements in the region into the future and as detailed above, may limit the availability of labour which can be sourced locally. There may however be opportunities to involve and encourage mature-aged workers back into the workforce or to participate as mentors.

1.5.6 Ethnic diversity

The ethnicity and ancestry of residents has implications for multiculturalism and welfare and support services in communities for migrant and non-English speaking residents. With regard to ethnicity derived from parental ancestry, Australian and English are the most prevalent ethnicities for all areas, with other Anglo-Saxon ethnicities also having a strong representation. The gas fields study area region is predominantly made-up of Australian-born residents, with just 5.7% of people were born overseas. This is significantly lower than the Queensland average of 19%.

The greatest proportions of residents not born in Australia originated from the United Kingdom and New Zealand for all studied gas field localities. This is shown in Table 1.6 below. The 'Born elsewhere' category incorporates those countries which are not individually identified by the ABS. This includes all African nations apart from South Africa and Egypt, a number of Middle Eastern and Eastern European nations in addition to various South American countries.

Table 1.6 Top 5 countries of birth 2006

	Bendemere	Chinchilla	Millmerran	Murilla	Tara	Wambo
United Kingdom	1.2%	1.7%	2.0%	1.7%	2.5%	2.0%
New Zealand	0.7%	1.5%	1.2%	0.5%	1.8%	1.3%
Born elsewhere	0.6%	0.7%	0.8%	0.9%	0.8%	0.4%
Germany	0.0%	0.3%	0.4%	0.3%	0.5%	0.1%
Netherlands	0.4%	0.2%	0.3%	0.3%	0.3%	0.3%

Source: ABS 2006a

For all communities located within the gas fields study region, the main language spoken at home is English. All analysed communities within the gas fields study area have a significantly lower proportion of residents who speak a language other than English compared to Queensland.

1.5.7 Family structures

Family structure refers to the various types of family units, including traditional family units (adult couple with children), couples without children, single parent families and lone or single person households. The presence of different family types can impact the labour force participation rates, the types of hours people are able to work, demand for child care and demand for different housing types. In 2006, unlike Queensland more broadly which has a higher prevalence of couples with children families, the most prevalent family structure in the gas fields' SLAs was couples without children. These accounted for 30% of all households and 44% of family households. There were a lower proportion of single parent families in the gas fields in comparison to Queensland and a higher proportion of lone households. These findings are indicative of an ageing population where children of older couples have moved out of home to start their own family or gain education and employment opportunities elsewhere.

1.5.8 Internal migration

Areas which are dominated by mining and mining-related industries, such as manufacturing and construction, are often characterised by transient populations. Regional areas are also sometimes characterised by this social trend and often experience difficulties with attracting and retaining key workers, particularly within the health and community services sectors.

Analysis of 2006 Census data for the gas fields' SLAs indicates that the proportion of people who lived at a different address five years ago was lower than the Queensland average. It is important to note however that almost 50% of those people who had moved between 2001 and 2006, moved between 2005/06 suggesting that there has been an increasing level of internally migration recently. This could be due to the growth in the resource sector in addition to new residential developments which have come onto the market within the studied gas field communities during the last few years.

1.5.9 Household size

Consistent with State and national trends, the average number of people per household decreased between 1996 and 2006 in all gas fields study area SLAs. As illustrated in Figure 1.6 below, all SLAs experienced a decrease in average household size of 0.2 persons, except Wambo, which decreased by 0.1 persons between 1996 and 2006.

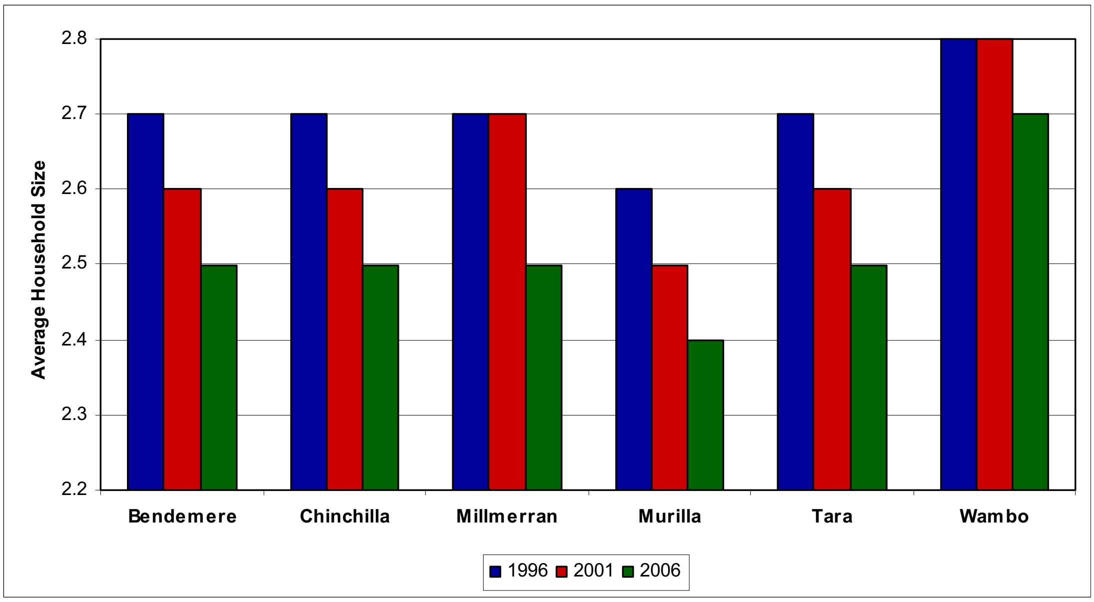

Figure 1.6 Average household size, gas fields' SLAs, 1996 to 2006

Source: ABS 1996, ABS 2001 and ABS 2006b

Urban localities

The average household size for urban localities in the gas field study region was similar to the broader SLA figures, ranging from 2.3 persons in Miles to 2.6 in Dalby. These figures are consistent with the Queensland average of 2.6 persons per household.

The smaller average household size in Chinchilla and Miles is an indication of fewer families living in these towns and the ageing population.

1.6 Indigenous Australians

The purpose of this section of the baseline is to provide more detailed information regarding the Aboriginal and Torres Strait Islander population who reside in the study area. This includes both traditional owners and historical people resident. This profile has been prepared based upon the data sources described in the gas fields Social Impact Assessment (Volume 2, Chapter 20, Section 2). However, there is a significantly lower level of available data for Indigenous communities in comparison to data for the general population. Furthermore, the Australian Bureau of Statistics acknowledges that the Census is often under-representative of the actual number of Indigenous residents, particularly those in regional and remote areas. Indigenous members of the population have historically experienced higher levels of disadvantage compared to the non-Indigenous population and as such, it is important that a more detailed understanding of the socio-economic and demographic circumstances is established so that appropriate strategies can be developed.

1.6.1 Indigenous population demographics

In 2006, there were 1,314 persons of Aboriginal and/or Torres Strait Islander heritage in the gas fields study area. Of this population, the majority (596 or 45%), resided in Dalby, followed by Chinchilla SLA (13%). In line with population trends for Indigenous persons in Queensland and throughout Australia, the age distribution of the population was very young, with 60% aged younger than 25 years. This is in contrast to the age cohort for the overall population, which makes-up just 35%. In comparison to Queensland, the study area has a very low proportion of the Indigenous population over the age of 65 years. Out of 1,314 Indigenous persons, just 37 (2.8%) residents were within this age cohort. This is indicative of a low life expectancy, in comparison to both the Queensland Indigenous population broadly and also the overall population of the study area. Recognising these differences in age profiles between Indigenous communities is important as it provides a basis for understanding potential differences in demand for education, health services and employment.

The figure below illustrates the number of Indigenous residents by age and sex in the study area. Based upon this information, it appears that the number of males and females in the age cohorts (under 25 years) is relatively consistent; however there are a considerably higher proportion of females aged between 25 and 44 years when compared to males. This potentially may impact Australia Pacific LNG's ability to attract Indigenous males of primary working age (25-54 years) to the Project.

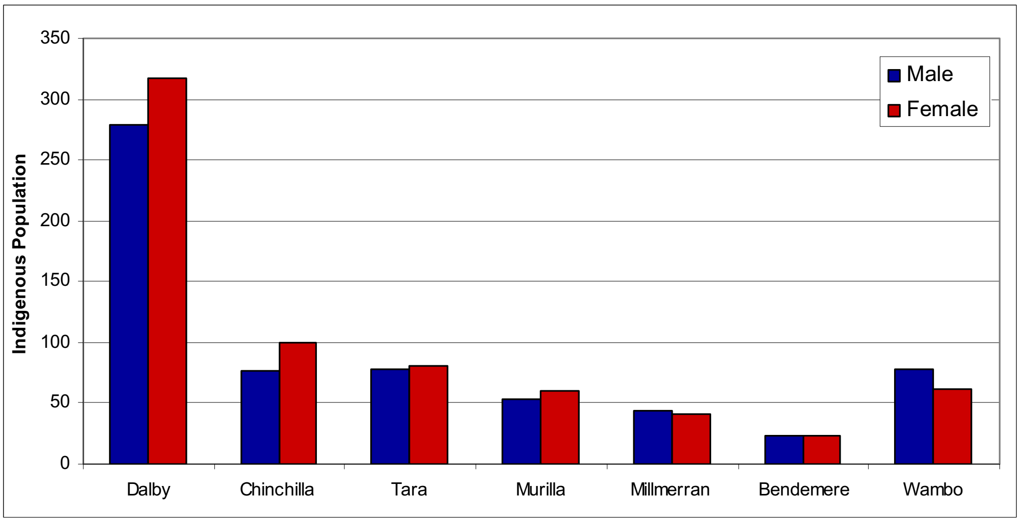

Figure 1.7 Indigenous age and sex distribution, gas fields study area, 2006

Indigenous household profile

Couple with children households comprised the largest share of Indigenous households across the gas fields' study area, representing about 35% of total Indigenous households. In comparison to Queensland (26.1%), single parent families were similarly represented in the study area, comprising 27.0% of total households. Lone person households accounted for 12.7% of Indigenous households, which is slightly higher than the Queensland average (11.9%), however significantly lower than the general population. This has implications for housing demand and also housing cost as larger families will inevitably require larger dwellings.

The average Indigenous household size in Queensland increased from 3.1 to 3.5 persons from 2001 to 2006. The study regions have comparable average household sizes, with 3.3 persons per household. This is considerably larger than the non-Indigenous population located within the study area, where the average household size ranged between 2.4 and 2.7.

1.6.2 Indigenous income and affordability

On average in Queensland, Indigenous individuals and households achieve lower weekly incomes than non-Indigenous residents. Lower income levels in Indigenous communities are most likely due to a younger age profile, higher participation rates in part-time employment, employment in industries where incomes tend to be lower, and higher levels of unemployment. In the gas fields' study area, this trend is particularly prevalent, with households exhibiting lower median weekly incomes than the Queensland average for Indigenous persons and considerably lower household incomes in comparison to the overall population (A$769 compared with A$966 per week). There was however variation within the gas field communities, with the median Indigenous household income in Tara being A$575 per week, compared with $971 per week for Indigenous households in Wambo.

Figure 1.8 below compares the income distribution for Indigenous households in the gas fields study area and Queensland. This figure illustrates there are proportionately less Indigenous families in the gas fields' study area earning high incomes (more than $1000 per week) than overall within Queensland.

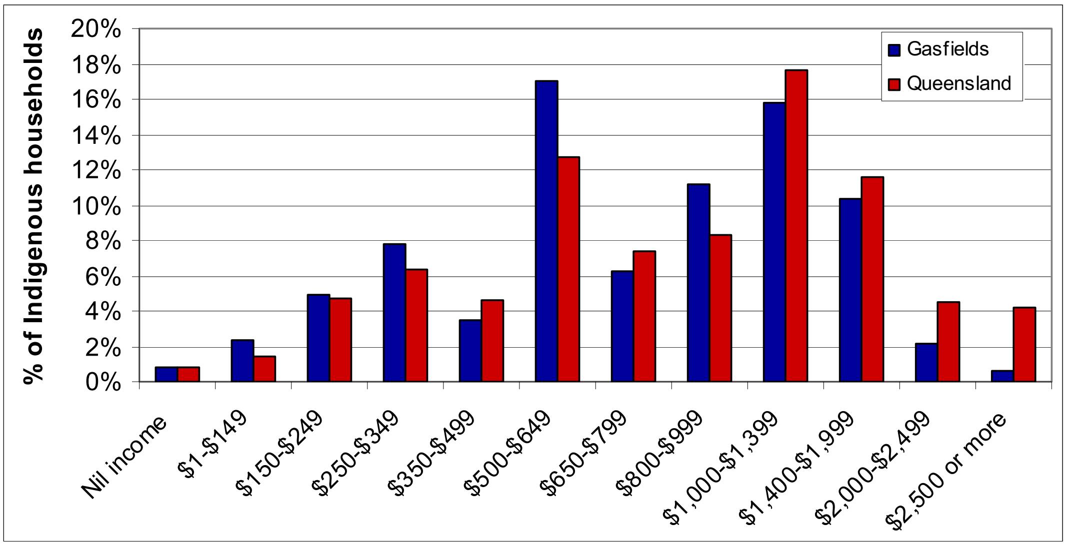

Figure 1.8 Indigenous household income distribution, 2006

1.6.3 Indigenous employment and business

Indigenous labour force

The Indigenous workforce of the gas fields' study area is generally younger than the non-Indigenous workforce, with more than half aged between 15-34 years. The size of the workforce as a proportion of the whole Indigenous population was also considerably smaller. The following table summarises the labour force profile of Indigenous residents in the gas fields study area compared with Queensland.

This illustrates a considerably higher unemployment rate for the Indigenous population within the region in comparison to Queensland and a significantly higher rate when compared to the overall population of the gas fields which was between 3% and 4% in 2006. It should be noted that within the gas fields' communities, there was significant variation, with the Murilla, Millmerran and Bendemere SLAs showing no unemployment for Indigenous persons, in comparison to 24% unemployment in Dalby.

The gas fields region also demonstrated a low Indigenous workforce participation rate. The workforce participation rate is a measure of employed persons and persons looking for employment as a proportion of the total population over 15 years of age. Indigenous participation rate in Tara was particularly low at 31.8%. This could be associated with a higher rate of single parent families and the very high number of children aged less than 15 years, which may limit the ability of carers to participate in the workforce. This is important for Australia Pacific LNG as it is indicative of a pool of Indigenous labour currently out of the workforce and that may be seeking work and training opportunities.

Table 1.7 Indigenous labour force characteristics 2006

	Labour force			Employed persons	
Area	**Total labour force**	**Labour force participation**	**Unemployment rate %**	**Male**	**Female**
Study area	396	52.7%	17.4%	52.0%	48.0%
Queensland	43,847	56.2%	13.1%	54.1%	45.9%

Source: ABS 2006

Indigenous employment

A considerably larger proportion of the Indigenous workforce in the gas fields study area was employed by the private sector (85%) in comparison to the Queensland average (60%) in 2006. With regard to government employment, the State Government employed the largest number of Indigenous employees, although this was lower than the Queensland average. The low number of State Government employees may be indicative of the small number of State Government offices in the region. In contrast to Queensland more broadly, Local Government in the gas fields region employed a very low proportion of Indigenous employees in 2006.

Within the gas fields' study area, the main fields of employment for Indigenous people in 2006 were healthcare, social assistance and construction. Other primary fields of employment were manufacturing and retail. In line with low levels of government employment, there were few Indigenous persons employed in the public administration and safety industry, which was the highest employer of Indigenous people in Queensland.

1.6.4 Indigenous education and training

Aside from the information that is available through the Census, there is very little comparative educational data gathered for Indigenous populations.

Indigenous school and tertiary education students

Data from the 2006 Census showed that there were 411 students of Aboriginal or Torres Strait origin who were attending preschool, primary school or secondary school. There was approximately half the number of secondary school students than primary school students, potentially suggesting a low retention rate of Indigenous students through to year 12.

In 2006, there were 145 Indigenous students attending a Queensland tertiary institution. A high proportion of these did not report the type of institution, however of those reported, attendance at a vocational education institution, such as TAFE, was most prevalent.

Destination of Indigenous school leavers

The Queensland Government undertakes an annual survey of school-leavers with the objective of collecting information about the post-school destinations of year 12 students in Queensland. The results of the survey are reported by region, with the gas fields' study area being located on the Darling Downs/South West Region. The most recently published data is the 2008 survey which provides information about Indigenous school-leavers.

Indigenous year 12 school leavers were less likely than their non-Indigenous peers to enrol at university (9% compared to 27%). Nonetheless, six Indigenous young people who completed the survey commenced university studies in 2008.

In contrast however, the proportion of Indigenous students in the region enrolled in vocational education and training, and working full-time was higher than the Queensland average. Indigenous year 12 school leavers were also more likely to enter a traineeship than their non-Indigenous peers (10% compared to 7%). Of the 69 Indigenous school-leavers who responded to the survey, 27 (39%) were employed either part time or full-time. An additional 15 school-leavers were seeking work at the time of the survey. These results show the potential opportunities for Australia Pacific LNG to engage young Indigenous residents in training and employment opportunities.

Highest level of schooling for Indigenous persons

The 2006 Census recorded that within the gas fields' study area, almost one in three Indigenous residents aged over 15 years did not reach year 10. This is a higher proportion than the Queensland average for Indigenous people and is a much higher proportion than the overall population. The proportion of the population who reached year 11 or 12 was also lower than the Queensland average, with the highest number of residents reporting that they had reached year 10.

Non-school qualifications of Indigenous persons

In 2006 within the study region, 16% of Indigenous residents aged over 15 years had gained a non-school qualification. The most popular qualifications gained were Certificate Level which is consistent with the requirements of the primary fields of employment. There were also a marginally higher proportion of people who had gained a university qualification than the Queensland average.

1.6.5 Indigenous housing and accommodation

The type of dwellings occupied by Indigenous households in 2006 was very similar to the overall population, dominated by separate houses rather than town houses or apartments. The distribution of dwelling types occupied by Indigenous households is shown in

Table **1.8**. Broadly speaking, the distribution is similar to the Queensland Indigenous average, although there are a greater proportion of separate houses rather than townhouses or apartments. With regard to 'other dwellings', which are defined as caravans, cabins, houseboats, tents, improvised dwellings and dwellings attached to offices or shops, the overall percentage for the gas fields is similar to Queensland's percentage for Indigenous households (3% and 5% respectively) - although higher than the overall population in Queensland. There is some deviation between the various communities. Overall 28 families reside in 'other dwellings', the majority of which are within caravans or cabins. Within the community of Millmerran and Chinchilla, 14% and 13% of households respectively live in such dwellings, which is much higher than the Queensland Indigenous average. This may be indicative of a lack of housing supply and affordability or higher proportions of low income families.

Table 1.8 Dwelling type, Indigenous households, 2006

	Gas fields	Queensland
Separate house	88%	82%
Semi-detached, row or terrace, town house etc	1%	5%
Flat, unit or apartment	6%	10%
Other dwelling	5%	3%

Source: ABS 2006

Indigenous tenure type

In comparison to the total population, Indigenous households in the study area are less likely to entirely own their home, however in comparison to the Queensland Indigenous average, home ownership is higher. In 2006, 16% of Indigenous households owned their homes outright, which was compared to just 10% overall in Queensland. Within the gas fields' study area, Indigenous households in Bendemere, Tara and Murilla SLAs were most likely to own their own home. A similar proportion of Indigenous households in the gas fields' study area are in the process of purchasing their own homes compared to the Queensland average.

With regard to renting, a greater proportion of families rent within the private market than from the State housing authority (Public Housing in the chart below) as illustrated in the figure below.

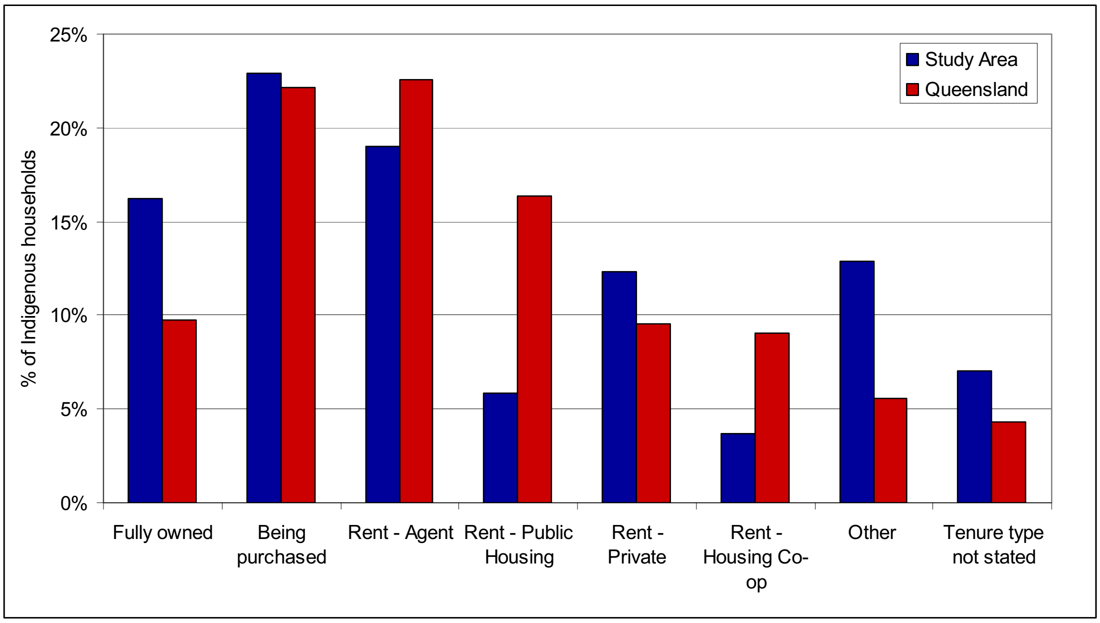

Figure 1.9 Housing tenure, Indigenous households 2006

There is a lack of published information outside of the Australian Bureau of Statistics publications in relation to the housing costs for Indigenous households. Australian Bureau of Statistics data are somewhat out of date, especially given the movement in the housing market in the gas fields' study area for the last three years. For those households in the private rental market or purchasing their own home, increases to the cost of housing are relevant, as discussed in Section 1.10.2.

The table below shows the median weekly rent paid by Indigenous households and the median monthly mortgage repayments based on ABS Census data from 2006. This illustrates that housing costs, for both rented properties and those being purchased, is lower than the medians for Queensland. It is important to note however, that in the major towns of Dalby and Chinchilla, median rent prices in June 2009 were A$298 and A$280 respectively (RP Data 2009. This suggests that many households are paying significantly more than the amount reported in the 2006 Census.

Table 1.9 Housing costs, Indigenous households, 2006

	Median Rent (A$)	Median monthly mortgage repayments (A$)
Gas fields study area	118	700
Queensland	150	1,192

Source: ABS 2006

Indigenous social housing

Social housing in Queensland is divided into a number of categories: public housing, Aboriginal and Torres Strait Islander (ATSI) designated housing, community housing and that provided by Indigenous community housing organisations. Department of Communities reports that in the gas fields' study area, there are eight ATSI-designated dwellings and 73 dwellings provided by an Indigenous community housing organisation; the majority of which are located in Dalby. Indigenous housing organisations in Dalby are the Goolburri Regional Housing Company, Gamba Lodge Hostel and Murrumba Aboriginal Housing Company.

The Department of Communities reports the average waiting time for public housing properties. In the South West Area, of which the gas fields' study area is part, the average waiting period ranged between one-and-a-half years for a seniors unit, to almost three years for a one-bedroom property.

1.6.6 Indigenous community health and safety

For almost every measure of health, the Indigenous population is significantly lower than the health of the non-Indigenous population and evidence suggests that this gap has increased in recent years (National Aboriginal Health Strategy). Given the lack of information available regarding the Indigenous health issues prevalent within the gas fields study area, this discussion will refer to the social determinants of the broad Indigenous population.

Information sourced from Queensland Health indicates that Indigenous peoples have a poorer health profile than other Australians and their life expectancy is considerably less. Contributing factors include:

- Lower socio-economic status (low incomes, high unemployment, poor educational attainment).
- Specific risk factors (higher tobacco and substance misuse rates, poorer nutrition).
- Location and environmental factors (remoteness from services, poor quality housing and facilities, overcrowding).

- Legacy of past practices (removal from land, cultural dislocation, family separation, discrimination).

Nearly one third of deaths among Indigenous people are from circulatory disease (stroke, heart disease) and another third from injury, respiratory diseases (pneumonia and chronic bronchitis) and cancer. In addition, the death rate from diabetes for Indigenous people is about eight times the national rate. This means that Indigenous people are dying more often and at younger ages from mainly preventable conditions.

Mainstream medical and health facilities are available to all residents, including the Indigenous population. In addition to these services and facilities, the Goondir Aboriginal and Torres Strait Islanders Corporation for Health Services is a community-controlled health service that provides health services to the local Indigenous community of the gas fields study area. The service has clinics in Dalby and Miles and also provides outreach services to other communities. Key service areas are:

- Full medical facilities
- Ante-natal checks
- Sound referral processes
- Maternal and child care/vaccinations
- Full health screening
- Women's health
- Men's health
- Sexual health promotion
- Health education
- Health promotion
- Hearing health screening in schools and clinics

1.6.7 Indigenous facilities and services

Indigenous residents are, like all groups, able to access general or mainstream services and facilities including child care, community centres, recreation facilities and support services, including employment service providers, family support services and various counselling services.

In addition to the Indigenous health services described above, there are a number of other Indigenous specific services and facilities in the gas fields' study area. As detailed in Section 1.6.5, there are two Aboriginal housing organisations, Goolburri Regional Housing Company and Murrumba Aboriginal Housing Company based in Dalby and Gamba Lodge, a hostel for transient Indigenous residents that is managed by Aboriginal Hostels Limited.

In addition to these services, the Bungeeba Aboriginal Community Centre in Dalby has an oval and tennis courts, offers yoga sessions and boxing training; all facilities are open to the community.

With regard to employment and training, 2008 Dalby State High received a three-year funding grant from the Federal Government's Structured Training and Employment Project program to employ and train 15 Indigenous youths through school-based traineeships and apprenticeships within the Western Downs region. A project coordinator has also been employed to implement a number of strategies to increase attraction and retention of Indigenous youth.

1.6.8 Indigenous cultural values

Native Title and Culture Heritage groups affected by the Australia Pacific LNG Project expressed concerns regarding potential impacts to land and access associated with the Project. Also of paramount interest was that cultural heritage management be completed in an appropriate manner. Refer to Volume 2, Chapter 18 for more details about Indigenous cultural values related to the gas fields' study area.

1.7 Income and affordability

The Australian Bureau of Statistics Census provides information about median individual and household incomes, as well as the breakdown of residents and household income. Time series data allows an assessment of how weekly income levels have changed. The purpose of this section of the Social Baseline is to provide detailed information on incomes and relative levels of disadvantage within studied communities.

1.7.1 Incomes

The median weekly household income in gas fields SLAs ranged from A$802 per week in Tara SLA to A$1,088 per week in Chinchilla SLA, all of which were lower than the Queensland average. Median weekly household incomes increased significantly in the gas fields study area between 2001 and 2006, ranging from 11.1% in Millmerran SLA (from A$880 per week) to 51.3% in Chinchilla SLA (from A$719 per week). These income increases were below the State average.

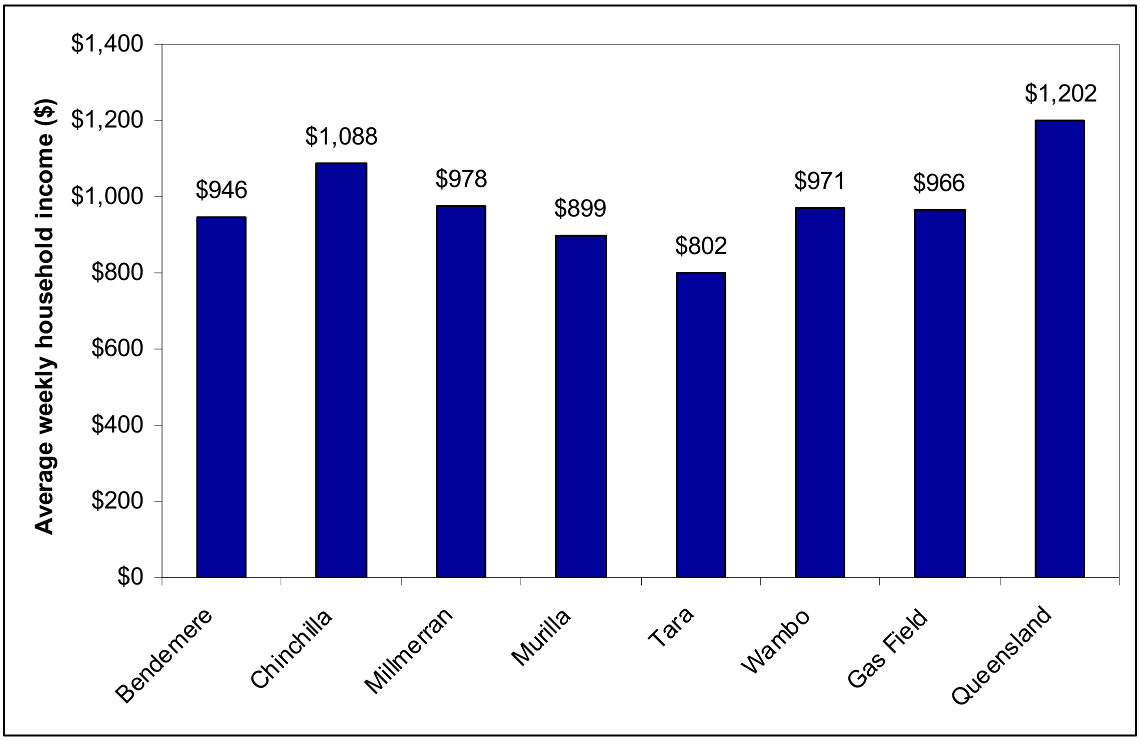

Figure 1.10 Average weekly household income, gas fields SLAs, 2006

Source: ABS 2006a

Urban localities

In line with increases to incomes within SLAs, households in select urban localities also experienced income growth. During the period 2001 and 2006 the average weekly household income increased most significantly in Chinchilla (58.8%), although it should be noted that the Chinchilla income level is still below the national average of $1,225 per week. The increase in Chinchilla's average weekly income may be due in part to an increase in employment within the construction sector. From the urban localities profiled, Miles had the lowest median household income, which may be potentially influenced by the older population profile.

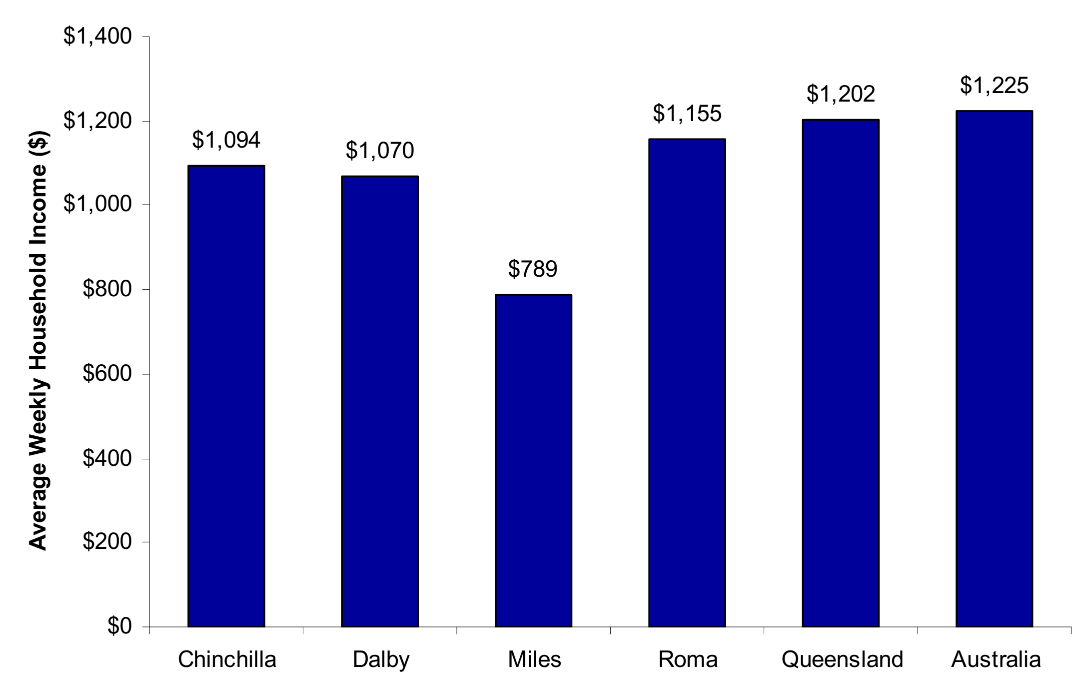

Figure 1.11 Average weekly household income, urban localities, 2006

Source: ABS 2006a

1.7.2 Socio-Economic Indexes for Area (SEIFA)

Socio-Economic Indexes for Area (SEIFA) is a suite of summary measures created from ABS Census information. Each index summarises a different aspect of the socio-economic conditions in an area and shows how relatively 'disadvantaged' that area is compared with other areas in Queensland or Australia. A lower score indicates that an area is relatively disadvantaged compared to an area with a higher score and all ranks are ordered from lowest to highest (that is, the lower the rank the more disadvantaged the area is compared to other locations). The data in this section are presented according to how each area ranked within Queensland, which has a total of 476 areas.

The indexes reported in this baseline assessment are:

- **Index of Relative Socio-economic Disadvantage** - is derived from Census variables related to disadvantage, such as low income, low educational attainment, unemployment, and dwellings without motor vehicles.
- **Index of Economic Resources** - focuses on Census variables like the income, housing expenditure and assets of households.

- **Index of Education and Occupation** - includes Census variables relating to the educational and occupational characteristics of communities, like the proportion of people with a higher qualification or those employed in a skilled occupation.

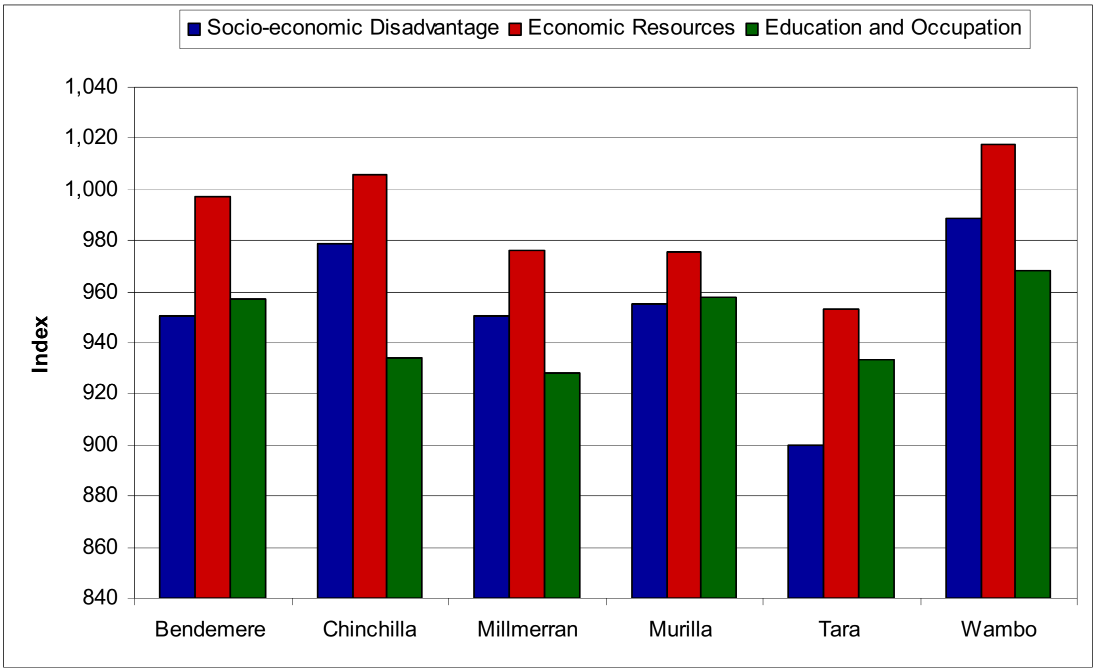

Figure 1.12 SEIFA, gas fields SLAs, 2006

Source: ABS 2006c

From the gas field SLAs, Tara had the most disadvantaged socio-economic conditions (ranking 57th in Queensland) and economic resources (ranking 100th within Queensland). Millmerran had the most disadvantaged education and occupation characteristics (ranking 127th in Queensland). Wambo was the least disadvantaged of all of the gas fields SLAs across all SEIFA indices. These SEIFA rankings of the gas fields SLAs will be used to inform the Project's community investment strategy for disadvantaged groups.

1.7.3 Transfer payments

Transfer payments refer to payments received by social welfare recipients. Statistics for residents receiving government allowances is available by postcode. This information was aggregated against the gas fields' study area and is reported within Table 1.10 and in comparison to Queensland.

In 2007, 49.4% to 64.8% of residents in the studied communities located within the gas fields' area were receiving some form of government allowance; compared to 18% for Queensland. Across all geographic areas, age pensions were the main type of allowance. The gas fields' area recorded an increase in the proportion of residents receiving an age pension between 2002 and 2007. A high proportion of people receiving the age pension in the gas fields' study area may be in part driven by retirees undertaking a 'tree change' in search of more affordable housing in comparison to cities, which is particularly impacting the Dalby SLA (Disability Services Queensland 2008).

Disability support pensions were also of major importance in the gas fields' study area. Other payments broadly are ranked, as shown in the table.

Table 1.10 Populations receiving Government allowances, 2002 to 2007

Government allowance	Gas fields		Queensland	
	2002 (%)	2007 (%)	2002 (%)	2007 (%)
Age pension	22.0-22.3	24.2-24.4	8.3	8.2
Disability support pension	9.5-10.0	10.9-11.5	3.4	3.3
Newstart allowance	6.2-7.0	4.2-5.2	3.1	1.8
Parenting payment – single	4.9-5.6	5.0-5.8	2.5	2.0
Youth allowance	4.2-4.9	2.2-3.0	2.2	1.4
Other pensions and allowances	3.6-15.7	2.9-14.9	2.1	1.3
Total income support customers	50.4-65.5	49.4-64.8	21.6	18.0

Source: Centrelink (2009)

Note: Due to confidentiality, areas where less than 20 persons receive pensions and allowances, the details are recorded as <20, therefore for the range of <20, zero to 19 has been used.

1.8 Employment and business

1.8.1 Labour force

The extent of the available labour force depends upon a number of factors, including a range of demographic characteristics such as age and workforce participation rates. Comparing the workforce size against the population aged between 15 and 64 years indicates that the workforce participation rate for the gas fields' area was 67.6% in 2006. This was marginally higher than the Queensland participation rate of 66.3%, which indicates that while it may be challenging to source labour from the local community, there may still be some opportunity for the Australia Pacific LNG Project to encourage people who are not currently participating in the labour force back into employment. These members of the community often include carers with young children, people with a disability and early retirees.

In 2006, the Agriculture, Forestry and Fishing sector was the largest employer in all gas fields' SLAs, with the exception of Chinchilla, where the Construction sector (19.5%) accounted for the majority of employment. Employment in the Agriculture, Forestry and Fishing sector in 2006 ranged from 31.7% in Murilla SLA to as high as 43.8% in Bendemere SLA, with an average of 31.8% across all SLAs located in the gas fields study area. These figures are significantly higher than the Queensland rate of just 3.4%. The proportion of people employed in the Agriculture, Forestry and Fishing sector as a percentage of all employment did however decline across all SLAs, with the greatest decline in Millmerran SLA (14.9%).

The Construction sector recorded the greatest proportional increase of employment across the gas fields' SLAs (6.4%) between 1996 and 2006, with Chinchilla recording an increase from 4.5% to 19.5% of total employment.

Urban localities

The manufacturing, retail trade, construction and health care and social assistance industries dominated employment across the urban localities. The top two fields of employment in 2006 for each of the study area urban localities and the proportion of people employed is presented in Table 1.11.

The proportion of persons employed in manufacturing in 2006 was particularly high in Dalby (11.3%). Employment within the manufacturing sector in Dalby was dominated by machinery and equipment manufacturing (38.7%); polymer product and rubber product manufacturing (12.7%) and fabricated-metal product manufacturing (11.3%).

The proportion of people employed in the construction industry more than doubled in Chinchilla between 2001 and 2006 (up from 8.4% in 2001 to 17.2% in 2006). At the time of the last Census, health care and social assistance was a significant industry of employment in Miles and Roma (13.8% and 12.0% respectively).

Table 1.11 Major employers, urban localities, 2006

Urban locality	Major employer		Second major employer	
Chinchilla	Construction	17.2%	Retail trade	14.9%
Dalby	Retail trade	13.9%	Manufacturing	11.3%
Miles	Health care and social assistance	13.8%	Public administration and safety	11.9%
Roma	Retail trade	14.2%	Health care and social assistance	12.0%
Queensland	Retail trade	11.6%	Health care and social assistance	10.2%
Australia	Retail trade	11.3%	Health care and social assistance	10.5%

Source: ABS 2006a

1.8.2 Unemployment

The unemployment rates for gas fields SLAs between the March 2001 and March 2009 are illustrated in Figure 1.13. The unemployment rate decreased in all SLAs for this period, with the largest decrease recorded in Tara SLA (9.4% to 3.4%). As at March 2009, the unemployment rate in all gas fields SLAs was significantly lower than Queensland (4.0%) and national (4.6%) rates. Such low levels of unemployment equate to a very tight labour market which will present challenges for Australia Pacific LNG when sourcing labour locally.

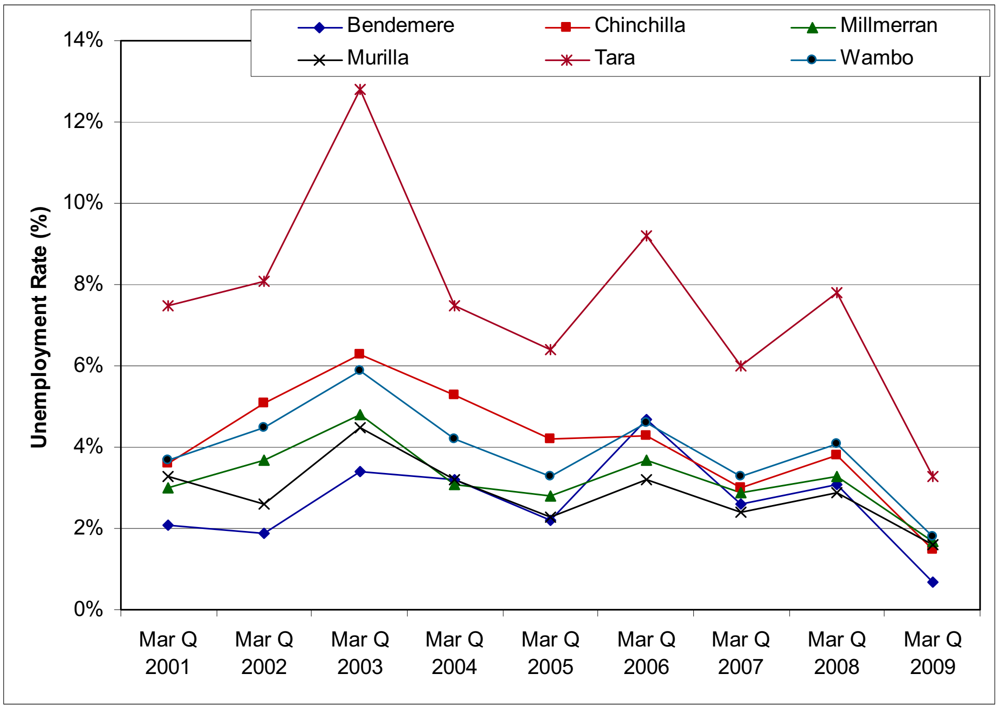

Figure 1.13 Unemployment rate, gas fields SLAs, 2002 to 2009

Source: Office of Economical and Statistical Research 2008

1.9 Education and training

1.9.1 Education levels

In the 2001 to 2006 period, the gas fields study area recorded an increase in the proportion of people with year 12 or equivalent as their highest year of schooling received from 23.8% in 2001 to 26.4% in 2006. All SLAs in the gas fields' area, with the exception of Millmerran SLA, recorded an increase within this category. However, the standards attained were below those for Queensland and Australia, where the proportion of people completing year 12 or equivalent in 2006 was 41.3% and 42.2% respectively. Within the region, the largest cohort was individuals who left school after year 10 or equivalent. This percentage declined marginally during the 2001-2006 period.

Urban localities

The trends and patterns within the urban localities were very similar to the other two geographic groupings. In 2006, the centres with the lowest proportions of individuals leaving school at the end of year 12 or equivalent were Chinchilla (26.9%), Miles (27.7%) and Dalby (29.3%). The remaining centres had proportions exceeding 30%.

1.9.2 School-aged children

The school-aged population refers to the population aged five to 17 years. Understanding the size of this population and the changes through time to this cohort assists with planning for education facilities, as well as community-based youth facilities.

As at 2006, the gas fields' study area, had a slightly higher proportion of school-aged children (18.7% or 4,288 students), with compared to Queensland as a whole (17.6%). Wambo SLA recorded the highest proportion of school-aged children (20% of the population), followed by Millmeran SLA

(19.3%) and Chinchilla (19.1%) SLA. Only Chinchilla has a smaller proportion of school-aged children when compared to the State average of 17.6%.

1.9.3 Schools

As of 1 July 2005, the Department of Education and Training structured its organisation into 10 regions and these regions are further broken down into 26 education districts. Communities in the gas fields' study area are covered by the Darling Downs-South West Queensland region, comprising of the Roma education district and the Downs education district. A full list of schools including the name, type, student count and year levels is presented in Table1.12, with a summary provided in Table 1.13.

Anecdotal evidence suggests that a significant number of students attend secondary school outside of the region which, if correct, may be due a greater variety of education options, including boarding schools available in Brisbane or Toowoomba or other cities.

Table 1.12 List of schools including the name, type, student count and year levels

Centre Name	Centre Type	Group	Student Count	Low Yr Level	High Yr Level
Chinchilla					
Chinchilla SHS - Special Education Program	Special Education Program	Secondary	0	8	12
Chinchilla SS - Special Education Program	Special Education Program	Primary	0	0P	7
Chinchilla State High School	State High School	Secondary	507	8	12
Chinchilla State School	State School	Primary	443	PY	7
Chinchilla Christian School	Non-State School	Primary		0P	7
St Joseph's School (Chinchilla)	Non-State School	Primary		0P	7
Dalby					
Dalby SHS - Special Education Program	Special Education Program	Secondary	0	8	12
Dalby South SS - Special Education Program	Special Education Program	Primary-Secondary	0	0P	10
Dalby SS - Special Education Program	Special Education Program	Primary-Secondary	0	PY	10
Dalby State High School	State High School	Secondary	784	8	12
Dalby South State School	State School	Primary	605	PY	7
Dalby State School	State School	Primary	528	PY	7
Dalby Christian School	Non-State School	Primary-Secondary		0P	12
Our Lady of the Southern Cross College (Dalby)	Non-State School	Primary-Secondary		0P	12

Centre Name	Centre Type	Group	Student Count	Low Yr Level	High Yr Level
St Mary's College (Dalby)	Non-State School	Secondary			
Miles					
Columboola Environmental Education Centre	Environmental Education Centre		0		
Miles SS - Special Education Program	Special Education Program	Primary-Secondary	0	0P	12
Miles State High School	State High School	Secondary	165	8	12
Miles State School	State School	Primary	227	PY	7
Roma					
Roma State College - Special Education Program	Special Education Program	Primary-Secondary	0	0P	12
Roma State College - Junior Campus	Campus	Primary	274	PY	3
Roma State College - Middle Campus	Campus	Primary-Secondary	391	4	8
Roma State College - Senior Campus	Campus	Secondary	269	9	12
Roma State College	State School	Primary-Secondary	0	PY	12
St John's School (Roma)	Non-State School	Primary-Secondary		0P	12

Source: DET (2009)
PY – prep year
0P – preschool
PS – primary special (referring to a special school)

Table 1.13 Number and type of schools, urban localities, 2009

Type of school	Chinchilla	Dalby	Miles	Roma	Total for gas fields study area
District office				1	1
State primary	1	2	1		4
State secondary	1	1	1		3
State primary/secondary				1	1
Number of students#	950	1,917	392	934	4,193
Non-state primary	2				2
Non-state secondary		1			1

Type of school	Chinchilla	Dalby	Miles	Roma	Total for gas fields study area
Non-state primary/secondary		2		1	3
Special education program	Y	Y	Y	Y	Y
Special school					0
Environmental education centre			1		1

Source: DET (2009)
[#] Does not include students attending non-state schools.

1.9.4 Non-school qualifications

In the 2001 to 2006 period, the gas fields' area recorded little variance for the type of non-school qualifications held. The proportion of persons holding university qualifications (bachelor degree, graduate certificate/diploma, post-graduate degree) in 2006 was lower than the Queensland average for all SLAs. Within the gas fields, the SLA with the highest rate of university qualifications was Murilla (19.2%) followed by Wambo (17.5%).

Within the gas fields' study area, a considerably higher proportion of the population (55%) had achieved certificate and diploma qualifications (the majority of which were gained from vocational education providers), compared to Queensland (35%).These statistics reflect the agriculture and manufacturing characteristics in the region. Vocational qualifications are commonly required within these sectors.

Urban localities

The proportion of people with non-school qualifications, holding university qualifications, ranged from 13.3% in Chinchilla to 23.4% in Roma. It was not surprising to find that the proportion of people holding university qualifications (bachelor degree, graduate certificate/diploma, post-graduate degree) was higher in the urban localities, given the higher prevalence of government and business services jobs that required such qualifications. In contrast, the proportion of trades-orientated non-school qualifications (advanced diploma, diploma and certificate) was lower across the urban localities.

1.9.5 Vocational training

There are 11 TAFE institutes in Queensland and two statutory TAFE institutes. The two TAFE institutes that oversee campuses in the gas fields' study area are Southern Queensland (based in Toowoomba) and Central Queensland (based in Rockhampton). Southern Queensland TAFE has campuses in Chinchilla, Dalby and Roma and Central Queensland TAFE has a campus in Gladstone.

Of particular relevance to the Project is the TAFE Queensland Mining Services which is operated through the Central Queensland Institute of TAFE. The service provides client-based training and assessment services for coal mining, metalliferous mining and processing, extractive operations and drilling operations at the client's site (for example, Queensland Alumina, Rio Tinto Alcan).

The delivery of vocational training that meets the needs of Australia Pacific LNG is partially contingent upon the capacity of local TAFE campuses. Early communication with TAFE in relation to the types of skills and number of apprentices required by the Project will maximise the available apprentice pool to draw from.

1.9.6 Tertiary education

There are no tertiary institutions located directly within the gas fields' study area. The closest tertiary institutions are the University of Southern Queensland (Toowoomba campus) and the University of Queensland (Gatton campus).

The University of Southern Queensland campus offers courses and programs in arts, business, education, science, engineering and surveying. The University of Southern Queensland also hosts research centres, which include the Australian Centre for Sustainable Catchments, the National Centre for Engineering in Agriculture and the Centre for Rural and Remote Area Health.

The University of Queensland campus offers programs in agribusiness, agriculture, animal studies, environmental management and horticulture. The University of Queensland hosts research centres for Animal Welfare and Ethics, Companion Animal Health, Native Floriculture, Nutrition and Food Sciences and Spray Technology Application Research and Training.

The University of Queensland has partnered with Origin and Pacific Renewable Energy to develop pilot plantations of *pongamia pinnata* on several hectares of land at Roma and Caboolture.

1.10 Housing and accommodation

Housing affordability and the impact that major projects can have on housing affordability has been identified as a major concern throughout discussions with all tiers of government. The gas fields' region has experienced significant growth in median house and rental prices during the last three years.

This section provides an outline of the current situation in the gas fields' study area, in terms of housing stock, housing affordability, social housing and supply of new residential land and dwellings. Trends relating to the housing of the non-resident population are also outlined.

1.10.1 Housing stock and tenure

At the time of the 2006 Census, there were approximately 8,376 dwellings located in the gas fields' study area. The majority of these were single detached dwellings, with town houses and units being most prevalent in the urban localities.

Table 1.14 below details the change to housing stock from 2001 to 2006 by dwelling type. In absolute terms, growth in the number of separate houses has been most prevalent, although growth in townhouses has also been considerable.

Table 1.14 Dwelling structure 2001-2006

	2001	2006	Change 2001-2006
Separate house	7,308	7,547	239
Semi-detached, row or terrace, town house etc	65	209	144
Flat, unit or apartment	198	172	-26
Other dwelling	457	445	-12
Dwelling not stated	30	3	-27
Total	**8,058**	**8,376**	**318**

Source: ABS 2001, 2006

The housing tenure profile of the communities located in the gas field's study area, as benchmarked against Queensland, is presented in Figure 1.14. Within all communities, the majority of dwellings are either entirely-owned or in the process of being purchased. Approximately 14% of occupied dwellings in the gas fields are being rented privately, either through an individual or an agent, which is a lower than the Queensland average. A significantly lower proportion of properties are rented through real estate agents in the region, in comparison to Queensland, the a much higher renting from an 'other' party such as privately through the owner, a relative or company.

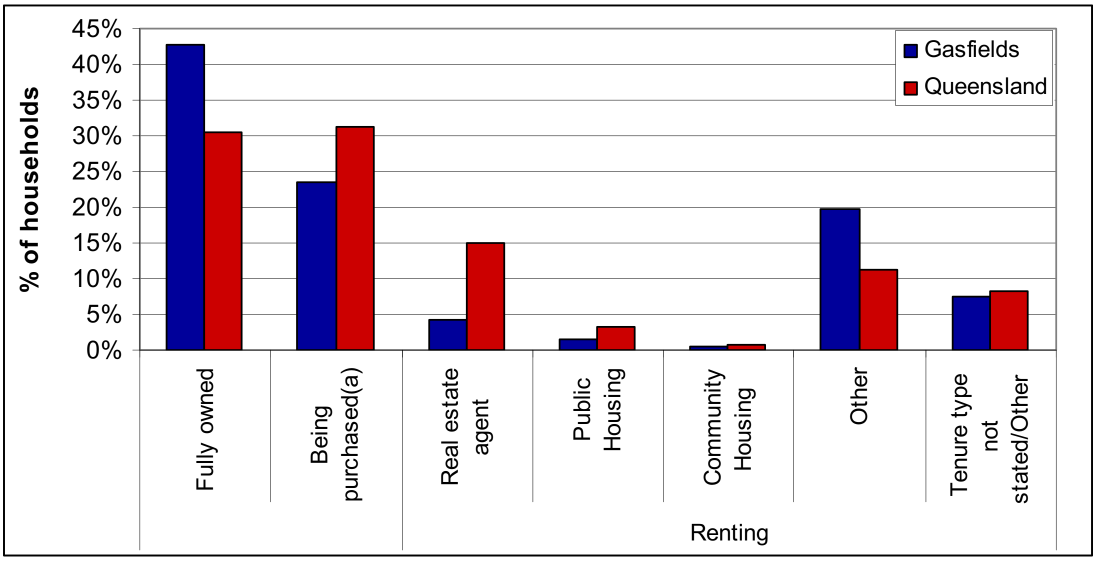

Figure 1.14 Housing tenure 2006

Source: ABS 2006

1.10.2 Median dwelling prices

The table below provides information that is based upon July 2009 data for median house prices, as well as average growth rates for the key urban localities in the study area.

As detailed below, the median price of houses in the gas fields' urban centres has grown significantly during the last five years, with Miles experiencing particularly significant growth for the last year. From 2005-2007, housing prices increased by the greatest rate in Miles ($96,600 to $193,200). The housing market in Roma has dampened over the last 12 months, however this could have been due to a number of factors, including the global financial situation. As shown in the table, the reduction in median house price pales in comparison to the level of growth experienced in the region during the last five years. Although Tara has the lowest median house price for all centres in the gas fields, it has experienced significant growth during the last 12 months. A range of factors are believed to have contributed to the significant increase to house prices, including increased demand associated with the growth of the mining and construction sectors.

Table 1.15 Median house price, gas fields' region, 2009

Urban locality	Median sales price (2009)	12-month growth to July 2009(%)	Five-year growth to July 2009 (%)
Chinchilla	$268,000	11.9%	155.2%
Dalby	$265,000	12.8%	130.4%
Miles	$250,000	28.3%	208.6%
Roma	$248,000	-5.3%	161.3%
Tara	$140,000	19.1%	154.5%

Source: RP Data 2009

1.10.3 Average weekly rents

The latest data available by SLA is the 2006 Census data. It should be noted that this data is now three years out of date and the data available for urban localities below, provides a more realistic overview of the current rental price situation in the gas fields' study area.

The average weekly rent for gas fields' SLAs ranged from A$60/per week in Bendemere SLA to A$166/per week in Chinchilla SLA, with an average of A$108/per week across all SLAs. This compared to an average of A$200/per week for Queensland and A$191/per week for Australia as a whole. During the 10 year period from 1996 to 2006, the average weekly rent increased by 71.4% in the gas fields' study area, compared to 60.0% in Queensland and 55.3% for Australia as a whole, for the same period. The sharpest increase occurred in Chinchilla SLA (115.6%), followed by Millmerran (62.8%) and Murilla (62.3%) SLAs.

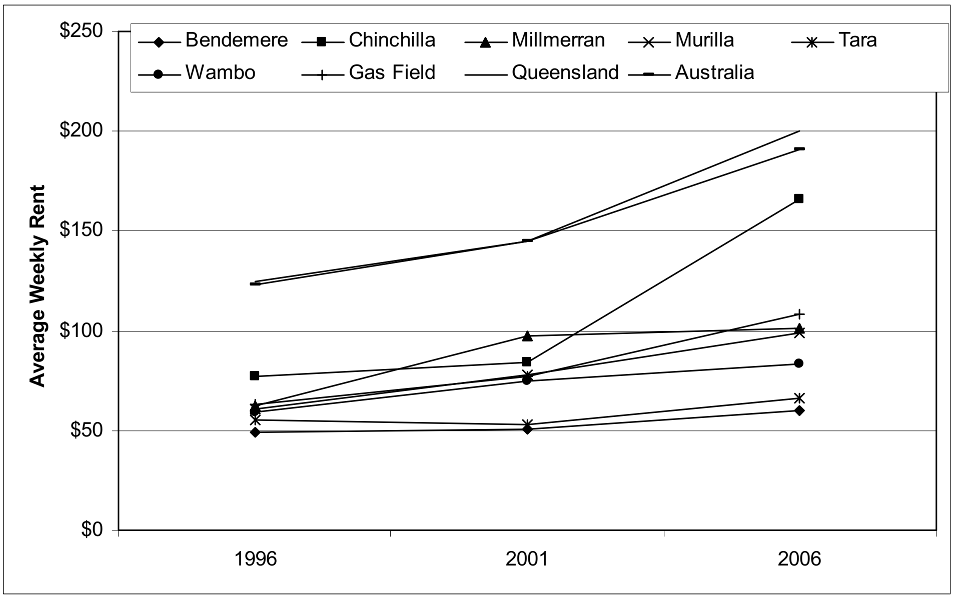

Figure 1.15 Average weekly rent, gas field SLAs, 1996 to 2006

Source: ABS 1996, ABS 2001 and ABS 2006

Urban localities

Figure 1.16 shows the weekly median advertised rent for 2006 and 2009. All centres in the region are experiencing high rental rates and these have increased by 55% in Chinchilla and 95% in Roma since the 2006 Census. The upwards pressure on rent for the last decade has presented challenges for people sourcing affordable accommodation.

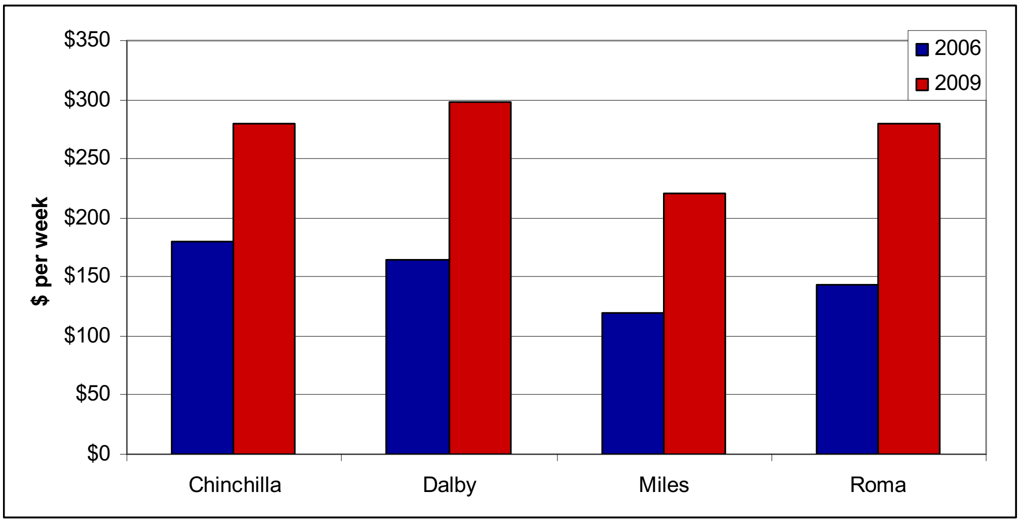

Figure 1.16 Average weekly rent, urban localities, 2006 and 2009

Source: ABS 2006, RP Data 2009

1.10.4 Vacancy rates

Rental housing vacancy rate data relate to vacancy rates of residential rental detached houses and units for the regions of ‘Rest of Queensland’ and ‘Queensland’. Vacancy rates are broken down into five regions: Inner Brisbane, Remainder of Brisbane LGA, Brisbane Surrounds, Gold Coast and Rest of Queensland. There were no data available on vacancy rates for specific towns or local government areas within the gas fields’ study area. Anecdotal evidence suggests that vacancy rates are extremely low in urban localities experiencing strong growth in the mining and construction sectors, which may have an impact to available housing and accommodation for Australia Pacific LNG employees.

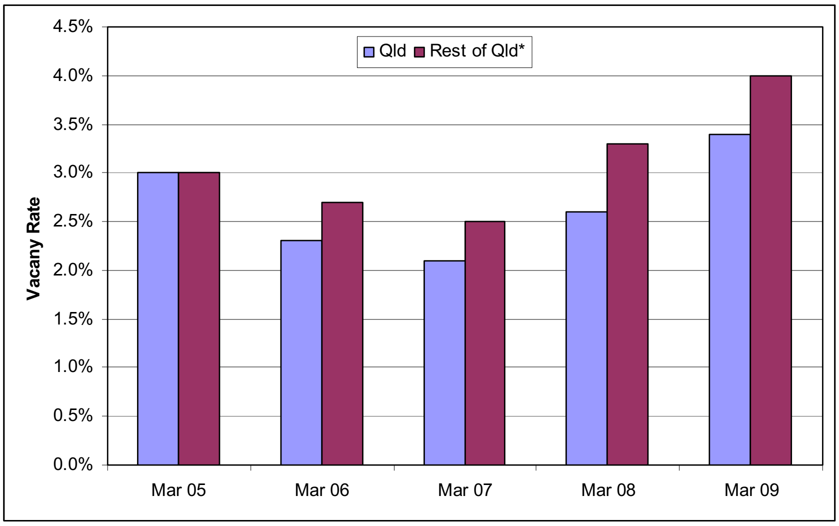

Figure 1.17 Rental housing vacancy rates, Queensland, March 2005 to March 2009 quarters

Source: Office of Economic and Statistical Research 2009b

1.10.5 Social housing

Social housing, which includes public rental stock, Aboriginal and Torres Strait Islander housing and community housing plays an essential role for supporting the most vulnerable members of society. The supply of social housing is particularly important within the gas fields' context, as the region has experienced significant increases to the cost of housing, as well as an increased polarisation between high and low income groups.

Supply of social housing

Queensland's Department of Communities (2008) reports there are 479 social housing dwellings in the gas fields' study area. The majority of these are provided through the State housing department, although a high proportion of dwellings are also rented through not-for-profit social housing providers. The greatest number of social housing dwellings, as expected, is within the larger regional centres of Dalby and Roma, followed by Chinchilla.

Table 1.16 Distribution of social housing in gas fields region

	Public housing	ATSI	Community housing providers	Indigenous community housing providers
Roma	96	10	76	17
Dalby	96	3	61	70
Chinchilla	17	2	6	0
Millmerran	0	3	0	0
Cecil Plains	3	0	0	0
Tara	13	0	6	0
Total	225	18	149	87

Source: Queensland Department of Communities 2008

Demand for social housing

The Department of Communities (2008) also reports the demand for social housing, based upon average waiting times for public housing and number of applicants within the residential tenancies register. The figure below shows the average waiting times, by dwelling type for the South West Central Housing District (which includes the gas fields) and Queensland. Overall, public housing waiting periods are lower in the gas fields' study area than Queensland more broadly. The exception is one bedroom dwellings, which have an average waiting period of almost three years.

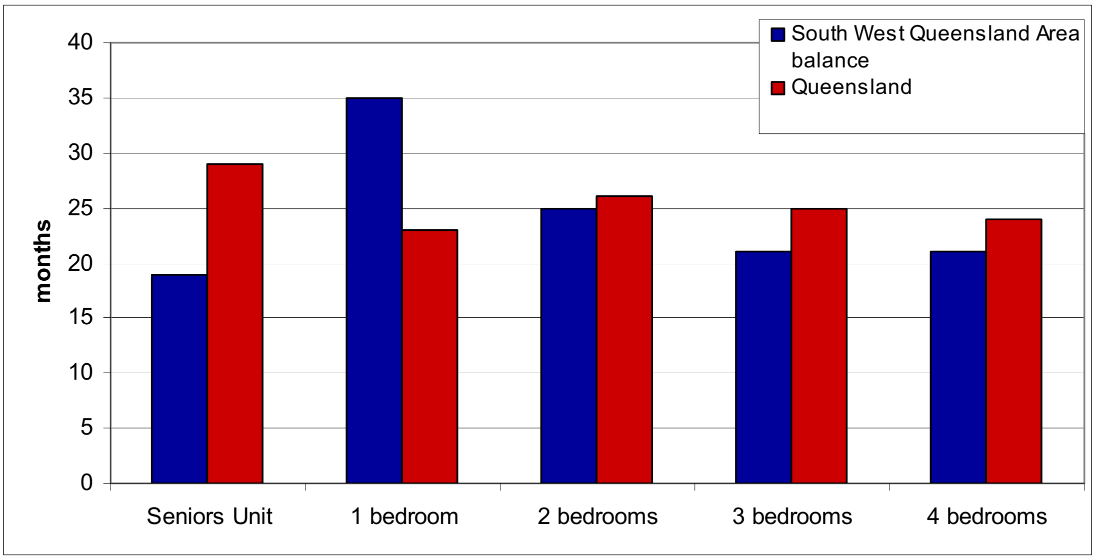

Figure 1.18 Public housing waiting periods, 2008

Source: Department of Communities 2008

The table below illustrates the number of applications within the housing register by dwelling size, as at 30 March 2008 for selected locations. The greatest number of applications within the region was in Dalby, a high proportion of which were for senior housing, in comparison to other areas. Overall, greatest demand is for two and three bedroom units. In contrast to the figures for Toowoomba and Queensland, there was much lower demand for one bedroom units.

Table 1.17 Number of applications on housing register by dwelling size

	Seniors unit	One bedroom	Two bedroom	Three bedroom	Four bedroom
Chinchilla	4	-	3	5	1
Dalby	10	2	18	12	3
Roma	4	1	17	6	7

Source: Department of Communities 2008

1.10.6 Government employee housing

The government provides employee housing assistance to eligible employees who are required to relocate to accept permanent employment offers. Individual government departments either own the homes, or rent the properties from other government departments or private owners.

Government Employee Housing (GEH) residences are leased to government departments/agencies at the full market, however the tenant/employee is not charged this amount. The residence is only allocated to employees who have been seconded or transferred to regional or remote areas to provide a government service. The properties are not available to local residences within these regional and remote towns.

Government employee housing statistics are summarised in Table 1.18 for the gas fields' study area. Data from Queensland Health were not available for each of the towns and has been aggregated by region. Department o Environment ad Resource Management, Department of Employment, Economic Development and Innovation, Department of Main Roads, Department of Communities, Department of

Infrastructure and Planning and Department of Justice and Attorney General were consulted and did not hold any government employee housing in the studied towns.

Table 1.18 Government employee housing

Government Department	Miles	Chinchilla	Roma
Department of Public Works	9	8	50
Department of Education	12	18	38
Queensland Police	8	4	14
Department of Community Safety	0	0	1
Total	29	30	103
Queensland Health	Darling Downs - 181	South West - 152	

1.10.7 Accommodation for non-resident workers

A survey of accommodation providers was conducted by Department of Infrastructure and Planning in June 2008 to establish the size of the non-resident workforce living in commercial accommodation. The survey identified 1,208 non-resident workers living in single persons' quarters and commercial dwellings in the Western Downs Regional Council area[1]. Single persons' quarters (SPQs) or workers camps were the largest providers of lodging for non-resident workers, catering for 726 people or 60% of the Western Downs Regional Council area total. The remaining 40% of non-resident workers lived in commercial accommodation in the towns.

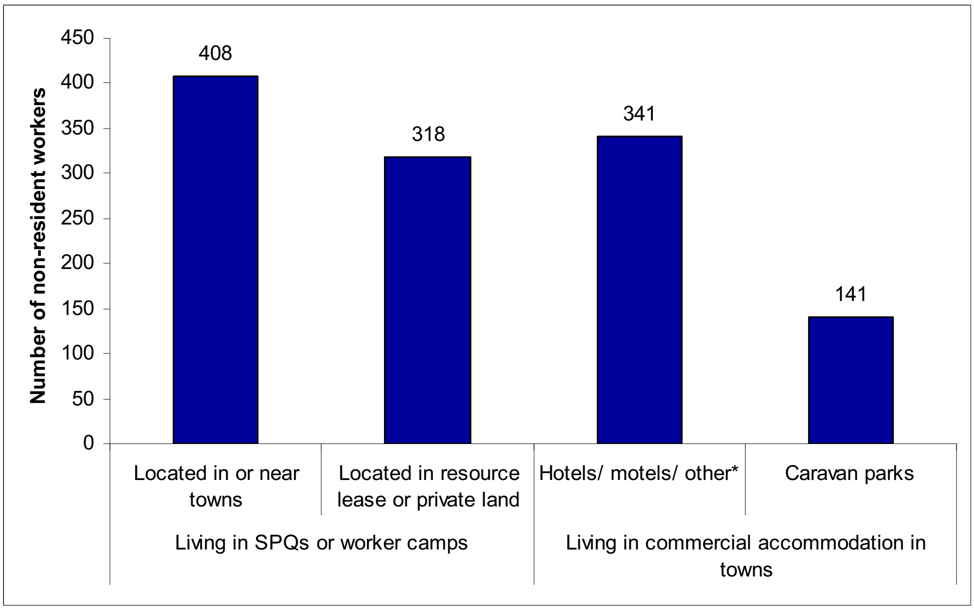

Figure 1.19 Non-resident workers, within Western Downs Regional Council area, 2008

Source: DIP 2008b

[1] Western Downs Regional Council includes the SLAs of Chinchilla, Murilla, Tara and Wambo. The DIP survey did not cover other SLAs in the SEIA study area.

The same survey established that as at June 2008, non-resident workers accounted for 12-90% of hotel and motel bed spaces within the towns surveyed (Figure 1.14). This compares to an average of 28% across the Surat Basin[2]. High demand and low supply of commercial accommodation is particularly evident in Wandoan (90%) and Chinchilla (53% occupation), which presents issues for securing temporary accommodation and places upward pressure on hotel/motel prices as well as reducing opportunities for further development of the tourism industry.

Table 1.19 Occupation of hotel/motel beds, 2008

Urban locality	Capacity of hotel/ motels (beds)	Beds occupied by non-resident workers	Occupation of beds by non-resident workers (% of total)
Wandoan	20	18	90%
Tara	55	35	64%
Chinchilla	190	101	53%
Condamine	29	14	48%
Dalby	400	130	33%
Roma	467	80	17%
Miles	113	14	12%

Source: Department of Infrastructure and Planning. 2008b

1.11 Community health and safety

This section of the baseline provides an overview of the level of medical and health facilities and services in the gas fields' study area and describes community perceptions of health. Crime rates within the study area are described in terms of reported incidences and an overview of police and emergency services resourcing provided.

1.11.1 Medical and health facilities

Public hospitals located within, or in close proximity to the gas fields' study area include:

- Chinchilla Health Services
- Dalby Health Services
- Miles Health Services
- Roma Hospital

Roma is home to the Queensland Health, South West Health Service District head office and is the largest provider of medical and health services in the gas fields' study area. Chinchilla, Dalby and Miles Health Services fall within Queensland Health's Darling Downs-West Moreton Health Service District.

[2] The Surat Basin study area includes the Maranoa and Western Downs Regional Councils

Table 1.20 Medical and health services, gas fields' SLAs, 2009

Medical and health service	Chinchilla	Dalby	Miles	Roma
Classification	Health service	Health service	Health service	Hospital
Ambulance centre	✓	✓	✓	✓
Community health	✓	✓	✓	✓
Dental	✓	✓	Visiting	✓
Child health	✓	✓	✓	✓
Drug and alcohol services	✓	×	×	✓
Mental health services	✓	✓	✓	✓
Nursing home	✓	✓	✓	✓
Long stay and respite care	✓	✓	✓	✓

Source: Queensland Health 2009

Aged care facilities within the gas fields' study area include aged care, respite and palliative care accommodation, home and community care (HACC) such as Meals on Wheels services, assisted living and allied health services. A new A$10.5M 40-bed aged care facility in Roma was completed in 2006.

1.11.2 Community perceptions of health

The Queensland Government undertakes regular surveys of the population's health. The survey provides Health Service District (HSD) specific data, along with State-wide information about a variety of topics, including general health, risk factors for chronic disease (for example, smoking, alcohol consumption, nutrition, physical activity, psychological distress, blood pressure and cholesterol), sunburn, sun-protective behaviours and diabetes. The gas fields' study area is situated in the Darling Downs-West Moreton HSD. Key health indicators for this population are detailed below.

- 34% of the population reported that they had an 'excellent' quality of life and 51% reported that they had a 'good' quality of life.
- 59% of the population was 'satisfied' with their health and 12% was either 'dissatisfied' or 'very dissatisfied'.
- During the last 12 months, 5.1% of respondents ran out of food and couldn't afford to buy more.
- Only 36% of respondents reported being in a healthy weight range, while 40% were overweight and 20% were obese, which was higher than the Queensland average.
- 49% of respondents do sufficient activity for health benefit, compared to 56% of the Queensland population.

These indicators suggest that the population of the Darling Downs-West Moreton HSD has poorer health outcomes than the Queensland average, particularly with regard to obesity and physical activity.

1.11.3 Policing and community safety

The study area falls within the Dalby and Roma Police Districts of the Southern Region district. The Queensland Police Service reports data pertaining to offences in three categories: offences against the person, offences against property and 'other' offences. The results for the 2008/2009 year for the Dalby and Roma Police Districts are presented in Table 1.21, Table 1.22 and Table 1.23. The total number of offences against the person was higher in the Dalby district (785 offences/100,000 people) and Roma district (902 offences/100,000 people) compared to the State as a whole (Queensland recorded 705 offences/100,000 people). Roma Police district had a much higher number of reported assaults (excluding sexual) (661 offences/100,000 people) compared to the Dalby Police district. Dalby reported a higher number of robbery and 'other' offences against the person.

Table 1.21 Offences against the person, reported per 100,000 population, 2008/2009

Offence	District		Queensland
	Dalby	Roma	
Homicide – murder	0	0	1
Other homicide	0	4	3
Assaults (excluding sexual)	503	661	449
Sexual offences	141	142	127
Robbery	18	4	43
Other	123	90	83
Total offences	**785**	**902**	**705**

Source: Queensland Police 2009

Offences against property relate mainly to unlawful entry, theft, property damage and fraud. During 2008/2009, offences against property were lower in Roma than Dalby across most categories, except for 'other' theft, 'other' property damage and the handling of stolen goods. Dalby and Roma both recorded lower offences than Queensland across all categories, except for Roma in arson and fraud offences.

Table 1.22 Offences against property, reported per 100,000 population, 2008/2009

Offence	District		Queensland
	Dalby	Roma	
Unlawful entry	899	631	1010
Other theft	1187	1310	1869
Arson	45	9	33
Other property damage	743	807	975
UUMV*	177	90	218
Fraud	560	146	405
Handling stolen goods	51	142	276
Total offences	**3662**	**3135**	**4618**

Source: Queensland Police 2009

* Unlawful Use of Motor Vehicle - includes attempted offences.

'Other offences' generally relate to 'drug offences', 'traffic and related offences' and 'good order offences'. Roma Police districts recorded higher rates of 'other offences' than for Dalby and Queensland as a whole (Roma at 4,819 offences/100,000 compared to Dalby at 3773 offences/ 100,000 and Queensland at 3813 offences/100,000). With regard to the breach of a domestic violence protection order, the Roma district had a significantly higher rate per 100,000 populations than either the Dalby district or the State more broadly.

Table 1.23 Other offences, reported per 100,000 population, 2008/2009

Offence	District		Queensland
	Dalby	Roma	
Drug offences	1019	1250	1026
Liquor offences (excl. drunkenness)	180	180	209
Gaming, racing, betting	0	0	0
Breach domestic violence protection order	183	305	195
Prostitution	0	0	7
Trespassing and vagrancy	75	150	90
Stock-related offences	120	253	28
Weapons act offences	96	167	78
Traffic and related offences	1163	1318	958
Good order offences	896	1975	1154
Miscellaneous offences	42	43	67
Total offences	3773	5819	3813

Source: Queensland Police 2009

It will be important that Australia Pacific LNG allays any perceptions that the community may have regarding increased instances of crime, as a result of the Project. This is discussed further in Section 5 of the Gas Fields Social Impact Assessment (Volume 2, Chapter 20).

1.11.4 Emergency services

Emergency services (excluding Queensland Police Service) are part of the Queensland Department of Community Safety. This department includes:

- Queensland Fire and Rescue Authority
- Queensland Ambulance Service
- Emergency Management Queensland

The Queensland Police Service is the primary law enforcement agency for the State of Queensland. The gas fields' study area falls within the Dalby and Roma Police districts, in the Southern Region. There are police stations located in each of the urban localities within the study area.

Similarly, the Department of Emergency Services is divided into seven regions of which South Western Regions apply to the gas fields' study area. Chinchilla, Miles, Dalby and Roma are located within the South Western Region. Data about unmet demand for volunteers in the emergency services' sector could not be sourced, however if the situation is similar to what is being elsewhere in regional Australia, demand will be greater than supply. Regional Australia generally experiences a shortage of volunteers to fulfil emergency services' positions and an increase in population may assist in fulfilling unmet demand. Potential impacts of the Project on participation of the workforce in volunteering activities are discussed in Section 5 of the Gas Fields Social Impact Assessment (Volume 2, Chapter 20).

1.12 Facilities and services

This section of the baseline provides an overview of the level of child care services and the presence of cultural, community and recreation facilities and organisations. A snapshot of the types of community events in the regional is given.

1.12.1 Child care

The provision of child care services is an important factor for enabling parents to participate in employment, education and training, community activities and personal activities. Child care may also be used for family support reasons. The number of child care facilities per 100 children aged 0 to 4 years for each of the urban localities is illustrated in Figure 1.20. The ratios are estimates only as the number of child care centres relates to 2009 information and the population estimates upon which the ratios are based, were derived from the ABS 2006 Census of Population and Housing. Miles recorded the highest number of child care facilities per 100 children aged 0 to 4.

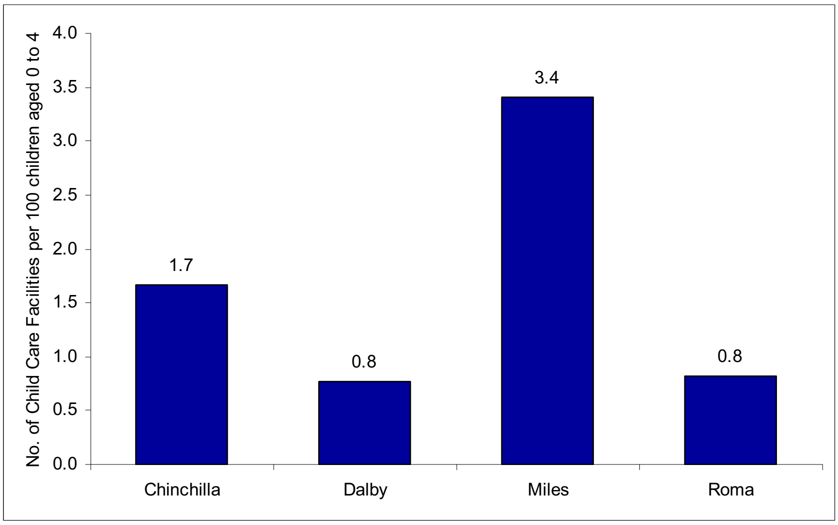

Figure 1.20 Number of child care facilities per 100 children Aged 0-4, 2009

Source: Australian Child care Index (2009) and ABS 2006a

1.12.2 Cultural, community and recreation facilities and organisations

The presence of quality and diverse cultural, community and recreation facilities and/or organisations is vital to the social wellbeing of communities. It plays an important role in the quality of life for residents, and for building a vibrant and strong community. A summary of the types of cultural, community and recreational facilities and organisations within the urban localities are presented in

Table 1.24. This list has been sourced from Queensland Health's website and the Regional Council websites. This list is by no means exhaustive.

The array of services and sporting and recreational options is extremely diverse throughout all urban localities with a particularly variety of options available in Roma, Dalby, and Chinchilla. During stakeholder meeting in the gas fields' region, Roma-based community organisations stated that the community has a broader need for improved youth and cultural-awareness programs. Several non-government agencies in the gas fields' area also discussed opportunities for Australia Pacific LNG employees to be further involved with volunteering for local community programs.

The table below summarises the community services available in the communities of Chinchilla, Dalby, Miles and Roma located within the gas fields' study area. These urban centres also provide community services which support surrounding smaller communities.

Table 1.24 Services and features available in gas field localities

Locality	Services and features available
Chinchilla	• Cultural centre and art gallery • Sports amenities and clubs • Recreation and arts clubs • Shops • Hotel, club, restaurant, cafe • Cinema • Welfare services • Youth and aged services • Churches and church group • Information centre and sightseeing • Historical museum • Airport
Dalby	• Shopping centre and shops • Library • Cinema • Hotels, restaurants, cafes, leagues club • Churches and church groups • Welfare services • Aged care and services • Youth services and clubs • Historical museum • Airport

Locality	Services and features available
Miles	• Shops • Sport amenities and clubs • Community centre • Museums • Art galleries • Hotels, restaurants, cafes • Library • Churches and church groups • Community services
Roma	• Community centre and art galleries • Shops • Cinema • Hotels, restaurants, cafes • Library • Welfare services • Youth services and clubs • Aged care and services • Sports and recreation amenities and clubs • Churches and church groups • Airport

Source: Council websites and online community directories (as at 02 December 2009)

1.12.3 Community events

A review of Regional Council and relevant websites was undertaken to establish the number and type of community events for each of the urban localities in the gas fields' study area, as shown in Table 1.25 and the findings indicate extremely active communities, with a diverse range of events throughout the year.

Table 1.25 Community Events in the Study Area, 2009

Town	*Community Event	
Chinchilla	• Chinchilla Melon Festival • Chinchilla Show	• Rotary May Festival
Dalby	• Australia Day Breakfast in the Park • Carlton Dalby Picnic Race Day • Dalby Gliding Competition	• Dalby Show • Drama at the Gas Fields
Miles	• Miles Country Music Spectacular • Beef, Bells and Bottle Tree Festival	• Christmas Street Carnival
Roma	• Roma Australia Day Celebrations • Easter in the Country Festival • Roma Show • Roma Sheepdog Trials	• Carlton Mid Roma Picnic Races • Santos Food and Fire Festival • Roma Cup
Theodore	• Theodore Show	

* This table is not exhaustive of the community events in the gas fields' region. There are also significant community events in the surrounding regional towns, for example: the Tara Festival of Culture and Camel Races, Millmerran Camp Oven Festival and Shooting Events.

1.13 Values and attitudes

An understanding of the community values and attitudes within the gas fields study area can be gained through a review of regional strategic planning documents which have been developed in consultation with the community. Key strategic documents which provide insight into pertinent values and attitudes of the community are the *Western Downs Regional Council Corporate Plan 2009-2013*, *Maranoa Regional Council Corporate Plan 2009 to 2013, Maranoa–Balonne Regional Plan 2009* and the *Surat Basin Scoping Study 2008.*

Through the community consultation process the *Western Downs Regional Council Corporate Plan 2009-2013* reported that the community valued their quality of lifestyle, community identity, clean environment, long-term water solutions and harmony between the energy sector and traditional industries. The *Corporate Plan 2009-2013* established a vision statement for the region which articulates the community's values and ambitions:

> *"A proud region united by opportunity and lifestyle."*

While the Corporate Plan is a five-year document, the Council has also taken a long-term view and is currently developing the *Western Downs 2050 Community Plan* which will guide future planning of the Council area. Western Downs Regional Council is currently undertaking community consultation to inform the plan. Five broad key goals for the region's future reflect the previously identified community values that include:

- Quality lifestyle
- Balanced growth

- Strong identity
- Stable water supply
- Sustainable environment

Information from the *Maranoa Regional Council Corporate Plan 2009 to 2013* and the *Maranoa–Balonne Regional Plan 2009* identified a number of key themes pertaining to community values and attitudes in the region, including:

- Fostering community cohesion while celebrating diverse cultural backgrounds.
- Maintaining a relaxed and safe rural lifestyle for residents.
- A strong connection to the area's heritage and traditional values.
- A strong vision for healthy, liveable and prosperous places.
- A desire to create a wealth of opportunities for future generations.
- A progressive and resourceful outlook with a desire to broaden the economic base.
- Strong ties to agricultural industries and sustainable production.

During focus group discussions with Surat Basin communities (Roma, Dalby, Chinchilla and Toowoomba) the *Surat Basin Scoping Study 2008* identified community perceptions regarding the areas current liveability and rural lifestyle. Participants nominated high levels of social capital, particularly in the smaller communities, as an asset. The region's communities were regarded as possessing a strong sense of identity and being cooperative, collaborative and welcoming places. The low commuting times, more relaxed lifestyle, safety and family friendliness, rural setting, open space and recreation options were all viewed as valued elements of the surveyed communities.

In addition to regional planning documents, Bergent conducted a study of the impacts associated with current operations to stakeholders and landholders and used the sessions to identify current community perceptions about the coal seam gas industry and future development. During December 2008, two focus groups (in Roma and Chinchilla) were held with 18 participants. The study had the following objectives:

- Identify the current perceptions and impacts to landowners and town residents from coal seam gas operations in the towns of Roma, Chinchilla and Miles.
- Identify the key community concerns and risks to Origin.
- Make recommendations to address these concerns and mitigate the risks.

This study found that local businesses are supportive of development in the coal seam gas industry, however identified some issues of concern for the day-to-day capacity of their towns (for example, retention of employees for small businesses, reduction in the availability of services). The broader community is generally supportive of Origin, however recognises that some issues need to be managed effectively for the Project to be regarded as successful within the community (for example, impacts to house prices and itinerant workers changing community dynamics).

2. Social baseline summary - Pipeline

2.1 Policy review

2.1.1 State Government

Department of Premier and Cabinet

Department of Premier and Cabinet

The Queensland Government's plan for Queensland in 2020 is outlined in *Toward Q2: Tomorrow's Queensland*. The Plan is framed around five ambitions for the State, covering the economy, environment and lifestyle, education and skills, health and community.

Targets of Toward Q2 include:

- Queensland is Australia's strongest economy, with an anticipated growth in infrastructure.
- Increase by 50% the proportion of Queensland businesses undertaking research and development or innovation.
- Cut by one-third Queenslanders' carbon footprint with reduced car and electricity use.
- Protect 50% more land for nature conservation and public recreation.
- All children will have access to a quality early childhood education so they are ready for school.
- Three out of four Queenslanders will hold trade, training or tertiary qualifications.
- Cut by one-third obesity, smoking, heavy drinking and unsafe sun exposure.
- Queensland will have the shortest public hospital waiting times in Australia.
- Halve the proportion of Queensland children living in households without a working parent.
- Increase by 50% the proportion of Queenslanders involved in their communities as volunteers.

Toward Q2 would be expected to promote government investment in the region to meet the targets. There is also an opportunity for the Project to contribute to some of these outcomes by facilitating training and employment opportunities for local residents and other people throughout Queensland and encouraging and supporting employees to volunteer in the community.

Department of Employment, Economic Development and Innovation

The *Blueprint for Queensland's LNG Industry* provides an outline of how the Queensland Government will facilitate the development of the LNG industry in Queensland and work with local communities to ensure that any development of LNG resources is beneficial. To co-ordinate government activities and facilitate ease of access to information, the government has established the LNG Industry Unit within the Department of Employment, Economic Development and Innovation. The unit is responsible for policy development, industry assistance and commercial negotiations for LNG projects.

With regard to workforce planning and development, a specialist energy and resource sector employment company, Energy Skills Queensland and the LNG industry, have formed the CSG/LNG Training Steering Committee. This committee has been tasked with providing recommendations to the Queensland Government regarding workforce planning and development for the LNG industry. The committee will detail skill requirements, number of workers required to be trained and the location of the training. Following its completion, it is anticipated that Energy Skills Queensland and the LNG industry will develop a CSG/LNG training facility in Queensland. Australia Pacific LNG will continue to work with the committee to discuss opportunities for partnership to support the training and development of local residents to gain employment within the industry.

Department of Communities

The *Sustainable Resource Communities Policy: Social Impact Assessment in the Mining and Petroleum Industries* (DEEDI 2008) is focused on communities where rapid development, brought about by the resources boom, is having significant impacts to communities. Key areas which experience the greatest impact include infrastructure and services and the social structure of local and regional communities that support the new or expanded mining and petroleum developments. Government is implementing the following initiatives to continue to build equitable and sustainable resource communities by:

- Strengthening the government's co-ordination role.
- Improving linkages between social impact assessment and regional planning.
- Fostering partnerships with local government, industry and community.
- Providing an enhanced regulatory environment for social impact assessment.

The framework identifies potential impacts of mining industry expansion and key planning issues; many if not all of which are relevant to this EIS. The likely areas which may be impacted by mining industry expansion identified by the framework include:

- Local and regional economic development
- Employment and skills
- Government co-ordination and service provisions
- Housing demand and supply
- Housing choice
- Housing affordability
- Short-term accommodation
- Strategic planning and infrastructure

The framework also notes that planning considerations are critical and identified the following key planning issues:

- Cumulative social, economic and environmental impacts
- Managing the urban lifecycle stages of growth, decline and renewal
- Managing risks
- Cultural impacts
- Capacity for economic diversification
- Balancing productive mining industry and sustained and vibrant communities

These issues provide a framework to guide this social impact assessment.

Blueprint for the Bush (Department of Communities 2006) is a 10-year plan to build a strong rural Queensland of sustainable, liveable and prosperous communities. It is the culmination of a partnership between the Queensland Government, AgForce Queensland and the Local Government Association of Queensland. The Blueprint introduces new strategies for rural infrastructure and services and strengthens existing measures that are working well. There are two funding programs within the Blueprint. The first supports local transport initiatives and the second supports initiatives which increase the capacity of communities to own and manage their future. There may be opportunities for Australia Pacific LNG to further support Blueprint for the Bush initiatives through financial and in-kind support. This could include assisting organisations with their funding applications, contributing funds to a partnership project or resourcing the implementation of community capacity building strategies identified through a Blueprint for the Bush initiative.

Department of Health

The *Queensland Health Strategic Plan 2007-2012* (Queensland Health 2007) identifies the strategic directions for Queensland Health between 2007 and 2012. Key challenges identified in the Strategic Plan of particular relevance to the study area are:

- Meeting the demand for health services of a rapidly growing population while maintaining adequate services in existing rural, remote and regional locations.
- Maintaining services, particularly in rural, remote and regional areas, given ongoing difficulty for recruiting and retaining health care workers and providers.

Initiatives identified to address the above challenges include:

- Implementing community-based models of service delivery where a range of services and providers are located together to support the shift of services closer to communities.
- Increasing and improving technology to support specialist services to rural and remote communities.
- Building capacity in community-controlled Aboriginal and Torres Strait Islander health services, where appropriate.

The initiatives identified in the Strategic Plan are being implemented by Queensland Health and will assist with informing the development of the Project's mitigation measures and strategies and may provide guidance for community investment opportunities.

Department of Emergency Services

The *Department of Emergency Services Strategic Plan 2008 to 2012* (Department of Emergency Services 2008) covers the three operational arms of this department; Queensland Ambulance Service, Emergency Management Queensland and Queensland Fire and Rescue Service. The goals of the Strategic Plan are to:

- Focus on front-line service delivery.
- Strengthen community capability and resilience.
- Support volunteer emergency service organisations.
- Build organisational capability and resilience.

Strategies particularly relevant to the socio-economic environment of the study area include recruitment and retention of volunteers, leveraging strategic partnerships with businesses and developing partnering opportunities with communities. Australia Pacific LNG intends to support this plan through encouraging and facilitating volunteering opportunities for its employees.

Department of Education and Training

The *Queensland Skills Plan 2008* (DET 2008a) has been developed in response to the challenges and opportunities posed by a strong and dynamic economy and labour market. It contains measures to alleviate skill shortages at all occupational levels. A key measure relevant to the study area is the 'focus on regional planning to build the capacity of the vocational education and training sector'. The development of local and regional Skills Formation Strategies will help align skills supply, workforce development and business strategy. This is achieved through the collaborative action of industry, government and the education and training sectors. It will be important for Australia Pacific LNG to work with TAFE and Education Queensland to identify its skill requirements and provide opportunities for trainees and apprentices.

The purpose of the *Department of Education, Training and the Arts Strategic Plan 2008 to 2012* (DET 2008b) is to build the knowledge, skills and creativity of Queenslanders to drive economic prosperity, build strong and vibrant communities and enhance lifelong well-being. Key strategies of particular relevance to the socio-economic environment of the study area include:

- Develop a new regional arts and cultural strategy to enable people across Queensland to enjoy high quality, inspiring arts and cultural experiences.
- Strengthen regional services to better meet the needs of regional clients.

Cultural experiences and services can play a role for improving the liveability of regional areas and through this make the locations more attractive places to live. The Dogwood Crossing@Miles facility is an example of such a cultural facility.

Department of Infrastructure and Planning

The *Central Queensland Regional Growth Management Framework 2002 (CQRGMF)* (Department of Local Government and Planning 2002) contains guiding principles, outcome statements, strategies and actions to provide a regional framework for the management and development of Central Queensland. Central Queensland Local Government areas within the Australia Pacific LNG study area are the Banana and Gladstone regional councils.

There are many strategies in the CQRGMF relevant to the development of the region's socio-economic environment and are categorised according to the following themes:

- Resource use, conservation and management
- Economic development
- Infrastructure
- Social and cultural development
- Education, training and research
- Planning and governance

The CQRGMF was endorsed by State Cabinet in July 2002 and is currently being implemented. The outcomes of the strategies and actions in the CQRGMF has been be used to inform the Project Social Impact Management Plan.

2.1.2 Local Council

Banana Shire Council

The *'Banana Shire Council Corporate Plan 2009 to 2014'* (Banana Shire Council 2009) was adopted 29 April 2009 and came into effect 1 July 2009. The Plan aims to:

- Enhance and build on lifestyle and sense of community.
- Support and drive economic development.
- Protect the unique environmental features and strengthen ecological sustainability.
- Ensure sustainable planning exists for the community's future.
- Planning and delivering effective and efficient infrastructure services.
- Promote excellence in leadership and organisational management.

The Banana Shire Council is in the process of developing its Operational Plan which will set out how its resources will be applied to achieve the aims of the Corporate Plan.

Western Downs Regional Council

The *Western Downs Regional Council Corporate Plan 2009 to 2013* (Western Downs Regional Council 2009) recognises the significant opportunities and challenges faced by the Western Downs region as one of Queensland's fastest growing economies. Managing the social and economic impact of this growth as well as ensuring infrastructure and services keep pace with growing demand are key future planning issues addressed in the Corporate Plan. Some of the main issues identified in the Western Downs Regional Council Corporate Plan include:

- Lack of affordable housing and competing access for land as a result of unprecedented growth of industrial projects which will see the number of transient miners increase from 4,000 to 15,000 by 2015.
- Pressure on road safety and road condition, resulting from increased traffic flows.
- Ability to meet the growing demand for health and education services.
- Ability to meet the growing demand for regional transport infrastructure (air, rail and road).

The Western Downs Regional Council is preparing a *Western Downs 2050 Community Plan* which guide the future planning of the Council area. Western Downs Regional Council is undertaking community consultation to inform the development of the plan. The Western Downs Regional Council website explains that the Plan focuses on:

> *"…how to get the best results for our communities from resource development activity and how to ensure that community services and facilities, health education, sport and recreation continue to meet our needs".*

2.1.3 Community based organisations

Fitzroy Basin Association

The *Central Queensland Strategy for Sustainability – 2004 and Beyond (CQSS2*) is the regional plan for the integrated management of the natural and cultural resources and environment of the river catchments of the Central Queensland region. The CQSS2 is only relevant to the gas pipeline component of the Project; specifically the Fitzroy Basin sub-regions of Dawson and Boyne Calliope. The CQSS2 developed the following goals through a collaborative approach with the resource management community to:

- Improve the health and maintain the functioning of our natural systems and conserve the region's biodiversity.
- Develop a diversity of economically viable industries that support vibrant regional communities and use the region's natural resources in an ecologically sustainable way.
- Integrate natural resource and environmental management, economic development and community development within the region.
- Share decision-making for the allocation of natural resources and the management of the region's environment across all stakeholders.
- Ensure the costs and benefits of achieving sustainable systems are shared equitably across the regional community.

Implementation of the CQSS2 is guided by an Investment Plan with the second major driver being the application of a social and economic assessment to inform priority investments and programs.

2.2 Regional Studies

Surat Basin Scoping Study: Enhancing Regional and Community Capacity for Mining and Energy Driven Regional Economic Development –Commonwealth Scientific and Industrial Research Organisation (CSIRO) 2008

In 2008, the CSIRO was commissioned by the Southern Inland Area Consultative Committee (now known as Regional Development Australia – Darling Downs and South East) and supported by the Australian Government Department of Infrastructure, Transport and Regional Development to undertake a scoping study, enabling practical, evidence-based interventions aimed at addressing key local and regional sustainability issues. The specific goals of the scoping study were to:

- Provide insights about change dynamics and possible impacts within the Surat Basin.
- Provide a preliminary assessment of the external and internal regional drivers and dynamics affecting change within the region.
- Explore possible impacts of change in the area at regional and community scale.
- Map existing institutional dynamics and identify synergies and barriers.

Based upon a literature review and consultation with communities in the Surat Basin (Roma, Chinchilla, Dalby and Toowoomba) and Bowen Basin (to gauge impacts experienced in relation to resource developments), the study provided a range of recommendations as detailed below.

- Information sharing, communication and transparency are critical for enabling good governance and change management at the community level.
  - Establish a tripartite institutional arrangement between the Surat Basin regional councils, State and Federal governments and mining companies to facilitate ongoing dialogue, strategic planning and revenue sharing.
  - Consider establishing mining town growth management groups.

  - Build capacity for Regional Councils and communities to allow for effective regional representation.
  - Establish a mediating body that operates in situations where consensus is not possible.
- Gain and revenue sharing is essential to increase the social acceptability of mining operations and to increase the local economic opportunities from mining in the Surat Basin region.
  - Consider establishment of a trust fund that builds on financial basis for investment today and in the future.
- Economic diversification leveraged from the energy boom is essential to the long term well-being of the region.
  - Maintain and enhance existing economic diversity.
  - Explore new ways to use natural resources in the production of goods and services.
  - Creation and fostering of industrial networks.
- Investment for hard and soft infrastructure will be crucial to meet the demands of an increased population.
  - Allow for timely land release and encourage corporate housing initiatives to improve housing affordability.
  - Benefit from both an increase in resident population and retained workforce, particularly in mining and energy production activities as a result of improved soft and hard infrastructure.
- Information is critical for effective ongoing management of regional opportunities from the energy boom.
  - Develop an agreed set of indicators for the region.
  - Improvement of the EIS process to allow for institutionalised impact assessment procedures, taking account of all relevant social and environmental impacts at community level.

The terms of reference for the scoping study did not include the development of a process for implementing the recommendations. To date, it is not known if any of the recommendations have been implemented and if so, to what extent (Darbas, *pers comm* 2009). The recommendations above and findings from this study have provided a platform from which potential impacts have been assessed. Furthermore, information gained from this study has been drawn upon when developing mitigation and enhancement strategies for the Project.

2.3 Town profiles

The gas pipeline study area incorporates a range of large and medium towns and small rural communities. These towns have been profiled to present a snapshot of the current situation. Data presented in this section was predominately gathered from the Australian Bureau of Statistics (ABS) 2006 and desktop research (including council websites and tourism websites).

2.3.1 Biloela

Biloela is a significant town within Capricornia's rural hinterland, located in central eastern Queensland's Callide Valley at the junction of the Burnett and Dawson Highways. Biloela is the main population and administrative hub in the Banana Shire and easily accessible to major centres such as

Rockhampton and Gladstone. Biloela plays an important role in the Central West region, by offering higher order services and infrastructure than some of the surrounding towns.

Biloela has been functioning as an agricultural centre since the 1920's with strengths in cattle grazing and cropping (cotton, sorghum, mung beans, wheat and herbs). In addition to agriculture, Biloela currently supports a variety of industries, including coal mining, energy production and meat works. Biloela has established itself as a major plant research area for the Department of Primary Industries and Fisheries, with the development of a 280 hectare research station to the north of the town in 1923 and its expansion in 1997.

The community is well serviced with community infrastructure including several primary and secondary schools, a local TAFE centre, hospital, community resource and conference centres and shopping centre.

Today Biloela is a modern town characterised by broad streets and a well established business centre. The town has a varied community and cultural life, identifying itself as "a small, clean, diverse and innovative community with an accepting and conservative attitude, serving a diverse industry base". Its vision for the future is to strengthen the local community through increased opportunities for young people, better access to higher education and health services and further diversification of industry. Table 2.1 outlines the key characteristics of the town.

Table 2.1 Biloela key characteristics

Characteristic	Biloela	Gas pipeline	Queensland
Population, 2006	5,716	19,638	4,091,546
Median age, 2006	34.4	36.6	37.2
Population AAGRa, 1996 to 2006	0.03%	0.1%	2.1%
Estimated population AAGR, 2009 – 2031	0.02%	0.5%	1.7%
Indigenous population, 2006	3.0%	3.0%	3.3%
Unemployment rate, March quarter 2009	3.2%b	2.3%	4.0%
Median weekly household income, 2006 (A$)	$1,375	$1,323	$1,202
Completed up to Grade 12, 2006	34.40%	30.0%	41.3%
Median dwelling price, 2009 (A$)	$307,500	NA	$414,000c
Average weekly rent, 2006 (A$)	$161	$118	$213

a Average Annual Growth Rate; b based upon Banana SLA estimate as data at the town level was not available for Biloela; c Brisbane only.

Source: ABS 2006

Key observations and issues

- High demand and low supply of housing stock, driven by a buoyant mining sector, has placed upward pressure on the price of housing, with the median house price increasing from A$126,000 in 2004 to A$307,500 in 2009 (the second most expensive of all studied towns).
- A strong mining sector may also have been a factor for Biloela recording the highest average weekly household income (A$1,375 per week in 2006) out of all studied towns in the gas pipeline area, including Gladstone (A$1,344 per week).

- Biloela has a relatively young population (average age 34.4 year in 2006) compared to other studied towns in the gas pipeline area and is supported by a high number of sporting and recreation facilities and organisations.

2.3.2 Theodore

Theodore is a small town on the Leichhardt Highway, located 105 km south-west of Biloela between the junction of Castle Creek and the Dawson River. Theodore was founded in 1922, when legislation was passed for the establishment of a major irrigation project.

The town is part of the Banana Shire and is considered to be an important service centre for the irrigation, agricultural, industries of the surrounding area. The main irrigated crop is cotton. Theodore's agricultural strengths are in dryland crops including wheat, sorghum and mung beans. There are also many cattle breeding studs and a sawmill located in the vicinity. Anglo Coal's Dawson South Stage 2 Coal project is located 10 kilometres to the north of Theodore. The EIS process for the project has recently been complete and subject to further studies, the project has been approved.

Theodore has a number of government and community welfare services, including emergency services, a hospital and Home and Community Care (HACC) service, as well as a number of sport, recreation and educational facilities.

Theodore identifies itself as a safe and friendly rural community that provides support to regional economies. It contains one of only two cooperative hotels in Australia, Theodore Hotel, which is owned and operated by the local residents. Table 2.2 outlines the key characteristics of the town.

Table 2.2 Theodore - key characteristics

Characteristic	Theodore	Gas pipeline	Queensland
Population, 2006	473	19,638	4,091,546
Average age, 2006	39.7	36.6	37.2
Population AAGR, 1996 to 2006	-0.6%	0.1%	2.1%
Estimated population AAGR, 2009 – 2031	-0.8%	0.5%	1.7%
Indigenous population, 2006	11.2%	3.0%	3.3%
Unemployment rate, March quarter 2009	3.2%a	2.3%	4.0%
Average weekly household income, 2006 (A$)	$1,093	$1,323	$1,202
Completed up to Grade 12, 2006	30.00%	30.0%	41.3%
Median dwelling price, 2009 (A$)	$172,500	NA	$414,000
Average weekly rent, 2006 (A$)	$108	$118	$213

a Based upon Banana SLA estimate, as individual town data was not available for Theodore.
AAGR – Aggregated Annual Growth Rate
Source: ABS 2006

Key observations and issues

- There was a 71.0% increase in the average weekly household income between 2001 and 2006, the largest increase of all studied towns in the gas pipeline area - which could be in part due to a stronger mining industry and declining agricultural, fishing and forestry sector during this period.

- In 2006, Theodore had the highest proportion of Indigenous peoples (11.2%) as a proportion of the total gas pipeline studied towns.
- Housing in Theodore is the least expensive of all studied towns in the gas pipeline area with a median dwelling price of A$172,500 in 2009 and has the second lowest proportion of homes owner-occupied in 2006 (48%).

2.3.3 Cracow

Cracow is located within the Banana Shire Local Government Area. The town is located on the Theodore - Eidsvold road, 485 kilometres north-west of Brisbane. The 2006 Census indicates that Cracow and the surrounding area had a population of 123.

Cracow was a prosperous gold mining town, with gold first discovered in the early 1800's. In 1931, the Golden Plateau mine was established and it operated continuously until 1976.

At its gold mining peak, the town included five cafes, barber shop, billiard saloon, two butchers, a picture theatre and a soft drink factory. The closure of the mine in the late 1970's resulted in Cracow being promoted as a "ghost town" due to the abandonment of several houses and the closure of shops. The key facilities remaining include the outpatients' clinic and the hotel as the only local business and social hub.

Cracow is considered to be a small and safe community, where people can enjoy their chosen lifestyle.

In 2004, Newcrest Mining NL re-established gold mining in the town providing some encouragement for sustaining the local community. Their future vision embodies the following: "a friendly mining town with a thriving tourism industry offering opportunities to present and new residents". Table 2.3 outlines the key characteristics of the town.

Table 2.3 Cracow - key characteristics

Characteristic	Cracow	Gas pipeline	Queensland
Population, 2006	122	19,638	4,091,546
Average Age, 2006	31	36.6	37.2
Indigenous Population, 2006	13.1%	3.0%	3.3%
Unemployment Rate, March Quarter 2009	3.2%a	2.3%	4.0%
Average Weekly Household Income, 2006 (A$)	$900	$1,323	$1,202
Completed up to Grade 12, 2006	31.5%	30.0%	41.3%
Median Dwelling Price, 2009 (A$)	NA	NA	$414,000
Average Weekly Rent, 2006 (A$)	NA	$118	$213

a Based on Banana SLA estimate as individual town data was not available for Cracow.

Source: ABS 2006

2.3.4 Taroom

Taroom lies on the banks of the Dawson River, 128 km north from Miles. It is a strong cohesive community and serves as one of the Banana Shire Local Government Area's three major population centres. The township was first settled in 1845 as a sheep grazing region. Today, cattle grazing has taken over as the major agricultural avidity and the district is recognised as one of the best cattle areas in the state, along with its quality grain crops and timber products. Taroom has rich visual amenity with gorges, grazing lands, national parks and open country spaces.

The population of Taroom is currently over 600 people and the community is well serviced with a hospital, town centre, shops, heritage centre and a range of sporting facilities including a swimming pool, golf course, tennis centre and horse racing centre. Local cultural events depicting Taroom's rural values include agricultural shows and rodeos.

Taroom has an active community that embraces the contribution of rural industries to the area. They have strong social connections, take pride in their community's heritage and value their current relaxed, rural lifestyle. Table 2.4 outlines the key characteristics of the town.

Table 2.4 Taroom - key characteristics

Characteristic	Taroom	Gas pipeline	Queensland
Population, 2006	630	19,638	4,091,546
Average Age, 2006	42	36.6	37.2
Indigenous Population, 2006	3.17%	3.0%	3.3%
Unemployment Rate, March Quarter 2009	0.4%	2.3%	4.0%
Average Weekly Household Income, 2006 (A$)	$795	$1,323	$1,202
Completed up to Grade 12, 2006	21.8%	30.0%	41.3%
Median Dwelling Price, 2009 (A$)	$180,000	NA	$414,000
Average Weekly Rent, 2006 (A$)	$80	$118	$213

Source: ABS 2006

2.3.5 Wandoan

Wandoan is a town located to the east of Leichhardt Highway, approximately half-way between Miles and Taroom. The town lies within the Western Downs Regional Council area. Community infrastructure includes an outpatient's clinic, community and cultural centre, education facilities and shops.

Originally named Juandah after a local cattle station, in 1926 the town changed its name to Wandoan. Today Wandoan is an agricultural based community mainly supported by cattle and grain farming and more recently coal and transportation with the prospective development of the Xstrata Coal Mine and Surat Basin Railway. Table 2.5 outlines the key characteristics of the town.

Table 2.5 Wandoan - key characteristics

Characteristic	Wandoan	Gas pipeline	Queensland
Population, 2006	385	19,638	4,091,546
Average Age, 2006	40	36.6	37.2
Indigenous Population, 2006	1.03%	3.0%	3.3%
Unemployment Rate, March Quarter 2009	0.4%a	2.3%	4.0%
Average Weekly Household Income, 2006 (A$)	$623	$1,323	$1,202
Completed up to Grade 12, 2006	26%	30.0%	41.3%
Median Dwelling Price, 2009 (A$)	$190,000	NA	$414,000
Average Weekly Rent, 2006 (A$)	$85	$118	$213

Source: ABS 2006

2.3.6 Miles

Miles is a small country town located in the heart of the gas fields study area. It was the administrative and commercial centre for the former Murilla Shire Council and now forms part of the Western Downs Regional Council. Originally named ‘Dogwood Crossing’ after a nearby creek, Miles is now referred to as the “crossroads of the golden west” and supports a diverse array of industries, including dairying, fruit growing, wheat, sheep, cattle, timber and bentonite clay mining.

Table 2.6 Key Characteristics

Characteristic	Miles	Gas field	Queensland
Population, 2006	1,296a	22,889	4,091,546
Average age, 2006	41.5	38.5	37.2
Population AAGR, 1996 to 2006	1.5%b	2.6%	2.1%
Estimated population AAGR, 2009 – 2031	0.4%	0.7%	1.7%
Indigenous population, 2006	7.3%	3.5%	3.3%
Unemployment rate, Sept Quarter 2008	1.1%c	1.5%	4.1%
Average weekly household income, 2006	$789	$966	$1,202
Education completed up to Grade 12, 2006	27.70%	26.4%	41.3%
Median dwelling price, 2009	$175,000	NA	$414,000d
Average weekly rent, 2006	$119	$108	$213

a 2008 population estimate; b AAGR 1996 to 2008

c based upon Murilla SLA estimate as data at the town level were not available for Miles; d Brisbane only

AAGR – Aggregated Annual Growth Rate

Source: ABS 2006

Key observations and issues

- The average age of residents in Miles (41.5 years in 2006) was the highest of all studied towns.
- In comparison to towns elsewhere in the gas fields, Miles has a very low average weekly household income ($789), which could be in part due to the small proportion of people employed in higher paying sectors such as mining (4.5%) and construction (6.9%), however this is most likely related to the higher proportion of people aged 65 and above (22.5%), i.e. of retirement age.
- Of the ten Surat Basin towns surveyed in 2008, Miles had 228 non-resident workers, accounting for 15.0% of the total population and 12% of the hotel/motel beds.

2.3.7 Gladstone

Gladstone was established in 1847 as a penal colony, originally called Port Curtis, and later changed to honour British Statesman, William Gladstone. Major industrial and community expansion commenced in the sixties and has continued to this day with a solid industrial, export and tourism base present. More recently the LNG industry has began to invest heavily with six projects currently progressing environment impact studies for projects in Gladstone (DEEDI 2009). Major industries in Gladstone include coal export, cattle export, tourism and aluminium smeltering – Gladstone is home to the Boyne aluminium smelter, Australia's largest aluminium smelter. Gladstone City is a thriving town serviced by public and private hospitals, 13 schools, the Central Queensland Institute of TAFE and Central Queensland University. In addition, there is a diverse range of retail, recreation, cultural, leisure and entertainment services and facilities available.

The Table below documents the key characteristics of the Gladstone City area.

Table 2.7 Key Characteristics, Gladstone Urban Locality

	Gladstone	Queensland
Population, 2006	30,734	4,091,546
Average Age, 2006	33.7	37.2
Population AAGR, 1996 to 2006	1.5%	2.1%
Estimated Population AAGR, 2009 – 2031	1.9%	1.7%
Indigenous Population, 2006	3.8%	3.3%
Unemployment Rate, Sept Quarter 2008	4.3%	4.1%
Median Weekly Household Income, 2006 (A$)	$1,344	$1,202
Completed up to Grade 12, 2006	35.20%	41.3%
Median Dwelling Price, June 2009 (A$)	$360,000	$414,000a
Average Weekly Rent, 2006 (A$)	$180	$213

AAGR – Aggregated Annual Growth Rate

Source: ABS 2006

2.3.8 Other affected communities

In addition to the larger affected communities, there are a number of other smaller towns and villages located within or adjacent to the study area which could potentially be impacted by the Project. Impacts could be associated with proximity to temporary accommodation camps or major transport routes.

- **Prospect** – Located on the Dawson Highway approximately 10km west of Biloela. The area supports a small school, Prospect Creek State School which has the capacity for 48 students.
- **Cockatoo** – A small locality,60kms east from Taroom. The area, named by early explorers, was derived from the waterway of Cockatoo Creek which runs through the region.
- **Camboon**- Situated on Eidsvold Theodore Road between Theodore and Cracow. The locality is largely comprised of a working cattle station, established in the 1800's, which continues to produce beef today.
- **Callide** – The locality of Callide is located in the fertile Callide Valley north of Biloela and provides a stop on the local rail network. Callide services major projects in the local area including the Callide Power Station, Callide Coal Mine and the Callide Oxyfuel Project.

2.4 Land tenure and use

The study area considered within the EIS Land Use and Planning Chapter for the Gas Pipeline (Volume 3, Chapter 6) is a 10km-wide corridor (five kilometres east and five kilometres west of the notional gas pipeline route) and along a notional 50m wide, pipeline right of way located in this corridor. The land use information was obtained from the Queensland Land Use Mapping Planning database which was developed by the Queensland Department of Environment and Resource Management.

The gas pipeline corridor study area covers approximately 427,100 hectares. Freehold land (66%) and leasehold land (26%) are the main land tenure types in the corridor.

The predominant land use over the corridor is cattle grazing. Various forms of cropping are found in areas of more fertile soil and where the use of machinery is not constrained. Other land uses include forestry, nature conservation, resource extraction and urban activities. Table 2.8 below provides a breakdown of land use in the 10-km study area.

Table 2.8 Land Use, Gas Transmission Pipeline Corridor

Item	Pipeline Corridor Investigation Area	Right-of Way
Area (ha)	42,700	2,166
Land use category	% of area	
Grazing natural vegetation / minimal use	88.800	97.100
Forestry – production*	7.400	-
Forestry -plantation	0.001	-
Dryland cropping / horticulture	2.500	2.300
Irrigated cropping / horticulture	0.400	0.400

Item	Pipeline Corridor Investigation Area	Right-of Way
Intensive animal / plant production	0.010	-
Urban	0.070	-
Mining and waste	0.050	0.046
Nature conservation / protected areas	0.490	-
Water	0.160	0.090

(Note: Production forestry on State Forest tenures – includes grazing activities as a co-use.)
Source: QLUMP 1999, DERM.

There are 13 State Forests in the pipeline corridor study area. These are the Barakula, Binkey 1, Binkey 2, Calliope Range, Camboon, Cherwondah, Cooaga, Gurulmundi, Mundell, Quandong, Rockybar, Scrubby Mountain and Targinie State Forests. There is also one timber reserve (Callide) and one resources reserve (Stones Country). The pipeline route traverses the Targinie State Forest and the Callide Timber Reserve.

There are also several mining exploration and development tenures within the study area. Petroleum, coal and gold mining are the most prevalent extractive resources.

To date, six Native Title or Aboriginal Parties potentially affected by the Project have been identified for the gas pipeline area, they include: Port Coral Coast, Gangulu, Wulli Wulli, Iman, Barunggam and Western Wakka Wakka Peoples. There is also an area of land within the study area where the Native Title and affected Aboriginal Parties are yet to be identified. For further information regarding Indigenous Cultural Heritage in the gas pipeline area, refer to Volume 3, Chapter 18.

For further information regarding land use and planning in the gas pipeline area, refer to Volume 3, Chapter 6.

2.5 Population demographics

2.5.1 Population size and distribution

The total population of the gas pipeline SLAs was 19,638 in 2006, which is a drop from population size 19, 887 as reported in the 2001 ABS Census. In 2006, Banana SLA accounted for nearly three quarters of the gas pipeline population which is also consistent with previous years' Census.

Population growth in the gas pipeline area was very low or negative when compared to Queensland, ranging from -1.0% (Taroom) to 0.3% (Calliope Pt B). The population of Taroom SLA declined by 9.4% (or 261 people) between 2001 and 2006, presumably due to a decline in the proportion of couples and families with children compared to lone person households over this period.

Similar to Australia as a whole, the gas pipeline areas demonstrated an ageing population. In the gas pipeline study area, there were a very low proportion of people within the 15-24 age cohort (11.5%) compared to Australia as a whole (13.6%) for the same period.

Although the construction workforce numbers (approximately 400) are small compared to the Project gas fields workforce numbers, there is potential for significant impact to the nearby urban localities as their existing populations are low, particularly in Theodore.

Urban localities

Population estimates for urban localities are sourced from ABS 2006a (Biloela, Gladstone and Theodore) and DIP 2008b (Wandoan and Miles). The largest urban resident population was in Gladstone (30,734). Medium-sized centres include Biloela, while there were small resident populations in Theodore and Wandoan. Population estimates for Wandoan and Miles were available for 2008 and showed populations of 460 and 1,524 respectively.

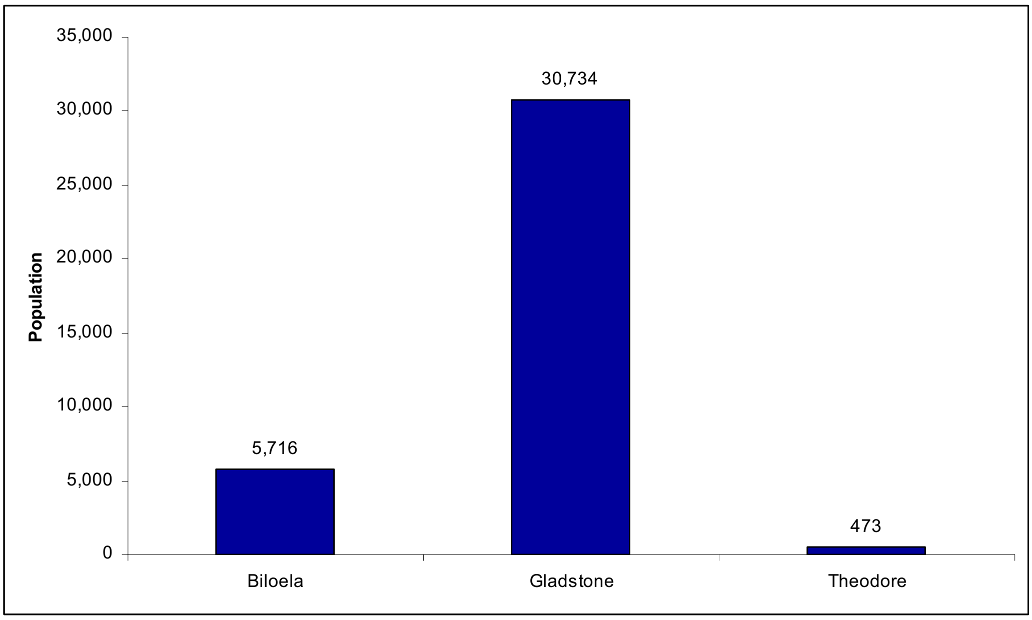

Figure 2.1 Population statistics, urban localities, 2006

Source: ABS 2006a

Overall, the urban population for the gas pipeline study area grew by 1.0% per annum in the 1996 to 2006 period, which was below the state and national averages of 2.1% per annum and 1.4% per annum, respectively. Population declined only in Theodore (-0.6% per annum), with the strongest positive growth recorded in Wandoan (1.8% per annum).

Table 2.9 Population change, urban localities

Urban Locality	1996 – 2006	1996 – 2008
Theodore	-0.6%	
Gladstone	1.5%	
Biloela	0.0%	
Wandoan		1.8%
Miles		-0.4%
Australia		0.8%
Queensland		1.2%

Source: ABS 2001, ABS 2006a and DIP 2008b

2.5.2 Non-resident workers

Non-resident populations have differing needs in terms of social and community services and infrastructure (for example, recreational facilities and transportation services). In 2008, DIP undertook a study into the non-resident worker population of the Surat Basin. The information below has been sourced from this report. It should be noted however that this study did not survey non-residents in any communities north of Wandoan.

The proportion of non-resident workers as a percentage of total population in selected urban localities in the study area is illustrated in Figure 2.2. Wandoan and Miles recorded the highest proportion of non-resident workers at 15.0% and 11.3% respectively. Wandoan had an estimated 52 non-resident workers at the time of the DIP survey.

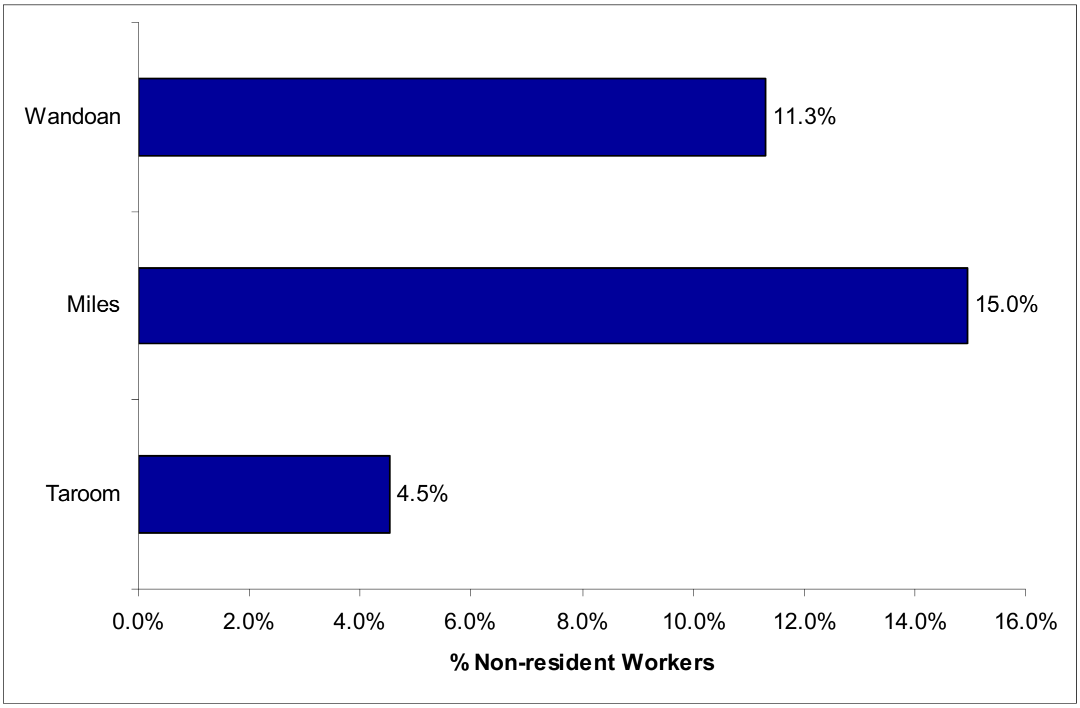

Figure 2.2 Proportion of non-resident workers within urban localities in the Surat Basin region of the study area.

Source: DIP 2008

2.5.3 Population projections

The resident population of the gas pipeline study area is projected to grow at 0.5% per annum between 2009 and 2031 with Banana SLA growing the slowest (0.2% per annum). The total population growth over the same period is estimated to be 2,130. Figure 2.3 displays the population projections for the gas pipeline SLAs. It should however be noted that this data is based on the latest available PIFU projections which at the time of writing, did not take into account expected population increases associated with proposed resource developments.

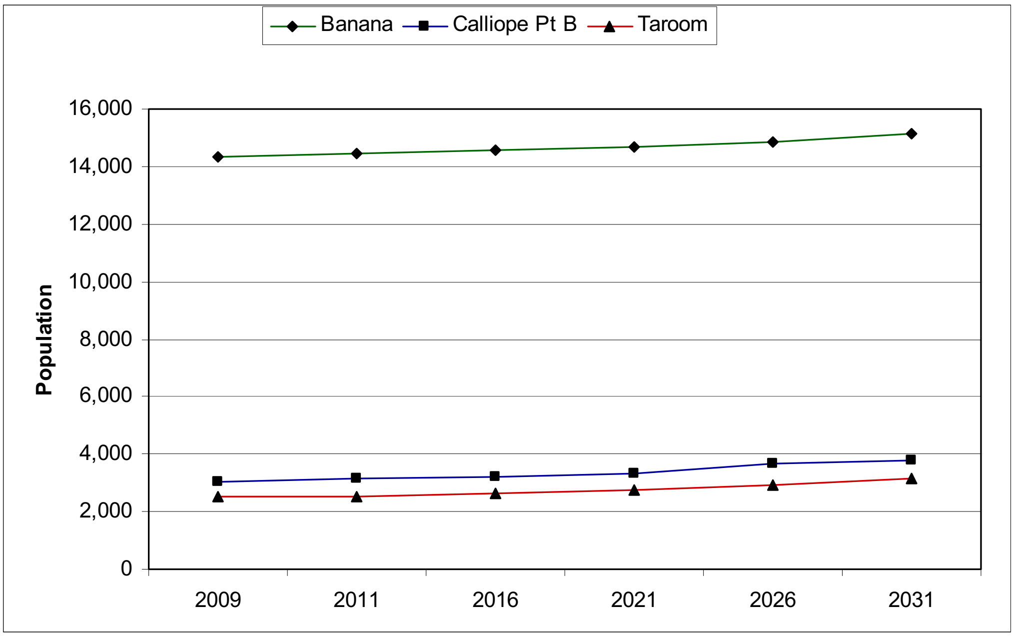

Figure 2.3 Population projections, gas pipeline SLAs, 2009 to 2031

Source: Based on DIP 2006 and DIP 2008a: SLA projections estimated by Economic Associates (2009)

Urban localities

Estimated population growth for urban localities between 2009 and 2031 is expected to be lower than for Australia as a whole (1.3%), with the exception of Gladstone (1.9% per annum). The population of Theodore is estimated to decrease by -0.8% from 464 in 2009 to 387 in 2031. Biloela is expected to record a population increase of about 0.02%. This compares to an average annual growth rate (AAGR) of 1.7% for the same period for Queensland. The estimated lower population growth rate in the gas pipeline area, and the decrease in population in Theodore, could have impacts on the sourcing of local labour for the Project workforce. The population estimates are based on the PIFU medium series projections. Where PIFU figures were not available, assumptions were made regarding the likely percentage the urban locality would account for in the relevant statistical local area.

2.5.4 Prevalence of disability in the population

The ABS reports on 'Unpaid Assistance to a Person with a Disability'. This data set records people aged over 15 years who, in the two weeks prior to Census night, spent time providing unpaid care, help or assistance to family and can provide an indication of the prevalence of disability within a community. In the pipeline study area, 1,994 people, or 8.5% of the population aged over 15 years reported that they had provided unpaid care to a person with a disability. This is slightly slower than the Queensland average of 9.5%. Within the study area, Taroom has the highest prevalence of carers, with 9.9% of the population over 15 years.

2.5.5 Age and gender distribution

In 2006, the average age of all residents in the gas pipeline SLAs, 36.6 years was marginally lower than Queensland and national averages (37.6 and 37.8 years respectively). The trend between 1996 and 2006 shows an ageing population with the average age increasing from 33.9 years to 36.6 years. The largest proportional decline between 1996 and 2006 was in the 30-34, 10-14 and 5-9 age cohorts, recording a decline of 1.6%, followed by the 10-14 and 5-9 age cohorts, each decreasing by 1.5% and 1.0% respectively.

There was a low proportion of people in the 15-24 age cohort in 2006 (11.5%) compared to Australia as a whole (13.6%) which may have many implications for attracting a local workforce as the labour pool for entry level employment, part-time employment and apprenticeships is small. This trend may be indicative of the common trend in regional Australia involving the movement of young adults into larger urban centres and cities to gain further education and employment opportunities not available locally. If more employment and training opportunities are available locally, this could stem this loss of young people.

As at 2006, 54% of the population of the gas pipeline SLAs was made-up of males, with the highest proportion in the 55-59 (58.0%) age cohorts.

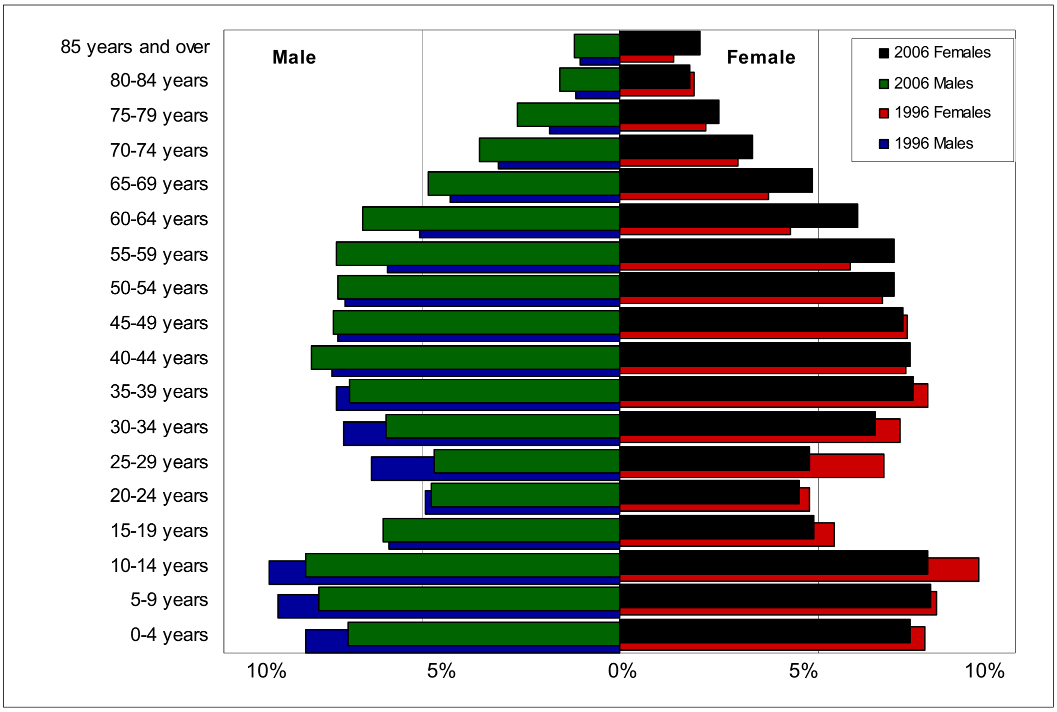

Figure 2.4 Population distribution by age and sex, gas pipeline SLAs, 1996 and 2006

Source: ABS 1996 and ABS 2006a

Urban localities

The urban localities trended towards an ageing population with comparatively few people in the 15-34 age cohort. The lack of young people in the region may be due to the quality or quantity of education, recreational and cultural infrastructure and services. This may present a challenge for the attraction and retention of Project staff with families, however current regional planning processes taking place are seeking to respond to these challenges. Australia Pacific LNG will continue to work closely with these planning processes to identify opportunities where they can add value and/or provide support.

In 2006, the average age of residents in the urban localities varied between 34.4 years (Biloela) and 41.5 years (Miles). The average age of residents showed little variance between 1996 and 2006 for all urban localities. The greatest decline in the proportion of people in the 0-34 age cohort was in Miles, which fell from 45.6% to 41.8%.

2.5.6 Ethnic diversity

The ethnicity and ancestry of residents has implications for multiculturalism and welfare and support services in communities for migrant and non-English speaking residents. With regard to ethnicity derived from parental ancestry, Australian and English are the most prevalent ethnicities for all areas, with other Anglo-Saxon ethnicities also having a strong representation.

2.5.7 Family structures

Family structure refers to the various types of family units, including traditional family units (adult couples with children), couples without children, single parent families and lone or single person households. The presence of different family types can impact the labour force participation rates, the types of hours people are able to work, demand for child care and demand for different housing types.

In 2006, the traditional family unit remained dominant across all gas pipeline SLAs, but declined proportionately between 1996 and 2006. Couple families with children comprised 34% of housholds across the gas pipeline SLAs in 2006. In comparison to Queensland all SLAs reported a lower proportion of single parent families than the Queensland average. The proportion of single parent families in Taroom was particularly low at 4.6% however Taroom had a significantly higher proportion of single person households in comparison to other SLA’s in the pipeline area. In 2006, the proportion of ‘single parent families’ was the highest in Banana and Calliope Pt B SLAs at 7.5% and 7.0% respectively, although this was still lower than the State average of 10.5%.

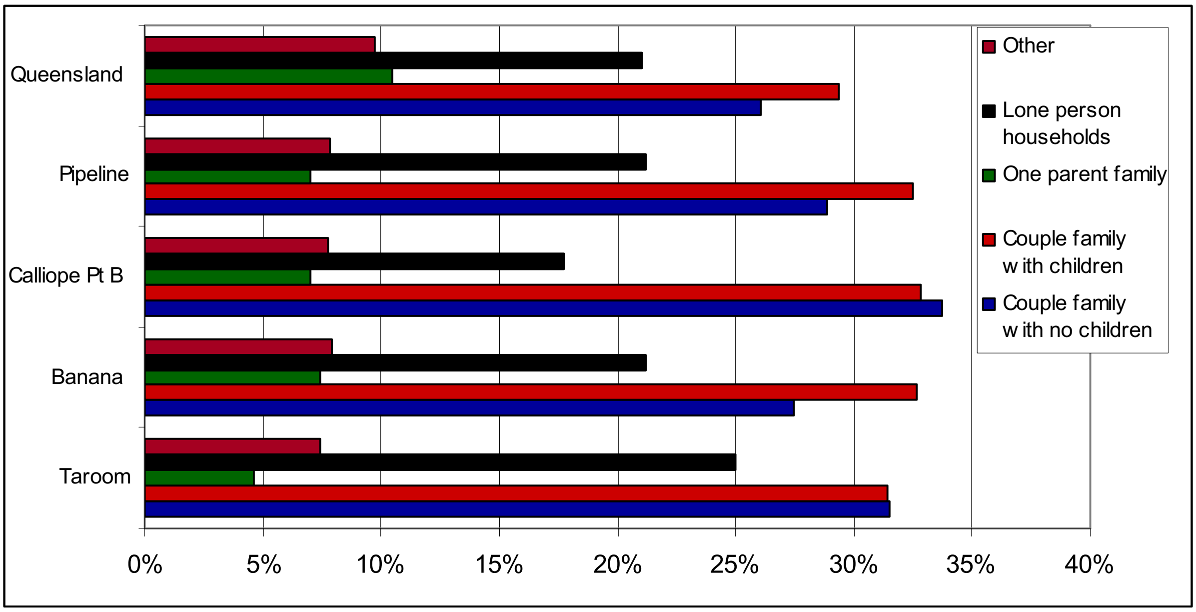

Figure 2.5 Family structure, pipeline SLAs, 2006

Source: ABS 2006a

2.5.8 Internal migration

Areas which are dominated by mining and mining-related industries such as manufacturing and construction are often characterised by transient populations. Regional areas are also sometimes characterised by this social trend and often experience difficulties attracting and retaining key workers, particularly in the health and community services sectors.

Analysis of 2006 Census data for the gas pipeline SLA's indicates that the proportion of people who lived at a different address five years ago was lower than the Queensland average. It is important to note however that almost 50% of those people who had moved between 2001 and 2006, moved between 2005/06 suggesting that there has been an increasing level of internal migration recently. This could be due to the growth in the resource sector in addition to new residential developments which have come on the market in gas pipeline communities during the last few years.

2.5.9 Household size

The average household size for SLAs in the gas pipeline area from 1996 to 2001 is presented in Figure 2.6. The average household size was generally higher than the State and national average (2.6 persons) in the gas pipeline area, the exception to this was Taroom SLA which also experienced a relatively significant decrease in household size during the period (0.4).

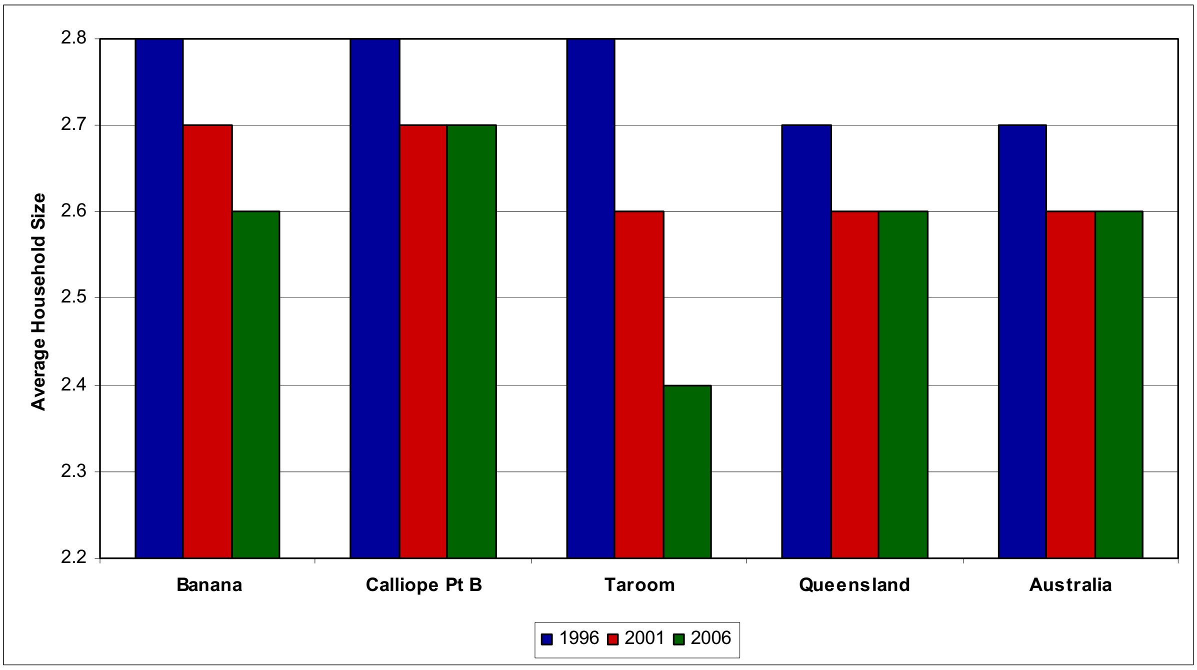

Figure 2.6 Average household size, gas pipeline SLAs, 1996 to 2006

Source: ABS 1996, ABS 2001 and ABS 2006

Urban localities

In 2006, the average household size for the studied urban localities ranged from 2.2 (Theodore) to 2.7 (Gladstone) persons per household. In line with the Local Government and national averages, Biloela recoded an average of 2.6 persons per household. Miles (2.3 persons per household) and Theodore are below the Australian average of 2.6 persons per household.

2.6 Indigenous peoples

The purpose of this section of the baseline is to provide more detailed information regarding the Indigenous Australian population who reside in the study area. This includes both Traditional Owners and historical people resident. This profile has been prepared based on the data sources described in Section 2 of the Social Impact Assessment (Volume 3, Chapter 20). However, there is a significantly lower level of available data for Indigenous communities in comparison to data for the general population. Furthermore, the Australian Bureau of Statistics acknowledges that the Census is often under-representative of the actual number of Indigenous residents, particularly those in regional and remote areas. Indigenous members of the population have historically experienced higher levels of disadvantage compared to the non-Indigenous population and as such it is important that a more detailed understanding of the socio-economic and demographic circumstances is established so that appropriate strategies can be developed.

2.6.1 Indigenous population demographics

In 2006, there were 1,617 residents persons of Aboriginal and/or Torres Strait Islander heritage in the gas fields study area. Of this population, the majority, 552 or 67% resided in Gladstone followed by Banana SLA (27%). There were very low numbers of Indigenous persons in the Taroom and Calliope Pt B SLAs.

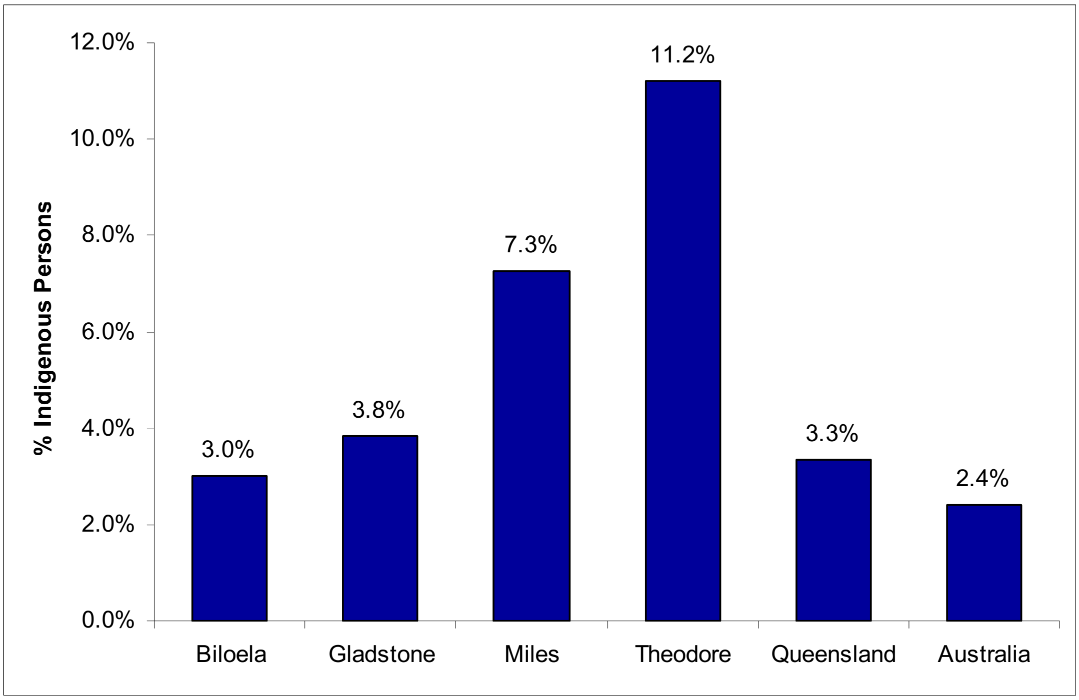

Figure 2.7 Percentage of Indigenous persons in gas pipeline urban localities

In line with population trends for Indigenous persons in Queensland and throughout Australia, the age distribution of the population was very young, with 61% aged younger than 25 years. This is in contrast to this age cohort in the overall population which makes up just 35%. In comparison to Queensland, the study area has a very low proportion of Indigenous population over the age of 65 years. Out of 1,617 Indigenous persons, just 31 (1.9%) residents were in this age cohort. This is indicative of a low life expectancy, in comparison to both the Queensland Indigenous population broadly, and also the overall population of the study area. Recognising these differences in age profiles between Indigenous communities is important as it provides a basis for understanding potential differences in demand for education, health services and employment.

The figure below illustrates the number of Indigenous residents by age and sex in the study area. Based upon this information, it appears that the number of males and females in young age cohorts (under 25 years) is relatively consistent; however there are a considerably higher proportion of females aged between 25 and 44 years than males. This potentially may impact Australia Pacific LNG's ability to attract Indigenous males of primary working age (25-54 years) to the Project.

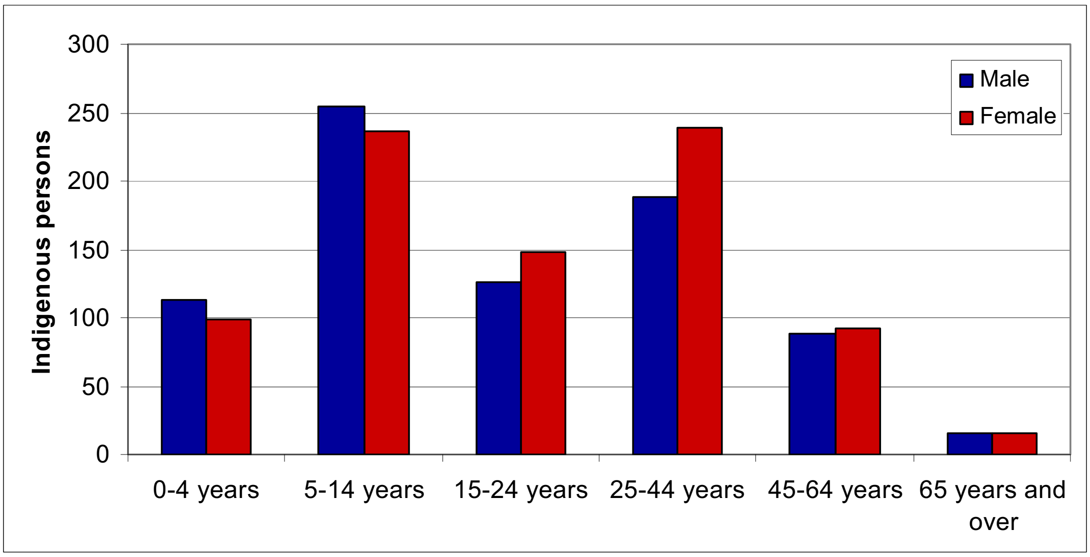

Figure 2.8 Indigenous age and sex distribution, pipeline study area, 2006

Indigenous household profile

Couples with children households comprised the largest share (40%) of Indigenous households across the gas pipeline study area. In comparison to Queensland, single parent families were less represented, comprising 23% of total households. Lone person households accounted for 11% of Indigenous households, which is slightly lower than the Queensland average, yet is significantly lower than the general population. This has potential implications for housing demand and also housing cost as larger families will inevitably require larger dwellings.

The average Indigenous household size in Queensland increased from 3.1 to 3.5 persons from 2001 to 2006. The SLA's in the study region have comparable average household sizes, ranging between 3.3 and 3.8 persons in 2006. This is considerably larger than the mainstream population where the average household size ranged between 2.4 and 2.7 persons.

2.6.2 Indigenous income and affordability

On average in Queensland, Indigenous individuals and households have lower weekly incomes than non-Indigenous residents. Lower income levels in Indigenous communities are most likely due to a younger age profile, higher participation rates in part-time employment, employment in industries where incomes tended to be lower, and higher levels of unemployment. In the gas pipeline study area, this trend was slightly less prevalent, with households exhibiting higher median weekly incomes than the Queensland average for Indigenous persons and only marginally lower median household incomes than the broader population in most SLAs in the pipeline study area. The exception to this was the Banana SLA where the weekly median income for Indigenous households was $762 compared with $1003 for non-Indigenous households.

Figure 1.8 below compares the income distribution for Indigenous households in the pipeline study area and Queensland. This chart illustrates how there are proportionately more Indigenous families in the gas fields earning high incomes (over $1400 per week) than overall in Queensland.

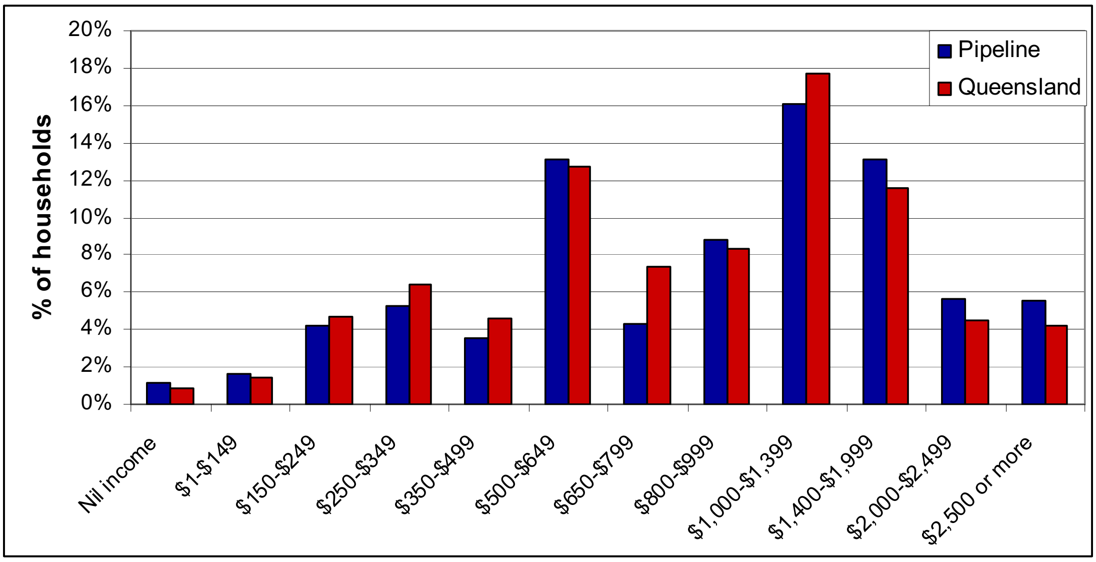

Figure 2.9 Indigenous household income distribution, 2006

2.6.3 Indigenous employment and business

Indigenous labour force

The Indigenous workforce of the Project area is generally younger than the non-Indigenous workforce, with over half aged between 15-34 years. The size of the workforce as a proportion of the whole Indigenous population was also considerably smaller due to the very high proportion of residents aged younger than 15 years. The following table summarises the labour force profile of Indigenous residents in the pipeline study area compared with Queensland. This illustrates a higher unemployment rate for the region in comparison to Queensland, and a significantly higher rate when compared to the overall population of the pipeline which was between 0.4% and 5.5% in 2009. It should be noted however that within the pipeline communities, there was significant variation, Calliope Pt B SLA reporting no unemployment for Indigenous persons, in comparison to 21% unemployment in Gladstone.

Table 2.10 Indigenous labour force characteristics 2006

Area	Labour Force				
	Total labour force	Employed Persons	Unemployed Persons	Labour force participation	Unemployment rate
Study Area	583	484	99	64.4%	17.0%
Queensland	43,847	38,083	5,765	56.2%	13.1%

Source: ABS 2006

The pipeline study area demonstrated a high workforce participation rate which is the measure of employed persons, and those looking for employment as a proportion of the total population over 15 years of age. The high unemployment rate and high participation rate indicates that while there may not be a large number of Indigenous persons the Project can encourage back into the workforce, there is a large number of unemployed persons current looking for employment. This presents an opportunity to provide targeted training and employment opportunities to this cohort of the local Aboriginal population.

Indigenous Employment

A considerably larger proportion of the Indigenous workforce in the study area was employed by the private sector (80%) in comparison to the Queensland average (60%) in 2006. With regard to government employment, the State Government employed the largest number of Indigenous employees, although this was lower than the State average. In contrast to Queensland more broadly, Local Government in the pipeline region employed a very low proportion of Indigenous employees in 2006. The low number of State Government employees may be indicative of the small number of State Government offices in the region.

Within the study area, the main fields of employment for Indigenous people in 2006 were manufacturing, construction and retail trade. Other primary fields of employment were public administration and safety and health care and social services. A high proportion (17%) of the Indigenous workforce resident in Banana SLA was employed in the mining industry.

2.6.4 Indigenous education and training

Aside from the information that is available through the Census, there is very little comparative educational data gathered for Indigenous populations.

Indigenous school and tertiary education students

Data from the 2006 Census showed that there were 519 students of Aboriginal or Torres Strait origin who were attending preschool, primary school or secondary school in the gas pipeline study area. There was approximately half the number of secondary school students than primary school students attending school, potentially suggesting a low retention rate of Indigenous students through to year 12.

In 2006, 140 Indigenous students who lived in the study area attended a tertiary institution. A high proportion of these did not report the type of institution, however of those reported, attendance at a vocational education institution such as TAFE was most prevalent.

Highest level of schooling for Indigenous persons

The 2006 Census recorded that within the study area, almost one in five Indigenous residents aged over 15 years did not reach year 10. This is a lower than the Queensland average for Indigenous peoples yet a higher proportion than the overall population of the study area. The proportion of the population who reached year 11 or 12 was also marginally higher than the Queensland average, with the highest number of residents reporting that they had reached year 10 (32%).

Non-school qualifications of Indigenous persons

In 2006 within the study region, 21% of Indigenous residents aged over 15 years had gained a non-school qualification. The most prominent qualifications gained were Certificate Level which is consistent with the requirements of the reported primary fields of employment for Indigenous residents. There were also a higher proportion of people who had gained a university qualification than the Queensland average, particularly post-graduate qualifications.

2.6.5 Indigenous housing and accommodation

The type of dwellings occupied by Indigenous households in 2006 was very similar to the overall population, dominated by separate houses rather than townhouses or apartments. The distribution of dwellings types occupied by Indigenous households is shown in Table 2.11. Broadly speaking, the distribution is similar to the Queensland average, although there are a greater proportion of separate houses rather than townhouses or apartments. With regards to 'other dwellings' which are defined as caravans, cabins, houseboats, tents, improvised dwellings and dwellings attached to offices or shops, the overall percentage for the pipeline communities is similar to Queensland (although higher than the overall population for the study area). Overall 17 families reside in 'other dwellings' the majority of which were reported in caravans or cabins.

Table 2.11 Dwelling type, Indigenous households, 2006

	Pipeline (%)	Queensland (%)
Separate house	86.6	81.9
Semi-detached, row or terrace, townhouse etc	2.2	5.2
Flat, unit or apartment	8.7	9.9
Other dwelling	2.5	2.6

Source: ABS 2006

Indigenous tenure type

In comparison to the total population, Indigenous households in the study area are less likely to fully own their home. However in comparison to the Queensland Indigenous average; the proportion of families in the process of purchasing their home is higher. In 2006, 9% of Indigenous households in the study area owned their homes outright which was compared to 10% overall in Queensland. Within the study regions, Indigenous households in Taroom and Calliope SLA's were most likely to own their own home.

With regards to renting, a greater proportion of families rent their house from the State Housing Authority (public housing) than from real estate agents as illustrated in the figure below.

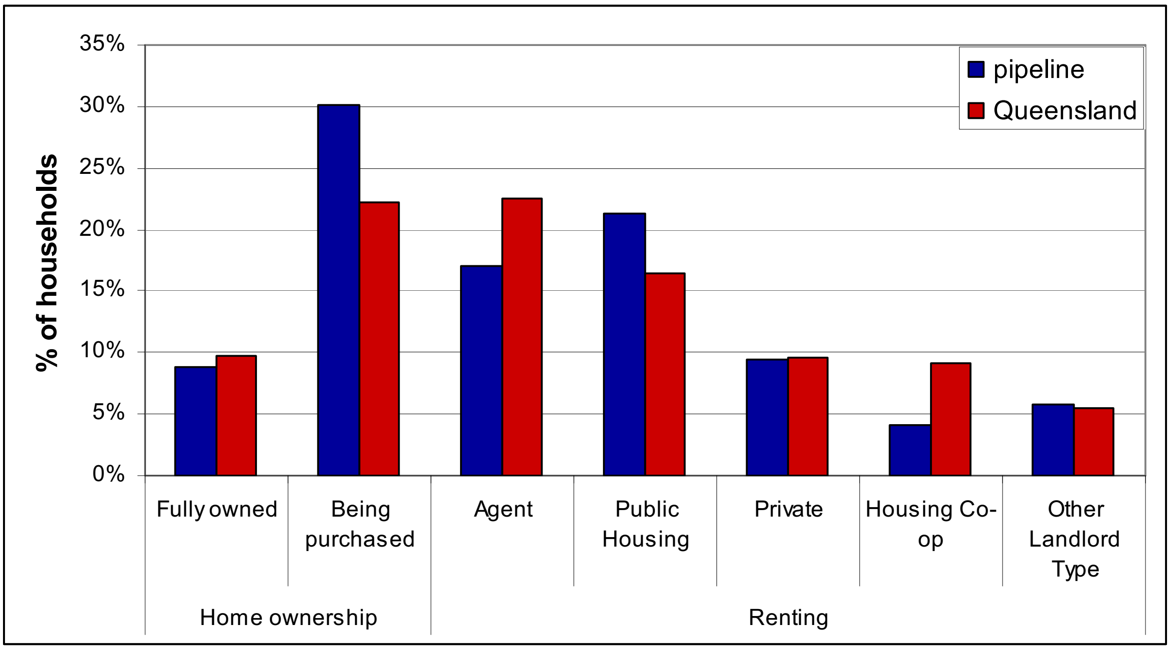

Figure 2.10 Housing tenure, Indigenous households 2006

There is a lack of published information outside of the ABS in relation to the housing costs for Indigenous households. ABS statistics are somewhat out of date, especially given the movement in the housing market in the gas pipeline region over the last three years.

The table below shows the median weekly rent paid by Indigenous households and also the median monthly mortgage repayments. This illustrates that housing costs, for both rented properties and those being purchased, is lower than the median for Queensland. It is important to note however, that in the major towns of Biloela and Gladstone, median rent prices in June 2009 were A$290 and A$345 respectively. This suggests that many households are paying significantly more than the amount reported in the 2006 Census.

Table 2.12 Housing costs, Indigenous households, 2006

	Median Rent (A$)	Median monthly mortgage repayments (A$)
Pipeline study area	100	1,115
Queensland	150	1,192

Source: ABS 2006

Social Housing

Social housing in Queensland is divided into a number of categories: public housing, Aboriginal and Torres Strait Islander (ATSI) designated housing, community housing and that provided by Indigenous community housing organisations. Department of Communities reports that in the gas pipeline study area there are 38 ATSI designated dwellings, three in Biloela, three in Theodore and the remaining 32 in Gladstone and 34 dwellings provided by an Indigenous community housing organisation, all of which are in Gladstone. The community housing is provided by the Aboriginal and Torres Strait Islander Housing Cooperative who through consultation have reported that waiting lists are extensive and can extend over two years.

2.6.6 Indigenous community health and safety

For almost every measure the health of the Indigenous population is significantly lower than the health of the non-Indigenous population and evidence suggests that this gap has increased in recent years (National Aboriginal Health Strategy). Given the lack of information available regarding the Indigenous health issues prevalent within the study area, this discussion will refer to the social determinants of the broad Indigenous population.

Information sourced from Queensland Health indicates that Indigenous peoples have a poorer health profile than other Australians and their life expectancy is considerably less. Contributing factors include:

- Lower socio-economic status (low incomes, high unemployment, poor educational attainment).
- Specific risk factors (higher tobacco and substance misuse rates, poorer nutrition).
- Location and environmental factors (remoteness from services, poor quality housing and facilities, overcrowding).
- Legacy of past practices (removal from land, cultural dislocation, family separation, discrimination).

Nearly one third of deaths among Indigenous people are from circulatory disease (stroke, heart disease) and another third from injury, respiratory diseases (pneumonia and chronic bronchitis) and cancer. In addition, the death rate from diabetes for Indigenous people is about eight times the national rate. This means that Indigenous people are dying more often and at younger ages from mainly preventable conditions.

Mainstream medical and health facilities are available to all residents, including the Aboriginal and Torres Strait Island population. In addition to this the Banana District Health Service, located in Biloela provides a community Indigenous health service. Aboriginal Health Workers assist the Aboriginal and Torres Strait Islander community to access available services and address other community needs. Aboriginal Health workers provide liaison between client and health services, school and community health promotion and education, primary health care assessments.

In Gladstone, the Nhulundu Wooribah Indigenous Health Centre provides health and aged care services to the Indigenous population. Particular areas of assistance include personal hygiene, shopping, yard maintenance and transport. Indigenous Health Education and Promotion Programs are also delivered out of the centre which receives State and Federal Government funding.

2.6.7 Indigenous facilities and services

Indigenous residents are, like all groups, able to access general or mainstream services and facilities including child care, community centres, recreation facilities and support services including employment service providers, family support and various counselling services.

There are four active Aboriginal organisations in the Gladstone region, the Gehgre ATSI Corporation, Nhulundu Wooribah Indigenous Health Centre, Aboriginal and Torres Strait Islander Housing Co-Operative and the Port Curtis Coral Coast Aboriginal Corporation. The aims and objectives of the Gehgre ATSI Corporation are to implement and monitor programs for Indigenous residents and effectively respond to the issues of, employment, youth sport and recreation, education, health, land rights, enterprise, women’s issues, aged-care, cultural awareness and accommodation. The Aboriginal and Torres Strait Islander Housing Co-Operative manage the Indigenous community housing stock. The Port Curtis Coral Coast Aboriginal Corporation is focused on natural resource management and achieving recognition of the relevant native title claimant group.

2.6.8 Indigenous cultural values

During consultation with Australia Pacific LNG, Native Title and Culture Heritage groups within the gas pipeline study area expressed concerns regarding potential impacts to land and access associated with the Project. Also of paramount interest was that the cultural heritage management be completed in an appropriate manner. Refer to Volume 3, Chapter 18 for more details regarding Indigenous cultural values.

2.7 Income and affordability

The ABS Census provides information about median individual and household incomes, as well as the breakdown of residents and household income. Time series data allows an assessment of how weekly income levels have changed.

2.7.1 Incomes

Between 2001 and 2006, the average weekly household income increased by 22.6%, 36.9% and 38.5% in Taroom, Banana and Calliope Pt B SLAs respectively. In 2006, the highest weekly household income was recorded in Banana SLA (A$1,370 per week), followed by Calliope Pt B (A$1,122 per week) and then Taroom (A$987 per week).

Urban localities

Between 2001 and 2006 the average weekly household income increased by the most in Theodore (71.0%), however the amount was still below the national average of A$1,225 per week. Biloela and Gladstone recorded the highest average weekly household income of A$1,375 per week and A$1,344 per week respectively.

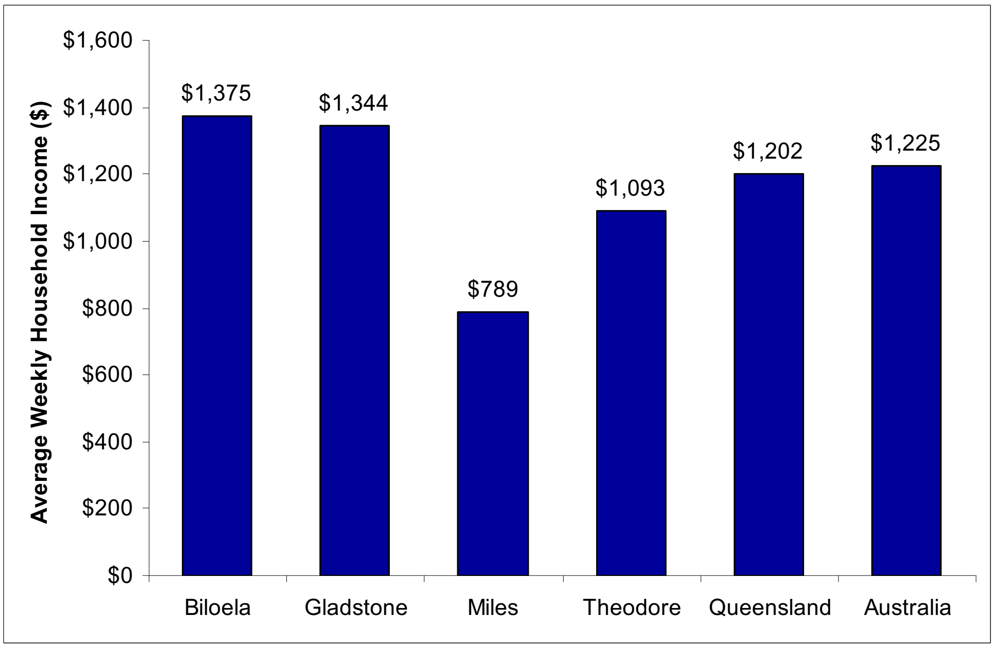

Figure 2.11 Average weekly household income, urban localities, 2006 (A$)

Source: ABS 2006a

2.7.2 Socio-Economic Indexes for Area

Socio-Economic Indexes for Area (SEIFA) is a suite of summary measures created from ABS Census information. Each index summarises a different aspect of the socio-economic conditions in an area and shows how relatively 'disadvantaged' that area is compared with other areas in Queensland or Australia. A lower score indicates that an area is relatively disadvantaged compared to an area with a higher score and all ranks are ordered from lowest to highest (i.e. the lower the rank the more disadvantaged the area is compared to other locations). The data in this section are presented according to how each area ranked within Queensland, which has a total of 476 areas.

The indexes reported in this baseline assessment are:

- **Index of Relative Socio-economic Disadvantage -** is derived from Census variables related to disadvantage, such as low income, low educational attainment, unemployment, and dwellings without motor vehicles.
- **Index of Economic Resources** - focuses on Census variables like the income, housing expenditure and assets of households.
- **Index of Education and Occupation** - includes Census variables relating to the educational and occupational characteristics of communities, like the proportion of people with a higher qualification or those employed in a skilled occupation**.**

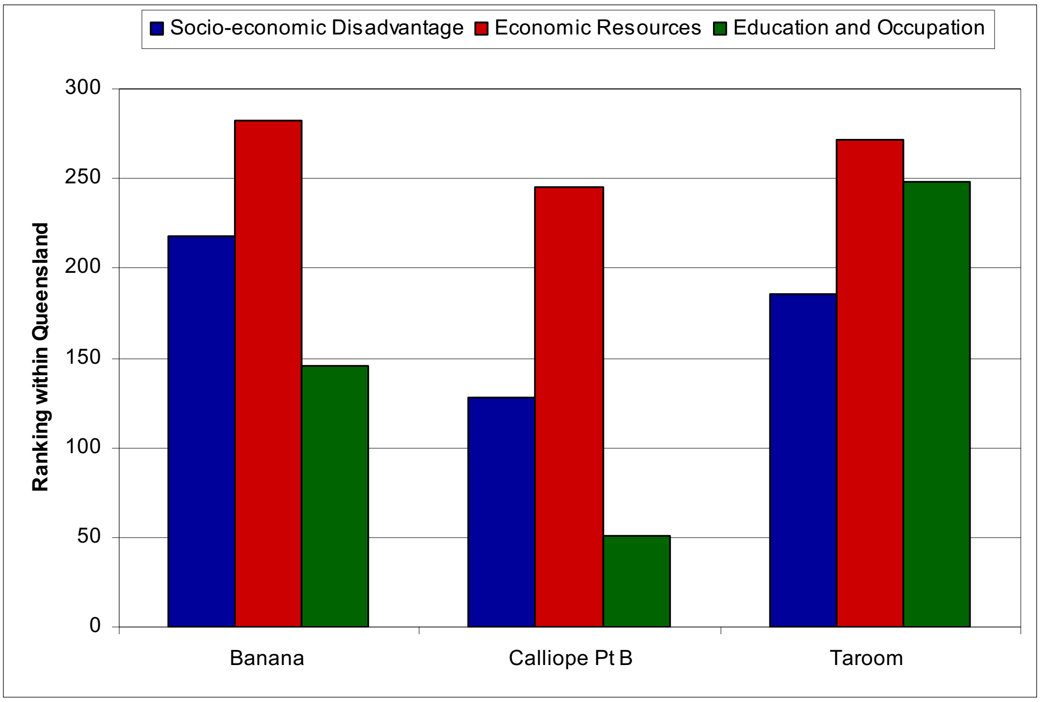

Figure 2.12 SEIFA gas pipeline SLAs, 2006

Source: ABS 2006c

Of the three SLAs in the gas pipeline area, Calliope Pt B SLA was the most disadvantaged in all three Indexes, particularly for the Index of Education and Occupation (ranked 50th in Queensland as a whole). These SEIFA rankings of the gas field SLAs will be used to inform the Project community investment strategy for disadvantaged groups.

2.7.3 Transfer payments

Transfer payments refer to payments received by social welfare recipients. Statistics for residents receiving government allowances is available by postcode. This information was aggregated against the gas pipeline study area and is reported within Table 2.13 in comparison to Queensland.

The gas pipeline area recorded a lower proportion of the population receiving government allowances compared to the gas field region of the Project, however the rate was still higher than for Queensland as a whole. The larger proportion of people receiving the age pension and disability support pension was the main contributor to heavy reliance on government allowances.

In 2007, 26.0% to 35.2% of residents in the gas pipeline corridor SLAs were receiving some form of government allowance. This compared to 20.6% to 22.4% for the related urban localities and 18.0% for Queensland. Across all geographic areas, age pensions were the main type of allowance.

Table 2.13 Populations receiving government allowances 2002 to 2007

Government allowance	gas pipeline		urban localities		Queensland	
	2002	2007	2002	2007	2002	2007
Age pension	13.4%-13.5%	12.8%-12.9%	10.0%	9.7%	8.3%	8.2%
Disability support pension	5.1%-5.5%	5.2%-5.6%	3.8%	3.7%	3.4%	3.3%
Newstart allowance	4.5%-5.1%	2.5%-3.0%	3.7%-3.8%	2.1%	3.1%	1.8%
Parenting payment – single	3.5%-4.1%	2.7%-3.2%	3.3%	2.8%	2.5%	2.0%
Youth allowance	2.5%-3.1%	1.3%-1.9%	2.3%	1.3%	2.2%	1.4%
Other pensions and allowances	3.0%-10.1%	1.5%-8.6%	1.7%-3.5%	0.9%-2.7%	2.1%	1.3%
Total income support customers	32.0%-41.3%	26.0%-35.2%	24.8%-26.6%	20.6%-22.4%	21.6%	18.0%

Source: CentreLink (2009)

Note: Due to confidentiality, areas where less than 20 persons receive pensions and allowances, the details are recorded as <20, therefore for the range of <20, zero to 19 has been used.

2.8 Employment and business

2.8.1 Labour Force

The extent of the available labour force depends on a number of factors, including a range of demographic characteristics such as age and workforce participation rates. Comparing the workforce size against the population aged between 15 and 64 years indicates that the workforce participation rate for the pipeline study area was 89.9% in 2006. This was significantly higher than the Queensland participation rate of 66.3%, which indicates that that it may be very challenging to source a local labour force.

Employment in the pipeline SLAs is characterised by the dominance of the agricultural, mining and manufacturing sectors. In 2006, the SLA with the strongest agricultural sector (by employment contribution) was Taroom SLA at 54.2%. Banana SLA had a strong mix of agricultural (15.3%) and mining (17.4%) employment, while Calliope Part B SLA had a strong mix of agriculture (15.4%), manufacturing (15.3%) and construction (10.0%) employment.

Urban localities

The manufacturing, retail trade, construction and health care and social assistance industries dominated employment across the urban localities. The top two employers in 2006 for each of the urban localities and the proportion of people employed is presented in Table 2.14.

The proportion of persons employed in manufacturing in 2006 was particularly high in Gladstone (19.6%), Biloela (12.0%, up from 8.6% in 1996) and Theodore (12.8%).

Employment within the manufacturing sector in each of these urban localities was dominated by the following type of manufacturing:

- **Gladstone**: primary metal and metal product manufacturing (59.2%)
- **Biloela and Theodore**: food product manufacturing (56.2%) and basic chemical and chemical product manufacturing (14.4%)

At the time of the last Census, health care and social assistance was a significant field of employment in Miles (13.8%). Due to a decline in the number of people employed in the Agriculture, Forestry and Fishing sector in Banana and Calliope Pt B SLAs, the gas pipeline average of persons employed in this category also declined as a whole from 26.9% in 1996 to 20.4% in 2006.

Table 2.14 Major employers, urban localities in the gas pipeline study area, 2006

Urban Locality	Major employer		Second major employer	
Biloela	Mining	14.5%	Manufacturing	12.0%
Gladstone	Manufacturing	19.6%	Construction	11.6%
Miles	Health care and social assistance	13.8%	Public administration and safety	11.9%
Theodore	Manufacturing	12.8%	Education and training/ health car and social assistance	10.9%
Queensland	Retail trade	11.6%	Health care and social assistance	10.2%
Australia	Retail trade	11.3%	Health care and social assistance	10.5%

Source: ABS 2006a

The unemployment rates for pipeline SLAs between March 2001 and March 2009 are illustrated in Figure 2.13. The unemployment rate decreased in all SLAs between the March quarter 2001 and March quarter 2007 and then increased in Banana and Calliope Pt B SLAs to the March quarter 2008. Between March 2008 and March 2009, the unemployment rate in Calliope Pt B and Taroom SLA decreased marginally, whilst Banana SLA's rate increased slightly. Australia Pacific LNG could provide an opportunity to reduce the recent increase in unemployment in Banana SLA through the provision of Project-related job opportunities

In comparison to the two other SLA's Taroom had a significantly lower unemployment rate (at just 0.4%) which was ones of the lowest rates in Queensland. As at the March quarter 2009, Calliope Pt B (5.5%) was the only SLA to record an unemployment rate higher than the Queensland average of 4.5%. The gas pipeline SLAs also recorded higher levels of unemployment than the Project gas field SLAs.

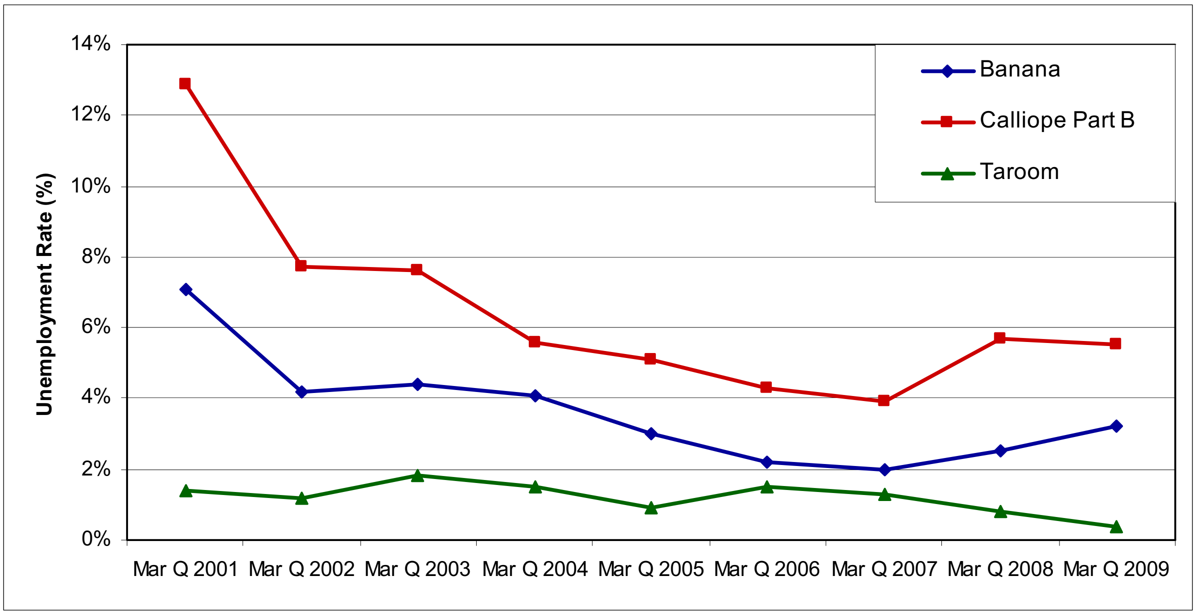

Figure 2.13 Unemployment rate, gas pipeline SLAs, 2001 to 2008

Source: OESR 2008

2.9 Education and training

2.9.1 Education levels

In 2006, Banana SLA (71.8%) recorded the highest proportion of people completing school to year 10 or above in the gas pipeline study area, followed by Taroom (71.1%) and Calliope Pt B (69.4%). These are slightly below the State and national averages of 76.4% and 75.1% respectively. All SLAs recorded an increase in the proportion of people completing school to year 10 or above between 2001 and 2006.

Urban localities

In 2006, the urban locality with the lowest proportion of individuals leaving school at the end of year 12 or equivalent was Miles (27.7%). The remaining urban localities had proportions exceeding 30%.

2.9.2 School-aged population

The school-aged population refers to the population aged 5-17 years. Understanding the size of this population and the changes over time to this cohort assists in planning for education facilities as well as community-based youth facilities. As at the time of the 2006 Census there were 3,646 school-aged children in the gas pipeline area, accounting for 18.6% of the total population. Taroom SLA had the lowest proportion of school-aged children with 406 children, or 16.1% of the overall population.

Urban localities

In 2006, the number of school-aged children as a proportion of the overall population for each of the urban localities ranged from 15.5% in Theodore to 19.4% in Gladstone. Only Theodore has a smaller proportion of school-aged children when compared to the State average of 17.6%.

2.9.3 Schools

As of 1 July 2005, the Queensland Department of Education and Training structured its organisation into 10 regions and these regions include 26 education districts. Urban localities in the gas pipeline study area are covered by the following regions and districts:

- Darling Downs-South West Queensland region
  - Roma education district
- Fitzroy-Central West region
  - Central Coast education district

There are 17 public schools and 8 private schools in the studied gas pipeline urban localities. There were 6, 913 students enrolled in February 2009. A full list of schools including their name, type, student count and year levels is presented in Table 2.15below. The analysis also includes the urban localities of Taroom, Wandoan and Banana.

Table 2.15 Schools in the gas pipeline area (including name, type, student count and year levels).

Centre Name	Centre Type	Group	Student count	Low Yr Level	High Yr Level
Biloela					
Biloela SHS - Special Education Program	Special Education Program	Secondary	0	8	12
Biloela SS - Special Education Program	Special Education Program	Primary	0	0P	7
Biloela State High School	State High School	Secondary	580	8	12
Biloela State School	State School	Primary	448	PY	7
Prospect Creek State School	State School	Primary	38	PY	7
Redeemer Lutheran Primary School (Biloela)	Non-State School	Primary		0P	7
St Joseph's Catholic School (Biloela)	Non-State School	Primary		0P	7
Gladstone					
Toolooa SHS - Flexible Learning Centre	Support Unit (Other)		0	10	10
Rosella Park School	Special School	Special	59	PS	SS
Gladstone SHS - Special Education Program	Special Education Program	Secondary	0	8	12
Gladstone South SS - Special Education Program	Special Education Program	Primary	0	PY	7
Gladstone West SS - Special Education Program	Special Education Program	Primary	0	PY	7
Kin Kora SS - Special Education Program	Special Education Program	Primary	0	PY	7
Toolooa SHS - Special Education Program	Special Education Program	Secondary	0	8	12

Centre Name	Centre Type	Group	Student count	Low Yr Level	High Yr Level
Clinton SS - Special Education Program	Special Education Program	Primary	**0**	**0P**	**7**
Gladstone State High School	State High School	Secondary	**1228**	**8**	**12**
Toolooa State High School	State High School	Secondary	**906**	**8**	**12**
Clinton State School	State School	Primary	**668**	**PY**	**7**
Gladstone Central State School	State School	Primary	**291**	**PY**	**7**
Gladstone South State School	State School	Primary	**275**	**PY**	**7**
Gladstone West State School	State School	Primary	**739**	**PY**	**7**
Kin Kora State School	State School	Primary	**779**	**PY**	**7**
St John the Baptist Catholic Primary School	Non-State School	Primary		**0P**	**7**
St Stephens Lutheran College	Non-State School	Primary-Secondary		**0P**	**12**
Star of the Sea Catholic Primary School (Gladstone)	Non-State School	Primary		**0P**	**7**
Chanel College (Gladstone)	Non-State School	Secondary		**8**	**12**
Trinity College (Gladstone)	Non-State School	Primary-Secondary		**0P**	**12**
Miles					
Columboola Environmental Education Centre	Environmental Education Centre		**0**		
Miles SS - Special Education Program	Special Education Program	Primary-Secondary	**0**	**0P**	**12**
Miles State High School	State High School	Secondary	**165**	**8**	**12**
Miles State School	State School	Primary	**227**	**PY**	**7**

Centre Name	Centre Type	Group	Student count	Low Yr Level	High Yr Level
Theodore					
Theodore State School	State School	Primary-Secondary	**192**	**PY**	**10**
Taroom					
Taroom State School	State School	Primary-Secondary	**129**	**PY**	**10**
St Mary's Primary School (Taroom)	Non-State School	Primary		**0P**	**7**
Wandoan					
Grosmont State School	State School	Primary	**9**	**PY**	**7**
Wandoan State School	State School	Primary-Secondary	**124**	**PY**	**10**
Banana					
Banana State School	State School	Primary	**55**	**PY**	**7**

Source: www.education.qld.gov.au, www.aisq.qld.edu.au, http://www.qcec.qld.catholic.edu.au/

Table 2.16 provides a summary of the number and type of schools in the gas pipeline urban localities.

Table 2.16 Number and type of State schools, urban localities, 2009

Type of school	Biloela	Gladstone	Miles	Theodore	Taroom	Wandoan	Banana	Total
District office		1						1
State primary	2	5	1					8
State secondary	1	2	1					4
State primary/ secondary				1	1	1		3
Number of students#	1066	4945	392	192	129	133	55	6912
Non-state primary	2	2			1			5
Non-state secondary		1						1
Non-state primary/ secondary		2						2
Special education program	Y	Y	Y	N	N	N	N	N/A
Special school		1						1
Environmental education centre			1					1

Source: DET (2009)

Does not include students attending non-state school.

Gladstone is a major regional centre with a population of approximately 30,000 and has 13 schools, including one special school. Gladstone is also home to the Central Coast education district office. Taroom SLA had the lowest proportion of school-aged children (406 children or 16.1% of overall population).

Anecdotal evidence suggests that a significant number of students attend secondary school outside of the region which, if correct, may be due to a greater variety of education options available in cities such as Brisbane, Gladstone and Rockhampton. It may also be indicative of children from farms located at too greater distance from their local schools moving into the larger centres to attending boarding schools.

Biloela State High School is a member of the Queensland and Energy Academy. The Queensland and Energy Academy is a partnership between the Queensland Resources Council and the Department of Education and Training and was developed in response to skills shortages in the mineral and energy sector. The Academy aims to encourage students to enter careers in the minerals and energy sector by working with relevant companies to provide opportunities for students to undertake work experience, on-site activities and school based apprenticeships and traineeships. This program could provide Australia Pacific LNG an opportunity to contribute to local training and employment outcomes.

2.9.4 Non-school qualifications

Within the SLAs in the gas pipeline corridor, 17.2% of persons who hold non-school qualifications have completed a university qualification (Bachelor degree, Graduate Certificate/Diploma, Postgraduate degree). The proportion of trades-oriented non-school qualifications (Advanced Diploma, Diploma and Certificate) in 2006 was 55.1% in the gas pipeline SLAs, which is significantly higher than for Australia as a whole (45.4%). A high proportion of people holding non-school qualifications in Gladstone held a trades-orientated qualification (56.5%). These statistics reflect the manufacturing and construction characteristics in the region as vocational qualifications are commonly required within these sectors.

2.9.5 Vocational training

There are 11 TAFE institutes in Queensland and two statutory TAFE institutes. The two TAFE institutes that oversee campuses in the study area are Southern Queensland (based in Toowoomba) and Central Queensland (based in Rockhampton). Southern Queensland has campuses in Chinchilla, Dalby and Roma, and Central Queensland has a campus in Gladstone.

Of particular relevance to the Project is the TAFE Queensland Mining Services which is operated though the Central Queensland Institute of TAFE and provides client-based training and assessment services for coal mining, metalliferous mining and processing, extractive operations and drilling operations at the client's site (for example, Queensland Alumina, Rio Tinto Alcan).

The delivery of vocational training that meets the needs of Australia Pacific LNG is partially contingent on the capacity of local TAFE campuses. Early communication with TAFE on the types of skills and number of apprentices required by the Project will maximise the available apprentice pool to draw from.

2.9.6 Tertiary education

Central Queensland University (CQU) and the University of Queensland (UQ) have direct interest in the study area. UQ has teaching hospitals in Moura and Theodore and CQU has a campus in Gladstone, which offers the following undergraduate degrees:

- Business
- Communication
- Engineering
- Information technology
- Learning design
- Learning management (early childhood, primary, secondary/vocational education and training)

In addition, CQU Gladstone is home to the following research centres:

- Gladstone Centre for Clean Coal
- Process Engineering and Light Metals research

- Centre for Environmental Management

Australia Pacific LNG has an existing relationship with UQ through a pilot plantation project at Roma and Caboolture: UQ has partnered with Australia Pacific LNG (via Origin Energy) and Pacific Renewable Energy to develop several hectares of pilot plantations of *pongamia pinnata* at Roma and Caboolture.(the pongamia pinnata trees produce a nut which contains oil, suitable for conversion into biodesiel).

2.10 Housing and accommodation

2.10.1 Dwelling structure

At the time of the 2006 Census, there were approximately 7,075 dwellings in the gas pipeline SLAs. The majority of these were single detached dwellings, with town houses and units being most prevalent in the urban localities. Of these, the majority were located within the Banana SLA.

The table below details the change in housing stock from 2001 to 2006 by dwelling type. Growth in the number of households living in 'other dwellings' has been most prevalent, there has also been growth in townhouses and units. Unlike the gas field study area, there was a reduction in the number of separate houses which was most pronounced in the Calliope and Taroom SLAs. The Taroom SLA saw an increase of 81 townhouses during the period

Table 2.17 Dwelling structure, gas pipeline SLA's 2001-2006

	2001	2006	Change 2001-2006
Separate house	6,227	6,202	-25
Semi-detached, row or terrace, town house etc	102	153	51
Flat, unit or apartment	228	279	51
Other dwelling	345	441	96
Dwelling not stated	44	0	-44
Total	6,946	7,075	129

Source: ABS 2001, 2006

Between 2001 and 2006, two of the four gas pipeline urban localities recorded increases in the proportion of owner-occupied homes – Biloela (4%) and Miles (3%). The sharpest decline in the percentage of owner-occupied homes for the same period was recorded in Theodore (7%).

2.10.2 Median dwelling prices

For the period 2004 to 2008 the greatest increase in median house price was in Miles, increasing from A$81,340 to A$222,200, representing an AAGR of 28.6%, compared to 11.7% for Australia as a whole for the same period. The median price for units in Biloela increased by some 307.1% during the same period and recorded a median price of A$403,000 in 2008, which equates to an AAGR of 42.0%. The sharp increase in the price of units in Biloela was driven by high demand by the mining industry and low supply of housing stock (which decreased by 7%).

Median sales prices for the current quarter (June 2009) and the percentage of growth over the last 12 months and 5 years is presented in Table 2.18.

Table 2.18 Median sales prices, gas pipeline urban localities (2009)

Urban locality	Median sales price, 2009 (A$)	12 month growth to July 2009(%)	5 year growth to July 2009 (%)
Biloela	295, 000	2.1	152.1
Gladstone	360,000 – 430,000	-10.9	82.3
Miles	250,000	28.2	208.6
Wandoan	240,000	29.7	Na

Source: RP Data 2009

The median price of currently advertised properties in Theodore is $250,000, with new properties advertising between $355,000 and $425,000.

2.10.3 Average weekly rents

The latest data available by SLA is 2006 Census data. It should be noted that this data is now three years out of date, and the RP Data information available for urban localities below, provides a more realistic picture of the current rental price situation in the pipeline communities as it is based on current advertised rental rates.

In 2006, average weekly rent payments were significantly lower in the gas pipeline SLAs compared to Queensland (A$200 per week), ranging from A$56 per week in Taroom SLA to A$129 per week in Banana SLA.

The increase in average weekly rent payments between 1996 and 2006 within the amalgamated gas pipeline SLAs (78.8%) was higher than the national increase (55.3%) for the same period. Taroom was the only SLA to record a drop in the average weekly rent, falling from A$58 per week in 2001 to A$56 per week in 2006. It should be noted however that this increase was off a very low base in comparison to the Brisbane average.

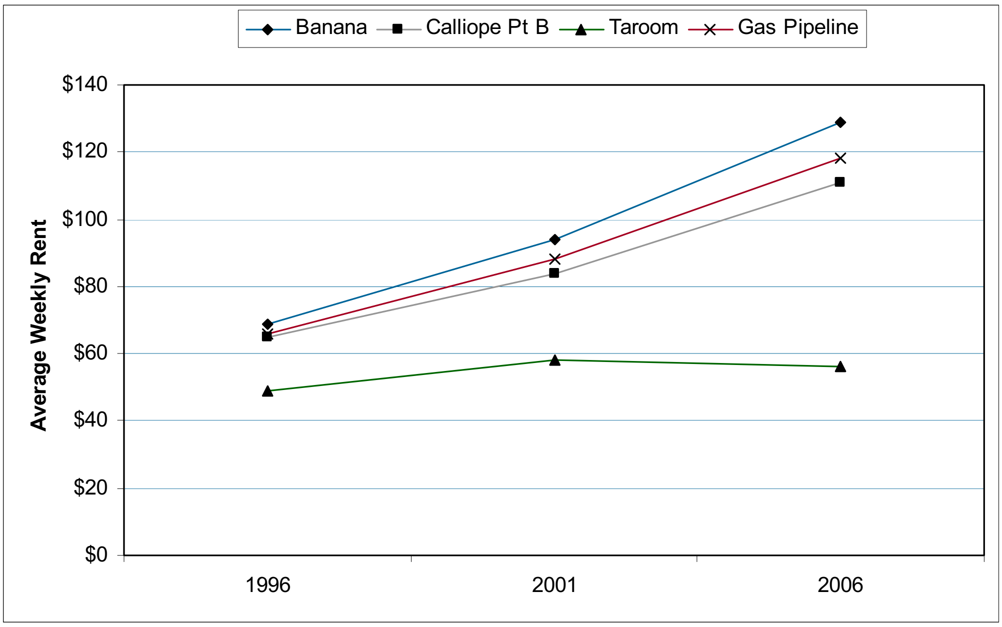

Figure 2.14 Average weekly rent, gas pipeline SLAs, 1996 to 2006 (A$)

Source: ABS 1996, ABS 2001 and ABS 2006

Urban localities

More recent data is available for some of the urban localities within the pipeline area. The table below shows the weekly advertised rent as at August 2009 for Biloela, Gladstone and Miles. These figures are significantly higher than those reported through the 2006 Census and are representative of an increasingly expensive rental market which has impacts on rental affordability.

Currently there are four properties for rent in Theodore ranging from $160 to $300 per week and one property available in Wandoan which is advertised for $180 per week. Currently, there are no properties available for rent in Taroom, and as such it is not possible to provide information on average advertised rental prices.

Table 2.19 Weekly median advertised rent of gas pipeline urban localities

Urban locality	Weekly median advertised rent (A$)
Biloela	290
Gladstone City	345
Miles	220

Source: RP Data (August 2009)
RP Data rent figures were not available for the towns of Wandoan, Taroom and Theodore.

2.10.4 Vacancy rates

An analysis of the current number of properties available to rent in the pipeline communities shows a very tight market with few properties available. As at 1st December 2009, the following numbers of properties were available within the gas pipeline urban localities:

- Theodore – 4
- Biloela – 26
- Wandoan – 1
- Miles – 6
- Taroom – 0

The rental market in Gladstone does not appear quite as tight, with a similar rate to Queensland (3.4%).

2.10.5 Social Housing

Social housing, which includes public rental stock, Aboriginal and Torres Strait Islander housing and community housing plays an essential role in supporting the most vulnerable members of society. The supply of social housing is particularly important in the pipeline context as the region has experienced significant increase in the cost of housing as well as an increased polarisation between high and low income groups.

Supply of social housing

The Queensland Department of Communities reports there are 943 social housing dwellings in the Gladstone Regional Council, representing 1.6% of Queensland's total housing dwellings. There are an additional 211 social housing dwellings in Biloela, 21 in Theodore and 8 in Thangool.

Demand for social housing

The Department of Communities (2008) also reports the demand for social housing, based on average waiting times for public housing. The figure below displays the average waiting times, by dwelling type for the Central Housing District (which includes the pipeline communities) and Queensland. Overall, public housing waiting periods are lower in the Project area than Queensland more broadly. The exception is the provision of seniors' dwellings and dwellings with more than four bedrooms within the study area, which have an average waiting period of almost three years.

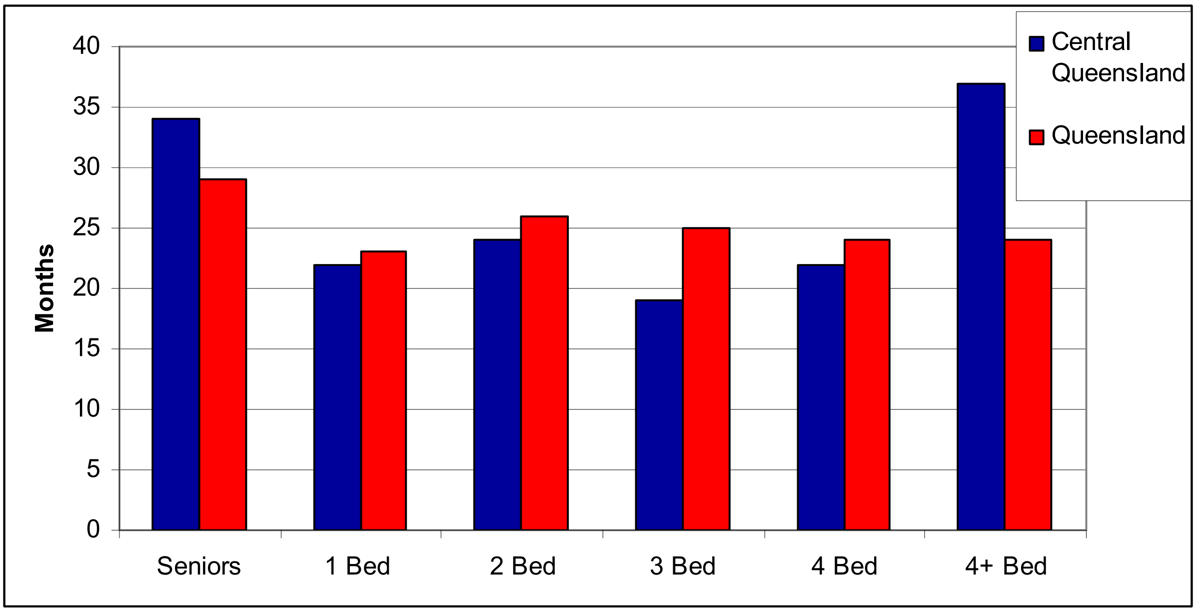

Figure 2.15 Public housing waiting periods 2008

Source: Department of Communities 2008

2.10.6 Government employee housing

The government provides employee housing assistance to eligible employees who are required to relocate to accept permanent employment offers. Individual government departments either own the homes, or rent them from other government departments or private owners.

Government Employee Housing (GEH) residences are leased to government departments/agencies at the full market rate, however the tenant / employee is not charged this amount. The residences are only allocated to employees who have been seconded or transferred to regional or remote areas to provide a government service. They are not available to local residents within these regional and remote towns.

Government employee housing statistics are summarised in Table 1.18 for the study area. Data from Queensland Health was not available. Department of Environment and Resource Management, DTMR, Department of Community Safety, Department of Communities, DIP and Department of

Justice and Attorney General were consulted and did not manage any Government employee housing in the studied towns.

Table 2.20 Government employee housing

Government Department	Gladstone	Biloela	Miles
Department of Public Works	4	42	9
Department of Education	64	30	12
Queensland Police Service	13	7	8
DEEDI	0	4	0
TOTAL	**81**	**83**	**29**
Queensland Health	Central Queensland - 136		Darling Downs – 181

2.10.7 Accommodation for non-resident workers

A survey of accommodation providers was conducted by DIP in June 2008 to establish the size of the non-resident workforce living in commercial accommodation. The survey found that some urban localities had a very high occupation of hotel/motel beds (for example, Wandoan, 90%).

The same survey established that as at June 2008, non-resident workers accounted for between 12% and 90% of hotel and motel bed spaces in the towns surveyed. This compares to an average of 28% across the Surat Basin[3]. High demand and low supply of commercial accommodation is particularly evident in Wandoan (90% occupation). Miles reported the lowest occupation of beds of all of the towns surveyed (12%).

The DIP survey concentrated on the Surat Basin region, and the table below provides data for the three gas pipeline towns that were included in the study –Wandoan, Taroom and Miles.

Table 2.21 Occupation of hotel/motel beds, 2008

Urban locality	Capacity of hotel/ motels (beds)	Beds occupied by non-resident workers	Occupation of beds by non-resident workers (% of total)
Wandoan	20	18	90%
Taroom	79	18	23%
Miles	113	14	12%

Source: DIP 2008b

Single persons quarters (SPQs) were the largest providers of lodging for non-resident workers (60% of all living arrangements). The distance between the Project area and urban localities are the biggest influence as to whether non-resident workers are accommodated on-site or in towns. The very high occupation of hotel/motel beds, for example Wandoan (90%), will present issues for securing temporary accommodation and places upward pressure on hotel/motel prices.

[3] The Surat Basin study area includes both the Roma and Dalby Regional Councils.

2.11 Community Health and Safety

This section of the baseline provides an overview of the level of medical and health facilities and services in the study area and describes community perceptions of health. Crime rates within the study area are described in terms of reported incidences. An overview of police and emergency services resourcing is also provided.

2.11.1 Medical and health facilities

The primary hospitals servicing the gas pipeline are Gladstone and Biloela hospitals.

Public hospitals located within, or in close proximity to, the gas pipeline area include:

- Biloela Hospital
- Gladstone Hospital
- Theodore Hospital
- Taroom Health Services
- Wandoan Outpatients Clinic

Taroom Health Service and Wandoan Outpatient Clinic fall within Queensland Health's Darling Downs - West Moreton Health Service District. Gladstone and Biloela Hospitals provide the most diverse range of medical and health services in the gas pipeline study area.

Biloela Hospital provides services in emergency, general medicine, surgery, paediatric, obstetrics and gynaecology, radiography, and palliative care. Biloela hospital also offers specialist services in ophthalmology, mental health, drug and alcohol, orthopaedics, physiotherapy, speech and occupational therapy, social work and aged services.

Theodore Hospital provides medical, surgical, paediatric, obstetrics, accident and emergency, palliative care and radiography services.

Gladstone Hospital provides services in emergency, outpatients, general medicine and surgery (including Day Surgery), basic orthopaedics, obstetrics and gynaecology, medical imaging, pharmacy, and pathology. The primary reasons that patients were hospitalised at the Gladstone Hospital in 2004/2005 include births, dental extractions and restorations, colonoscopies and chest pain. The major health hub for the region is Rockhampton 110km north-west of Gladstone. A considerable number of patients travel to Rockhampton for health care services unavailable in Gladstone.

Co-located with the Gladstone hospital is the Mater Misericordiae Private Hospital (the Mater), providing approximately 30 beds. The Mater provides specialist, day surgery and outpatient services. Key services include:

- General medicine
- General surgery
- Obstetrics and gynaecology
- Oncology and palliative care
- After hours medical service
- Radiology
- Pathology

- Visiting specialist services

Table 2.22 Medical and health services, gas pipeline SLAs, 2009

Medical and health service	Biloela	Gladstone	Theodore	Taroom	Wandoan
Classification	**Hospital**	**Hospital**	**Hospital**	**Health service**	**Outpatient clinic**
Ambulance centre	✓	✓	✓	✓	✓
Community health	Visiting	✓	✓	Visiting	Visiting
Dental	✓	✓	✓	✓	✓
Child health	Visiting	✓	Visiting	Visiting	✓
Drug and alcohol services	✓	✓	✓	✓	✓
Mental health services	Visiting	✓	✓	✓	Visiting
Nursing home	✓	✓	✓	✓	✓
Long stay and respite care	✓	✓	✓	Visiting	✓

Source: Queensland Health 2009

2.11.2 Police and community safety

The Queensland Police Service is the primary law enforcement agency for the State of Queensland. The gas pipeline study area falls within the Gladstone and Roma police districts. Roma district falls within the Southern Region and Gladstone district is in the Central Region. There are Police stations located in each of the urban localities within the study area.

Offences against the person and against property for each of the Police districts, reported per 100,000 population for 2008 / 2009 are presented in Table 2.23 and Table 2.24 respectively. The total number of offences against the person was lower in Gladstone district compared to the State as a whole (Queensland recorded 705 offences/ 100,000 people). Roma district had a higher number of reported assaults (661 assault offences and 142 sexual offences / 100,000 people) compared to Gladstone district and Queensland.

Table 2.23 Offences against the person, reported per 100,000 population, 2008/09

Offence	District		Queensland
	Gladstone	**Roma**	
Homicide – murder	4	0	1
Other homicide	4	4	3
Assaults (excluding. sexual)	385	661	449
Sexual offences	99	142	127
Robbery	14	4	43
Other	68	90	83
Total Offences	573	902	705

Source: Queensland Police 2009

Offences against property relate mainly to unlawful entry, theft, property damage and fraud. In 2008 / 2009 offences against property were considerably lower in Roma district compared to Gladstone district and Queensland, mainly due to the lower incidences of unlawful entry, arson, other property damage and fraud.

Table 2.24 Offences against property, reported per 100,000 population, 2008 / 2009

Offence	District		Queensland
	Gladstone	Roma	
Unlawful entry	848	631	1010
Other theft	1357	1310	1869
Arson	22	9	33
Other property damage	930	807	975
UUMV*	93	90	218
Fraud	261	146	405
Handling stolen goods	99	142	276
Total Offences	3609	3135	4618

Source: Queensland Police 2009

* Unlawful Use of Motor Vehicle. Includes attempted offences.

'Other offences' generally relate to 'drug offences', 'traffic and related offences' and 'good order offences'. Gladstone and Roma districts recorded higher rates of 'other offences' than for Queensland as a whole (Gladstone 4,565 offences/ 100,000 and Roma 5,819 offences/ 100,000 compared to Queensland 3,813 offences/ 100,000).

Table 2.25 Other offences, reported per 100,000 population, 2008/2009

Offence	District		Queensland
	Gladstone	Roma	
Drug offences	1142	1250	1026
Liquor offences (excluding drunkenness)	239	180	209
Gaming, racing, betting	0	0	0
Breach violence protection order	200	305	195
Prostitution	0	0	7
Trespassing and vagrancy	104	150	90
Stock related offences	154	253	28
Weapons act offences	85	167	78
Traffic and related offences	1160	1318	958
Good order offences	1395	1975	1154
Miscellaneous offences	85	43	67
Total Offences	4565	5819	3813

Source: Queensland Police 2009

During stakeholder meetings with emergency services in the gas pipeline study area, comments were made that the local police services are concerned regarding the potential for increased unruly behaviour and traffic offences as a result of the population increase from the CSG to LNG projects. Australia Pacific LNG's strategies to mitigate any concerns regarding unsafe behaviour are detailed in Section 5 of the Social Impact Assessment (Volume 3, Chapter 2).

2.11.3 Emergency services

Emergency services (excluding Queensland Police Service) are part of the Queensland Department of Community Safety. This department includes:

- Queensland Fire and Rescue Authority
- Queensland Ambulance Service
- Emergency Management Queensland

Data about unmet demand for volunteers within the emergency services sector could not be sourced, however if the situation is similar to that of elsewhere in regional Australia, then demand will be greater than supply. Regional Australia generally experiences a shortage of volunteers to fulfil emergency services positions and an increase in population, due to the Project, may assist in fulfilling unmet demand.

During discussions with project stakeholders, police and emergency services commented that they may have difficulty resourcing the population increases due to the CSG to LNG projects (Taroom and Gladstone Police, and Gladstone Department of Fire and Rescue).

2.12 Facilities and services

This section of the baseline report provides an overview of the level of child care services and the presence of cultural, community and recreation facilities and organisations within the gas pipeline study area. A snapshot of the types of community events in the region is also provided.

2.12.1 Child care

The provision of child care services is an important factor for enabling parents to participate in employment, education and training, community activities and personal activities. Child care may also be used for family support reasons.

Within the gas pipeline study area, Miles and Theodore recorded the highest number of child care facilities, with 3.4 and 3.0 facilities per 100 children aged 0 to 4 respectively.

The Gladstone region is serviced by seven kindergartens and 13 child care centres and family day care schemes. Three of the private schools offer after school care and the Gladstone Police and Citizens Youth Centre offers school-aged vacation care and after-school care. All of the child care centres also offer school-aged vacation programs and after-school care. Waiting lists of 12 months are common for child care centres in Gladstone.

The number of child care facilities per 100 children aged 0 to 4 years for each of the urban localities is illustrated in Figure 2.16. The ratios are estimates only as the number of child care centres relates to 2009 information and the population estimates upon which the ratios are based, were derived from the ABS 2006 Census of Population and Housing. Miles recorded the highest number of child care facilities per 100 children aged 0 to 4.

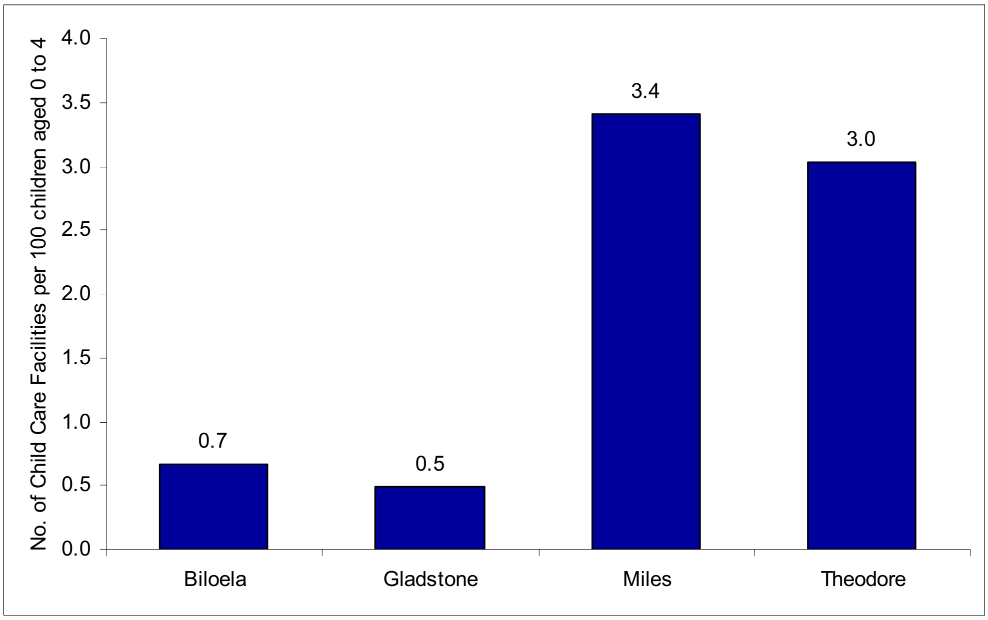

Figure 2.16 Number of child care facilities per 100 children aged 0-4, 2009

Source: Australian Child care Index (2009) and ABS 2006a

2.12.2 Cultural, community and recreation facilities and organisations

The presence of quality and diverse cultural, community and recreation facilities and/or organisations is vital to the social health of communities. It plays an important role in the quality of life for residents, and for building a vibrant and strong community. A summary of the types of cultural, community and recreational facilities and organisations within the towns of Biloela, Cracow, Theodore, Taroom, Wandoan and Miles are presented in Table 2.26. These urban centres also provide community services and features which support surrounding smaller communities. This list has been sourced from Queensland Health's website and the Regional Council websites. This list is by no means exhaustive.

The array of services, sporting and recreation options are extremely diverse throughout all urban localities, with a particularly large number of options available in Gladstone and Biloela. Overall, the study area has a diverse array of high quality cultural, community and recreation facilities.

Banana Shire Council completed community surveys in 2008 in Cracow, Biloela and Theodore. Respondents were asked as to which social services require improving. The community service improvements that the respondents prioritised are listed below.

Table 2.26 Services and features available in gas pipeline localities

Locality	Services and features available	Services that require improvement – as identified by community
Biloela[1]	• community resource centre • entertainment centre and arts • sports amenities, 36 sport and recreation clubs • shops • hotels and restaurants	• volunteering • support of the local economy • involvement in youth club and activities • support of aged care • enhance positive town culture

Locality	Services and features available	Services that require improvement – as identified by community
	• library • PCYC and youth council • welfare services • aged care and services • air, bus and rail services • service clubs • information centre and sightseeing • churches and church groups • commercial airport	
Cracow[1]	• community centre • hotel • service clubs • library service • state schools • tennis, golf and horse sports amenities and association	• aesthetic value of Cracow • fresh food supply • walkways, street signage, and park developments
Theodore[1]	• aged care and services • sporting amenities and 11 sport and recreation clubs • shops • Hotel • service clubs • information centre and sightseeing • churches • airport for chartered flights	• promotion of local history • manual and technical skills training • promotion of an annual youth event and services • community cooping with losing local services
Taroom[2]	• aged care and Meals on Wheels • sporting amenities and 9 sport and recreation clubs • shops • 3 schools and a preschool • service clubs • Hotel	

Locality	Services and features available	Services that require improvement – as identified by community
	• churches and church groups • airport for chartered flights	
Wandoan	• shops • sport amenities and clubs • Murilla Community Centre • museums, and art galleries • library • shops • Miles Historical Village • churches • sightseeing • community services • unlicensed airport	
Miles[3]	• shops • sport amenities and clubs • Murilla Community Centre • museums, and art galleries • library • shops and banking • Miles Historical Village • Churches and church groups • sightseeing • community services	
Gladstone	• ntertainment centre and arts • libraries • hotels, nightclubs, restaurants, cinemas • shops and shopping centres • sporting amenities and a diverse range of sporting clubs • 23 service clubs • 22 welfare organisations	

Locality	Services and features available	Services that require improvement – as identified by community
	• churches and church groups • information centre and sightseeing • airport	

Source: [1] Banana Shire Council Town Profiles (2008), [2] Taroom District Development Association (www.taroom.or accessed at 02 December 2009), [3] Miles Profile (www.health.qld.gov.au/workforus/profiles accessed at 02 December 2009), Gladstone Regional Council Community Directory (2009)

2.12.3 Community events

A review of Regional Council and relevant websites was undertaken to establish the number and type of community events for each of the urban localities in the study area, as shown in Table 2.27 and the findings indicate extremely active communities, with a diverse range of events throughout the year.

Table 2.27 Community events in the study area, 2009

Town	Community event	
Biloela	• Biloela Comedy and Food Festival • Brigalow Arts Festival	• Lake Callide Family Fishing Classic • Callide Valley Show
Gladstone and Calliope	• SUNfest • Baffle Creek Fishing Challenge • Coconet Classic • EcoFest • Calliope Rodeo • Gladstone Harbour Festival	• Mt Larcom and District Annual Show • Gladstone Annual Show • Gladstone Multicultural Festival • Gladstone Seafood Festival • Calliope Gold Cup Annual Race Day • Boyne-Tannum Hook-up
Miles	• Miles Country Music Spectacular • Beef, Bells and Bottle Tree Festival	• Christmas Street Carnival
Roma	• Roma Australia Day Celebrations • Easter in the Country Festival • Roma Show • Roma Sheepdog Trials	• Carlton Mid Roma Picnic Races • Santos Food and Fire Festival • Roma Cup
Taroom	• Taroom Show	
Theodore	• Theodore Show	
Wandoan	• Wandoan Show	

2.13 Community values, attitudes and liveability

The Banana Shire Council community survey conducted in 2008 addressed residents' perceptions of the community, community wellbeing, amenity and liveability.

The survey found that the respondents rated Banana Shire as a good place to bring up kids (93%), and is a stable (83%), relaxed (85%) and a safe rural place to live (92%). The survey respondents also rated their connections with other community members ("good mix of people" (87%) and "the people are friendly" (92%) as an important contributor to their community spirit and positive sentiment to the Banana Shire.

Survey respondents reported that they value that their community has an availability of social services and infrastructure, and also maintains its rural country lifestyle and identity.

The survey respondents raised issues regarding the need for improvement of local roads and youth and medical services and facilities. The respondents also raised environmental concerns related to, water access, weed management, coal mine pollution and fauna management.

Community values related to the Gladstone region are discussed in the LNG facility SIA (Volume 4, Chapter 20), and community values for the Surat region, including Miles are discussed in the gas field SIA (Volume 2, Chapter 20).

3. Social baseline summary – LNG Plant

3.1 Policy Review

3.1.1 State Government

Department of Premier and Cabinet

The State Government's plan for Queensland in 2020 is outlined in *Toward Q2: Tomorrow's Queensland.* The Plan is framed around five ambitions for Queensland, covering the economy, environment and lifestyle, education and skills, health and community.

Targets of Toward Q2 include:

- Queensland is Australia's strongest economy, with infrastructure that anticipates growth.
- Increase by 50% the proportion of Queensland businesses undertaking research and development or innovation.
- Cut by one-third Queenslanders' carbon footprint with reduced car and electricity use.
- Protect 50% more land for nature conservation and public recreation.
- All children will have access to a quality early childhood education so they are ready for school.
- Three out of four Queenslanders will hold trade, training or tertiary qualifications.
- Cut by one-third obesity, smoking, heavy drinking and unsafe sun exposure.
- Queensland will have the shortest public hospital waiting times in Australia.
- Halve the proportion of Queensland children living in households without a working parent.
- Increase by 50% the proportion of Queenslanders involved in their communities as volunteers.

Toward Q2 would be expected to provide a platform to promote government investment in the region to meet the targets. There is also an opportunity for the Project to contribute to some of these outcomes through facilitating training and employment opportunities for local residents and other people throughout Queensland and encouraging and supporting employees to volunteer in the community.

Department of Employment, Economic Development and Innovation

The *Blueprint for Queensland's LNG Industry* provides an outline of how the Queensland Government will facilitate the development of the LNG industry in Queensland and work with local communities to ensure that any development of LNG resources is beneficial. To co-ordinate government activities and facilitate ease of access to information, the government has established the LNG Industry Unit within the Department of Employment, Economic Development and Innovation. The unit is responsible for policy development, industry assistance and commercial negotiations for LNG projects.

With regard to workforce planning and development, a specialist energy and resource sector employment company, Energy Skills Queensland and the LNG industry, have formed the CSG/LNG Training Steering Committee. This committee has been tasked with providing recommendations to the Queensland Government regarding workforce planning and development for the LNG industry. The committee will detail skill requirements, number of workers required to be trained and the location of the training. Following its completion, it is anticipated that Energy Skills Queensland and the LNG industry will develop a CSG/LNG training facility in Queensland. Australia Pacific LNG will work with the committee to discuss opportunities for partnership to support the training and development of local residents to gain employment within the industry.

The *Central Queensland Regional Growth Management Framework 2002 (CQRGMF)* (Department of Local Government and Planning 2002) contains guiding principles, outcome statements, strategies and actions to provide a regional framework for the management and development of Central Queensland. Central Queensland Local Government areas within the Australia Pacific LNG study area are the Banana and Gladstone regional councils.

There are many strategies in the CQRGMF relevant to the development of the region's socio-economic environment and are categorised according to the following themes:

- Resource use, conservation and management
- Economic development
- Infrastructure
- Social and cultural development
- Education, training and research
- Planning and governance

The CQRGMF was endorsed by State Cabinet in July 2002 and is currently being implemented. The outcomes of the strategies and actions in the CQRGMF has been be used to inform the Project Social Impact Management Plan.

Department of Communities

The *Sustainable Resource Communities Policy: Social Impact Assessment in the Mining and Petroleum Industries* (DEEDI 2008) is focused on communities where rapid development, brought about by the resources boom, is having significant impacts to communities. Key areas which experience the greatest impact include infrastructure and services and the social structure of local and regional communities that support the new or expanded mining and petroleum developments. Government is implementing the following initiatives to continue to build equitable and sustainable resource communities by:

- Strengthening the government's co-ordination role.
- Improving linkages between social impact assessment and regional planning.
- Fostering partnerships with local government, industry and community.
- Providing an enhanced regulatory environment for social impact assessment.

The framework identifies potential impacts of mining industry expansion and key planning issues; many if not all of which are relevant to this EIS. The likely areas which may be impacted by mining industry expansion identified by the framework include:

- Local and regional economic development
- Employment and skills
- Government co-ordination and service provisions

- Housing demand and supply
- Housing choice
- Housing affordability
- Short-term accommodation
- Strategic planning and infrastructure

The framework also notes that planning considerations are critical and identified the following key planning issues:

- Cumulative social, economic and environmental impacts
- Managing the urban lifecycle stages of growth, decline and renewal
- Managing risks
- Cultural impacts
- Capacity for economic diversification
- Balancing productive mining industry and sustained and vibrant communities.

These issues provide a framework to guide this social impact assessment.

Blueprint for the Bush (Department of Communities 2006) is a 10-year plan to build a strong rural Queensland of sustainable, liveable and prosperous communities. It is the culmination of a partnership between the Queensland Government, AgForce Queensland and the Local Government Association of Queensland. The Blueprint introduces new strategies for rural infrastructure and services and strengthens existing measures that are working well. There are two funding programs within the Blueprint. The first supports local transport initiatives and the second supports initiatives which increase the capacity of communities to own and manage their future. There may be opportunities for Australia Pacific LNG to further support Blueprint for the Bush initiatives through financial and in-kind support. This could include assisting organisations with their funding applications, contributing funds to a partnership project or resourcing the implementation of community capacity building strategies identified through a Blueprint for the Bush initiative.

Department of Health

The *Queensland Health Strategic Plan 2007-2012* (Queensland Health 2007) identifies the strategic directions for Queensland Health between 2007 and 2012. Key challenges identified in the Strategic Plan of particular relevance to the study area are:

- Meeting the demand for health services of a rapidly growing population while maintaining adequate services in existing rural, remote and regional locations.
- Maintaining services, particularly in rural, remote and regional areas, given ongoing difficulty for recruiting and retaining health care workers and providers.

Initiatives identified to address the above challenges include:

- Implementing community-based models of service delivery where a range of services and providers are located together to support the shift of services closer to communities.
- Increasing and improving technology to support specialist services to rural and remote communities.

- Building capacity in community-controlled Aboriginal and Torres Strait Islander health services, where appropriate.

The initiatives identified in the Strategic Plan are being implemented by Queensland Health and will assist with informing the development of the Project's mitigation measures and strategies and may provide guidance for community investment opportunities.

Department of Emergency Services

The *Department of Emergency Services Strategic Plan 2008 to 2012* (Department of Emergency Services 2008) covers the three operational arms of this department; Queensland Ambulance Service, Emergency Management Queensland and Queensland Fire and Rescue Service. The goals of the Strategic Plan are detailed below.

- Focus on front-line service delivery.
- Strengthen community capability and resilience.
- Support volunteer emergency service organisations.
- Build organisational capability and resilience.

Strategies particularly relevant to the socio-economic environment of the study area include recruitment and retention of volunteers, leveraging strategic partnerships with businesses and developing partnering opportunities with communities. Australia Pacific LNG intends to support this plan through encouraging and facilitating volunteering opportunities for its employees.

Department of Education and Training

The *Queensland Skills Plan 2008* (DET 2008a) has been developed in response to the challenges and opportunities posed by a strong and dynamic economy and labour market. It contains measures to alleviate skill shortages at all occupational levels. A key measure relevant to the study area is the 'focus on regional planning to build the capacity of the vocational education and training sector'. The development of local and regional Skills Formation Strategies will help align skills supply, workforce development and business strategy. This is achieved through the collaborative action of industry, government and the education and training sectors. It will be important for Australia Pacific LNG to work with TAFE and Education Queensland to identify its skill requirements and provide opportunities for trainees and apprentices.

The purpose of the *Department of Education, Training and the Arts Strategic Plan 2008 to 2012* (DET 2008b) is to build the knowledge, skills and creativity of Queenslanders to drive economic prosperity, build strong and vibrant communities and enhance lifelong well-being. Key strategies of particular relevance to the socio-economic environment of the study area include the following.

- Develop a new regional arts and cultural strategy to enable people across Queensland to enjoy high quality, inspiring arts and cultural experiences.
- Strengthen regional services to better meet the needs of regional clients.
- Cultural experiences and services can play a role for improving the liveability of regional areas and through this make the locations more attractive places to live. Further development of the Gladstone cultural and entertainment offer could attract workers and their families.

3.1.2 Local government

The *Gladstone Regional Council Corporate Plan 2009 to 2013* (Gladstone Regional Council 2009) outlines the key outcomes that GRC would like to achieve during the period years and how it intends to achieve those outcomes. Council identified the following outcomes to be focused on through the implementation of the Plan:

- Gladstone Airport upgrade.
- Develop a new regional planning scheme.
- Planning and funding for key infrastructure provision in response to growth, particularly roads, water, sewerage and social infrastructure.
- Maintaining balance between development and lifestyle.

In addition to these outcomes, GRC recognised that external environmental factors influenced the Plan's success. Key factors identified were:

- Cost shifting from State and Federal government.
- Ensuring that major industrial development occurs in an environmentally sustainable manner.
- Ensuring an adequate water supply sustains regional growth.
- Housing availability and affordability during peak construction periods.
- The reliance on the resource industry for the Gladstone region's economic base.

In order to address issues facing the region, an opportunity exists for the Project to develop a collaborative working relationship with Gladstone Regional Council.

3.1.3 Other Strategies and Studies

Gladstone Regional Vision 2028 Final Project Report

The Gladstone Regional Vision 2028 is the result of an extensive consultation process that sought input from Gladstone regional residents in relation to how their communities could and should develop during the next 20 years. The study aimed to:

- Help regional leaders gain a richer understanding of the community's needs.
- Facilitate the creation of an inspiring vision and associated community action plan for Gladstone Region 2028.
- Provide a solid foundation for ensuring long term alignment and partnerships between industry, community and government.
- Create an on-going platform for community input into industrial and Local Government planning.

The Vision 2028 Report includes information about community attitudes and values which has been used to inform the Project's social baseline study. It also identifies priority areas for community investment that will be drawn from when undertaking discussions with local decision makers about possible community development and program opportunities.

Gladstone Regional Social Infrastructure Strategic Plan (SIS Plan)

The *Gladstone Regional Social Infrastructure Strategic Plan* (SIS Plan) is a joint project between the State Government (Department of Infrastructure and Planning), the Gladstone Economic and Industry Development Board (GEIDB) and Gladstone Regional Council.

The objective of the SIS Plan is to '*inform and guide future planning activities and investment decisions for strategic social infrastructure in the region'.* The study will involve an audit of existing community infrastructure and consultation with the community, government and service providers to identify current needs and future needs. It is also anticipated that the SIS Plan will better inform any contributions to the regional social infrastructure capital base by current and future private sector industrial proponents considering the Gladstone region as a location to site a major project development. The SIS Plan will additionally provide a platform for Local Government and the community sector to advocate for funding for required community facilities and services. It will further allow the Council and State Government, and other providers, to better prioritise scarce social infrastructure funds in line with identified priorities.

The results of the study, anticipated to be finalised in February 2010, will be important in helping Australia Pacific LNG to prioritise investment into community programs, services and initiatives. It may also identify opportunities for project proponents to work collectively with the Local and State Governments and the community to deliver outcomes which improve community wellbeing.

3.1.4 Community based organisations

Fitzroy Basin Association

The *Central Queensland Strategy for Sustainability – 2004 and Beyond (CQSS2*) is the regional plan for the integrated management of the natural and cultural resources and environment of the river catchments of the Central Queensland region. The CQSS2 is only relevant to the gas pipeline component of the Project; specifically the Fitzroy Basin sub-regions of Dawson and Boyne Calliope. The CQSS2 developed the following goals through a collaborative approach with the resource management community to:

- Improve the health and maintain the functioning of our natural systems and conserve the region's biodiversity.
- Develop a diversity of economically viable industries that support vibrant regional communities and use the region's natural resources in an ecologically sustainable way.
- Integrate natural resource and environmental management, economic development and community development within the region.
- Share decision-making for the allocation of natural resources and the management of the region's environment across all stakeholders.
- Ensure the costs and benefits of achieving sustainable systems are shared equitably across the regional community.

Implementation of the CQSS2 is guided by an Investment Plan with the second major driver being the application of a social and economic assessment to inform priority investments and programs.

3.2 Town Profiles

The study area for the Project incorporates a range of large and medium towns and small rural communities. The larger communities which are expected to experience the greatest impact due to population and industry growth are Gladstone, Calliope and Boyne Island and Tannum Sands. These towns have been profiled to present a snapshot of the current situation. Data presented in this section was predominately gathered from the Australian Bureau of Statistics (ABS) 2006 and desktop research (including council websites and tourism websites).

3.2.1 Gladstone

Gladstone was established in 1847 as a penal colony, originally called Port Curtis, and later changed to honour British Statesman, William Gladstone. Major industrial and community expansion commenced in the sixties and has continued to this day with a solid industrial, export and tourism base present. Major industries in Gladstone include coal export, cattle export, tourism and aluminium smeltering – Gladstone is home to the Boyne aluminium smelter, Australia's largest aluminium smelter. More recently, the LNG industry has invested heavily in the region with six projects currently progressing environment impact studies for projects in Gladstone (DEEDI, November 2009). Gladstone is a thriving town serviced by public and private hospitals, 13 schools, the Central Queensland Institute of TAFE and Central Queensland University. In addition, there is a diverse range of retail, recreation, cultural, leisure and entertainment services and facilities available.

The Table below (Table 4.1) documents the key characteristics of the Gladstone City area.

Table 3.1 Key Characteristics, Gladstone Urban Locality

Characteristics	Gladstone	Queensland
Population, 2006	30,734	4,091,546
Average age, 2006	33.7	37.2
Population AAGR*, 1996 to 2006	1.5%	2.1%
Estimated population AAGR, 2009 – 2031	1.9%	1.7%
Indigenous population, 2006	3.8%	3.3%
Unemployment rate, September quarter 2008	4.3%	4.1%
Median weekly household Income, 2006 (A$)	$1,344	$1,202
Completed up to grade 12, 2006	35.20%	41.3%
Median dwelling price, June 2009 (A$)	$360,000	$414,000a
Average weekly rent, 2006 (A$)	$180	$213

*AAGR – Aggregated Annual Growth Rate
Source: ABS 2006

Key observations and issues

- The housing and accommodation market in Gladstone is under significant pressure due to continuing strength in the construction, mining and manufacturing sectors. As at June 2009, the median dwelling price of A$360,000 was lower than for Brisbane and the average weekly rent in 2006 (A$180 p.w.) was nearly as high as the state average (A$213 p.w.). It should be noted however that house prices in Gladstone have experienced a slump over the last 12 months which is in striking contrast to the last 10 years where they have increased by an average of 10% annually.

- The demographics of Gladstone differ significantly when compared to the other studied towns due to the urban nature and heavy reliance on mining, construction and manufacturing sectors. For example, a higher proportion of people had completed up to Grade 12 in 2006 (35.2%) compared to other towns. This is most likely due to the higher proportion of white collar workers and a very young average age of 33.7 years in (ABS 2006).

3.2.2 Calliope

Calliope is a small rural community located approximately 15km south west of Gladstone. Surrounded by farms and hinterland landscapes Calliope is a former gold rush community, with gold mined commercially into the early 1900's. Since the end of the gold rush era primary industry has been the mainstay of the Calliope district with beef cattle, dairying, pigs, crops, fruit and vegetables all being produced.

In recent years the township of Calliope has undergone significant growth. This growth has coincided with the expansion of the Gladstone region and large scale development of local industry. This trend is expected to continue.

The Table below documents the key characteristics of the Calliope urban locality.

Table 3.2 Key Characteristics, Calliope Urban Locality

	Calliope	Queensland
Population, 2006	1,505	4,091,546
Average age, 2006	33	37.2
Population AAGR, 2001 to 2006	2.4%	1.2%
Estimated population *AAGR, 2009 – 2031	1.5%	1.7%
Indigenous population, 2006	2.1%	3.3%
Unemployment rate, March quarter 2009	4.3%	4.0%
Median weekly household income, 2006 (A$)	$1192	$1,202
Completed up to Grade 12, 2006	26%	41.3%
Median dwelling price, June 2009 (A$)	$385,000	$414,000a
Average weekly rent, 2006 (A$)	$190	$213

[a] Brisbane only

*AAGR – Aggregated Annual Growth Rate

Source: ABS 2006

3.2.3 Boyne Island and Tannum Sands

The coastal communities of Boyne Island and Tannum Sands are located 20 minutes south of Gladstone. With a population of close to 8,000, the communities are linked to the Gladstone City area by a bridge over the Boyne River. More discrete statistical details about these communities are not available as the Australian Bureau of Statistics does not report at that scale. The beachside locations and relatively industry-free environment at Boyne Island and Tannum Sands are proving attractive alternatives to living in Gladstone.

The Table below documents the key characteristics of the Boyne Island and Tannum Sands region.

Table 3.3 Key Characteristics, Boyne Island and Tannum Sands Urban Locality

	Boyne Island	Tannum Sands	Queensland
Population, 2006	3,719	4,308	4,091,546
Median age, 2006	34	35	37.2
Population AAGR, 1996 to 2006	0.5%	1.6%	1.2%
Estimated population AAGR, 2009 – 2031	1.7%	1.7%	1.7%
Indigenous population, 2006	2.7%	2.2%	3.3%
Unemployment rate, March quarter 2009	4.3%	4.3%	4.0%
Average weekly household income, 2006 (A$)	$1,283	$1,334	$1,202
Completed up to grade 12, 2006	34.8%	36.5%	41.3%
Median dwelling price, 2009 (A$)	$395,000	$430,000	$414,000a
Average weekly rent, 2006 (A$)	$220	$220	$213

[a] Brisbane only

AAGR – Aggregated Annual Growth Rate

Source: ABS 2006

3.3 Land Tenure and Use

The LNG plant and ancillary facilities are located within the Gladstone Regional Council Local Authority area and Port Curtis. The tenure and ownership details are outlined below:

Table 3.4 Land tenure of the LNG facility location

Parcel Description	Current Tenure	Proposed Tenure	Current Owner
Lot 3, SP225924	Freehold	Freehold	MIDQ
Reclaim areas	Unallocated State Land	Freehold	State of Queensland
Seabed area	Lease	Lease	Gladstone Ports Corporation Limited
Un-named road	To be confirmed (most likely MIDQ)	Freehold	Gladstone Regional Council

Note: MIDQ = Minister for Industrial Development of Queensland

Source: ABS 2006

The LNG facility is located within the designated Curtis Island Industry Precinct of the Gladstone State Development Area. In 2008, the State Government compulsorily acquired land on the south-west corner of Curtis Island (just over 6,000ha) to extend the Gladstone State Development Area. Within the Gladstone State Development area, the Queensland Government designated 1563 hectares of land for LNG and export wharf facilities: the Curtis Island Industry Precinct. Prior to the compulsory acquisition of the land for industrial purposes, the land was leasehold for rural grazing purposes. The majority of the land that was cleared for grazing has now re-established growth of natural vegetation.

The majority of the Gladstone State Development Area located on Curtis Island has been designated as the Curtis Island Environmental Management Precinct. The predominant land use in this area is currently natural vegetation and cattle grazing.

Land use in the surrounding area comprises a mixture of port activities, large-scale industry, forestry, nature conservation, urban and rural activities. Production forestry activities are carried out in the Curtis Island State Forest some five kilometres away to the north of the Project site, and on the mainland at Targinie and Yarwun, some six kilometres to 10km away from the LNG plant site. The surrounding area to the Project site supports several major industrial uses. These are located on the mainland to the west and south-west of the Project site and include the Cement Australia cement plant, the Stuart Oil Shale Project (Queensland Energy Resources of Australia), the Rio Tinto Yarwun alumina plant, the Orica Ltd chemical plant, and the GPC Fisherman’s Landing port facilities. Several quarries are also located in the general area.

Curtis Island and surrounding waters contains several conservation areas which provide for a range of nature-based recreation activities, including Curtis Island National Park, Cape Capricorn Conservation Park, the Garden Island Conservation Park, the Curtis Island Conservation Park, the Curtis Island Nature Refuge and Curtis Island State Forest. The Great Barrier Reef Coast Marine Park situated in the Narrows and Graham Creek is a habitat protection area.

Net and crab fisheries are the principal commercial fisheries operating in the Port Curtis area, although some beam trawling for prawns has been known to occur on occasions. The recreational fishery is largely confined to the estuarine and inshore areas of Port Curtis.

The Gladstone urban area is located approximately 11km to the south-east of the Project site on the southern side of Port Curtis. The port provides for the import and export of bulk materials, fuel, and container cargoes.

For further information regarding land use and tenure, refer to Volume 4, Chapter 6.

3.4 Population Demographics

3.4.1 Population Size and Distribution

The population of the study area is made up three SLAs, Gladstone, Calliope Part A and Calliope Part B. At the time of the 2006 census, the population for these three SLAs was 46,525 persons, with the majority of this population (63%) located within the Gladstone SLA.

The Queensland Office of Economic and Statistical Research have published more recent population estimates by urban locality. The estimated population as at 30 June 2008 for population centres located in the study area are illustrated in Figure 3.1. Gladstone accounts for the 57% of the population of Gladstone Regional Council (which incorporates the three SLAs in the study area in addition to Miriam Vale SLA) with the next largest population centres being Tannum Sands and Boyne Island (populations of 4,638 and 4,202 respectively).Of an estimated Gladstone Regional Council population of 57,587 people in June 2008, about 85 percent (or 49,000 people) were within commuting distance of Gladstone City (Rolfe 2009).

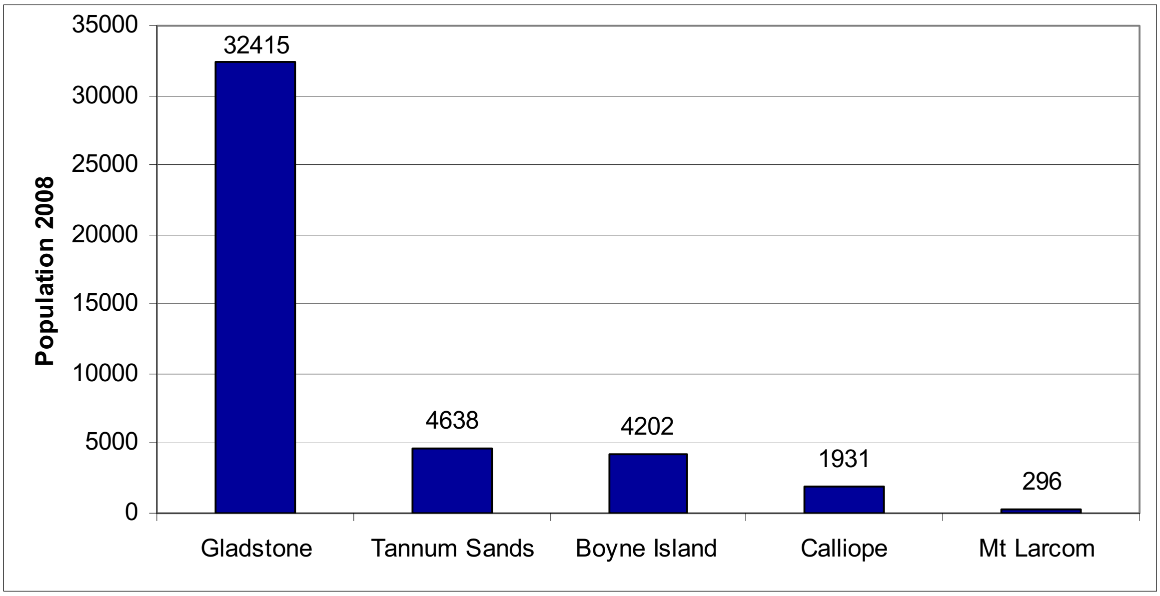

Figure 3.1 Estimated population of urban centres, June 2008

Source: Office of Economic and Statistical Research 2009

The Average Annual Growth Rate (AAGR) for the populations of Calliope Part A, Calliope Part B and Gladstone SLAs between 1996 and 2006 are illustrated in Figure 3.2. The population of Gladstone and Calliope Pt A grew at a faster rate than for Queensland as a whole over this period at 1.5% and 2.5% respectively due to undergoing rapid and large scale industrial development and expansion for this period. In contrast, Calliope Part B covers a predominantly rural area with a very small population base centred on agriculture and service industries.

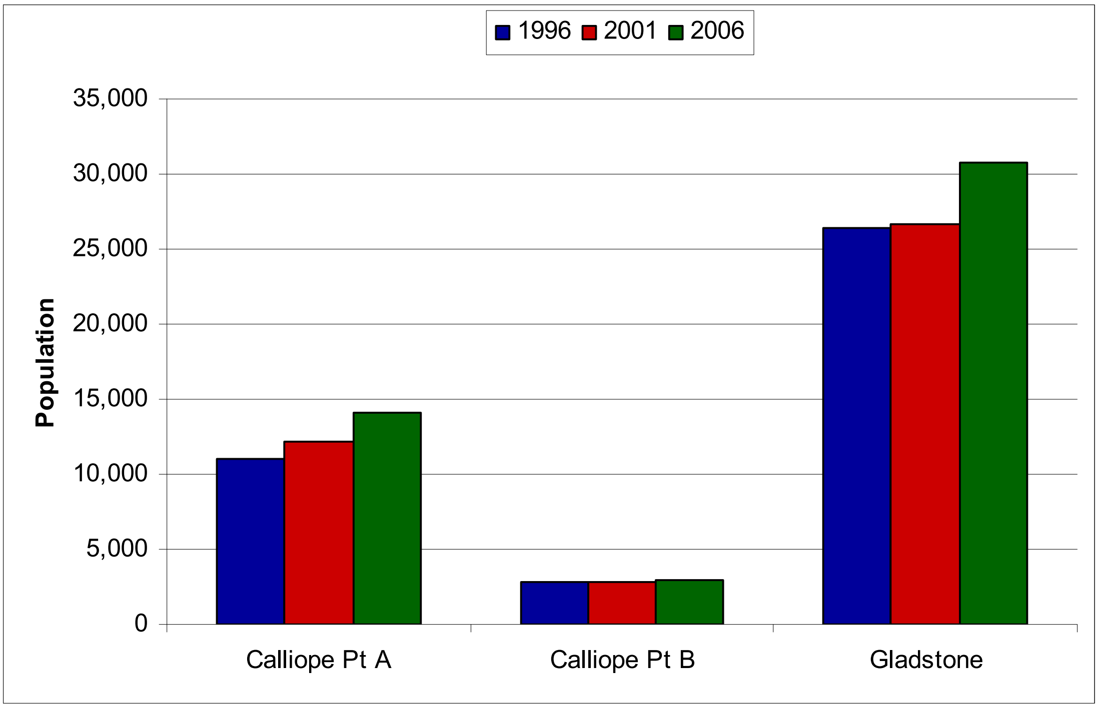

Figure 3.2 Population Change, 1996 to 2006

Source: ABS 2001, ABS 2006a

3.4.2 Population projections

Detailed population projections to the year 2031 have been prepared by the Planning and Information Forecasting Unit (PIFU), Department of Infrastructure and Planning and are illustrated in Figure 3.3 below. The population estimates were based upon the PIFU medium series projections and show that between 2009 and 2031 the population of Gladstone is expected to grow by 1.9% per annum, which is marginally more than Queensland as a whole (1.7% pa)[4]. By 2031 the population of Gladstone is estimated to increase to 50,925. Calliope Pt A and Calliope Pt B are predicted to grow by 1.9% and 1.0% per annum respectively. Growth in Calliope Part A is being driven by the presence of coastal centres such as Boyne Island and Tannum Sands which are within commuting distance to Gladstone and the increase in industrial development around centres such as Calliope.

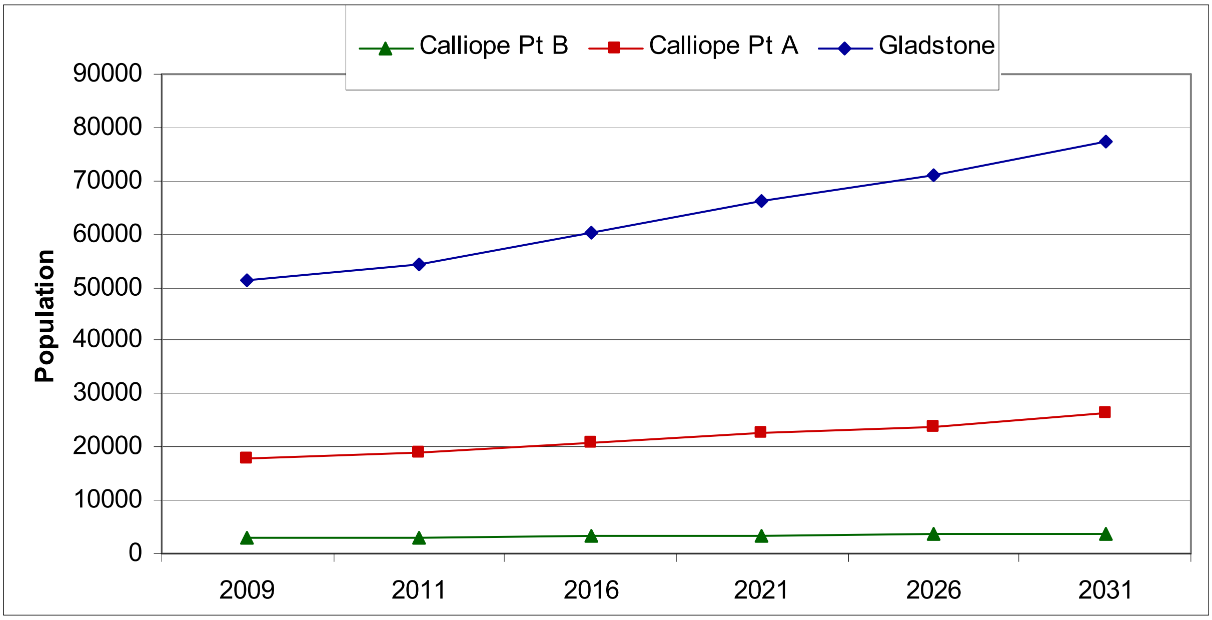

Figure 3.3 Population projections, 2009 to 2031

Source: Based on DIP 2006 and DIP 2008a

3.4.3 Prevalence of disability in the population

The ABS reports on 'Unpaid Assistance to a Person with a Disability'. This data set records people who, in the two weeks prior to Census night, spent time providing unpaid care, help or assistance to family and can provide an indication of the prevalence of disability within a community. In the LNG facility study area, 2,859 people, or 8.3% of the population reported that they had provided unpaid care to a person with a disability. This is slightly lower than the Queensland average of 9.5%. Within the study area, Calliope Pt B has the highest prevalence of carers, with 8.7% of the population.

3.4.4 Age and gender distribution

The Gladstone urban locality has a relatively young population profile, and in particular, there are a higher proportion of people aged 20 to 35 years, which could be attributed to more diverse employment opportunities and the presence of trade related jobs which are often dominated by

[4] It should be noted that the data were based upon the latest available PIFU projections, which at the time of writing, did not take into account expected population increases associated with proposed major developments planned in the Gladstone region.

younger persons. In Gladstone in 2006, there were marginally more females aged 20-29 years and older females aged over 70 years than males. Generally however, there is a similar proportion of males to females in most age groups.

In contrast to Gladstone, Calliope has an older population profile, with a smaller proportion of persons of both sexes aged between 20 and 30 years. There is also a larger proportion of an older working aged population aged between 35 and 50 years than the wider region. The 10-14 years age group is also over-represented when compared with the Gladstone region. This population profile is indicative of a large proportion of established families with older children, rather than young adults and couples with young children. With respect to differences in proportions of females and males at various ages, there are marginally more females (1%) aged between 30 and 39 than males.

3.4.5 Ethnic Diversity

The ethnicity and ancestry of residents has implications for multiculturalism and welfare and support services in communities for migrant and non-English speaking residents. With regards to ethnicity derived from parental ancestry, Australian and English are the most prevalent ethnicities for all areas, with other Anglo-Saxon ethnicities also having a strong representation. The Gladstone region is predominantly made-up of Australian-born residents. In Gladstone, 10.4% of people were born overseas and 12.1% of residents from Calliope, both of which are well below the Queensland average of 19%. These details are illustrated in the table below.

Table 3.5 Place of birth 2006

	Born in Australia	Born Overseas
Gladstone	89.5%	10.4%
Calliope Pt A	87.3%	12.7%
Calliope Pt B	88.1%	11.9%
Queensland	80.8%	19.2%

Source: ABS 2006a

The greatest proportions of residents not born in Australia originally hailed from the United Kingdom and New Zealand for all studies localities. This is shown in Table 3.6 below. The ‘born elsewhere’ category covers those countries which are not individually identified by the ABS. This includes all African nations apart from South Africa and Egypt, a number of Middle Eastern and Eastern European nations in addition to various South American countries.

Table 3.6 Top 5 countries of birth 2006

	Gladstone	Calliope Pt A	Calliope Part B	Queensland
United Kingdom	3.0%	4.0%	2.8%	5.31%
New Zealand	2.5%	3.3%	1.6%	4.09%
Born elsewhere	1.2%	1.1%	1.8%	2.67%
South Africa	0.4%	1.1%	0.2%	0.62%
Philippines	0.5%	0.3%	0.1%	0.51%

Source: ABS 2006a

In all communities in the Project study area, the main language spoken at home is English. All analysed communities within the Gladstone region have a significantly lower proportion of residents who speak a language other than English compared to Queensland.

3.4.6 Family structures

Family structure refers to the various types of family units, including traditional family units (adult couple with children), couples without children, single parent families and lone or single person households. The presence of different family types can impact labour force participation rates, the types of hours people are able to work, demand for child care and demand for various types of housing types. In 2006, the family structures in Gladstone SLA were very similar to those for Queensland as a whole with couple with children families the most dominant type. Gladstone also had the highest rate of one parent families in the region (15%) which is comparable to the Queensland average (16%). Family households in Calliope Pt A SLA were predominantly traditional families (45%) and comprised less lone person households compared to the other SLAs in the Project study area.

3.4.7 Migration

Areas which are dominated by mining and mining-related industries such as manufacturing and construction are often characterised by transient populations. Regional areas dominated by mining industries are also sometimes characterised by this social trend and often experience difficulties attracting and retaining key workers, particularly in the health and community services sectors. Although Gladstone is renowned as an industrial hub based on mining-related industry, analysis of migration data for Gladstone suggests that whilst there are a high proportion of residents who have moved during the past five years, many of these have moved from another location in Gladstone rather than elsewhere in Queensland. This is indicative of a relatively stable population, at least over this period of time. Calliope had a much greater proportion of new residents who had moved from outside the region during the last five years, although this was of a smaller population base than Gladstone.

Table 3.7 Place of Usual Residence 2001 and 2006

	Gladstone	Calliope	Queensland
Same address five years ago	43%	44%	46%
Different address, same SLA	22%	15%	8%
Different address in:			
Queensland	19%	26%	26%
Other States and Territories	6%	7%	7%
Overseas	2%	3%	4%

Source: ABS 2006a

3.4.8 Household size

Consistent with Queensland and national trends, the average number of people per household decreased between 1996 and 2006 in Calliope Pt B and Gladstone SLAs. Calliope Pt A remained constant with an average of 2.9 persons per household which is considerably higher than the

Queensland average of 2.6. The higher average number of people per household in Calliope Pt A is most likely attributed to the relatively high proportion of households as couple families with children (45% in Calliope SLA compared to 32% for Queensland as a whole).

The average household size between 1996 and 2006 is illustrated in Figure 3.4.

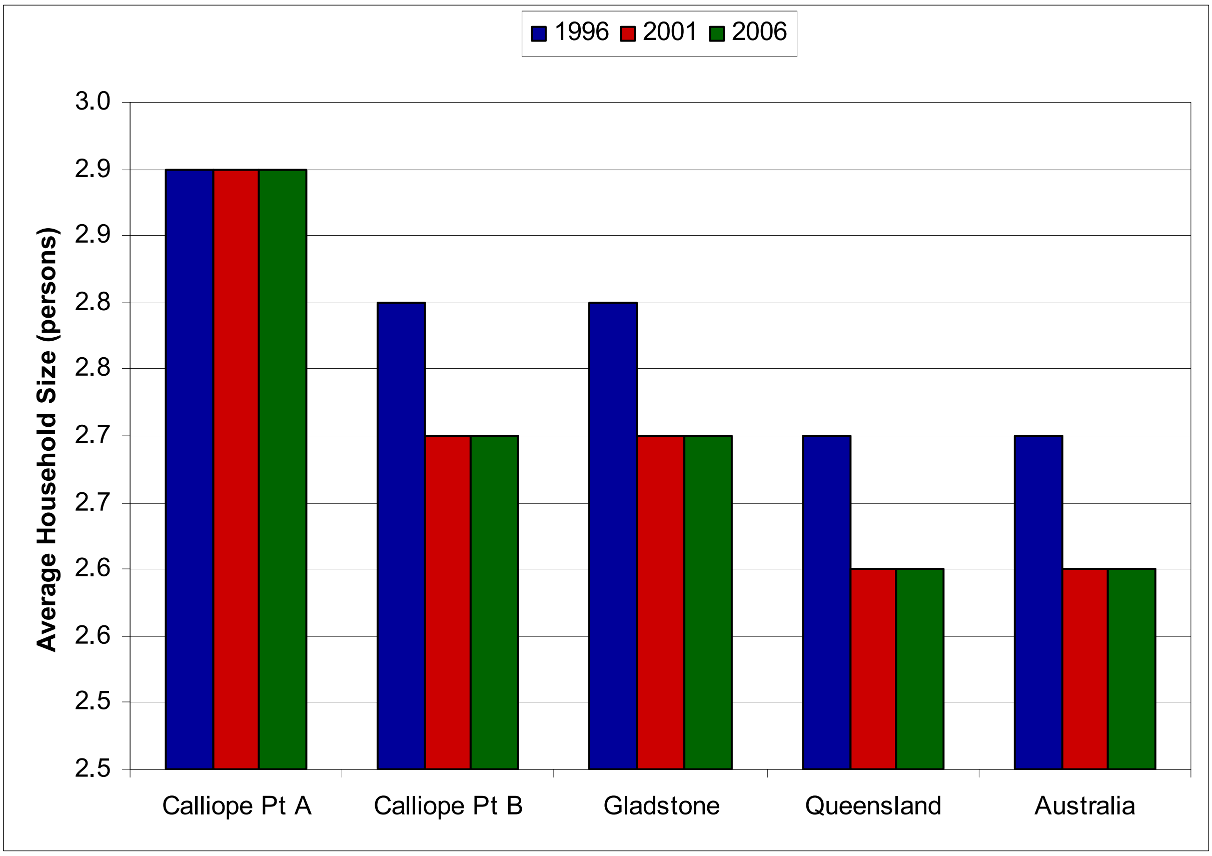

Figure 3.4 Average household size, 1996 to 2006

Source: ABS 2006

3.5 Indigenous Australians

The purpose of this section of the baseline is to provide more detailed information regarding the Aboriginal and Torres Strait Islander population who reside in the study area. This includes the local Indigenous community including Traditional Owners that reside locally. This profile has been prepared based on the Gladstone and Calliope Indigenous Regions as classified by the ABS which are the same as the former Gladstone and Calliope LGA's. The study area as discussed in this section of the report refers to the amalgamation of the Gladstone and Calliope Indigenous Regions. It is important to note that the Australian Bureau of Statistics acknowledges that the census is often under-representative of the actual number of Indigenous residents, particularly those in regional and remote areas. Indigenous members of the population have historically experienced higher levels of disadvantage compared to the non-Indigenous population and as such it is important that a more detailed understanding of the socio-economic and demographic circumstances is established so that appropriate strategies can be developed.

Where Indigenous statistics are presented according to Gladstone or Calliope, this refers to the ABS Indigenous statistical areas of Gladstone City LGA and Calliope LGA (which incorporates Calliope, Boyne Island and Tannum Sands).

3.5.1 Indigenous population demographics

In 2006, there were 1,479 resident persons of Aboriginal and/or Torres Strait Islander heritage in the study area. Of this population, the majority, 1,077 or 73% resided in Gladstone. In line with population trends for Indigenous persons in Queensland and throughout Australia, the age distribution of the population reflected a very young Indigenous community, with 61% aged younger than 25 years. This is in contrast this age cohort in the overall population of the study area which makes up just 39%. In comparison to Queensland, the study area has an exceptionally low proportion of the Indigenous population over the age of 65 years. Out of 1,479 persons just 34 residents (2.3%) were in this age cohort. This is indicative of a lower life expectancy, in comparison to both the Queensland Indigenous population broadly, and also the overall population of the study area. Recognising these differences in age profiles between Indigenous communities is important as it provides a basis for understanding potential differences in demand for education, health services and employment.

The figure below illustrates the number of Indigenous residents by age and sex in the study area. Based on this, it appears that there are a larger proportion of young Indigenous males than females, yet a larger proportion of females are over the age of 25 than males resulting in a similar proportion of females and males. This potentially has implications for Australia Pacific LNG, as the number of Indigenous residents of prime working age (25-54 years) is lower, especially for males.

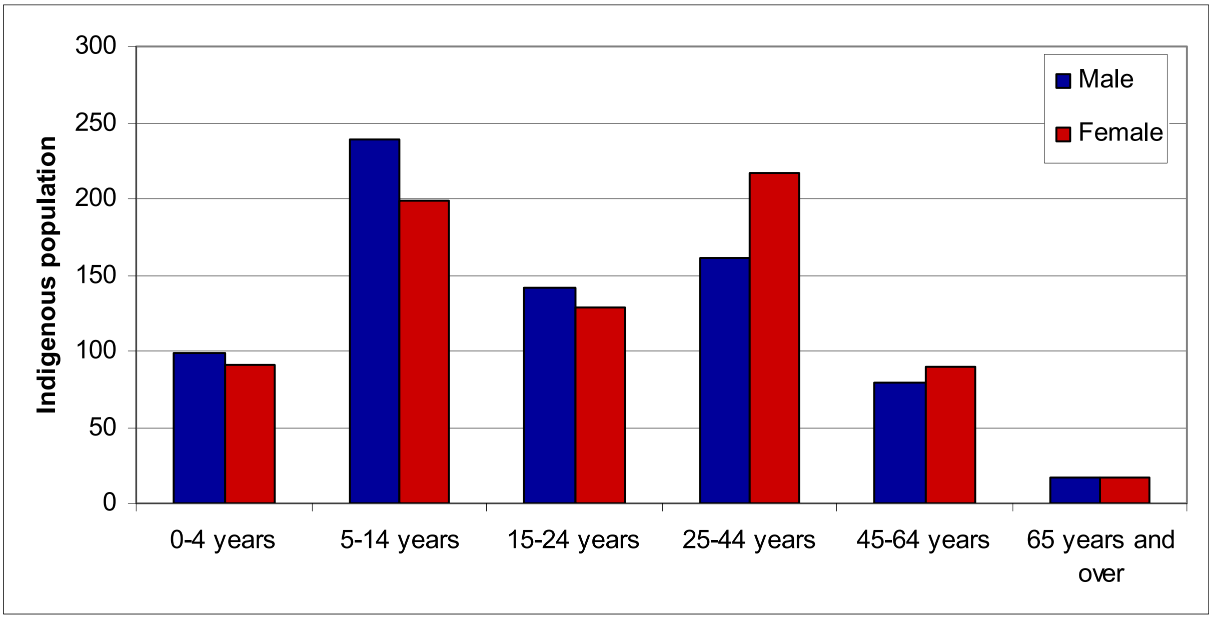

Figure 3.5 Indigenous age and sex distribution, study area, 2006

Source: ABS 2006

Indigenous household profile

Couple with children households comprised the largest share of Indigenous households across the study area, representing between 43% of total Indigenous households. In comparison to Queensland, single parent families were underrepresented in the study area, comprising 20% of total households. Lone person households accounted for just 10% of Indigenous households which was significantly lower than the general population (21% of total households). This has potential implications for housing demand and also housing affordability as larger families will inevitably require larger dwellings.

The average Indigenous household size in Queensland increased from 3.1 to 3.5 persons from 2001 to 2006. The study regions have comparable average household sizes, with 3.5 person per household for Gladstone and 3.4 for Calliope. This is considerably larger than the overall population where the average household size ranged between 2.7 and 2.9 in the study area.

3.5.2 Indigenous income and affordability

On average in Queensland, Indigenous individuals and households achieve lower weekly incomes than non-Indigenous residents. Lower income levels in Indigenous communities are most likely due to a younger age profile, higher participation rates in part-time employment, employment in industries where incomes tended to be lower, and higher levels of unemployment. In the study area, this trend is present, particularly with respect to individual income levels, however in comparison to the Queensland average for Indigenous persons, income levels are higher.

The median household weekly income for Indigenous residents in Calliope is particularly high and at just over A$1200 per week is in line with the overall population. Figure 3.6 illustrates the proportion of households in each income cohort. This shows that in comparison to Queensland, a much higher proportion of Indigenous households, particularly in the Calliope area, achieve incomes over A$1400 per week.

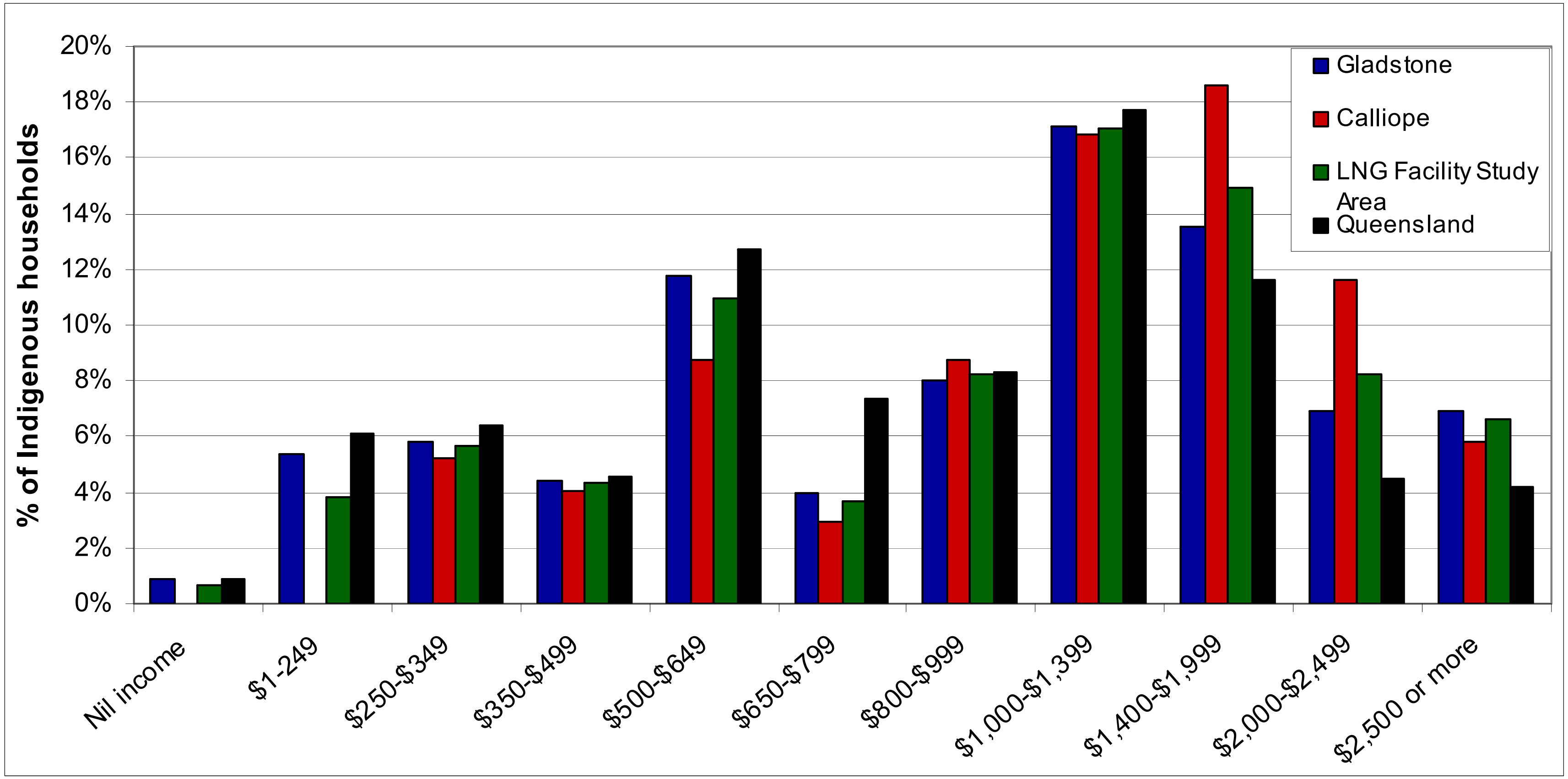

Figure 3.6 Indigenous household income distribution 2006 (A$)

Source: ABS 2006

3.5.3 Indigenous employment and business

Indigenous labour force

The Indigenous workforce of the study area is generally younger than the non-Indigenous workforce, with over half aged between 15-34 years. The size of the workforce as a proportion of the whole Indigenous population was also considerably smaller than the non-Indigenous workforce proportion. Table 4.8 summarises the labour force profile of Indigenous residents in Gladstone and Calliope, the LNG facility study area and Queensland. Although there is a considerably higher unemployment rate for Indigenous workers in the Gladstone region when compared to Queensland, the community has a higher workforce participation rate, meaning that there are less people out of the workforce and looking for work, rather than on government pensions (for example those on disability pensions, mothers/carers with young children and older adults). This is important for Australia Pacific LNG as it indicative of a pool of Indigenous labour looking for work and training opportunities. Calliope's Indigenous unemployment rate is just 6.6% which is comparable to the non-Indigenous unemployment rate in the community.

Table 3.8 Indigenous labour force characteristics 2006

	Labour Force			Employed Persons	
Area	**Total labour force**	**Labour force participation**	**Unemployment rate**	**Male**	**Female**
Gladstone	391	63.8%	21.0%	55.0%	45.0%
Calliope	137	58.8%	6.6%	60.9%	39.1%
LNG facility study area	528	62.4%	17.4%	56.9%	43.1%
Queensland	43,847	56.2%	13.1%	54.1%	45.9%

Source: ABS 2006

Indigenous employment

A considerably larger proportion of the Indigenous workforce in the LNG facility study area is employed by the private sector (82%) in comparison to the Queensland average (60%). With respect to government employment, the State Government employs the largest proportion of Indigenous employees, although this is lower than the Queensland average. The lower proportion of State Government employees may be indicative of the small number of State Government offices in the region. In contrast to Queensland more broadly, Local Government in Gladstone employs a very low proportion of Indigenous employees.

Within the LNG facility study area, the main fields of employment for Indigenous people in 2006 were construction and manufacturing. These were also among the highest paying fields of employment across all sectors which provides context to the higher individual and household incomes for Gladstone and Calliope in comparison to Queensland. Other primary fields of employment included mining, retail trade and accommodation and food services. Similar to wider employment trends within the region, there are low levels of Government employment with few Indigenous persons employed in the 'public administration and safety' industry which was the highest employer of Indigenous people in Queensland. The Public Administration and Safety industry looks after the needs of the Australian public and assists them to access government services. It also maintains public order and safety. The sector includes Commonwealth, States and Territories and Local Government as well as emergency services such as the police, ambulance and fire authorities.

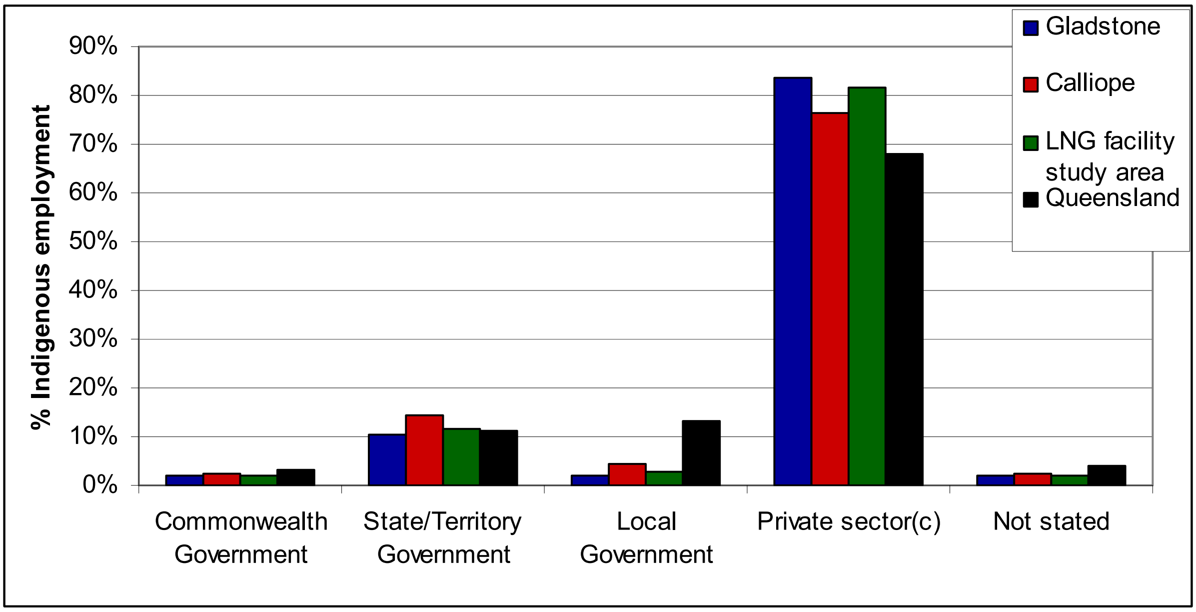

Figure 3.7 Percentage of Indigenous employed in LNG facility study area

Source: ABS 2006

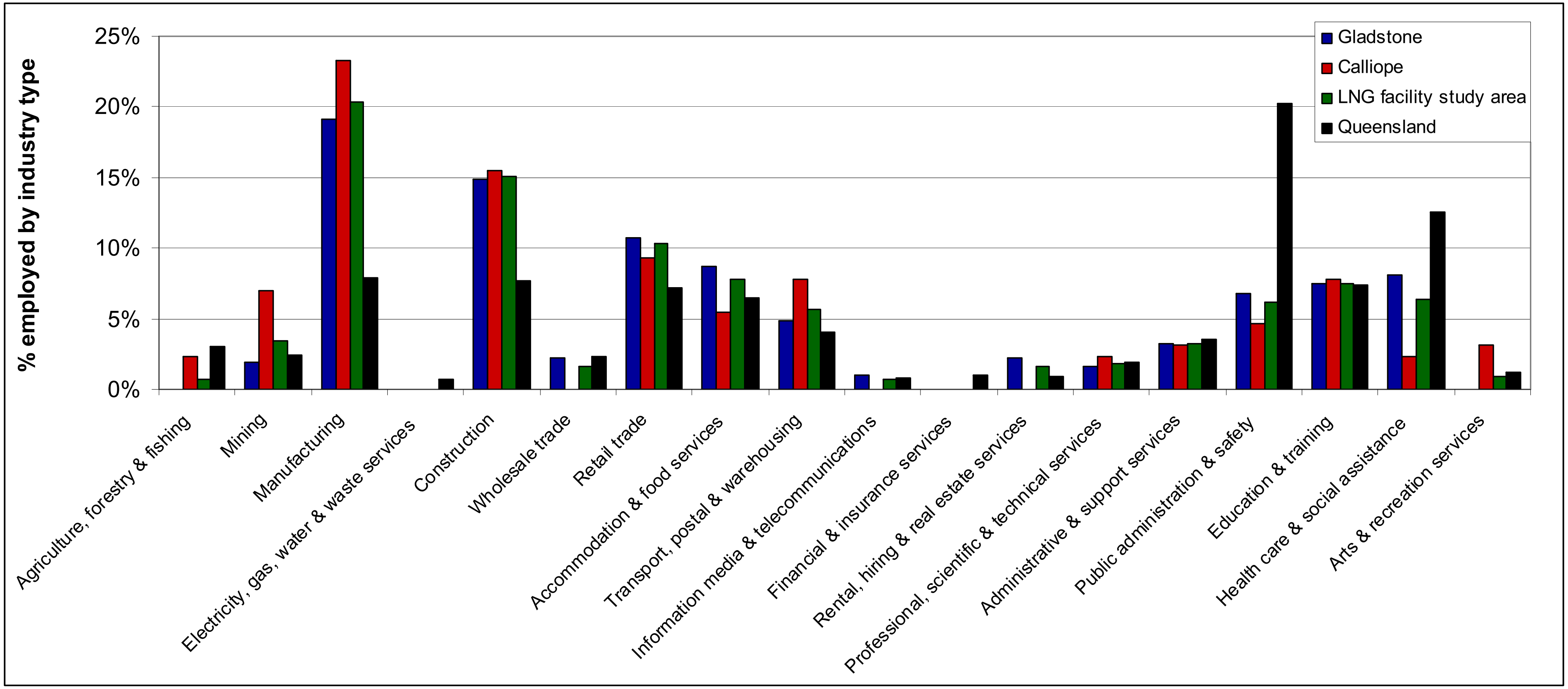

Figure 3.8 Percentage of Indigenous employed in LNG facility study area by industry type

Source: ABS 2006

3.5.4 Indigenous education and training

Aside from information that is available through the Census, there is very little comparative educational data gathered for Indigenous populations.

Indigenous school students

Data from the 2006 Census showed that there were 479 students of Aboriginal or Torres Strait origin who were attending preschool, primary school or secondary school in the former Gladstone and Calliope LGA's. The proportion or students attending secondary schools was much lower than for primary schools, potentially suggesting a low retention rate of Indigenous students through to year 12. When the number of students attending school is compared with the actual number of students in the 'school-aged' category, it is found that there were approximately 30 more students in the 13-17 years age range than those attending a secondary school.

Destination of Indigenous school leavers

The Queensland Government completed an annual survey of school leavers with the objective of collecting information on the post-school destinations of year 12 students in Queensland. The results of the survey are reported by region, with the LNG facility study area for this project falling into the Fitzroy/Gladstone Region. The most recently published data is the 2007 survey which provides information about Indigenous school leavers. The survey showed that Indigenous Year 12 completers were less likely than their non-Indigenous peers to enrol at university (5.6% compared to 27.4%). Indeed only three Indigenous young people, out of a total of 54 who completed the survey commenced university studies in 2007. The proportion of Indigenous students in the region enrolled at University was also lower than the Queensland average for Indigenous (12.6%). In contrast however, the proportion of Indigenous students in the region enrolled in VET education, and working full-time was higher than the Queensland average. Furthermore, all Indigenous students were either employed, looking for employment or engaged in study, compared with 1.2% of non-Indigenous students in the Fitzroy/Gladstone Region who were engaged in none of these activities. The high rate of VET enrolments is indicative of the types of employment opportunities in the Gladstone region – many of which require certificates or diplomas rather than university degrees. These results show the potential opportunities for Australia Pacific LNG to engage young Indigenous residents in training and employment opportunities.

Indigenous highest level of schooling

The 2006 Census recorded that within the LNG facility study area, almost one in four Indigenous residents aged over 15 years did not reach year 10. This is a similar figure to the Queensland average for Indigenous people and is a much higher proportion than the overall population. The proportion of the population who reached year 11 or 12 was however greater than the Queensland average.

Indigenous non-school qualifications

In 2006 within the study region, 34% of Indigenous residents aged over 15 years had gained a non-school qualification. The most prominent qualifications gained were Certificate Level III and IV which is consistent with the requirements of the primary fields of employment. There were also a marginally higher proportion of people who had gained a university qualification than the Queensland average.

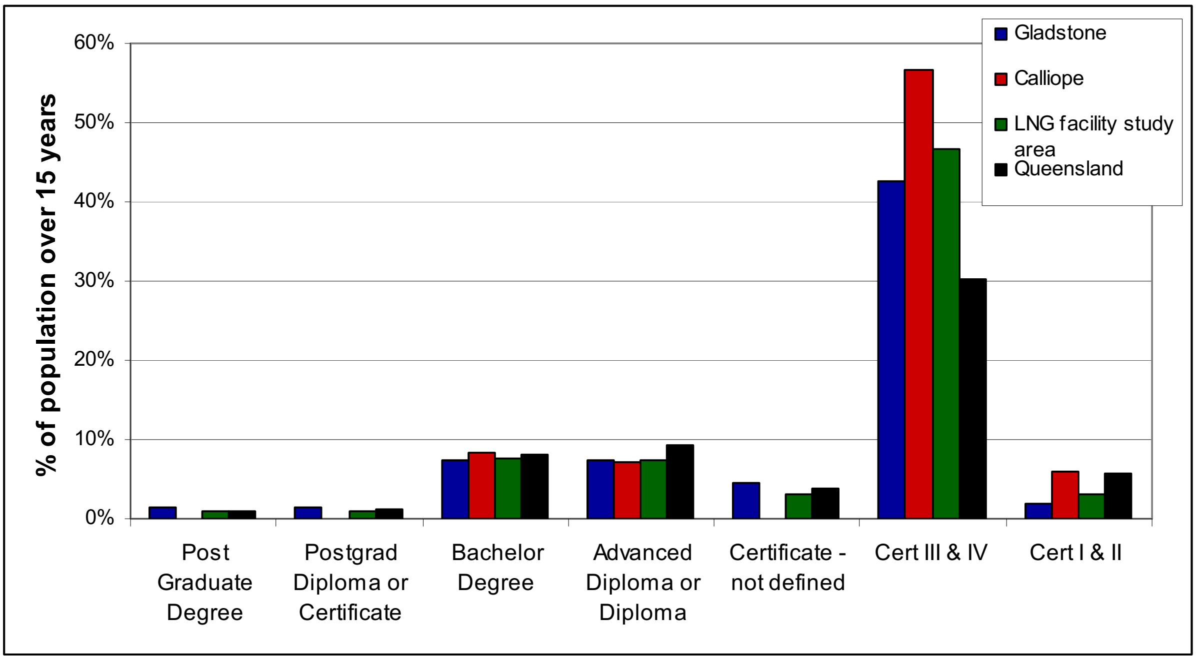

Figure 3.9 Percentage Indigenous population with qualifications in LNG facility study area

Source: ABS 2006

3.5.5 Indigenous housing and accommodation

The type of dwellings occupied by Indigenous households in 2006 was very similar to the overall population, dominated by separate houses rather than town houses or apartments. The distribution of dwellings types occupied by Indigenous households in shown in Figure 3.10. Broadly speaking, the distribution is similar to the Queensland average, however one relatively significant deviation is the proportion of Indigenous households in Calliope living in 'other dwellings'. 'Other dwellings' are defined as caravans, cabins, houseboats, tents, improvised dwellings and dwellings attached to offices or shops. In the context of Calliope, the majority of Indigenous persons in this category resided in cabins or caravans. This may be indicative of a lack of affordability for Indigenous people within the Calliope location. This is further supported, as will be discussed later in this section, by the fact that there is no Indigenous specific social housing and very low levels of general public housing in Boyne Island, Tannum Sands and Calliope.

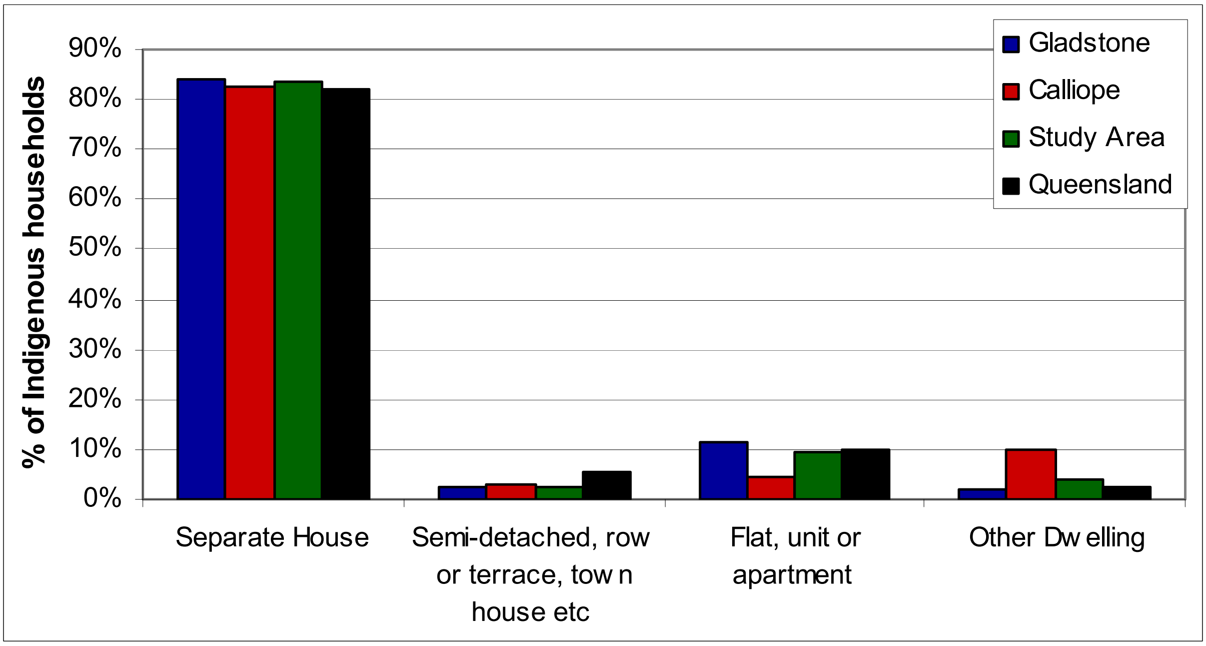

Figure 3.10 Dwelling type, Indigenous households, 2006

Source: ABS 2006

Indigenous tenure type

In comparison to the total population, Indigenous households in the study area are significantly less likely to fully own their home. In 2006, just 7.2% of households owned their homes outright which was lower than the Queensland average. There were however a much higher proportion of houses ‘being purchased’ by Indigenous households(34%) than the Queensland average (22%) for Indigenous households, a figure which was also consistent with the overall population. Calliope had a particularly high proportion of households in the process of purchasing their home which is in line with higher income levels present in that community, yet in contrast to the high proportion of families living in caravans and cabins. With respect to renting, a similar proportion of Indigenous families rent from real estate agents and the State housing authority, at levels consistent with the Queensland average. The supply and demand for Indigenous public housing is discussed below.

Indigenous housing cost

There is a lack of published information outside of the ABS, regarding the housing costs for Indigenous households. ABS statistics are somewhat out of date, especially given the movement in the housing market in the Gladstone region over the last three years (2006-2009). For those households in the private rental market or purchasing their own home, increases in the cost of housing as discussed in Section 3.9 are relevant.

The table below shows the median weekly rent paid by Indigenous households and also the median monthly mortgage repayments. This illustrates that housing costs, for both rented properties and those being purchased, is higher than the medians for Queensland. Given than median rental costs for 2009 in Gladstone ranged from A$200 to A$360, it can be assumed that many households are paying significantly more than the amount reported in the 2006 Census.

Table 3.9 Housing costs, Indigenous households, 2006

	Median Rent (A$)	Median monthly mortgage repayments (A$)
Gladstone	$159	$1,213
Calliope	$170	$1,190
Queensland	$150	$1,192

Source: ABS 2006

Indigenous Social Housing

Social housing in Queensland is divided into a number of categories: public housing, Aboriginal and Torres Strait Islander (ATSI) designated housing, community housing and that provided by Indigenous community housing organisations. Department of Communities reports that within the Project study area there are 34 ATSI designated dwellings and 34 dwellings provided by the local Indigeous housing provider, the Aboriginal and Torres Strait Islander Housing Co-Operative. These are all located within Gladstone. Stakeholder consultation found that waiting lists are extensive and can extend over two years.

3.5.6 Indigenous community health and safety

The health of the Aboriginal and Torres Strait Islander population is significantly worse than the health of the non-Indigenous population and evidence suggests that this gap has increased in recent years[5]. Given the lack of information available regarding the Indigenous health issues prevalent in the study area, this discussion will refer to the social determinants of the broad Indigenous population.

Information sourced from Queensland Health indicates that Aboriginal and Torres Strait Islander peoples have a poorer health profile than other Australians and their life expectancy is considerably less. Contributing factors include:

- Lower socioeconomic status (low incomes, high unemployment, poor educational attainment).
- Specific risk factors (higher tobacco and substance misuse rates, poorer nutrition).
- Location and environmental factors (remoteness from services, poor quality housing and facilities, overcrowding).
- Legacy of past practices (removal from land, cultural dislocation, family separation, discrimination).

Nearly one third of deaths among Aboriginal and Torres Strait Islander people is from circulatory disease (stroke, heart disease), and another third from injury, respiratory diseases (pneumonia and chronic bronchitis) and cancer. In addition, the death rate from diabetes for Aboriginal and Torres Strait Islander people is about eight times the national rate. This means that Aboriginal and Torres Strait Islander people are dying more often, and at younger ages from largely preventable conditions.

[5] National Aboriginal Health Strategy

Indigenous health facilities

Mainstream medical and health facilities are available to all residents, including the Aboriginal and Torres Strait Island population. The Nhulundu Wooribah Indigenous Health Centre provides health and aged care services to the Indigenous population and wider Gladstone community. The Centre's services include a registered nurse and the provision of health and aged care services. Particular areas of assistance include personal hygiene, shopping, yard maintenance and transport. Indigenous Health Education and Promotion Programs are also delivered out of the Centre, which receives State and Federal Government funding.

Indigenous health services and Programs are also provided through the Gladstone Women's Health Centre and Gladstone Community Health Centre.

3.5.7 Indigenous facilities and services

Aside from the Indigenous health services described above, there are few other Indigenous specific services and facilities in the LNG facility study area. Aboriginal and Torres Strait Island residents are, like all groups, able to access general or mainstream services and facilities including child care, community centres, recreation facilities and support services including employment service providers, family support services and various counselling services.

With respect to Aboriginal organistions, there are four active in the region, the Gehgre ATSI Corporation, Nhulundu Wooribah Indigenous Health Centre, Aboriginal and Torres Strait Islander Housing Co-Operative and the Port Curtis Coral Coast Aboriginal Corporation. The aims and objectives of the Gehgre ATSI Corporation are to implement and monitor programs for ATSI residents and effectively respond to the issues of, employment, youth sport and recreation, education, health, land rights, enterprise, women's issues, aged care, cultural awareness and accommodation. The Aboriginal and Torres Strait Islander Housing Co-Operative manage the Indigenous community housing stock. The Port Curtis Coral Coast Aboriginal Corporation is more focused on natural resource management and achieving recognition of the native title claimant group.

For a number of years prior to 2005 the Gladstone Indigenous community leased a small building in town called the Murri Centre which was for community use such as art and craft and business operation. In 2005 the rent was significantly increased making the location unviable for the Indigenous community to continue their lease, and with no long-term funding solutions, the Centre closed in 2006.

Consultation with Indigenous community representatives indicated that the local Indigenous community (including representatives from Gooreng Gooreng, Bailai and Gureng) have been working since 2007 to develop an Indigenous Business Centre with the aim of becoming a self-sustaining not-for-profit centre. A feasibility and business plan has been created which shows that the Murri Centre can be self-sustaining if land and infrastructure is provided at no cost. Key business functions of the Murri Centre will be:

- Nhulundu Wooribah Indigenous Health Organisation.
- Gehgre Corporation (owners of Billabong property and focused on education and training initiatives as well as appropriate use of Billabong).
- Aboriginal and Torres Strait Islander Housing Co-Operative.
- Tourism through an art gallery and Indigenous contemporary restaurant which will provide Indigenous traineeships and apprenticeships.

- Potential cultural heritage keeping place – Port Curtis Coral Coast has indicated they would like to locate key artefacts from local area at the Murri Centre.
- Business hub and business incubator encouraging Indigenous business opportunities through assistance and mentoring from local successful business people.

3.5.8 Indigenous cultural values

During consultation with Australia Pacific LNG, Native Title and Culture Heritage groups within the LNG facility study area expressed concerns regarding potential impacts to land and access associated with the Project. The potential for ongoing impact to the marine environment including wildlife such as turtles, sea grass and dugong was also discussed. The completion of cultural heritage management in an appropriate manner was of paramount concern. Refer to Volume 4, Chapter 18 for more details regarding Indigenous cultural values.

3.6 Income and affordability

The ABS Census provides information on median individual and household incomes. Time series data allows an assessment of how weekly income levels have changed. Figure 3.11 and Figure 3.12 show the median individual and household incomes in the Gladstone and Calliope communities compared to Queensland in 1996, 2001 and 2006. This shows that in all communities, income growth has been most pronounced between 2001 and 2006, with a slower rate of growth between 1996 and 2006.

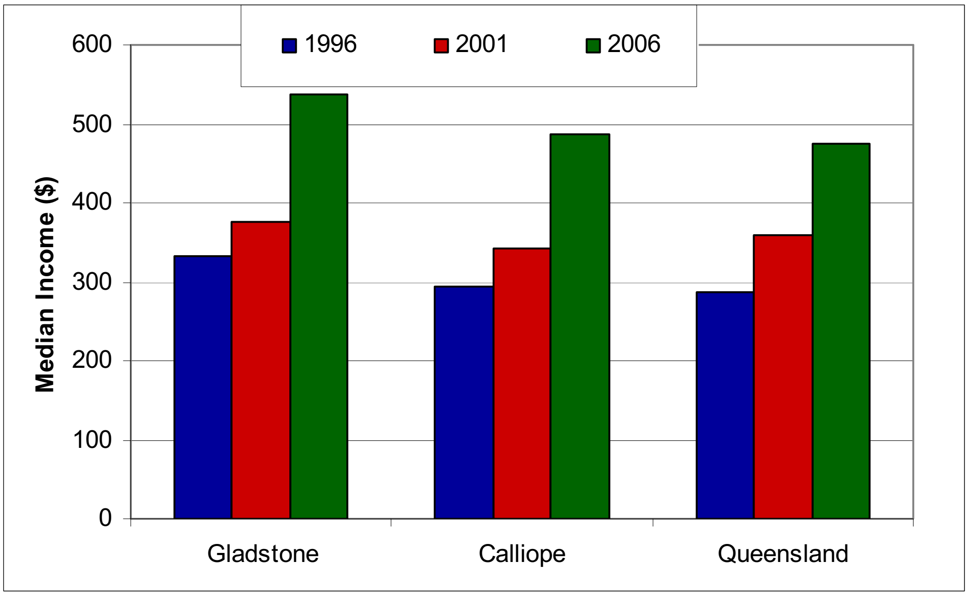

Figure 3.11 Median individual weekly income, Gladstone, Calliope and Queensland, 1996- 2006

Source: ABS Census of Population and Housing, 1996, 2001, 2006

Calliope households achieved the greatest absolute median income growth of A$343 per week, compared with A$309 in Gladstone. The higher than average incomes, particularly in the manufacturing and construction sectors (which play an important role in contributing to the local economy in Gladstone) attract workers to the Gladstone region, placing pressure on the current levels of social infrastructure and services and demand for housing and accommodation.

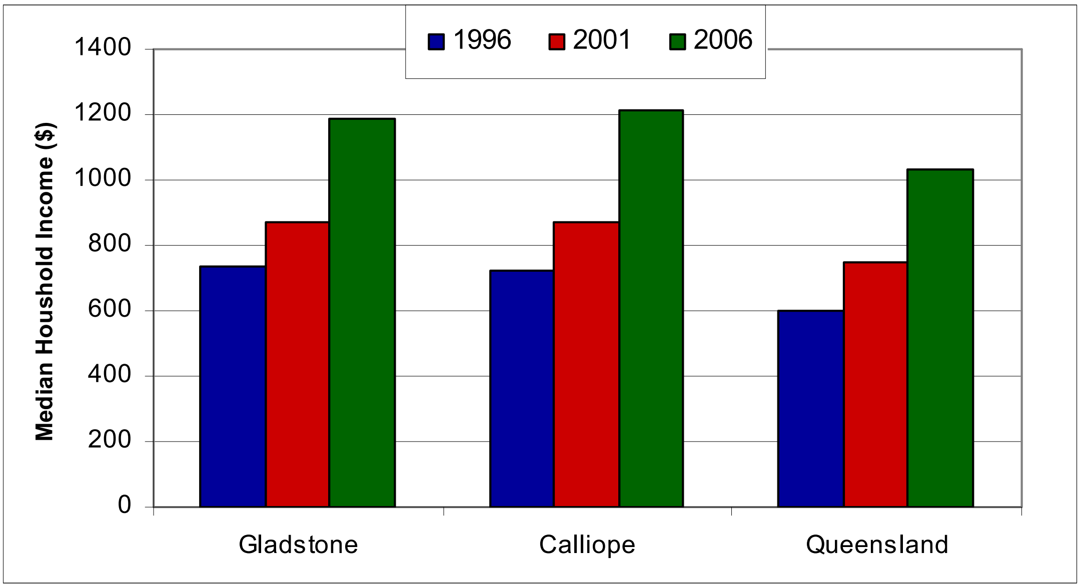

Figure 3.12 Median household weekly income (A$), Gladstone, Calliope and Queensland, 1996-2006

Source: ABS 1996, 2001, 2006

A key concern raised in the Social Infrastructure Strategy Plan (DIP, Gladstone Regional Council, Gladstone Economic and Industry Development Board) is the unequal distribution of the region's industrial growth, with income and economic gains negatively impacting on low socio-economic groups by an increased polarisation between the 'haves' and 'have nots' (as discussed in Section 3.1.3). This is associated with significant variation in achievable incomes between various industries and a lack of social support services and infrastructure. Ensuring that the Project will not further contribute to this polarisation is a focus of the mitigation strategies.

3.6.1 Socio-Economic Indexes for Area

Socio-Economic Indexes for Area (SEIFA) is a suite of summary measures created from ABS Census information. Each index summarises a different aspect of the socio-economic conditions in an area and shows how relatively 'disadvantaged' that area is compared with other areas in Queensland or Australia. A lower score indicates that an area is relatively disadvantaged compared to an area with a higher score and all ranks are ordered from lowest to highest (that is, the lower the rank the more disadvantaged the area is compared to other locations). The data in this section presented according to how each area ranked within Queensland which has a total of 476 areas.

The indexes reported in this baseline assessment are:

- **Index of Relative Socio-economic Disadvantage**: is derived from Census variables related to disadvantage, such as low income, low educational attainment, unemployment, and dwellings without motor vehicles.
- **Index of Economic Resources**: focuses on Census variables like the income, housing expenditure and assets of households.
- **Index of Education and Occupation**: includes Census variables relating to the educational and occupational characteristics of communities, like the proportion of people with a higher qualification or those employed in a skilled occupation.

Gladstone is ranked 233 out of 476 in Queensland in the Index of Relative Socio-economic Disadvantage compared to a ranking of 144 and 128 for Calliope Pt A and Calliope Pt B respectively (ABS 2006b). Compared to the other studied SLAs, Calliope Pt A ranked higher across all three indexes. Higher SEIFA rankings across these indexes most likely are due to higher household incomes, lower unemployment and an older working population.

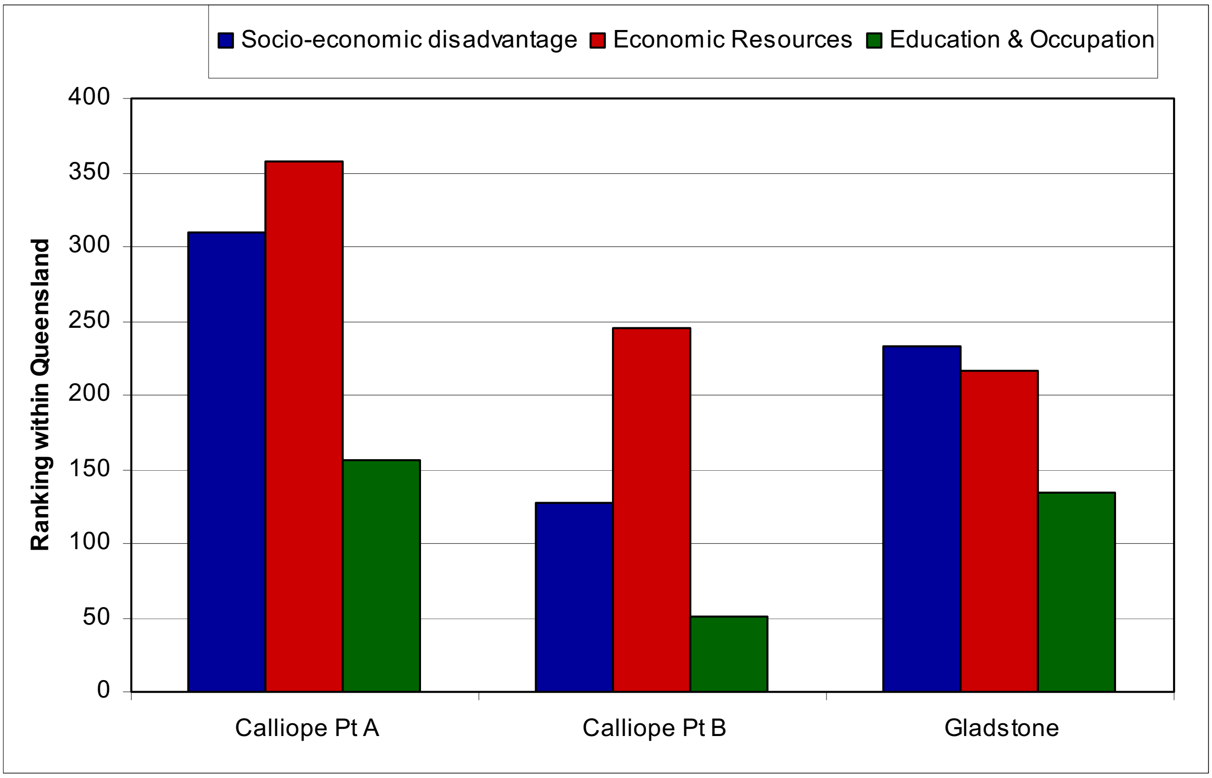

Figure 3.13 SEIFA Ranking of Study Areas SLAs within Queensland

Source: ABS 2006c

3.7 Employment and business

3.7.1 Labour force

The extent of the available labour force depends on a number of factors, including a range of demographic characteristics such as age and workforce participation rates. Data from the 2006 Census reveals that 21,481 people residing within the Gladstone Regional Council area were in the workforce. The total population of the Gladstone regional area at the 2006 Census was 50,752 people, with 34,311 people aged between 15 and 64. Comparing the workforce size against the population aged between 15 and 64 years indicates that the workforce participation rate is approximately 62.6%. This is marginally lower than the Queensland participation rate of 66.3%, suggesting that there may be opportunity for the Australia Pacific LNG Project to encourage people who are not currently participating in the labour force into employment. Those members of the community often not in the workforce include mothers/carers with young children, people with a disability and early retirees.

The distribution of employment across industry sectors in 2006 is summarised in Table 3.10. This shows as the total employment across the amalgamated Gladstone Regional Council. The distribution of employment across industries in the Gladstone region and a comparison to the Queensland averages are reported.

The results show that the Gladstone region has more than double the state average of employment in the manufacturing sector, as well as higher average employment in the services, construction, accommodation and transport sectors. This matches closely with the role that Gladstone plays as a major industrial centre.

Table 3.10 Labour force by industry sector in Gladstone Regional area in 2006

	Gladstone Region	Share of Region	Share by Qld sector
	Number	%	%
Agriculture, forestry and fishing	479	2.23	3.38
Mining	233	1.08	1.68
Manufacturing	4,553	21.20	9.87
Electricity, gas, water and waste services	553	2.57	1.02
Construction	2,351	10.95	9.04
Wholesale trade	523	2.44	3.95
Retail trade	2,360	10.99	11.64
Accommodation and food services	1,527	7.11	6.99
Transport, postal and warehousing	1,517	7.06	5.07
Information media and telecommunications	130	0.61	1.44
Financial and insurance services	280	1.30	2.85
Rental, hiring and real estate services	430	2.00	2.08
Professional, scientific and technical services	1,117	5.20	5.61
Administrative and support services	484	2.25	3.05
Public administration and safety	904	4.21	6.71
Education and training	1,624	7.56	7.62
Health care and social assistance	1,364	6.35	10.21
Arts and recreation services	128	0.60	1.35
Other services	642	2.99	3.75
Inadequately described/Not stated	279	1.30	2.67
	0		
Total	**21,478**	**100**	**100**

Source: ABS 2006a

Unemployment in the Gladstone region has risen slightly from December 2007 to December 2008, particularly in comparison to Queensland trends (Figure 3.2.2). While the Queensland average for unemployment remained steady at around 3.7% over this time period, the rate in the Gladstone regional area increased from 3.3% to 4.5% during this time period. Consultation with Gladstone

Engineering Alliance indentified that during the last 12 months there has been a downturn in mining related industries which could have influenced this increase in unemployment. This was lower than the corresponding unemployment rates in the Rockhampton region of 4.0% to 5.4% for the same time period.

3.8 Education and training

3.8.1 School-aged population

The school-aged population refers to the population aged 5-17 years. Understanding the size of this population and the changes over time to this cohort assists in planning for education facilities as well as community-based youth facilities. In comparison to Queensland, the study area had a slightly lower proportion of the population aged between five and 17 years. Within the three areas of analysis, 23% of the Calliope Pt A population was of school age (five -17 years) in 2006, compared to 19.4% and 18.9% in Gladstone and Calliope Pt B respectively. The high rate of school aged children in Calliope Pt A is consistent with higher rates of couples with children in this locality. Also evident in Gladstone is a high proportion of primary school-aged children (2,995) compared to secondary school-aged children (1,831).

3.8.2 Schools

The Queensland Department of Education and Training structures its organisation into 10 regions and these regions are further broken down into 26 education districts. The LNG facility study area is located in the Central Coast district which is within the Fitzroy-Central West region. Gladstone is home to the Central Coast district office. As at February 2009 there were 15 public schools with a total of 13,690 students enrolled and an additional seven private schools in the Central Coast Education District.

A full list of schools within Gladstone city area, including their name, type, student count and year levels is presented in Table 3.12, with a summary provided in Table 1.13 below.

Table 3.11 Number and Type of Schools, Gladstone city, 2009

Type of School	Gladstone
District office	1
State primary	5
State secondary	2
Non-state primary	2
Non-state secondary	1
Non-state primary / secondary	2
Special education program	yes
Special school	1
Number of students	5,595

Source: DET (2009)

Table 3.12 List of schools within Gladstone city area

Centre Name	Centre Type	Group	Student Count	Low Yr Level	High Yr Level
Toolooa SHS - Flexible Learning Centre	Support Unit (Other)		0	10	10
Rosella Park School	Special School	Special	59	PS	SS
Gladstone SHS - Special Education Program	Special Education Program	Secondary	0	8	12
Gladstone South SS - Special Education Program	Special Education Program	Primary	0	PY	7
Gladstone West SS - Special Education Program	Special Education Program	Primary	0	PY	7
Kin Kora SS - Special Education Program	Special Education Program	Primary	0	PY	7
Toolooa SHS - Special Education Program	Special Education Program	Secondary	0	8	12
Clinton SS - Special Education Program	Special Education Program	Primary	0	0P	7
Gladstone State High School	State High School	Secondary	1228	8	12
Toolooa State High School	State High School	Secondary	906	8	12
Clinton State School	State School	Primary	668	PY	7
Gladstone Central State School	State School	Primary	291	PY	7
Gladstone South State School	State School	Primary	275	PY	7
Gladstone West State School	State School	Primary	739	PY	7
Kin Kora State School	State School	Primary	779	PY	7
St John the Baptist Catholic Primary School	Non-State School	Primary		0P	7
St Stephens Lutheran College	Non-State School	Primary-Secondary		0P	12
Star of the Sea Catholic Primary School (Gladstone)	Non-State School	Primary		0P	7
Chanel College (Gladstone)	Non-State School	Secondary		8	12
Trinity College (Gladstone)	Non-State School	Primary-Secondary		0P	12

Source: DET 2009

Consultation with Education Queensland through the EIS process suggests that at present, state schools in the study area have sufficient capacity to respond to the demand associated with the development of the Australia Pacific LNG liquefied natural gas facility. At present the senior and primary state schools in the study area have the capacity to take an additional 300 to 450 children. Private schools in the area also have the capacity to absorb additional students. The ageing demographics of the region and proportionately smaller school-aged population cohort have led to a reduction in enrolments for the past 25 years. To ensure that Education Queensland is able to plan for any increases in enrolments, it will be important for Australia Pacific LNG to maintain communication with the department regarding workforce numbers, particularly those who are, or will be locally based rather than FIFO.

A key concern raised by Education Queensland was the difficulty in attracting and retaining teachers due to a lack of housing affordability. Currently, the department has some access to government housing for new teaching staff, however vacancy rates are extremely low and much of the stock requires upgrades. Key shortage areas include science, maths and engineering teachers.

3.8.3 Non-school Qualifications

Non-school qualifications refer to qualifications gained through vocation or tertiary education, ranging from Certificate 1 level to Bachelor degrees and PhDs. Within the LNG facility study area, a considerably higher proportion of the population (47%) had achieved certificate qualifications (the majority of which were gained from vocational education providers) compared to Queensland (35%). The proportion of people with a non-school qualification holding a bachelor degree or higher was the greatest in Gladstone (19.4%), followed by Calliope Pt A (18.3%) and Calliope Pt B (16.1%), however these were considerably lower than the national average of 29.6%. These statistics reflect the demand for people which these qualifications by the manufacturing and construction fields of employment in the region. Vocational qualifications are commonly required within these sectors.

Consultation with the Department of Education found that although a lower rate of senior students transitioned into university studies than those in Brisbane, the proportion of students transitioning to Vocational Education and Training (VET) is relatively high. This is supported by 900 local companies providing work placements and DET ‘Education Queensland and Industry Partnership Program’ (Clever Recruiting) providing a number of VET options that integrate industry-based schooling programmes and prepare students for these employment pathways.

3.8.4 Vocational education and training (VET)

There are 11 TAFE institutes in Queensland and two statutory TAFE institutes. One of the two TAFE institutes that oversee campuses in the study area is the Central Queensland Institute of TAFE (based in Rockhampton). Southern Queensland Institute of TAFE (SQIT) has a campus in Gladstone and offers a range of courses including commercial courses, training for apprenticeships and traineeships, certificate and diploma level and short courses in business and industry.

Vocational training is available to both school leavers and school-based apprentices and trainees. For school-based vocational training, the Business and Information Technology Skills (BITS) Centre is operated at Boyne Smelter by Tannum Sands High School. It provides students with opportunities to study within the business and information technology areas. Students are involved in the management structure of the Centre and its strategic decisions. Students can gain certified VET courses and Queensland Studies Authority Senior Certificate Courses. Programmes are designed to equip students with the skills and knowledge required to meet demand of the regional skills shortages.

The Australian Technical College – Gladstone Region was established by the Australian government in 2006. It is one of a national of senior secondary colleges that participate in the 'Skills for the Future' initiative and is industry-led and governed. The initiative is funded by non-government organisations and the board of directors aim to shape the operations and programs to best reflect the needs of the region's employers. The trade areas offered by the college are:

- Electro technology
- Building and construction
- Engineering (metal trades)
- Automotive
- Diesel fitting

The Gladstone Area Group Apprentices Ltd (GAGAL) facilitates school-based apprenticeships and traineeships with local companies. Students in years 10, 11 or 12 are eligible for programs which typically involve three days at school with the other two days completing their apprenticeship or traineeship at their place of employment.

Based on information gathered through consultation with Education Queensland, within the schooling sector, boys have an extremely high success rate in trade schools, however, not as many girls and Indigenous students enter these pathways. A high percentage of girls enter part-time work post schooling and Education Queensland believes there are opportunities to provide girls as well as Indigenous students with alternative pathways to increase their education attainment and diversify their employment opportunities.

Australia Pacific LNG are investigating opportunities to positively contribute to the educational outcomes of the local population by working in partnership with TAFE and Education Queensland to provide opportunities for both school-based apprentices as well as others looking to re-skill and gain employment in the CSG/LNG sector.

3.8.5 Tertiary Education

Central Queensland University (CQU) has direct interest in the Project study area, with a campus located at the Gladstone Marina. Central Queensland University offers bridging courses, undergraduate, postgraduate and research degrees. The Gladstone campus is home to the university's two largest research centres, the Process Engineering and Light Metals Centre and the Centre for Environmental Management. Specifically, the CQU campus offers undergraduate degrees in business, communication, engineering, information technology, learning design and learning management (that is; early childhood, primary, secondary/vocational education and training).

The presence of these two research centres provides an opportunity for Australia Pacific LNG to work in partnership with CQU to support potential and current employees and utilise the knowledge and expertise of the Process Engineering and Light Metals Centre and the Centre for Environmental Management in its LNG operations. A partnership approach to providing professional development to staff could be a key factor in attracting employees.

3.9 Housing and Accommodation

Housing affordability and the impact that major projects can have on housing has been raised as a major concern by all tiers of Government. The Gladstone region has experienced significant growth in median house and rental prices for the last 10 years. However, the recent global financial situation and retrenchments in the region has changed the market. This section provides an outline of the current situation in the study area in terms of housing stock, housing affordability, social housing and supply of new residential land and dwellings. Trends relating to the housing of the non-resident population are also outlined.

3.9.1 Housing stock and tenure

At the time of the 2006 census, there were approximately 16,700 dwellings in the study area. The majority of these were single detached dwellings, with town houses and units being most prevalent in the urban localities, particularly Gladstone. The table below details the change in housing stock from 2001 to 2006 by dwelling type. In absolute terms, growth in the number of separate houses has been most prevalent, although growth in apartments has also been considerable.

Table 3.13 Dwelling structure 2001-2006

	2001	2006	Change 2001-2006
Separate house	12,557	14,011	1,454
Semi-detached, row or terrace, town house etc	364	387	23
Flat, unit or apartment	1,278	1,476	198
Other dwelling	637	881	244
Dwelling not stated	233	8	-225
Total	15,069	16,763	1,694

Source: ABS 2006

NB: 'Other Dwelling' refers to caravans, cabins, houseboats, tents, improvised dwellings and dwellings attached to offices or shops.

The housing tenure profile of the study region communities benchmarked against Queensland is presented in Figure 3.14. In all communities, the majority of dwellings are either fully owned or in the process of being purchased. Public rented housing is most prevalent in Gladstone, with 6.6% of occupied dwellings being rented from the State or Local Government. More than 25% of occupied dwellings in Gladstone are being rented privately, which is a similar rate to the Queensland average.

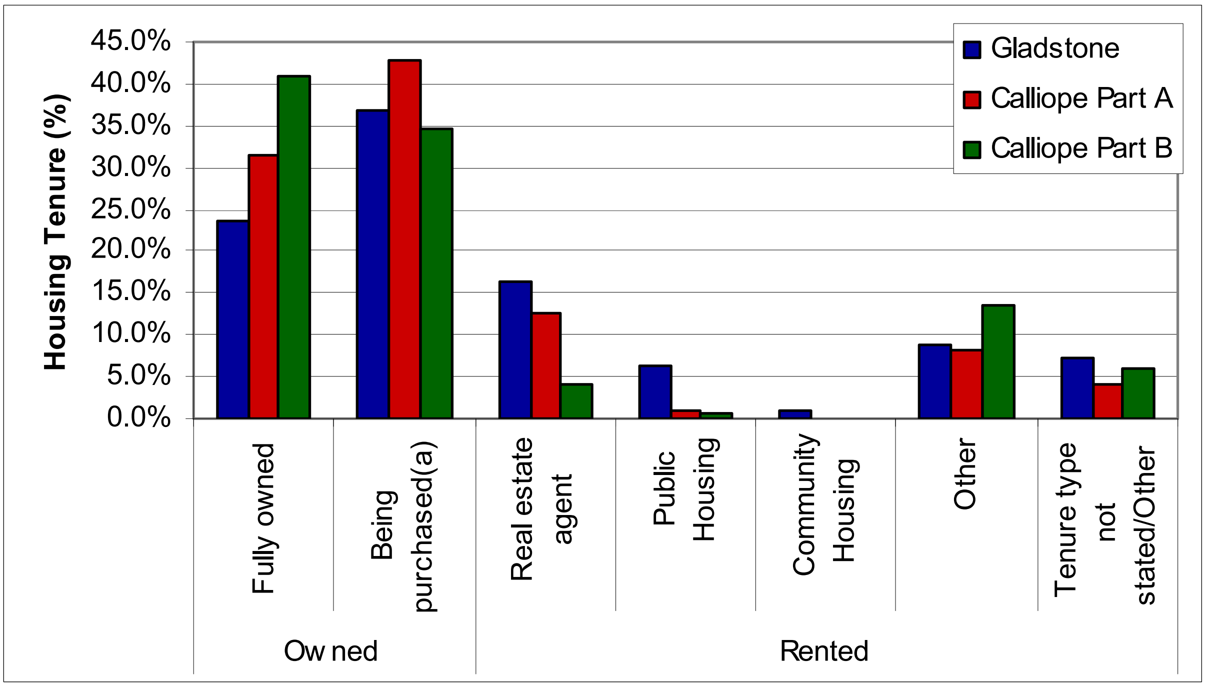

Figure 3.14 Housing tenure 2006

Source: ABS 2006

3.9.2 Median Dwelling Prices

The property market of Gladstone and surrounding communities such as Boyne Island, Tannum Sands and Agnes Waters has been extremely strong for the past few years, experiencing significant increases in median prices for units, houses and vacant lots. According to the Real Estate Institute of Queensland, prior to the global financial crisis, Gladstone had been experiencing a house price boom, fuelled by its diversity of industries. The boom was also attributed to the region's proximity to the Great Barrier Reef and coastal towns such as Tannum Sands, as well as initiatives such as the first home owners grant. However, as shown in Table 3.14 below, the global financial crisis has impacted negatively on house and unit prices within the LNG facility study area, with all localities experiencing a negative growth rate in the 12 months to July 2009. This is in contrast to the average annual growth rate for the past 10 years which has been more than 10% for all localities. The table below provides information based on July 2009 data for median house and unit prices as well as average growth rates for the key urban localities in the study area.

Table 3.14 Median house price, Gladstone region 2009

	Median house price		
Urban locality	**Median price to July 2009 ($)**	**12 month growth to July 2009(%)**	**Annual Average Growth (last 10 years) (%)**
Gladstone	360,000	-10.9	13.3
Boyne Island	395,000	- 8.7	13.4
Tannum Sands	430,000	-10.9	12.3
Calliope	385,000	-2.2	18.0

Source: RP Data 2009

Median prices for units in Gladstone and Tannum Sands have also increased considerably for the last 10 years, however as with the house market, the last 12 months have seen a reduction in price growth. In contrast, sale prices for three months from July to September 2009 observed a considerable increase in median unit price for Gladstone, up to A$350,000 from A$262,500 and a small increase for Tannum Sands up to A$270,000 from A$255,000.

Table 3.15 Median unit price, Gladstone region 2009

	Median unit price		
Urban locality	**Median price to July 2009 (A$)**	**12 month growth to July 2009(%)**	**Annual average growth (last 10 years) (%)**
Gladstone	262,500	-10.8	12.2
Boyne Island	N/A	N/A	N/A
Tannum Sands	255,000	0.0	20.3
Calliope	N/A	N/A	N/A

Source: RP Data 2009

3.9.3 Average weekly rents

The rental market in Gladstone has experienced strong growth from June 2007 to June 2009 with the median rent for three bedroom housing increasing from A$280/wk to A$300/wk (7% increase) and four bedroom houses increasing from A$330/wk to A$360/wk (8% increase). While these increases are comparable to the increases experienced in Brisbane for the same period (16% and 17% respectively), the prices paid per week for rental units increased significantly for units. The median rent on one bedroom units increased from A$123/wk to A$200/wk (63% increase). Data sourced from the Central Queensland District Social Housing Report (2009) indicates that in 2008, one quarter of the private rental stock available in the Gladstone region was affordable for low income earners (that is, it cost less than 30% of household income), which was similar to the Queensland average. There has however been a significant decrease in the availability of affordable rental housing since 2003 when over half (52%) of the rental housing stock was affordable.

Table 3.16 presents the median weekly rents paid for private accommodation in the Gladstone Regional Council area from June 2007–June 2009.

Table 3.16 Median weekly rents, Gladstone Regional Council

Local Government Authority	Type of housing	Median weekly rent June 2007 (A$)	Median weekly rent June 2008 (A$)	Median weekly rent June 2009 (A$)	% Change 07-09
Gladstone Regional Council	4 bedroom house	$330	$360	$360	8%
	3 bedroom house	$280	$300	$300	7%
	3 bedroom unit	$250	$310	$315	26%
	2 bedroom unit	$190	$225	$240	26%
	1 bedroom unit	$123	$128	$200	63%

Source: Queensland Rental Tenancy Authority 2009

3.9.4 Vacancy Rates

A review of the Gladstone housing and rental markets indicates a tightening market in 2009 not too dissimilar to the rest of Queensland. For the March quarter of 2009, the vacancy rate for all types of residential rental accommodation in Queensland was 3.4% (increased from 2.6% in 2008). The Gold Coast had the highest residential vacancy rate (4.5%), whilst the remainder of Brisbane had the lowest rate (2.2%) (Office of Economic and Statistical Research – Queensland (OESR) 2009). Based on figures provided by the Housing and Homelessness Service of the Department of Communities, the private rental vacancy rate for the Gladstone region in 2008 was 3.4%, indicating moderate rental availability.

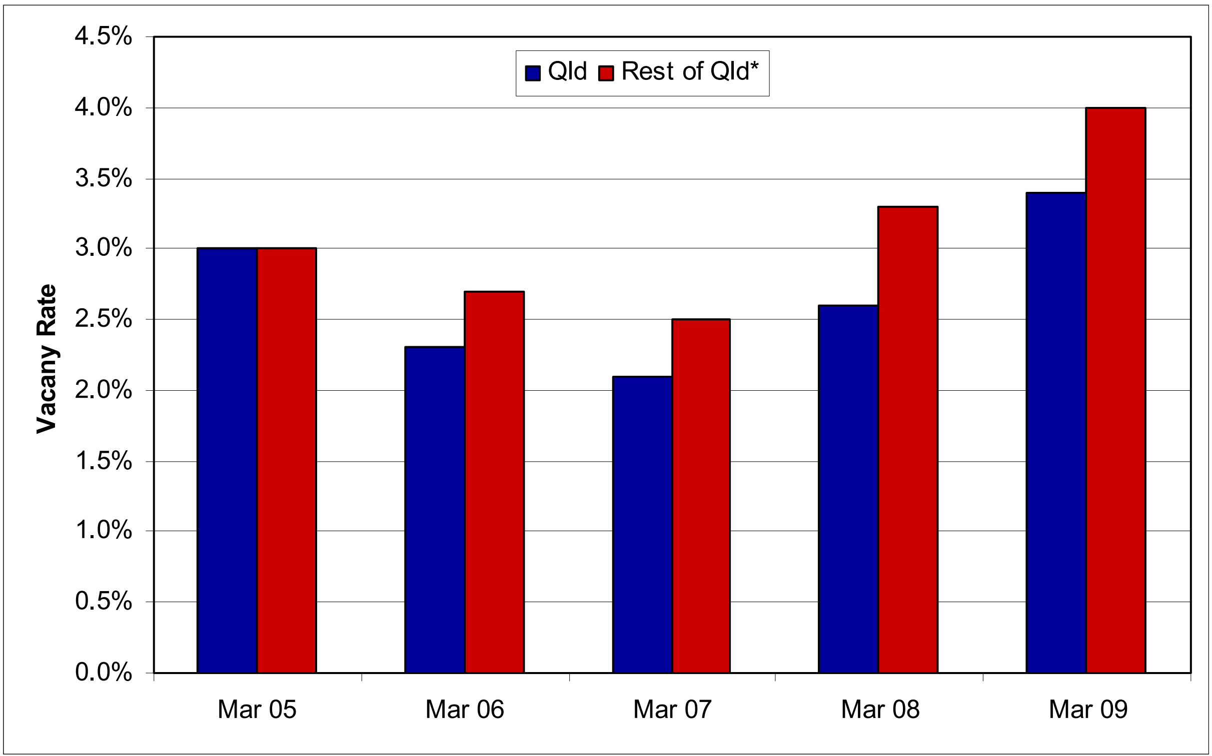

Figure 3.15 Queensland residential rental accommodation vacancy rate

Source: OESR 2009

3.9.5 Social housing

Social housing, which includes public rental stock, Aboriginal and Torres Strait Islander housing and community housing plays an essential role in supporting the most vulnerable members of society. The supply of social housing is particularly important for the Gladstone context as the region has experienced significant increase in the cost of housing as well as an increased polarisation between high and low income groups as identified in the SISP.

Supply of social housing

The Queensland Department of Communities reports there are 943 social housing dwellings in the Gladstone Regional Council, representing 1.6% of Queensland's total housing dwellings. The majority of dwellings contain three or four dwellings (64%) and are largely detached (65%). Senior units for those residents aged over 55 years (14%) account for slightly more than the Queensland average (11%). The table below provides the distribution of social housing by SLA.

Table 3.17 Distribution of social housing in Gladstone SLAs

	Number of properties
Calliope - Part A	71
Calliope – Part B	0
Gladstone	860
Miriam Vale	12
Gladstone Regional Council	948

Source: Department of Communities, May 2009

Demand for Social Housing

Social housing enables individuals and households in housing distress to access affordable housing. The Department of Communities maintains a register of applicants for social housing. This register comprises information about age and household type and defines a level of need for each applicant. As at February 2009, the Central Queensland area (of which the Gladstone region is part) had 659 applicants for social housing. Of these, 75 were located in Gladstone and one was located in Miriam Vale. The applicants for Gladstone were predominantly lone person households (73%) and single parent households (12%). The majority of applicants were identified by the Department of Communities as being in 'very high' or 'high' need (61%) with only 4% of applicants classified as 'low need'.

The average allocation time for public housing in the Central Queensland housing district, of which Gladstone is part, is generally higher than the Queensland average. Seniors housing units and dwellings with more than four bedrooms have particularly long waiting periods at 34 and 37 months respectively.

3.9.6 Government Employee Housing

The government provides employee housing assistance to eligible employees who are required to relocate to accept permanent employment offers. Individual government departments either own the homes, or rent them from other government departments or private owners.

Government Employee Housing (GEH) residences are leased to government departments/agencies at the full market rate, however the tenant / employee is not charged this amount. The residences are only allocated to employees who have been seconded or transferred to regional or remote areas to provide a government service. They are not available to local residents within these regional and remote towns.

Government employee housing statistics are summarised in Table 1.18 for the study area. Data from Queensland Health was not available. Department of Environment and Resource Management, DTMR, Department of Community Safety, Department of Communities, DIP and Department of Justice and Attorney General were consulted and did not manage any Government employee housing in the studied towns.

Table 3.18 Government employee housing

Government Department	Gladstone
Department of Public Works	4
Department of Education	64
Queensland Police Service	13
DEEDI	0
TOTAL	81
Queensland Health	Central Queensland - 136

3.9.7 Housing supply

Due to a shortage of housing within Gladstone and a desire by many working in the region to settle their families in centres close to the coast, the analysis of housing and residential land supplies has been extended to include all the major population centres within the Gladstone Regional Council's boundaries. The analysis includes Calliope, Gladstone, Benaraby, Agnes Waters, Town of 1770, Boyne Island, Tannum Sands and Turkey Beach.

There were 35,748 published dwelling approvals in Queensland between December 2007 and December 2008, lower by 21.9% than the previous year's total of 45,788. Approvals for separate houses were down by 19.4% and approvals for other dwellings (townhouses and units) were down by 27.0%. Dwelling approvals for Queensland in the December quarter 2008 were 51.6% lower than in the December quarter 2007. Brisbane City (18.7%) and Gold Coast City (13.5%) accounted for nearly one third (32.2%) of annual dwelling approvals in Queensland (PIFU 2009).

In the year to December 2008, Gladstone Regional Council was ranked seventh in the top 10 LGA's outside South East Queensland for dwelling approvals in Queensland. For the Gladstone Regional Council, the number of new building approvals decreased slightly in 2008, with 628 approvals. Compared to 727 approvals in the previous year, these figures represent a decrease of 14% in dwelling activity. Table 3.7.4 provides a summary of the number of new residential dwellings approved by the Gladstone Regional Council from 2000 to 2008. The data in Table 3.19 indicates that Gladstone Regional Council approved 4,866 residential dwellings since 2000. New dwelling approvals have increased in the region; on average by 16% per annum during this period (PIFU 2009).

Table 3.19 Private dwelling approval numbers and value

Year	Total residential dwelling approvals for Gladstone Regional Council	Average annual increase in dwellings (%)
2000	262	n/a
2001	276	5
2002	571	107
2003	723	27
2004	495	-32

Year	Total residential dwelling approvals for Gladstone Regional Council	Average annual increase in dwellings (%)
2005	553	12
2006	631	14
2007	727	15
2008	628	-14
Total	**4,866**	**16.25%**

Source: PIFU (2008c)

3.9.8 Residential land supply

PIFU (2009c) report a significant decline in the number of residential lots approved and produced in the year ending September quarter 2008. Regional councils in the Central Queensland region approved 5,087 residential lots in the year ending September quarter 2008. This was a decline of 39% compared with the same period in 2007 when 8,296 lots were approved. Meanwhile, 3,420 residential lots were produced in the Central Queensland region in the year ending September 2008. Compared with the previous year when 3,574 lots were produced, this was a decrease of 4%. The number of lots registered in Central Queensland in the September quarter 2008 decreased by 54% to 555 registrations, compared to 1,205 registrations recorded for the same period in 2007. The number of lots consumed in the region for the year to December 2008 decreased by 20% to 661 lots when compared with the same period in 2007 (829 lots). An individual summary for the Gladstone Regional Council follows:

- Gladstone Regional Council approved 1,475 residential lots in the year to December quarter 2008. This was an increase of 104.9% compared with the same period last year when 720 lots were approved.
- There were 457 residential lots produced in the Gladstone Regional Council in the year to December quarter 2008. Compared with the previous year when 338 lots were produced, this was an increase of 35.2%.
- The number of lots registered in Gladstone Regional Council in the December quarter 2008 remained the same as last year, when 144 lots were registered. Lot registrations in the year ending December 2008 were up 28.2% more than the previous year.
- The number of lots consumed in Gladstone Regional Council in the December quarter 2008 decreased by 40.8% to 100 lots when compared with the same period last year. Lot consumption for the year ending December 2008 was down 21.7% over the previous year.
- In the December quarter of 2008, 22 vacant land sales were recorded with a median value of A$150,500. This was a decrease of 80.7% in land sales volume and a decrease of 11.5% in median value compared with the same quarter last year.
- In the year ending December 2008, Gladstone Regional Council recorded a 13.6% decrease in new residential dwelling approvals for the previous year. A total of 628 approvals, 77.2% of which were for separate houses, compares to 727 approvals in 2007.
- Through implementation of mitigation strategies, Australia Pacific LNG will need to work with the regional councils and State Government to communicate workforce requirements, particularly

those relating to the operating phase of the Project so that Council and developers are able to plan for the potential increases in housing demands.

3.9.9 Non Resident Accommodation

Short term accommodation

Desktop research for this SIA identified the availability of short-stay accommodation in the Gladstone region. Within Gladstone City, there were 29 motel and serviced apartment facilities, with 767 motel rooms and apartments. In the Gladstone LGA generally, short-stay accommodation includes:

- 39 hotels and motels, with 839 rooms (including those counted above)
- 14 serviced apartment facilities with a total of 424 rooms
- 131 onsite vans, within caravan parks
- 94 cabins.

There were a total of 1,488 short-stay accommodation units in the LGA.

Non resident worker accommodation

There is an increasing use of non-resident labour force in Gladstone. Gladstone Area and Promotion Development Limited (GAPDL) (2009) reported that in 2006, approximately 900 workers (about 4.2% of employees in Gladstone) did not reside in the region. The major communities that provided non-resident labour into Gladstone were Rockhampton (100 workers) and Bundaberg (80 workers), while the remainder originated from further away. These non-resident workers have been commuting from their own residence or relying on short term accommodation options in Gladstone during shift periods. The level of the non-resident workforce is likely to have decreased in 2009 following Rio Tinto's decision to scale back the Yarwun refinery expansion in April 2009 in addition to a number of other mining related industry cutbacks. .

It is anticipated that purpose built workers' accommodation will be built for a range of major projects, including the Australia Pacific LNG Project in locations most appropriate to support the projects. This will ensure that short-term accommodation will be available for tourist uses and also to reduce the impact on the local housing market.

3.10 Community health and safety

3.10.1 Medical and health facilities

The primary hospital servicing the Gladstone region is the Gladstone Hospital. Gladstone Hospital provides services in emergency, outpatients, general medicine and surgery (including Day Surgery), basic orthopaedics, obstetrics and gynaecology, medical imaging, pharmacy, and pathology. The primary reasons that patients were hospitalised at the Gladstone Hospital (as in-patients) in 2004/2005 include births, dental extractions and restorations, colonoscopies and chest pains. The major health hub for the region is Rockhampton 110km north-west of Gladstone. A considerable number of patients travel to Rockhampton for health care services unavailable in Gladstone. Anecdotal evidence suggests that Gladstone community members perceive themselves to be like the 'poor cousin' when comparing the facilities and services offered in Rockhampton (SISP Stage 1 Background Report 2009).

Co-located with the Gladstone hospital is the Mater Misericordiae Private Hospital (the Mater), providing approximately 30 beds. The Mater provides specialist, day surgery and outpatient services. Key services include:

- General medicine
- General surgery
- Obstetrics and gynaecology
- Oncology and palliative care
- After hours medical service
- Radiology
- Pathology
- Visiting specialist services

Aged care facilities in the Gladstone Region include aged care, respite and palliative care accommodation, services such as Meals on Wheels and assisted living or home and community care (HACC) services and allied health services. The Commonwealth Department of Aging identifies three facilities which provide residential aged care services in the study area. Of these, there are 82 residential high care places provided in Calliope, 45 low care residential places in Gladstone and 40 low care residential places located at Boyne Island.

The major causes of death and illness in the Gladstone Health Services District are coronary heart disease, stroke, chronic obstructive pulmonary disease, depression and lung cancer (Queensland Health 2004). As identified by Queensland Health in 2004, health determinants of significant impact in this population include harmful alcohol consumption, smoking, overweight and obesity, poor nutrition, physical inactivity, and risk and protective factors for mental health. These findings are relevant to the Project as Australia Pacific LNG could choose to support programs that contribute to the health and well-being of its employees and/or the community more generally.

3.10.2 Disability Services and Facilities

According to the SISP Preliminary report there are presently there are two providers of overnight respite care for people with disabilities (Mainstay and Endeavour Foundation) in the Gladstone region. Demand for these services is very high with Mainstay (the only 7 day/ week respite service in Gladstone) having a waiting period of up to three months for new registrations before being able to access the service. With respect to housing for people with a disability, there is only one identified provider of residential care in the Gladstone area, the Endeavour Foundation. This organisation has provision for six clients and one emergency unit. Limited accommodation is available in residential aged care facilities however this is considered inappropriate for young people with a disability.

Employment services for people with disabilities are provided through three main providers in the GRC area. The SISP Preliminary Report identified the opportunity for Industry to provide training through apprenticeships, work experience, on the job training and other training programs for people with disabilities.

3.10.3 Community perceptions of health

The Clean and Healthy Air for Gladstone Project was established in July 2007 in order to “respond to community concerns about air pollution from industry, and to enable a better understanding of the

Gladstone air shed and any associated human health risks".[6] In February 2009, the Clean and Healthy Air for Gladstone Project released the results of the Gladstone community health survey. The community health survey found that respondents expressed high levels of concern about potential impacts of industry generally, and air pollution specifically, on their health and the health of their households (75.7% expressed some level of concern about potential impacts of industry on health). Of those who expressed any level of concern about potential impact of industry on health, nearly 68.7% were concerned about air pollution and dust. Nearly half of all respondents (49.0%) reported that they perceived odour, believed to be from industry, in or around their homes. Of all respondents, 4.3% reported experiencing extremely annoying odour, in or around their homes, often or all of the time. There was a statistically significant difference in the degree that respondents perceived the odour to be annoying, across localities of residence. The locality with the highest report of annoying odour was South Gladstone (21.3%). It will be important for Australia Pacific LNG to communicate the nature and significance of any anticipated emissions from the Project to the community to put to rest any concerns.

3.10.4 Policing and community safety

The Queensland Police Service is the primary law enforcement agency for Queensland. The study area falls into the Gladstone Police districts. There are Police stations located in the Calliope A and Calliope B SLAs. There are two police stations in Gladstone and Water Police operate from the Central Queensland Ports Authority, Gladstone.

Offences against the person and against property for the Gladstone district compared to Queensland as a whole, reported per 100,000 population for 2008/2009 are presented in Table 1.21 and Table 1.22 respectively. Offences are reported in three categories, offences against the person, offences against property and other offences.

The total number of offences against the person in the Gladstone district was equal to or lower than for the State as a whole across all categories except for 'assaults'.

Table 3.20 Offences against the person, reported per 100,000 population, 2008/2009

Offence	Gladstone	Queensland
Homicide – murder	1	1
Other homicide	0	2
Assaults (excl. sexual)	454	452
Sexual offences	133	162
Robbery	27	41
Other	56	83
Total Offences	671	742

Source: Queensland Police 2009

[6] Queensland Government (November 2008) Clean and Healthy Air for Gladstone Project. Interim Report: Summary of data analysis from existing health datasets.

Offences against property relate mainly to unlawful entry, theft, property damage and fraud. In 2008/2009 offences against property were considerably lower in the Gladstone district in comparison to Queensland.

Table 3.21 Offences against property, reported per 100,000 population, 2008/2009

Offence	Gladstone	Queensland
Unlawful entry	671	1,062
Other theft	1,274	1,852
Arson	20	30
Other property damage	1,001	994
UUMV*	67	233
Fraud	167	447
Handling stolen goods	97	135
Total Offences	3,297	4,753

Source: Queensland Police 2009

* Unlawful Use of Motor Vehicle. Includes attempted offences.

'Other offences' generally relate to 'drug offences', 'traffic and related offences' and 'good order offences'. Gladstone district recorded higher rates of 'other offences' than for Queensland as a whole (3,921 offences/ 100,000) at 4,728 offences/ 100,000, particularly in the areas of drug and traffic related offences. The rate of offences relating to a breach of domestic violence orders was lower for Gladstone than for Queensland more broadly.

Table 3.22 Other offences, reported per 100,000 population, 2008/2009

Offence	Gladstone	Queensland
Drug offences	1,307	1,155
Liquor offences (excluding drunkenness)	194	166
Gaming, racing, betting	0	0
Breach violence protection order	167	194
Prostitution	7	9
Trespassing and vagrancy	140	100
Stock related offences	73	35
Weapons act offences	105	91
Traffic and related offences	1,306	955
Good order offences	1,377	1,145
Miscellaneous offences	52	71
Total Offences	4,728	3,921

Source: Queensland Police 2009

3.10.5 Emergency services

Emergency services in Queensland fall under the Queensland Department of Community Safety. The Department is an umbrella organisation which is made-up of nine divisions, including:

- Queensland Fire and Rescue Authority
- Queensland Ambulance Service
- Emergency Management Queensland

The Queensland Fire and Rescue Authority have one permanent fire station in Gladstone and support stations in Calliope, Gladstone and Mount Larcom. State Emergency Services are located in Calliope, Gladstone Mount Larcom and Boyne Island.

In Queensland there are more than 85,000 volunteers contributing to Emergency Services and are represented in a number of organisations, including State Emergency Service, Rural Fire Service, Queensland Ambulance Service and Volunteer Marine Rescue Association. Data on unmet demand for volunteers in the emergency services sector could not be sourced, however the SISP Stage 1 Background Report (2009) identified a shift in volunteering due to difficulties in regular attendance as a consequence of the regions recent growth. The Gladstone Fire and Rescue service have reported that they have lost volunteers due to the impacts of the global financial crisis as volunteers are hesitant to take time off from work to volunteer for fear of losing their jobs[7].

Australia Pacific LNG may wish to support participation of its employees in volunteer activities which would benefit the emergency services sector. Also of relevance is the communication of emergency response plans by Australia Pacific LNG to the relevant emergency service providers, and the inclusion of near neighbours on Curtis Island in these plans.

3.11 Facilities and services

3.11.1 Child care

The Gladstone region is serviced by seven kindergartens and 11 child care centres and family day care schemes. Three of the private schools offer after-school care and the Gladstone Police and Citizens Youth Centre offers school-aged vacation care and after-school care. All of the child care centres also offer school-aged vacation programs and after-school care.

The preliminary findings of the Social Infrastructure Strategic Plan currently being prepared found that there is currently demand for Kindergartens in the LNG facility study area, particularly in Tannum Sands, evidenced by a petition to the State Government for a second kindergarten in the Tannum Sands community where the waiting list at is approximately 110 children for only 40 places. The Preliminary Report finds that up to 7 additional kindergarten facilities will be required in future to 2031, with several additional centres being required in the longer term in Calliope and Boyne Island/ Tannum Sands, a larger or additional centre in Agnes Water and possibly centres in the Rural West and Miriam Vale.

[7] Anecdotally reported by Gladstone Fire and Rescue during consultation for the Project in October 2009.

3.11.2 Cultural, community and recreation facilities and organisations

The presence of quality and diverse cultural, community and recreation facilities and/or organisations is vital to the social health of communities. It plays an important role in the quality of life for residents, and in building a vibrant and strong community.

Sport and recreation facilities

Overall, the Gladstone area has a diverse array of cultural, community and recreation facilities with more than 50 sporting clubs and recreational associations available. Sporting interest ranges from hockey, golf clubs and boating recreational associations. Participation in outdoor recreational activities is reflective of the mild tropical climatic conditions experienced in the region nearly all-year round. According to the 2006 Gladstone City Open Space and Recreation Plan, Gladstone enjoys a substantial quantity of open space, especially open space with utility, corridor and environmental values. The level of sport and recreation open space is 127.5 hectares but it is supplemented by a high level of privately owned land offering various sport and recreation activities and facilities. It is estimated that 54 hectares of additional sport and recreation open space will need to be acquired or developed to service the forecast population growth in the next 20 years. A survey of a sample of Gladstone residents undertaken as part of the Open Space and Recreation Plan suggested approximately 49% of the people were “very satisfied” or “satisfied” with Council facilities but approximately 27% were either “dissatisfied” or “most dissatisfied” with Council facilities.

Community organisations

According to Gladstone Regional Council Community Directory, there are approximately 100 special interest and recreational groups in the Gladstone Region. These include arts and crafts groups, musical groups and recreation groups. In addition to this, there are over 100 sporting clubs and associations in the region including swimming, athletics, fishing, bowls, tennis and netball.

Community facilities

The Gladstone Regional Council manages a range of community facilities as well as operating community services and programs. In addition to Council owned and run facilities, a number of not-for-profit organisations also provide spaces and programs to support the community. A summary of the community facilities available in the Gladstone region is provided below:

- **Community centres –** there are three major community centres available to the Gladstone community located in Calliope, Boyne Island and Gladstone. The Gladstone community centre is run by the Police-Citizens Youth Club and provides programs including after-school and vacation care, boxing, bingo and a youth group.
- **Libraries -** Libraries are an important element of community infrastructure provision. The Gladstone Regional Council has a total of 28,118 borrowers which is approximately 60% of population over the age of five years. In total there are six libraries, with a large central library located in Gladstone and smaller libraries in Calliope and Miriam Vale.

Demand for social infrastructure and services

The Background Report for the Social Infrastructure Strategy Plan study has identified a number of key infrastructure and service requirements for the Gladstone Region based on an initial literature review. Although these still require verification through a consultation process, they provide a good indication of the direction of demand. Key areas identified are:

- Additional youth services, activities and facilities.
- Youth homelessness resources/programs.
- Access to disability support, including independent lifestyle support, education and training opportunities, employment and enterprise options and identification of children at risk of coming into care.
- General and specialist counselling services for people of all ages.
- An Early Years Centre for integrated early childhood and family services.
- Additional child care services and those suited to a range of working hours.
- Early intervention and prevention services for children aged 0-15 years and families.

Once the study has been finalised, it will assist Australia Pacific LNG to work with State and Local Governments and the community to direct community investment funds and programs to those areas of greatest need.

In addition to these service and infrastructure demands, the Social Infrastructure Baseline Report prepared for the Queensland Curtis LNG Project Environmental Impact Statement (Andrea Young Planning Consultants 2008) identified demand in the Gladstone region for a further district community centre and youth facility, performing arts spaces and community health centre between 2009 and 2026.

3.12 Community values, attitudes and liveability

An understanding of the Gladstone community's values and attitudes can be gained through a review of regional strategic planning documents which have been developed in consultation with the community. Key strategic documents which provide an insight into pertinent values and attitudes of the community are the *Gladstone Regional Vision 2028 Project* and the *SISP Stage 1 Background Report.*

Through extensive community consultation, the *Vision 2028* project established a vision statement for the region which articulates the community's values and ambitions:

> *"The Gladstone region will be recognised, nationally and internationally, as a sustainable 'region of choice' for achieving the best integration of large industry and commerce, environmental protection and community wellbeing. We will be renowned for balance: a friendly, clean and vibrant place in which to work, live and raise a family"*

The Visioning Project identified broad aspirations for the community relating to industrial development, lifestyle and community empowerment. These are further detailed below:

- That growth will be managed in a different way ('smart growth') to maintain the relaxed, outdoor sporty lifestyle and minimise/avoid the negative social and environmental consequences of rapid growth – the challenge is to combine growth and aspirations effectively.
- Shift from being a good place to work, and generally also to live, to 'a good place to work, live and raise a family.
- To become more inclusive, and a multicultural region.
- More local empowerment so residents and government have greater opportunity to be the 'masters of their own destiny.

- To evolve and extend the role of the CQU in the Gladstone regional community as a provider of quality research and learning opportunities through creative partnerships.
- To build opportunities and structures that support children and young people in the region and allow them to have access to a variety of quality education opportunities...as well as create support for families and community-friendly spaces.
- To see the region working for everybody and all generations, and not just those with “high paying industry jobs” by ensuring future growth is guided by careful planning that anticipates the likely social consequences.
- To become environmentally sustainable.

With respect to further industrial development, Gladstone residents appear to embrace new industries, however are well aware of the challenges associated with social change caused by increased development and the need to manage these challenges closely. For example, the SISP Stage 1 Background Report (2009) cited that industry shift work was regarded by the community as one of the causes for decreasing people’s time with family and decreasing participation in community events.

The SISP Stage 1 Background Report (2009) showed that the community is generally supportive of industrial growth within the region, however not at the cost of lifestyle opportunities.

The Gladstone Region Visioning Panel (GRVP) has been established in Gladstone to monitor and respond to local community issues. The GRVP is an outcome of the Vision 2028 Project Report, funded by the Rio Tinto Alcan Community Fund (2008). As the local government authority, the Gladstone Regional Council established, and will continue to facilitate the GRVP.

The GRVP launched an online discussion forum in October 2009 aimed at obtaining ongoing community, business, industry and government feedback. This feedback will be used to inform Gladstone Regional Council decision-making processes. Topics discussed in the forum to date (as at November 2009) predominately relate to environment, social services and infrastructure. The community has responded most frequently to discussions related to local shopping facilities, prevalence of litter in natural environment, aged care and festoon lighting.

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