

# Chapter 15

## Social and Economic

## 15.0 Social and Economic

This chapter provides an overview of the existing socio-economic environment of the Project area. The chapter aims to describe the regional social and economic characteristics of the Project area, including the residential, commercial, industrial and agricultural values. It describes the likely impacts (positive and negative) on affected communities and likely economic impacts arising from each stage of the construction and operation of the Project. Measures are recommended, where appropriate, to mitigate any adverse impacts and maximise potential benefits during the construction and operation phases of the Project.

### 15.1 Existing Environment

#### 15.1.1 Regional context

The Draft Alignment commences near Mount Fox, approximately 100 km north-west of Townsville and extends in a westerly direction for approximately 195 km to near the old township of Kidston. The Draft Alignment intersects three LGAs including Hinchinbrook Shire Council, Charters Towers Regional Council and Etheridge Shire Council. The majority of the Draft Alignment falls within the Charters Towers LGA with approximately 115 km of the 195 km Draft Alignment located within this LGA.

The Project area is sparsely populated and traverses rural land holdings predominantly characterised by cattle grazing land. The closest population centres to the Draft Alignment include Ingham (approximately 40 km north-east of Mount Fox), Einasleigh (approximately 40 km north of Kidston) and Greenvale (3 km south of the Draft Alignment).

For the purpose of this assessment, the socio-economic study area has been determined as the LGAs of Hinchinbrook Shire Council, Charters Towers Regional Council and Etheridge Shire Council.

Relevant stakeholders (local and regional) and consultation activities are detailed in Chapter 29 Community and Stakeholder Consultation. Key stakeholders groups identified, include:

- Landholders
- Federal Government
- State Government
- Local Government
- Peak Bodies
- Industry
- Heritage bodies.

The following were considered to be the key topics raised during consultation activities:

- potential impacts on property operations
- biosecurity
- compensation
- potential impacts on existing infrastructure/topography
- co-location with Ergon Energy powerlines.

#### 15.1.2 Community profile

The Charters Towers Regional Council, Hinchinbrook Shire Council and Etheridge Shire Council LGAs represent the regional community of interest. The Draft Alignment intersects six State Suburbs (SSCs) including:

- Mount Fox
- Valley of Lagoons

- Greenvale
- Conjuboy
- Lyndhurst
- Einasleigh.

As previously noted, the Draft Alignment is sparsely populated with a combined population of 467 persons across the six state suburbs as at the 2016 census. As such, the broader statistical areas of the three subject LGAs has been used for socio-economic indicators to form the regional community of interest.

### 15.1.2.1 Local and regional populations

#### State suburb summary

State suburb level figures have been provided for high level indicators including population, dwellings and household incomes across the Project area as per Table 15-1. The Project area population is characterised by a sparsely populated ageing population with low median weekly household incomes compared to Queensland.

Table 15-1 Study area profile based on State Suburb data

State Suburb (SSC) area	2016 Population	Male (%)	Female (%)	Median age	No. private dwellings	Median weekly household income (\$)
Mount Fox	87	45.8	54.2	43	63	725
Valley of Lagoons	48	53.3	46.7	59	33	866
Greenvale	232	54.7	45.3	51	134	833
Conjuboy	0	N/A	N/A	N/A	0	N/A
Lyndhurst	8	57.1	42.9	47	3	N/A
Einasleigh	92	60.9	39.1	47	57	762
Queensland	4,703,193	49.4	50.6	37	1,987,313	1,402

Source: ABS 2016 Census of Population and Housing

#### Population

The three LGAs that the Draft Alignment traverses have experienced varied levels of population decline between 2011 and 2016 as outlined in Table 15-2. Population decline has been most prominent in Etheridge LGA (-10.5%) and Hinchinbrook LGA (-5.9%).

Table 15-2 Population Change 2011-2016

LGA	2011	2016	Change (no.)	Change (%)
Hinchinbrook Shire Council (S) LGA	11,568	10,885	-683	-5.9
Charters Towers Regional Council (R) LGA	12,169	11,876	-293	-2.4
Etheridge Shire Council (S) LGA	893	799	-94	-10.5

Source: ABS 2016 Census of Population and Housing

## Population growth

The population of the Hinchinbrook and Etheridge LGAs is projected to decrease over the forecast period to 2036, and the Charters Towers LGA population is expected to increase marginally (refer to Table 15-3).

**Table 15-3 Population projections 2016-2036**

LGA	2011	2016	2021	2026	2031	2036	Ann Av.
Hinchinbrook (S) LGA	11,817	11,419	11,001	10,569	10,108	9,638	-0.8
Charters Towers (R) LGA	12,434	12,551	12,711	12,857	13,031	13,198	0.2
Etheridge (S) LGA	929	895	875	871	866	862	-0.3

Source: QGSO Population Projections (medium series)

### 15.1.2.2 Families and households

#### Family types

The majority of households within the regional community of interest are family households predominantly made up of couples and couples with children. There is a higher proportion of couple families with children within the regional interest area compared to Queensland as a whole.

**Table 15-4 Family and household characteristics percentages 2016**

LGA	Family Households			Household Types		
	Couple (%)	Couple with children (%)	Sole parent families (%)	Family households (%)	Sole person households (%)	Group and other households (%)
Hinchinbrook (S) LGA	50.6	35.9	12.5	68.5	29.7	1.8
Charters Towers (R) LGA	42.1	38.3	18.1	68.0	29.1	2.9
Etheridge (S) LGA	45.6	44.5	9.9	54.9	41.7	3.4
Queensland	39.4	42.5	16.5	71.8	23.5	4.7

Source: ABS 2016 Census of Population and Housing

#### Household types

A high proportion of occupied dwellings within the regional area of interest are made up of separate houses as outlined in Table 15-5.

**Table 15-5 Dwelling Structure 2016**

LGA	Separate house (%)	Semi-detached, row or terracehouse, townhouse etc. (%)	Flat or apartment (%)	Other dwelling (%)
Hinchinbrook (S) LGA	91.6	1.1	5.0	1.9
Charters Towers (R) LGA	92.1	1.6	3.5	2.1
Etheridge (S) LGA	79.0	0.0	1.9	14.0
Queensland	76.6	10.6	11.3	1.0

Source: ABS 2016 Census of Population and Housing

### 15.1.2.3 Demographic characteristics

#### Age and gender

The median age of the three LGAs reflect an ageing population within the regional community of interest with all three LGAs registering an increase in the median age between 2011 and 2016 (Table 15-6).

**Table 15-6 Median age 2011-2016**

LGA	2011	2016	Change (no.)
Hinchinbrook (S) LGA	46	50	4
Charters Towers (R) LGA	38	40	2
Etheridge (S) LGA	43	45	2
Queensland	36	37	1

Source: ABS 2016 Census of Population and Housing

The three LGA's have a marginally higher proportion of males and lower proportion of females compared to Queensland (refer to Table 15-7).

**Table 15-7 Persons count based on place of usual residence on Census night**

LGA	Male (%)	Female (%)
Hinchinbrook (S) LGA	51.0	49.0
Charters Towers (R) LGA	49.5	50.5
Etheridge (S) LGA	54.1	45.9
Queensland	49.4	50.6

Source: ABS 2016 Census of Population and Housing

#### Educational attainment

A lower proportion of the population 15 years and over within the study area has a Bachelor Degree or Advanced Diploma and above compared to Queensland (refer to Table 15-8).

**Table 15-8 Level of highest educational attainment (15 years and over) 2016**

Educational Attainment	Hinchinbrook LGA		Charters Towers LGA		Etheridge LGA		Queensland	
	No.	%	No.	%	No.	%	No.	%
Bachelor Degree and above	673	7.3	799	8.6	36	5.5	693,412	18.3
Advanced Diploma and Diploma Level	455	5.0	470	5.0	37	5.6	330,619	8.7
Certificate	1,972	21.5	1,584	17.0	95	14.4	691,290	18.3
Year 12	1,207	13.1	1,328	14.3	74	11.2	625,959	16.5
Year 11	437	4.8	482	5.2	23	3.5	163,394	4.3
Year 10	1,667	18.2	1,700	18.3	141	21.4	488,554	12.9
Year 9 or below	1,335	14.5	1,311	14.1	116	17.6	275,376	7.3
No educational	49	0.5	37	0.4	7	1.1	15,700	0.4

Educational Attainment	Hinchinbrook LGA		Charters Towers LGA		Etheridge LGA		Queensland	
	No.	%	No.	%	No.	%	No.	%
attainment								
Not stated	1,215	13.2	1,419	15.2	102	15.5	409,227	10.8

Source: ABS 2016 Census of Population and Housing

#### 15.1.2.4 Income and disadvantage

##### Median income, mortgage repayments and rent 2016

Median personal and household incomes within the regional community of interest are substantially less than the Queensland median. Median rent and mortgage repayments are also significantly less within the three LGAs compared to Queensland (refer to Table 15-9).

**Table 15-9 Median income, mortgage repayments and rent 2016**

LGA	Median personal income (\$)	Median weekly household income (\$)	Median mortgage repayment (\$/monthly)	Median rent (\$/weekly)
Hinchinbrook (S) LGA	538	1,041	1,300	180
Charters Towers (R) LGA	522	1,047	1,300	200
Etheridge (S) LGA	521	865	664	95
Queensland	660	1,402	1,733	330

Source: ABS 2016 Census of Population and Housing

##### Relative socio-economic advantage and disadvantage

Socio-Economic Indexes for Areas (SEIFA) is a product developed by the ABS that ranks areas in Australia according to relative socio-economic advantage and disadvantage. The indexes are based on information from the five-yearly Census. The index focuses on low-income earners, relatively lower education attainment, high unemployment and dwellings without motor vehicles. Low index values represent areas of most disadvantage and high values represent areas of least disadvantage (QGSO, 2016).

It is evident from Table 15-10 that the three subject LGAs have a low SEIFA score compared to other LGAs across Queensland with a high proportion of the population within quintile 1 (most disadvantaged).

**Table 15-10 Index of disadvantage, population and quintile group, QGSO 2016**

LGA	SEIFA Score	% Pop. Quintile 1	% Pop. Quintile 2	% Pop. Quintile 3	% Pop. Quintile 4	% Pop. Quintile 5	Overall Quintile position
Hinchinbrook (S) LGA	959.8	36.4%	26.0%	31.8%	5.8%	0.0%	2
Charters Towers (R) LGA	927.5	45.4%	42.0%	8.3%	4.3%	0.0%	1
Etheridge (S) LGA	931.5	33.7%	66.3%	0.0%	0.0%	0.0%	1

##### Internet access

The percentage of dwellings across the three LGAs with access to internet is lower than that of Queensland. Approximately 26 percent of dwellings across the region do not have access to internet compared to 13.6 percent for Queensland (refer to Table 15-11).

**Table 15-11 Dwelling internet connection 2016**

LGA	Internet not accessed from dwelling	Internet accessed from dwelling	Not stated
Hinchinbrook (S) LGA	26.5	70.2	3.3
Charters Towers (R) LGA	26.1	70.3	3.5
Etheridge (S) LGA	26.6	58.1	15.3
Queensland	13.6	83.7	2.7

Source: ABS 2016 Census of Population and Housing

### 15.1.2.5 Housing and accommodation

#### Housing access

Occupancy rates are comparatively low within the three LGAs compared to Queensland. This is particularly apparent in Etheridge with a total of 23 percent of the dwelling count being unoccupied private dwellings as at the 2016 census (refer to Table 15-12).

**Table 15-12 Dwelling count 2016**

LGA	Occupied private dwellings	Unoccupied private dwellings
Hinchinbrook (S) LGA	83.2	16.8
Charters Towers (R) LGA	84.9	15.1
Etheridge (S) LGA	77.1	22.9
Queensland	89.4	10.6

Source: ABS 2016 Census of Population and Housing

#### Housing type

The majority of occupied private dwellings within the regional community of interest are separate houses with over 90 percent of occupied private dwellings in Hinchinbrook and Charters Towers LGA being separate houses (refer to Table 15-5).

#### Housing tenure

A higher proportion of occupied private dwellings are owned outright within the regional community of interest compared to the State of Queensland (refer to Table 15-13).

**Table 15-13 Tenure of occupied private dwellings 2016**

LGA	Owned Outright (%)	Owned with a mortgage (%)	Rented (%)	Other tenure type (%)	Tenure not stated (%)
Hinchinbrook (S) LGA	48.4	22.7	24.4	0.9	3.6
Charters Towers (R) LGA	36.7	28.5	29.8	1.3	3.8
Etheridge (S) LGA	46.8	16.0	20.6	2.5	14.2
Queensland	28.5	33.7	34.2	0.9	2.7

Source: ABS 2016 Census of Population and Housing

### 15.1.3 Social infrastructure

There is a limited range of social infrastructure facilities in close proximity to the Draft Alignment. The regional community of interest is predominantly serviced by the regional centres of Ingham (40 km to the north east of Mount Fox) and Charters Towers (140 km south of Mount Fox). A limited range of

lower order services are provided at the regional township of Greenvale (approximately 3.5 km to the south of the Draft Alignment) as outlined in Table 15-14.

**Table 15-14 Social infrastructure facilities in Greenvale**

Facility	Type	Location
Greenvale State School	State Primary School	Cassia Ct, Greenvale QLD 4816
Australia Post - Greenvale	Post office	2 Acacia Dr, Greenvale QLD 4816
Greenvale Police Station	Police station	Acacia Dr, Greenvale QLD 4816
Greenvale Roadhouse and Fuel Supplies	Service station and roadhouse	Lot 1 Redbank Dr, Greenvale QLD 4816
Three Rivers Hotel	Hotel	1 Redbank Dr, Greenvale QLD 4816
Greenvale Caravan Parks and Cabins	Accommodation	3 Kylee Ct, Greenvale QLD 4816

#### 15.1.4 Economic and industry profile

The economy of the regional community of interest continues to be predominantly based on primary production with beef cattle farming being the agricultural industry of prominence across the Project area. The regional economy will be diversified through the development of the Kidston Renewable Energy Hub, which requires the construction of the Project to connect to the National Electricity Market.

##### 15.1.4.1 Business profile

There were a total of 2,700 businesses within the regional community of interest in 2016-17 with 1,716 (63.6%) of businesses classified as non-employed business and 717 businesses (26.6%) employing 1 to 4 employees.

Agriculture, forestry and fishing accounted for nearly 50% of all registered businesses across the three LGAs which highlight the importance of the agricultural base to the region's economy.

##### 15.1.4.2 Industry of employment

Employment by industry data (refer to Table 15-15) demonstrates that the agricultural industry is the most important industry to the regional economy accounting for 15.8% of the total workforce. Other significant industries of employment within the region include health care and social assistance (11.2%) and education and training (11.0%).

**Table 15-15 Top five industry subdivisions of employment**

Industry	Combined region (Hinchinbrook LGA, Charters Towers LGA, Etheridge LGA)		Queensland	
	Number	%	Number	%
Agriculture, forestry and fishing	1,502	15.8	60,608	2.8
Health care and social assistance	1,068	11.2	276,945	13.0
Education and training	1,047	11.0	192,143	9.0
Retail trade	868	9.1	211,778	9.9
Manufacturing	703	7.4	128,787	6.0



Source: ABS 2016 Census of Population and Housing

### 15.1.4.3 Occupational profile

The high percentage of managers within the regional community of interest can be attributed to the high number of farmers and farm managers. There is also a high percentage of machinery operators and drivers and labourers compared the breakdown of the Queensland workforce (refer to Table 15-16).

**Table 15-16 Employment by occupation 2016**

Occupation	Area			
	Hinchinbrook Shire Council	Charters Towers Regional Council	Etheridge Shire Council	QLD
Managers	15.4	15.4	31.0	12.1
Professionals	12.2	14.0	8.4	19.8
Technicians and trades workers	16.1	14.1	9.5	14.3
Community and personal service workers	10.8	11.0	7.1	11.3
Clerical and administrative workers	10.9	9.6	9.0	13.6
Sales workers	8.2	8.3	1.6	9.7
Machinery operators and drivers	12.1	11.0	8.2	6.9
Labourers	12.8	15.0	23.9	10.5

Source: ABS 2016 Census of Population and Housing

### 15.1.4.4 Unemployment

The combined unemployment rate across the three LGAs was 9.7% in the March quarter 2018. This rate is substantially greater than the unemployment rate for Queensland of 6.0%. It is noted that the unemployment rate for the region has dropped from a high of 12.5% in March 2017 whilst the overall Queensland unemployment rate has remained stable.

**Table 15-17 Unemployment and labour force by LGA, March quarter 2018**

LGA	Unemployed	Labour force	Unemployment rate
	Number		%
Hinchinbrook (S) LGA	411	4,856	8.5
Charters Towers (R) LGA	582	5,203	11.2
Etheridge (S) LGA	24	404	5.9
Queensland	156,975	2,602,760	6.0

## 15.2 Potential Impacts

### 15.2.1 Population and community profile

Given the sparse population within the Project area, the Project is not anticipated to have a significant impact on the community. As the construction phase is temporary, and workers are not proposed to be permanently relocated to the region, elements of the community profile are not anticipated to be impacted to a noticeable level.

During construction there will be a temporary influx of workers into the region. Temporary construction camps will be required to house the construction phase workforce. Some of these camps will be up to 120 beds and discussions are underway with each LGA and existing accommodation providers to determine whether they are able to provide these services.

The operational phase of the Project is not anticipated to have any material impact upon the demographic profile of local and regional populations. Workers will travel to the Project area during the operational phase to undertake maintenance activities, however it is short term and temporary in nature.

### 15.2.2 Local and regional benefits

Specialist contractors will be engaged by Powerlink Queensland to construct the transmission line and substations. A peak workforce of approximately 370 people is estimated for the construction of the transmission line, with the workforce numbers ramping up and down over the construction phase. A workforce of around 40 personnel is expected for the construction of each substation.

It is noted that the regional community of interest has a high unemployment rate. Employment generated during the construction period is likely to be of regional and local benefit. As the proposed transmission line is approximately 195 km long, it is likely the opportunity for project-related employment will occur across a broad geographic area and flow-on effects to small business will be equally wide spread. Powerlink Queensland is currently engaging with each LGA to identify opportunities for existing businesses to provide support to its Project.

Where possible, Powerlink Queensland intends to use and expand existing facilities to house the construction phase workforce. If new facilities are required, these will be developed in consultation with LGAs to determine the most appropriate location and services. During operation, Powerlink Queensland employees will be required to travel to the Project for regular maintenance activities. Powerlink Queensland employees are likely to stay with the region at existing accommodation facilities, as well as spend money for food, fuel and a range of other potential services. During both construction and operation there is a potential for a direct benefit to the local community, in employment and provision of local services.

The Project is required to connect the Kidston Renewable Energy Hub to the national electricity market. Both of these projects will play a key role in driving economic growth and diversifying the service offering in the region. Other benefits associated with the Project include supporting the diversification of Queensland's electricity generation mix and supporting both the Commonwealth Renewable Energy Target and State planning intent.

### 15.2.3 Lifestyle and amenity

There is the potential for the following temporary impacts during construction:

- management of stock in proximity of the transmission line
- noise emissions from the operation of machinery
- dust emissions associated with earthworks
- traffic disruptions.

These impacts are discussed further in Chapter 13 Land Use. Powerlink Queensland will continue to work closely with landholders prior to and during the construction period to ensure they are aware of the type, location and timing of construction activities on their properties and to minimise construction impacts where possible.

The transmission line and substations will introduce a new permanent item into the visual landscape. Visual impacts and potential mitigation measures are addressed in detail within Chapter 14 Visual Amenity. It was concluded that the overall impact on visual amenity would be low.

Transmission line noise is not expected to be audible at any residence, nor will any property owners be affected by any noise or vibration generated by the substation. Noise and vibration impacts and mitigation measures will be considered by Powerlink Queensland and are addressed in Chapter 19 Noise and Vibration. Maintenance checks will be conducted regularly on the transmission infrastructure.

### **15.3 Mitigation and Management Measures**

The Project is unlikely to have significant adverse impacts on the socio-economic profile of the area during the construction or maintenance/operational phases of the Project. The development of this electricity transmission infrastructure will assist and support the region to develop and prosper through the benefits associated with the Kidston Renewable Energy Hub.

Powerlink Queensland will continue working closely with affected landholders to ensure they are informed of upcoming project activities and property specific access requirements are incorporated into the construction phase.

#### **15.3.1 Population and community**

While the construction workforce will be required to temporarily relocate to the area during the construction period of the Project, the workforce required will be small and will not significantly influence the existing community profile. The operational phase of the Project is not anticipated to have any material adverse impact upon the demographic profile of local and regional populations. As such, no specific management and mitigation measures are considered relevant.

#### **15.3.2 Economic effects**

Investment associated with the Kidston Renewable Energy Hub will have a positive overall impact on the local and regional population in terms of job creation and investment in trunk infrastructure. The connection to the National Electricity Market, via the Project, is required for development of the Kidston Renewable Energy Hub.

Following public consultation on this Draft EAR, Powerlink Queensland will commence negotiations with landholders to voluntarily acquire easements for the proposed transmission line. Easements provide Powerlink Queensland with a legal 'right of way' over a portion of land so it can safely build, operate and maintain the asset. Easements are registered on the title of the affected land with ownership of the land remaining with the landholder. This means the landholder may continue using the land for many purposes, including grazing operations, provided it does not conflict with the easement conditions.

In accordance with the *Acquisition of Land Act 1967*, Powerlink Queensland makes a one-off lump sum compensation payment at the conclusion of compensation negotiations. This is consistent with compensation practices across other jurisdictions in Queensland (e.g. roads, highways, sewerage pipelines). Matters considered in the assessment of compensation are contained in Section 20 of the Act and include the value of the land taken, injurious affection and economic losses and costs attributable to disturbance.

#### **15.3.3 Construction phase**

Site rehabilitation will be undertaken progressively during construction where practicable and Powerlink Queensland will ensure that all disturbed areas impacted from construction are rehabilitated at the end of the Project. Prior to construction, a Traffic Management Plan will be prepared to minimise potential impacts to road and property access. All works will be in accordance with the requirements specified in the Environmental Management Plan (Refer to Appendix I Environmental Management Plans) and relevant Powerlink Queensland policies.

#### **15.3.4 Operational phase**

Once operational the existing land uses can continue within the easement provided they are consistent with the easement terms and conditions.

After completion of construction and commissioning of the transmission line, the amount of activity on site will decrease substantially. During operation, normal practice is for maintenance staff to carry out scheduled inspections of the transmission line, substations, easement and access tracks on average twice per year. All operational activities will be carried out in accordance with relevant Powerlink Queensland policies.