



Submission to

**Senate Inquiry into the indicators of, and impact of,
regional inequality in Australia**

Townsville City Council

June 2018

EXECUTIVE SUMMARY

Regional Inequality and Challenges to Townsville's Growth

Regional inequality is a significant constraint on national development. In particular, it is being driven by the shift from resource (agriculture, mining, and manufacturing) to service industries. This shift has profound geographic consequences with the loss of jobs most acutely experienced in regional centres like Townsville and North Queensland. Skilled service jobs are in high demand, but these cluster in capital cities.

A further contributing factor to regional decline is energy affordability. This is due in significant part to successive Australian and state governments failing to balance competing priorities of competition, security, reliability and emissions targets, without adequate regard to the impacts on affordability and business viability. Like energy, significantly higher cost of household and business insurance in North Queensland is also creating regional inequality and cost of living pressures for Townsville residents.

Townsville is being impacted by synchronised cyclical (mining) and structural (manufacturing) industry decline. These forces underlie deterioration in confidence, investment, employment, income and growth. This is compounded by federal Government fiscal decisions impacting the level of Australian Public Service employment within the city. The subsequent economic and demographic effects are cause for government intervention that will mitigate the economic and social impacts and enable the region, its industries and residents, to adjust effectively and take advantage of new opportunities arising from the Indo-Pacific region.

Current Policy Responses – Townsville City Deal

In December 2016, the Commonwealth, Queensland Government and Townsville City Council enacted Australia's first City Deal. The Townsville City Deal is a 15-year commitment focused on improving the lives of Townsville residents through job creation, economic growth, investment in local infrastructure, a revitalised urban centre, and a more vibrant and liveable city. It provides an approach for government to work together to deliver transformative outcomes for Townsville.

The Townsville City Deal is in its second year of implementation. While Townsville City Council is encouraged with progress made in establishing the deal, further work needs to be done to drive outcomes under the deal. The level of funding commitment and practical implementation to drive investment, particularly at the federal level, has been disappointing.

Given the economic climate and the commitment provided under the City Deal, Townsville is very disappointed with the 2018/19 Federal budget. The city received no additional funding and was not specifically included in any capital works initiatives. Nothing was delivered under the City Deal.

Townsville City Council looks forward to working with the Federal Government to address the impacts of inequality in North Queensland. Recommended initiatives and actions to progress this process include:

Recommended Actions

Townsville City Council has identified a number of priorities requiring federal support. These are:



Regionalisation Policy:

- Relocation of federal government functions to Townsville and the devolution of authority and decision making to regional Australia
- Supported regional immigration schemes
- Supported foreign student programs
- Improved availability of reliable regional social, economic and demographic data and analysis

 **Defence:**

- Revisit and elevate the Defence Working Group under the City Deal
- Development and implementation of Townsville focus defence procurement strategy
- Townsville to be developed as a deep maintenance, sustainment and logistic hub
- Co-location/relocation of defence trade training schools to Townsville
- Establish a permanent navy presence in support of 2 RAR's role as the Australian army's principal amphibious force
- Acceleration of capital works programs

 **Water:**

- Army to partner with Council in the proposed water reuse scheme for Lavarack Barracks
- Funding support for green energy (solar) water pipeline pumping upgrade
- Medium term support for future water security infrastructure developments and upgrades

 **Port Channel Widening:**

- \$75 million towards contribution towards Townsville Port Channel widening

 **Transport Infrastructure:**

- Acceleration of North Queensland Bruce Highway initiatives
- Increased investment in upgrades to the Mount Isa Rail Line

 **Knowledge and Innovation:**

- Development of Australian Tropical Marine and Aquaculture Centre within the CBD
- Support for Townsville implementing its Smart City Strategy to capitalise on the next wave of digital infrastructure, skills and jobs
- Employment re and upskilling initiatives
- Support for innovative economic investment opportunities and partnerships with the private sector such as those presented by a Lithium Ion Battery Plant or construction of a major lagoon on the Strand

 **Price Parity**

- Investment in new energy generation in the north
- Introduction of energy retail competition to North Queensland
- Supported access to solar PV, smart meters and energy efficient appliances to reduce energy demand for low income households
- Greater regulatory scrutiny on insurance pricing and encouragement of regional insurance market reform

1. Introduction

Over 150 years Townsville has grown from a small private port to the largest city in Northern Australia.

We survived depressions and recessions, natural disasters, droughts and World Wars and have grown to be home to metal refineries, universities, the largest tertiary hospital outside a capital city and 200,000 of our nation's most resourceful and resilient people.

Since 2013, Townsville has been hit with several economic shocks that have seen our economy and community suffer. These shocks have been significantly exacerbated and hampered in their recovery by government policy, regulation and political processes.

Our city is experiencing increasing social disadvantage, compounded by significantly higher than average business and households cost, particular for energy, insurance and transport services. With more than 21 per cent of Townsville residents falling within the most disadvantaged quartile, households are having increasing difficulty in meeting high cost-of-living expenses. Australia's welfare and taxation systems need to better recognise and address systemic regional inequalities.

Central to Townsville's transition is the structural shift from manufacturing and agriculture to an economy dominated by services. As a metalliferous manufacturing hub, located on the doorstep of the world's largest base metals minerals province, Townsville has lost both jobs and confidence as we redefine our place in the changing world of global trade.

Economic opportunities and government funding are not distributed equitably. The relative decline of agriculture, manufacturing and mining is having a profound impact on regional Australia. Skilled service jobs are in high demand and tend to cluster in capital cities. Regional Australia is voting with its feet through its increasing support for minor parties. The message is clear and its time we listened.

With our links to the north's natural wealth and beauty, and proximity to the increasingly prosperous Indo-Pacific, no region is better placed to take advantage of Australia's resources and global opportunities than Townsville North Queensland.

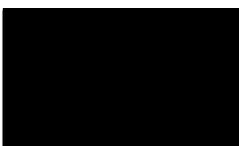
We are young, capable and enthusiastic and we are proven in our ability to contribute more than our share. Most importantly we want to partner with our federal and state colleagues to reach our potential in a world of opportunity.

The Townsville City Deal, with its focus on the growth and investment needed to create a more vibrant and liveable city, provides the foundation to this partnership. The Townsville City Council looks forward to working with its state and federal partners to deliver real outcomes for the city and its residents.

Townsville was disappointed with the recent federal budget. Despite obvious economic and social need, the city received no new or additional federal funding or support. It is difficult to reconcile this against the City Deal's principles of breaking down barriers to secure economic success for the city and its people.

This submission offers a revealing look at Townsville's current socioeconomic environment and provides a current and real example of inequality in regional Australia. It should be a catalyst for change in federal-local relations.

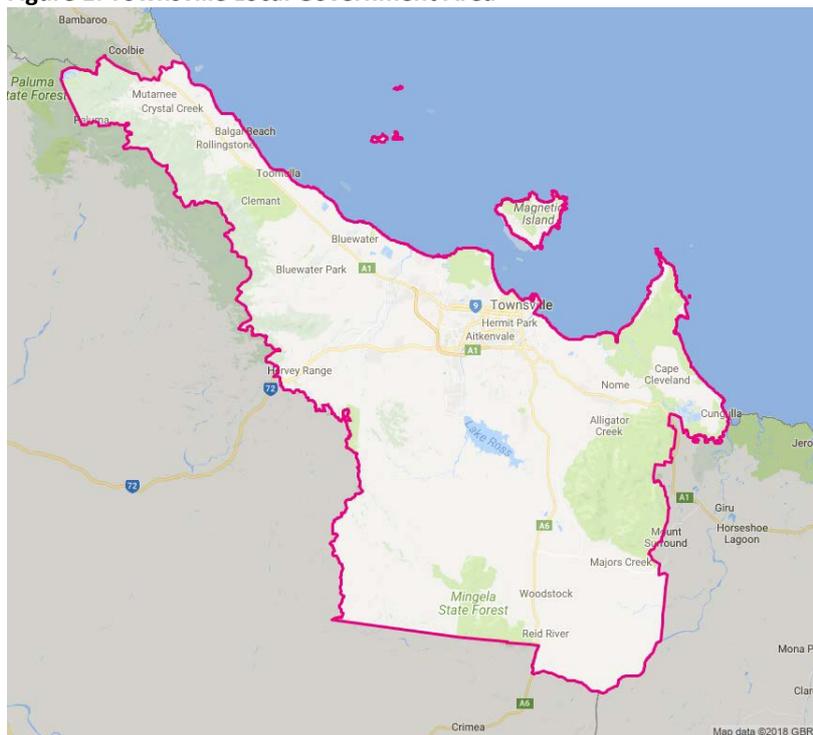
We thank you for your consideration and look forward to working with the Federal Senate to address inequality and disadvantage in regional Australia.



Cr Jenny Hill
Mayor of Townsville

2. Townsville City Overview

Figure 1: Townsville Local Government Area



Source: MapBuilder

The Townsville Local Government Area, as outlined in Figure 1, has a land area of 3,738.6 km², with an average daily temperature range of 18.8°C to 28.1°C and average annual rainfall of 1,363 mm.

As at 30 June 2017, Townsville had a population of 193,601 with average annual growth of 1.7 percent over the preceding decade and 1.0 percent over the five years to June 2017. This growth was 0.1 and 0.5 percentage points less respectively than the average annual growth for Queensland over the corresponding period.

During 2016/17 Townsville's population growth declined to 0.8 percent.

Estimated Resident Population (ERP), for the decade through to June 2017, is outlined within Table 1 below.

Table 1: Estimated Resident Population – Townsville LGA and Queensland

LGA/State	As at 30 June				Average annual growth rate		
	2007	2012pr	2016	2017p	2007–2017p	2012–2017p	2015–2016p
	— number —				— % —		
Townsville	163,509	183,771	192,058	193,601	1.7	1.0	0.8
Queensland	4,111,018	4,569,863	4,848,877	4,928,457	1.8	1.5	1.6

Source: ABS 3218.0, *Regional Population Growth, Australia, various editions*

The ERP growth for Townsville and Queensland is illustrated in Figure 2 below. After 5 years of average growth relative to Queensland, Townsville has experienced lower growth for the five years to June 2017.

Figure 2: Estimated Residential Population Growth, Townsville and Queensland

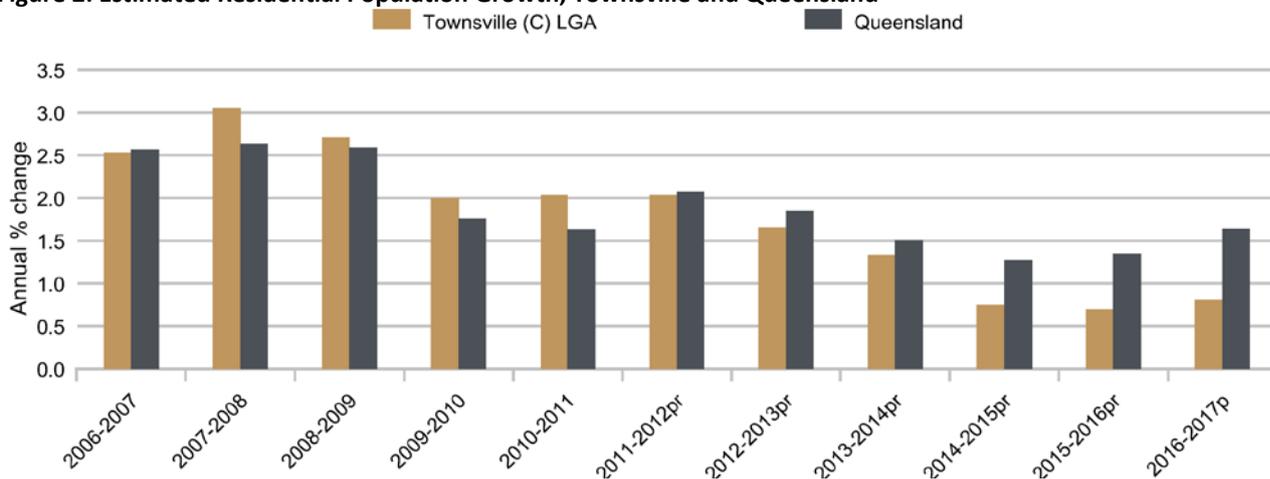


Table 2 outlines the median age for Townsville and Queensland as at 30 June 2016. Townsville had a median age of 33.8 years. This is 3.2 years younger than Queensland's average age and represents an increase of 1.0 year from median age of 32.8 years as at 30 June 2006.

Table 2: Median Age, Townsville and Queensland

LGA / State	As at 30 June			Change
	2006	2011	2016pr	2006–2016pr
	— years —			Years
Townsville	32.8	33.2	33.8	1.0
Queensland	36.1	36.6	37.0	1.0

Source: ABS 3235.0, *Population by Age and Sex, Regions of Australia* data and Queensland Treasury estimates unpublished

Table 3 presents ERP by age for Townsville and Queensland as at 30 June 2016.

Table 3: Estimated Resident Population by age, Townsville and Queensland

LGA/State	Age group									
	0–14		15–24		25–44		45–64		65+	
	number	%	number	%	number	%	number	%	number	%
Townsville	39,270	20.4	30,611	15.9	54,759	28.5	45,174	23.5	22,244	11.6
Queensland	954,598	19.7	649,335	13.4	1,334,934	27.5	1,196,357	24.7	713,653	14.7

Source: ABS 3235.0, *Population by Age and Sex, Regions of Australia*

Compared to Queensland, Townsville has a higher proportion of the population aged 0 – 44 and a lower proportion aged 45- 65+.

Table 4 outlines births and deaths for Townsville and Queensland for calendar year 2016.

Table 4: Registered Births and Deaths, Townsville and Queensland 2016

LGA / State	Births		Deaths		Natural Increase
	Number	Rate ^a	Number	Rate ^a	Number
Townsville	2,679	13.9	961	5.0	1,718
Queensland	61,841	12.8	29,690	6.1	32,151

Source: ABS 3301.0 Births Australia 2016; ABS 3302.0 Deaths Australia 2016. QGSO. (a) Crude rate per 1,000 persons.

Townsville's population naturally increased (Births – Deaths) by 1,718 persons during 2016. With a birth rate of 13.9 people per 1,000 persons and a death rate of 5.0 people per 1,000 persons, Townsville's natural rate of population growth, at 8.9 persons per 1,000 persons, is 2.4 people per 1,000 persons higher than that recorded for Queensland (6.5 persons per 1,000).

Table 5 presents population projections for Townsville and Queensland through to 2036.

Table 5: Projected Population, Townsville and Queensland

LGA / State	As at 30 June						Average annual growth
	2011	2016	2021	2026	2031	2036	2011–2036
	— number —						%
Townsville	180,114	199,358	219,643	241,872	265,015	288,593	1.9
Queensland	4,476,778	4,853,048	5,250,292	5,730,062	6,240,546	6,763,153	1.7

Source: *Queensland Government Population Projections*, 2015 edition (medium series)

The resident population of Townsville is projected to be 249,898 persons as at 30 June 2036. This represents an average increase of 1.9 percent per annum over 25 years.

Table 6 presents unemployment and labour force for Townsville and Queensland as at December Quarter 2017.

Table 6: Unemployment and labour force, Townsville and Queensland, December 2017

LGA / Queensland	Unemployed	Labour force	Unemployment rate
	— number —		%
Townsville	7,840	96,155	8.2
Queensland	156,785	2,573,166	6.1

Source: Department of Employment, *Small Area Labour Markets Australia*, December 2017

At 8.2 percent, Townsville's unemployment rate was 2.1 percent higher than that recorded for Queensland (6.1%) for the December quarter 2017.

Table 7 outlines Indigenous Status for Townsville and Queensland as at Census 2016. 7.0 percent of residents of Townsville identified as being indigenous.

Table 7: Indigenous Status, Townsville and Queensland

LGA / State	Indigenous Persons					Non-indigenous		Total Persons
	Aboriginal	Torres Strait Islander	Both	Total				
	- Number -	- Number -	- Number -	%	- Number -	%	Number	
Townsville	9,591	1,893	1,549	13,040	7.0	160,539	86.0	186,757
Queensland	148,943	21,053	16,493	186,482	4.0	4,211,020	89.5	4,703,193

Source: ABS. Census of Population 2016. Indigenous Profile. Usual Residence. GSO

Table 8 provides selected median and average measures from the 2016 Census for Townsville and Queensland.

Table 8: Select medians/averages, Townsville and Queensland, 2016

LGA / State	Median / Average					
	Median mortgage repayment	Median total family income	Median total household income	Median total personal income	Average household size	Average number of persons per bedroom
	\$/month	\$/week	\$/week	\$/week	persons	number
Townsville	1,733	1,705	1,424	703	2.6	0.8
Queensland	1,733	1,661	1,402	660	2.6	0.8

Source: ABS, Census of Population and Housing, 2016, General Community Profile - B02

At Census 2016, Townsville residents recorded higher median personal, family and household income than Queensland residents/households, while median monthly mortgage repayments were the same as for Queensland.

Table 9 presents the index of relative socio-economic disadvantage for Townsville and Queensland.

Table 9: Population by Index of Relative Socio-Economic Disadvantage, 2016

LGA/State	Quintile 1 (most disadvantaged)	Quintile 2	Quintile 3	Quintile 4	Quintile 5 (least disadvantaged)
	— % —				
Townsville	21.2	26.0	20.7	15.7	16.5
Brisbane	16.6	15.2	18.3	21.0	28.9
Queensland	20.0	20.0	20.0	20.0	20.0

Source: ABS 2033.0.55.001, *Census of Population and Housing: Socio-Economic Indexes for Areas (SEIFA), Australia - Data only, 2016*, (Queensland Treasury derived)

With 47.2 percent of residents in the most disadvantaged quintiles, Townsville has a higher level of disadvantage than that recorded for Queensland (40%).

As at December 2017, the Townsville North Queensland region had Gross Regional Product of \$15.946 billion. This equates to \$69,622.00 per capita or \$153,999.00 per worker. A breakdown of the region’s gross production is outlined in Table 9.

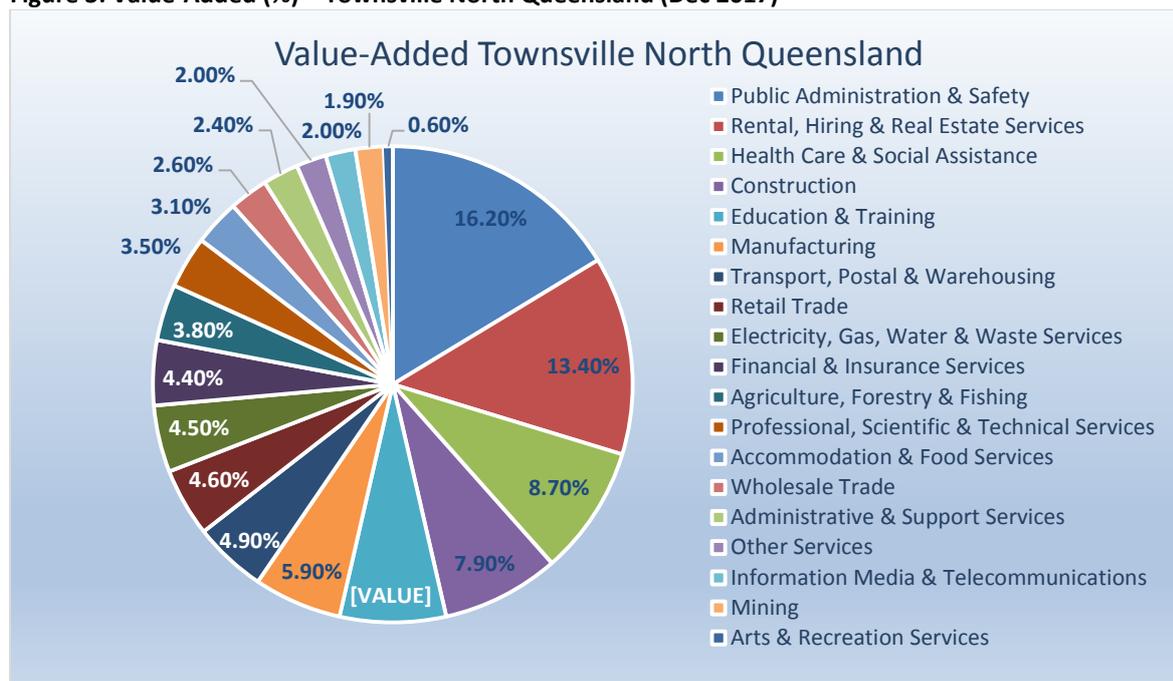
Table 9: Gross Regional Product – Townsville, December 2017

GRP Expenditure Method	\$M
Household Consumption	\$10,213.072
Government Consumption	\$3,255.864
Private Gross Fixed Capital Expenditure	\$3,985.899
Public Gross Fixed Capital Expenditure	\$797.899
Gross Regional Expenses	\$18,252.655
plus Regional Exports	\$8,078.049
minus Domestic Imports	-\$8,650.901
minus Overseas Imports	-\$1,733.871
Gross Regional Product	\$15,945.931

Source: Remplan

Figure 3 outlines value-added by industry sector for Townsville North Queensland as at December 2017.

Figure 3: Value-Added (%) – Townsville North Queensland (Dec 2017)



Source: Remplan

The Townsville North Queensland Region has a diversity of economic drivers with no one sector contributing more than 16 percent to the region’s economy.

Public Administration and Safety is Townsville North Queensland’s largest industry sector, contributing \$2,416M or 16.2% to Gross Regional Product.

Other significant contributing sectors include Health Care and Social Assistance (\$1,299M), Construction (\$1,261M), Education and Training (\$1,051M) and Manufacturing (\$942M).

3. Townsville Situation Analysis

There is broad consensus that, post mining boom, Australia’s “next economic wave”¹ will be derived from:

- Agribusiness
- Tourism
- International Education
- Gas
- Health Services
- Financial Services (banking, wealth management, insurance etc.)

Demand for these services will be driven by increasing prosperity throughout the Indo-Pacific region and the tropics generally. This area accounts for more than 50 percent of global population and 60 percent of the world’s children. Most live in poor but rapidly improving economic circumstances.

Townsville and the North Queensland region has strategic connections to Agribusiness and Tourism and competitive advantages in International Education and Health Services. It is well connected logistically to the Indo-Pacific region.

Figure 4: Townsville Strategic Location



With direct links to mining, agriculture and tourism, no region is better placed to take advantage of Australia’s natural resources and global trade opportunities than Townsville North Queensland.

The city’s estimated resident population of 193,946, makes it Australia’s 13th largest major urban area behind Geelong, Queensland’s 4th largest major urban area behind the Sunshine Coast and the largest city in Northern Australia.

Located approximately 1,200 kilometres north of the State capital – Brisbane, Townsville is Australia largest urban area, not directly linked to its capital by proximity.

Linkages, size and location provide the Townsville North Queensland Region with a diversity of economic drivers with no one sector contributing more than 16 percent to the economy.

As outlined previously, Public Administration and Safety is Townsville’s largest industry sector.

Central to the public sector’s contribution’s is Defence. Home to more than 15,000 Defence personnel and dependents, Townsville is regarded as Australia’s largest garrison city. The region hosts four major defence establishments: Lavarack Barracks; RAAF Base Townsville; Townsville Field Training Area; and the Port of Townsville’s Berth 10 (designed for the Royal Australian Navy).

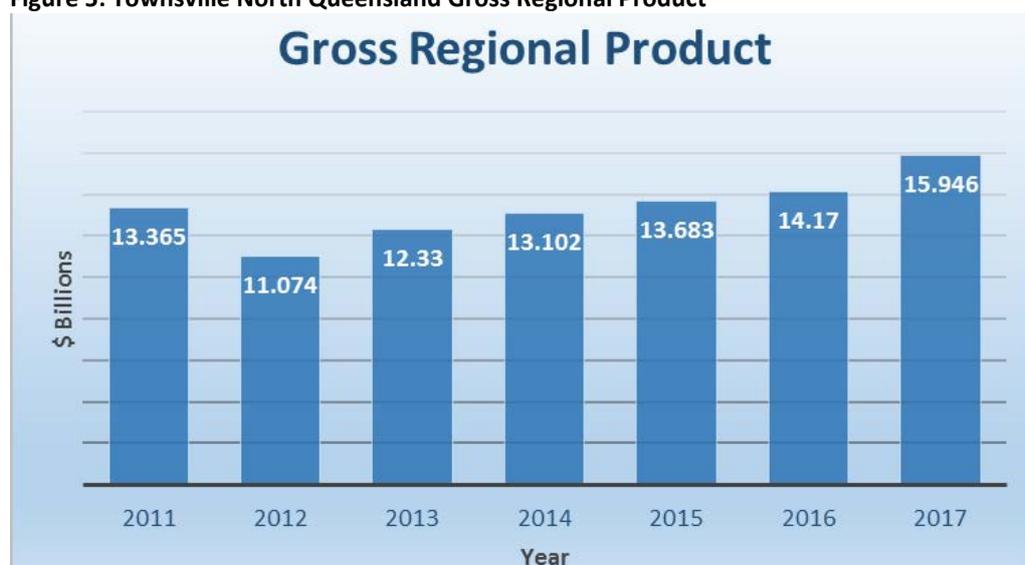
¹ Termed coined by Deloitte Access Economics in its publication Positioning for Prosperity

Townsville’s growth and prosperity has been heavily influenced by government investment including:

- the establishment of James Cook University, Australian Institute of Marine Science, the CSIRO and the Great Barrier Reef Marine Park Authority in the 1960s and 1970s;
- the establishment of Lavarack Barracks and RAAF Base Townsville in the 1960s and 1970s; the Burdekin Dam construction in the 1980s;
- the relocation and redevelopment of Townsville General Hospital as a tertiary teaching hospital; and,
- the redevelopment of the Strand and Jezzine Barracks in the 1990s and 2000s.

Figure 5 graphs Gross Regional Product for the Townsville North Queensland Region for the period 2011 to 2017.

Figure 5: Townsville North Queensland Gross Regional Product



Source: Remplan

After 16 years of continuous rapid growth, predominately driven by mining, manufacturing, health and education, the Townsville North Queensland economy suffered a major recession (17.1 percent decline) in 2012. While nominally the region took almost three years to return to pre-recession levels, in real terms, it took more than five years to recover, only returning to pre-recession levels of production in 2017.

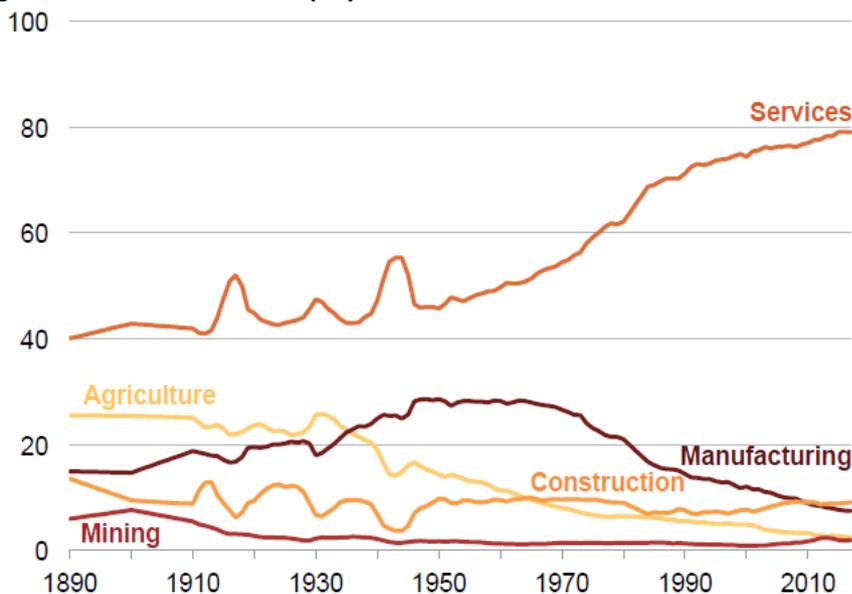
Significant contributing factors to this downturn are a combination of market-driven changes (mining industry demand shocks) and structural change, particularly within the manufacturing sector.

These economic factors are not unique to Townsville. The end of the mining investment boom significantly impacted both Western Australia and Queensland, with regional centres such as the Pilbara, Mackay and Townsville the most impacted. The decline in manufacturing is a national phenomenon, particularly impacting regional centres.

Figure 6 outlines Australia’s sectoral share of employment for the period 1890 through to 2016. As in other countries, Australians are spending a growing share of their income on services². The long-term trend continued over the past two decades, with fewer working in agriculture and manufacturing and more working in services. Since the mid-1980s, the share of jobs in agriculture has fallen from 6.1 per cent to 2.5 per cent and in manufacturing from 16.1 per cent to 7.5 per cent. Townsville is highly exposed to these, particularly the shift in manufacturing.

² Regional patterns of Australia’s economy and population. Grattan Institute 2017

Figure 6: Sectoral Share of Employment



Source: Grattan Institute 2017

Contributing \$942 million, or 5.9 percent of total value-added, Manufacturing is a long established and valued sector within Townsville's economy.

Critical to the sector is Townsville's connection to mining and agriculture. Metals manufacturing contributes \$277.1 million (down from \$365 million with the closure of the Yabulu Nickel Refinery). Chemical and plastics manufacturing contributes \$93 million. Transport equipment and parts manufacturing contributes \$91.6 million and food products (Abattoir, bakeries etc.) manufacturing contributes ~\$85.1 million annually.

It is estimated that Manufacturing employs 5,500 Townsville residents and contributes \$531 million in salaries and wages to the Townsville economy annually.

Townsville has three minerals refining/smelting facilities:

- Queensland Nickel; nickel, cadmium and cobalt
- Glencore Copper Refinery: copper cathode
- Sun Metals: zinc, and sulphuric acid

These facilities use both local and imported product to produce high value-added goods traded on global markets. They are significant contributors to Australia's national accounts.

In January 2016, Queensland Nickels Yabulu Refinery was placed in administration. At the time, the refinery employed approximately 780 people. In the two years leading up to the closure, a further 237 employees were made redundant³. It is estimated that the refinery's closure resulted in the following impacts to the Townsville North Queensland economy:

- \$1.1 billion in output (including \$680 million directly and \$400 million indirectly)
- \$220 million in Gross Regional Product per annum (\$40 million directly and \$180 million indirectly)
- \$150 million in incomes and salaries paid to workers (\$70 million directly and \$80 million indirectly)
- 1,970 Full-Time Equivalent (FTE) jobs (including 780 directly and 1,190 indirectly)

The Glencore Copper Refinery is scheduled to close, potentially within the next five years. The Copper Refinery directly employs approximately 400 people.

³ AEC 2016

The impact on employment is evident in Figures 8 and 9.

Figure 7 presents the quarterly unemployment rate for Townsville and Queensland for the period ending December 2010 through to March 2017.

Figure 7: Unemployment Rate, Townsville and Queensland.



Source: Department of Employment, *Small Area Labour Markets Australia*, various editions

From a low of 4.1 percent recorded in the March Quarter 2013, Townsville’s unemployment rate more than doubled (x 2.5) over the 4 years to record a 22 year high of 10.8 percent in March 2017. The significant contributing factor was the closure of Queensland Nickel’s Yabulu Refinery in 2016. The downturn in mining investment (from 2013) also significantly contributed to unemployment. Over the three quarters to December 2017, the unemployment rate declined to 8.2 percent, an outcome last seen in the March quarter of 2016.

Figure 8 outlines the impact on Townsville’s labour force.

Figure 8: Labour Force⁴, Townsville LGA



Source: Department of Employment, *Small Area Labour Markets Australia*, various editions

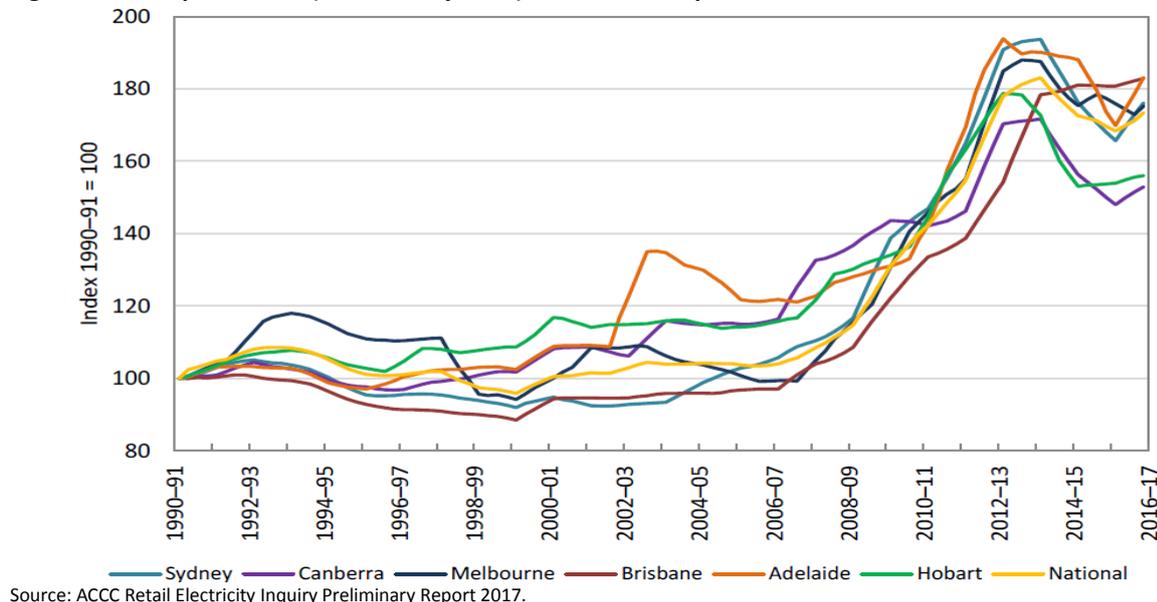
From a high of 106,077 people recorded in the quarter ending 31 December 2011, Townsville’s labour force trended down to 89,577 people in the quarter ending 30 December 2016 (loss of 16,500 or 15.5%). Since the December quarter, Townsville’s labour force has recovered to reach 96,155 as at the December quarter 2017.

The combination of increasing unemployment and decreasing labour force participation suggests a level of unemployment greater than the rate recorded with about 10,000 people giving up on employment or leaving the city.

⁴ 4 quarter smoothed

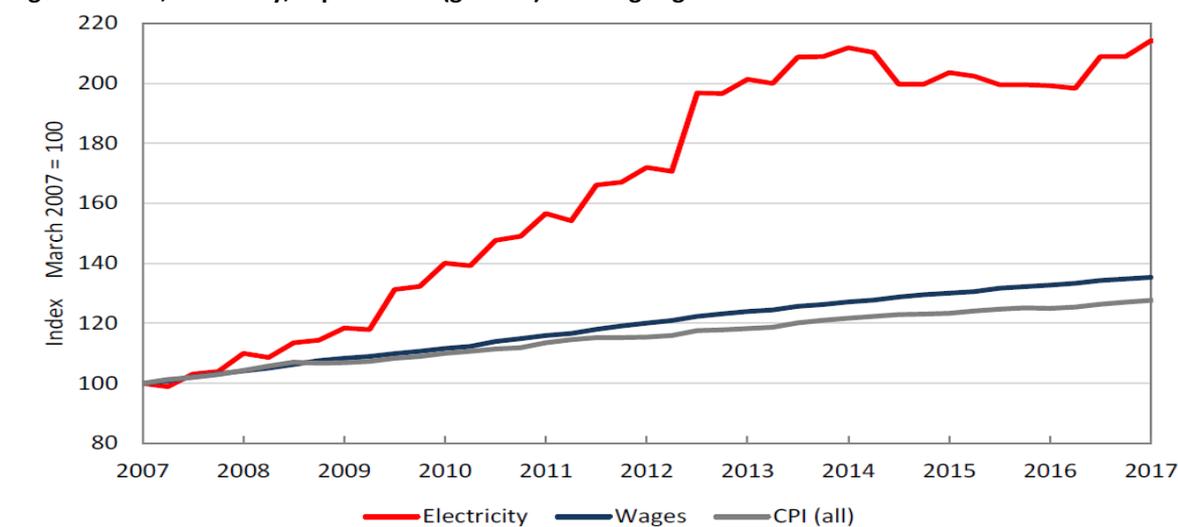
A significant contributing factor to regional industry decline is energy affordability with price increases over the past ten years putting business and residential consumers under pressure. This is due in significant part to successive Australian and state governments failing to balance competing priorities of competition, security, reliability and emissions targets, without regard to the impacts on affordability and business viability. As is evident in Figure 9, policy, regulatory and market decisions have led to dramatically higher prices.

Figure 9: Retail price index (inflation adjusted) – Australian capital cities



These large price increases have not been matched across the economy or in wage growth. Figure 10 below indicates that between 2007 and 2017, electricity prices had a compound annual growth rate of 8 per cent which was more than twice that for wages (3.1 per cent) and triple the CPI rate (2.4 per cent) for the corresponding period.

Figure 10: CPI, electricity, capital cities (general) and wages growth



This situation is exacerbated in North Queensland due to our proximity to generation and subsequent reliance on transmission. Since the introduction of a national electricity market, the delivered price of electricity in the North has been up to 25% higher than comparable areas in the State. Significant factors contributing to higher input costs include high transmission use of system (TUOS) and marginal loss factor (MLF) charges levied by Energy Queensland (Powerlink). This significantly impacts the competitiveness of industry and is a major disincentive to investment resulting in the loss of opportunity.

North Queensland’s largest industrial power user, Sun Metals, have noted that their power costs (around \$50-60M pa) have tripled over the last 15 years, and the additional cost associated with energy and its transmission are impacting their competitiveness. Sun Metals has noted that if their plant had been in Gladstone rather than Townsville they would save approximately \$10.5M per annum on transmission charges alone.

Electricity prices have gone from a source of regional competitive advantage to a drain on business productivity. Townsville, with its exposure to energy intensive metals processing and refining, is at the leading edge of the shift from manufacturing to services. This is occurring however without recognition or structured support from government to mitigate and facilitate the transition.

Outcomes in energy are similar to those experienced within other critical regional markets including insurance and telecommunications.

Figure 11 outlines the relative size of Northern Australian home and content markets for 2016/17. As illustrated, North Queensland makes up approximately 4 per cent of policies nationally, yet accounts for about 8 per cent of national premium revenue.

Figure 11: Northern Australia Home and Contents Markets 2016/17



Source: ACCC Northern Australia Insurance Inquiry Update Report – June 2018

In 2016/17 the average annual home and contents insurance premium in North Queensland was approximately \$2,000, which is double the average premium reported for the rest of Australia at \$1000 per year.⁵ The average in premiums per sum insured (per \$1,000 insured) illustrate even greater disparity at more than double the rate for the rest of Australia.

Figure 12: Average annual premium and premium per \$1000 sum insured 2016/17



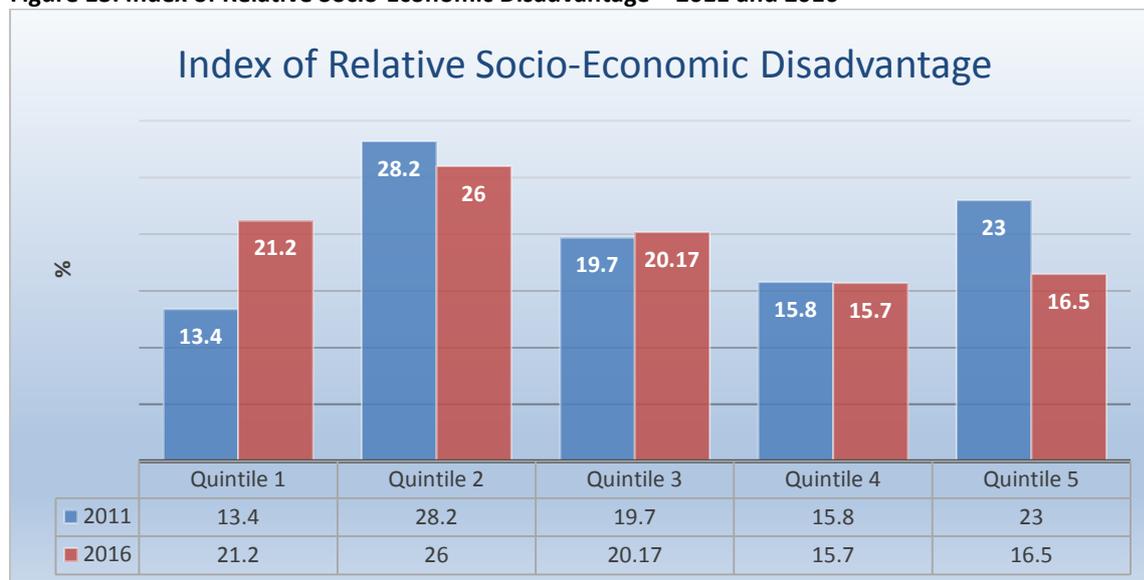
Source: ACCC Northern Australia Insurance Inquiry Update Report – June 2018

⁵ ACCC Northern Australia Insurance Inquiry Update Report – June 2018

For low income or vulnerable households, meeting increases in electricity and insurance costs often results reducing expenditure on household basics like food, children’s educational needs or healthcare, or deferring household repairs or basic transport costs.

The loss of high paying jobs in mining and manufacturing has had a marked impact on the level of social and economic disadvantage experienced within Townsville. Figure 13 compares the relative socio-economic disadvantage experienced over the inter-censal period 2011-2016.

Figure 13: Index of Relative Socio-Economic Disadvantage – 2011 and 2016



Source: ABS 2033.0.55.001, *Census of Population and Housing: Socio-Economic Indexes for Areas (SEIFA), Australia - Data only, 2011 & 2016*, (Queensland Treasury derived)

The Socio-Economic Indexes for Areas (SEIFA) 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.

The impact is most evident in the changes in Quintile 1 (most disadvantaged) and Quintile 5 (least disadvantaged). Residents within the most disadvantaged quintile (1) went from a below Queensland average level of 13.4 percent in 2011 to an above Queensland average of 21.2 percent in 2016 (increase of 7.8% of the population). Conversely, those within the least disadvantaged quintile (5) have gone from an above average level of 23 percent in in 2011 to a below average level of 16.5 percent in 2016.

Based on 2016 census SEIFA estimates, 21.2 per cent of Townsville residents are in the most disadvantaged quartile and at significant risk of having trouble in meeting high electricity and insurance costs.

High levels of disadvantage often translate to higher levels of criminality. Table 10 presents the reported offences for both Townsville and Queensland for 2016/17.

Table 10: Reported Offences, Townsville and Queensland, 2016/17

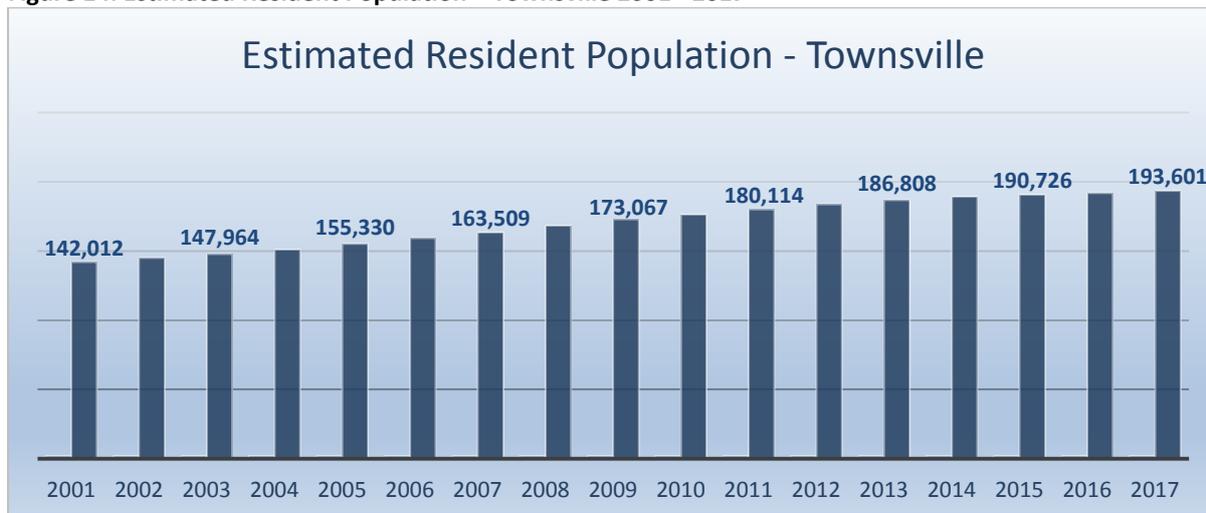
LGA/ State	Type of Offence							
	Offences against the Person		Offences against Property		Other Offences		Total	
	number	rate ¹	number	rate ¹	number	rate ¹	number	rate ¹
Townsville	2,315	1,197	12,246	6,322	12,707	6,571	27,268	14,100
Queensland	34,349	699	230,473	4,691	233,510	4,753	498,332	10,142

Source: Queensland Police Service; ¹ rate per 1000 people

Townsville’s rate of total reported offences per 1,000 people is 39 per cent higher than that recorded for Queensland in the corresponding period.

Figure 14 examines Townsville Estimated Resident Population for the period 2001 to 2017.

Figure 14: Estimated Resident Population – Townsville 2001 - 2017

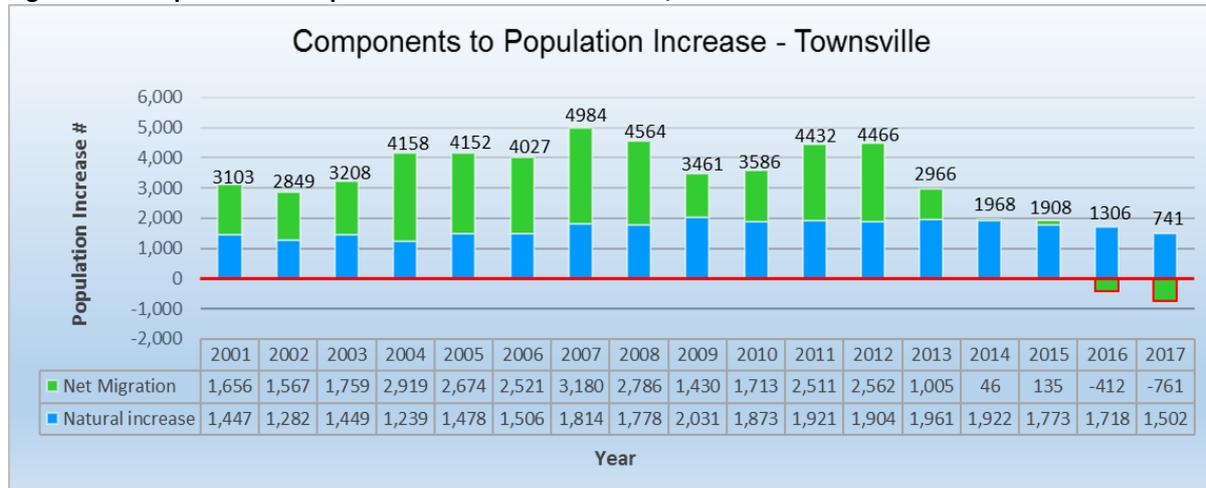


Source: ABS 3218.0, *Regional Population Growth, Australia, various editions*

The average rate of population increase has declined from 1.8 percent per annum over the 10 years to 2017, to 0.8 percent for the year ending 30 June 2017.

Changes in population occur due to a combination of natural increase/decreases (Births minus Deaths) and net migration increase/decreases (immigration minus emigration). Figure 15 illustrates the components to population increase for the period 2001 through to 2017.

Figure 15: Components to Population Increase – Townsville, 2001 – 2017.



Source: ABS 3218.0, *Regional Population Growth, Australia, various editions*. ABS 3301.0 Births Australia; ABS 3302.0 Deaths Australia various editions. QGSO.

Over the 17 years to 2017, Townsville averaged net migration of 1,858 per annum. Recent net migration peaked in 2007 (pre-GFC) at 3,180 with a sharp decline coinciding with the end of the mining boom in 2013. In 2017, net migration was -761. This was the second consecutive year of negative migration. The downturn in mining investment and the closure of Queensland Nickel’s Yabulu Refinery were significant contributing factors to declines in net migration. This has also been compounded by recent restructuring of Australian Public Service functions within Townsville, resulting in the estimated loss of 200 full-time equivalent positions.

Given the physical and emotional effort involved in moving inter-regionally, there is a significant lag between loss of employment and emigration. This is evident in Figure 16, with net migration going into decline in 2016 (-412) and 2017 (-761). This decline will continue until Townsville returns to pre-recession employment levels of approximately 100,000 jobs. This requires the addition of approximately 10,000 jobs (10%).

4.2 What causes regions to prosper?

Long-term regional prosperity is intrinsically linked to:

- access to markets and competitively priced inputs of production
- scale (population and industry)
- diversity of, or the ability of the region to diversify
- Skills and education
- amenity (lifestyle and services)

Agglomeration economics explains that already concentrated populations tend to grow faster because they have access to markets, high quality human capital, and the infrastructure that facilitates economic interactions⁷.

The development of knowledge-based service industries relies on the concentration of firms and services. Government has a role in developing the infrastructure and architecture (physical and soft) necessary for people to acquire knowledge and for businesses to innovate and develop. This includes facilitating access to markets and creating the liveability needed to attract and retain skilled people. It also includes equitable availability of government services and distribution of government expenditure.

Where a region's economy is significantly centred on an historic advantage, and one or more factors of production change over time, then that region is at risk of structural decline and subsequent socioeconomic disadvantage. This was the situation for Newcastle in the 1980s and 90s with its economy founded on competitive advantages in natural resources (coal & iron ore & steel manufacturing). The transition for Newcastle was centred on economic diversification with a focus on service industries. Initiatives focused on the architecture for innovation and entrepreneurship and creating the urban environment (CBD) attractive to industry.

Newcastle's economic adjustment was lead, managed and coordinated through local, state and federal partnerships, with funding significantly provided by the Commonwealth and New South Wales governments. It played a significant part in facilitating the necessary economic transition, while revitalising the CBD and mitigating the social and personal costs of adjustment.

Newcastle's situation in the 1980s and 1990s is not dissimilar to Townsville's today.

Successful adjustment and transition requires that all levels of government, the private sector and community work together to achieve shared goals and objectives. This needs a well communicated multilateral strategic approach, working across government and electoral cycles, with a focus on employment creation, economic diversification and re and upskilling initiatives.

⁷ Grattan 2011

4.3 Policy settings: addressing regional inequality

Broadly speaking, regional development policy should provide a practical response to state and national growth management needs. It should extend the focus of state and federal governments beyond capital cities to more evenly, efficiently and equitably spread growth, to provide regional development opportunities and address socioeconomic disadvantage. Practical measures to achieve this could include, inter alia:

- Subsidised and/or supported essential service provision (energy, insurance, labour etc.)
- Decentralisation of government services. This should be more than moving a department or office from Sydney to Paramatta or from Melbourne to Geelong
- Regional location incentives – (e.g. business and individual tax incentives, including meaningful zonal tax offsets that recognise regional inequality and the additional cost of living within regional and remote areas)
- Local procurement processes – local industry engagement policies and procedures
- funded regional development plans
- Budgeted regional infrastructure plans

Infrastructure investment does play an important role in mitigating disadvantage and redirecting growth to targeted locations. Provision of quality infrastructure and services in regional centres is a vital element of any strategy to attract investment and population growth.

The process of addressing regional inequality starts with a commitment from all levels of government to work together to deliver common goals. These partnerships, and the initiatives enacted within them, must recognise the relative capacity of partners, with the federal government taking the significant resourcing role.

At a targeted level, policies and programs to address regional industry adjustment and inequality need to be developed and implemented at the local level through inter-governmental and community partnerships. This requires whole-of-government partnerships working together to identify barriers, develop agreed goals and implement specific initiatives and programs.

In December 2016, the Commonwealth, Queensland Government and Townsville City Council enacted Australia's first City Deal.

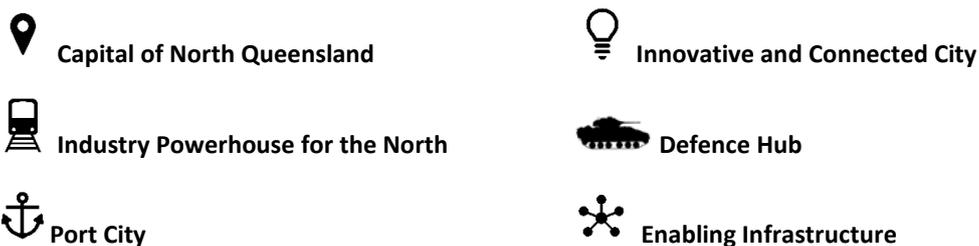
The Townsville City Deal is a 15-year inter-governmental commitment focused on improving the lives of Townsville residents. It provides an approach for government and the community to work together to deliver transformative outcomes for Townsville. The framework has been designed to transform Townsville and drive economic growth. Over 15 years the Townsville City Deal will:

- revitalise development, particularly in the city and Waterfront PDA
- activate industry and export growth
- support long term growth of local businesses
- enhance liveability
- improve planning, coordination and governance.

The process and timelines for the City Deal are outlined below.



The objectives of the Townsville City Deal will be delivered through the following broad initiatives:



Details of the City Deal are available at: <https://cities.infrastructure.gov.au/townsville-city-deal> .

The Townsville City Deal is in its second year of implementation. While Townsville City Council is encouraged with progress made in establishing the deal, further work must be done to drive outcomes under the deal. The level of funding commitment and practical implementation to drive investment and social equality, particularly at the federal level, has been disappointing. This lack of commitment is evident in the 2018/19 Federal Budget outcomes as discussed in section 4.1 above, and Townsville City Council looks forward to the opportunity to redress this situation.

The Townsville City Council has identified a number of priorities requiring federal support.

 **Regionalisation Policy:**

- Relocation of federal government functions to Townsville and the devolution of authority and decision making to regional Australia
- Supported regional immigration schemes
- Supported foreign student programs
- Improved availability of reliable regional social, economic and demographic data and analysis

 **Defence:**

- Revisit and elevate the Defence Working Group under the City Deal
- Development and implementation of Townsville focus defence procurement strategy
- Townsville to be developed as a deep maintenance, sustainment and logistic hub
- Co-location/relocation of defence trade training schools to Townsville
- Establish a permanent navy presence in support of 2 RAR's role as the Australian army's principal amphibious force
- Acceleration of capital works programs

  **Water:**

- Army to partner with Council in the proposed water reuse scheme for Lavarack Barracks
- Funding support for green energy (solar) water pipeline pumping upgrade
- Medium term support for future water security infrastructure developments and upgrades

   **Port Channel Widening:**

- \$75 million towards contribution towards Townsville Port Channel widening



Transport Infrastructure:

- Acceleration of North Queensland Bruce Highway initiatives
- Increased investment in upgrades to the Mount Isa Rail Line



Knowledge and Innovation:

- Development of Australian Tropical Marine and Aquaculture Centre within the CBD
- Support for Townsville implementing its Smart City Strategy to capitalise on the next wave of digital infrastructure, skills and jobs
- Employment re and upskilling initiatives
- Support for innovative economic investment opportunities and partnerships with the private sector such as those presented by a Lithium Ion Battery Plant or construction of a major lagoon on the Strand



Price Parity

- Investment in new energy generation in the north
- Introduction of energy retail competition to North Queensland
- Supported access to solar PV, smart meters and energy efficient appliances to reduce energy demand for low income households
- Greater regulatory scrutiny on insurance pricing and encouragement of regional insurance market reform

5. Conclusion

Regional inequality does exist. A significant contributing factor is the shift from resource (agriculture, mining, and manufacturing) to service industries. This shift has profound geographic consequences with the loss of jobs in manufacturing and agriculture most acutely experienced in regional centres. Skilled service jobs are in high demand, but these cluster in capital cities. Governments respond by increasing scarce infrastructure investment in these cities. The resultant inequalities are impacting the political climate with the influence of minor parties increasing, particularly in regional Australia. This is a logical response to the perception of political biases.

Townsville is being impacted by synchronised cyclical (mining) and structural (manufacturing) industry decline. This is being compounded by Federal Government fiscal decisions resulting in the loss of Australian Public Service jobs within the city. These forces underlie deterioration in confidence, investment, employment, income and growth. The subsequent economic and demographic effects are cause for government intervention to allow the region, its industries and residents, to adjust effectively and take advantage of new opportunities arising from the Indo-Pacific region.

A significant contributing factor to regional decline is energy affordability. This is due in significant part to successive Australian and state governments failing to balance competing priorities of competition, security, reliability and emissions targets, without adequate regard to the impacts on affordability and business viability. Like energy, significantly higher cost of household and business insurance and travel is creating regional inequality and cost of living pressures for Townsville residents.

The Townsville City Deal is a 15-year commitment focused on improving the lives of Townsville residents through job creation, economic growth, investment in local infrastructure, a revitalised urban centre, and a more vibrant and liveable city. It provides an approach for government to work together to deliver transformative outcomes for Townsville⁸. Enacted in December 2016, the Townsville City Deal has spent much of the ensuing time in understanding the economic climate and the factors impacting it and in developing and implementing plans to redress these.

Given the economic climate, increasing social disadvantage and the commitment provided under the City Deal, Townsville and North Queensland are very disappointed with the 2018/19 Federal budget. Townsville received no additional funding and was not specifically included in any capital works initiatives. Nothing was delivered under the City Deal.

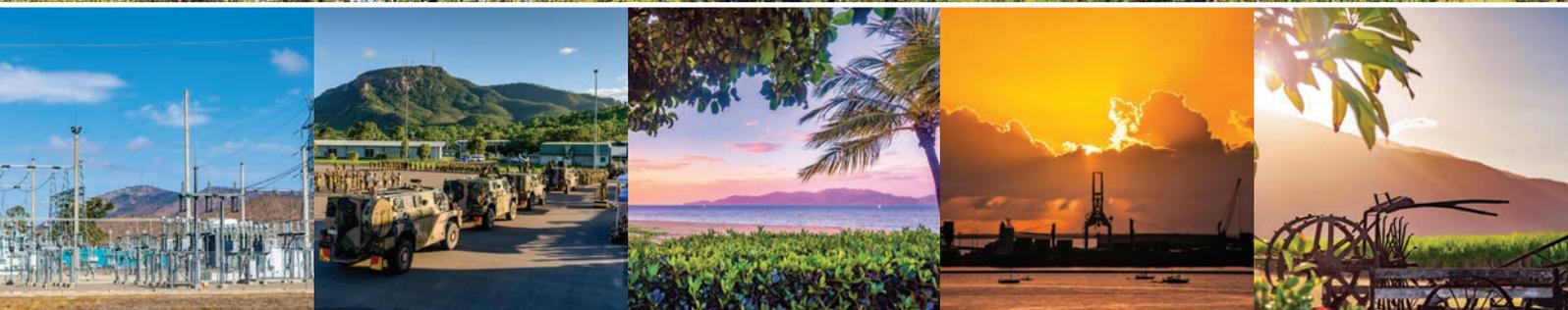
Governments hold a central role in mitigating disadvantage and redirecting growth to targeted locations. The City Deal provides the basis to achieving this for Townsville. We look forward to working with the Federal Government in achieving the objectives of the Townsville City Deal in a timely and tangible way.

⁸ Townsville City Deal 2016.

TOWNSVILLE NORTH QUEENSLAND

Federal Government Budget Submission

2018



FOREWORD

Townsville North Queensland encompasses five major regional centres: Townsville, Charters Towers, Burdekin, Palm Island and Hinchinbrook. The region contributes over \$15.94B annually to the Queensland economy and is home to nearly 240,000 people. Townsville itself is now Australia's 13th largest city and is acknowledged by State and National Governments as the 'Capital of Northern Australia'. The region has one of the most diverse economic bases in Australia and enjoys a stunning natural environment that provides tourism growth opportunities and an attractive lifestyle for its residents.

Key state and national policy documents highlight the critical importance of Townsville and North Queensland as a driver of national economic growth and job creation. The signing of Australia's first ever City Deal for Townsville is testament to the commitment of three levels of Government to drive economic growth, unlock potential for the broader region and encourage business and industry development to help Townsville and North Queensland become:

- › the economic gateway to Asia and Northern Australia;
- › a global leader in tropical and marine research and innovation;
- › a prosperous and highly-liveable city for residents and visitors.

But Townsville and its immediate region has been doing it tough in recent years and needs targeted government investment and policy support to reverse economic decline.

Investment in projects such as the North Queensland Stadium and the Singapore-Australia Comprehensive Strategic Partnership are welcome initiatives that are applauded in the region, but much more needs to be done if the region's true potential is to be unlocked for local, state and national benefit.

As a community we have all worked hard to secure major investments into projects and, to their credit, Local, State and Federal Governments have played major roles in the economic recovery of the North Queensland region. As a result, the region is proud to boast a multimillion dollar pipeline of projects that is driving renewed confidence and investment and more than 10,000 jobs have been created in the past 12 months.

Projects and policies that promote economic diversification and growth are key and leading those priorities is a major focus on the issues of Water and Energy. For a region abundant with natural resources, it is no longer acceptable for our businesses and our community to live with the unsustainable costs of accessing these basic necessities and this budget submission strongly focuses on addressing these two economic development inhibitors.

Supporting the Water and Energy priorities are a package of projects and policies that will drive new job generation, create economic opportunity and encourage business and industry to invest.

Townsville Enterprise is calling on the Federal Government to commit to the following:

Enabling Infrastructure

- › Water Security for Townsville
- › Sustainable North Queensland Energy Pricing and Infrastructure

Port City

- › Port of Townsville Channel Capacity Upgrade Project
- › Townsville Eastern Access Rail Corridor (TEARC) and the Mount Isa to Townsville Rail Connection

Defence

- › Townsville – Australia's Northern Defence Deep Maintenance, Sustainment and Logistics Hub
- › Centre for ADF Amphibious Capability

Capital of Northern Australia

- › Townsville population target and relocation of Government bodies

Destination Development

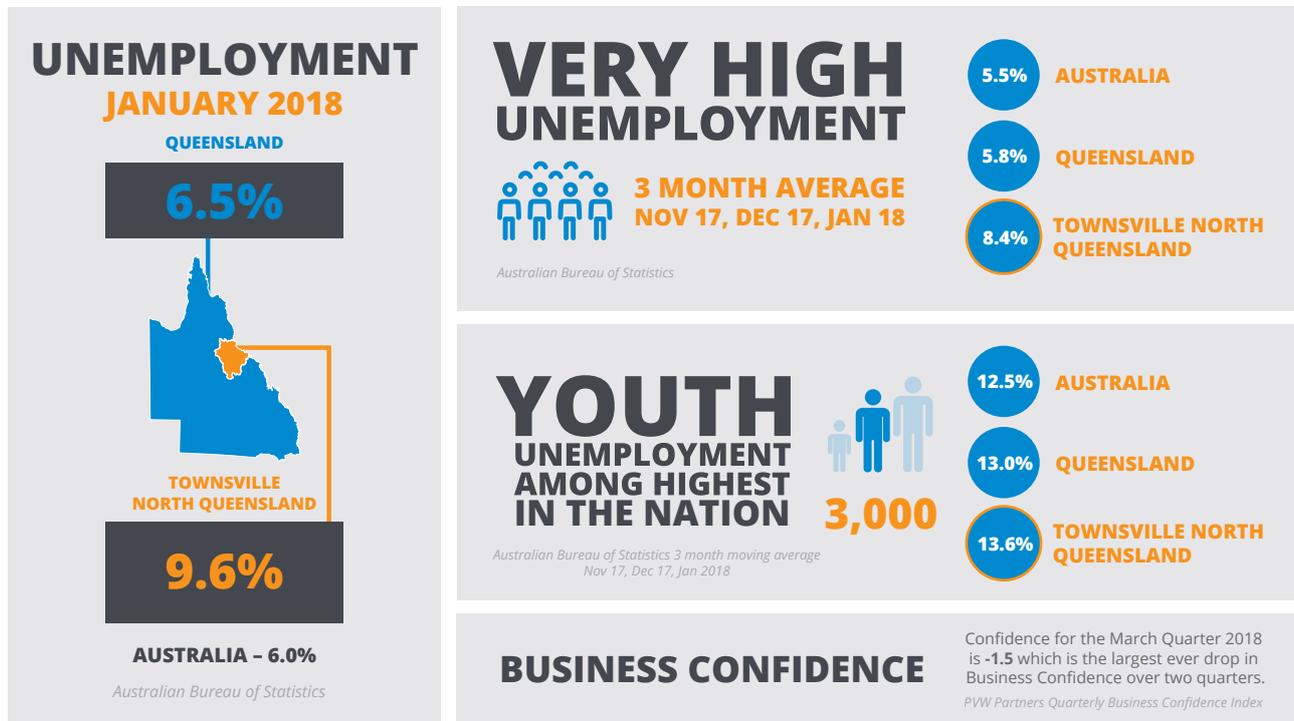
- › Australian Tropical Marine and Aquaculture Centre
- › Museum of Underwater Art (MOUA)
- › Reef HQ Upgrade

Supporting the Regions

- › Use of Macro-Algae to Remediate Sewerage Effluent
- › Warren's Gully System Capacity Upgrade

TOWNSVILLE NORTH QUEENSLAND LOCAL CONTEXT

SHORT TERM ECONOMIC SNAPSHOT



LONG TERM GROWTH FUNDAMENTALS



SUMMARY OF RECOMMENDATIONS

To continue enabling the growth of Townsville North Queensland, Townsville Enterprise is calling on the Federal Government to support the following priority areas:

ENABLING INFRASTRUCTURE

WATER SECURITY FOR TOWNSVILLE

- › Commission and complete business case studies for connecting the Houghton Pump station to the adjoining high-voltage transmission network and developing an integrated solar energy array to offset energy costs;
- › Progress the final investment decision for the development of Stage 2 of the Burdekin Falls Dam within the next term of the Queensland Parliament, dependent on the Burdekin Falls Dam Raising Feasibility Study;
- › Commit to a whole-of-government approach to the development of the Big Rocks Weir and the increased allocation of water under the Burdekin Basin Water Plan.

SUSTAINABLE NORTH QUEENSLAND ENERGY PRICING AND INFRASTRUCTURE

- › Fast-track the establishment of cost effective 'clean technology' base load generation in North Queensland (seek diversification of ownership);
- › The next 2,000MW of electricity generation to be licensed in Queensland must be based in North Queensland and connected to the grid north of Collinsville;
- › Federal Government must use its influence to police the behaviour of the generators so that wholesale prices match the costs of production – not prices driven by market distortion;
- › A review of the existing regulatory framework must be expedited in order to address North Queensland's particular issues (this may require the establishment of a different regulatory framework to that of South East Queensland); and
- › Ensure North Queensland has future access to competitively priced natural gas.

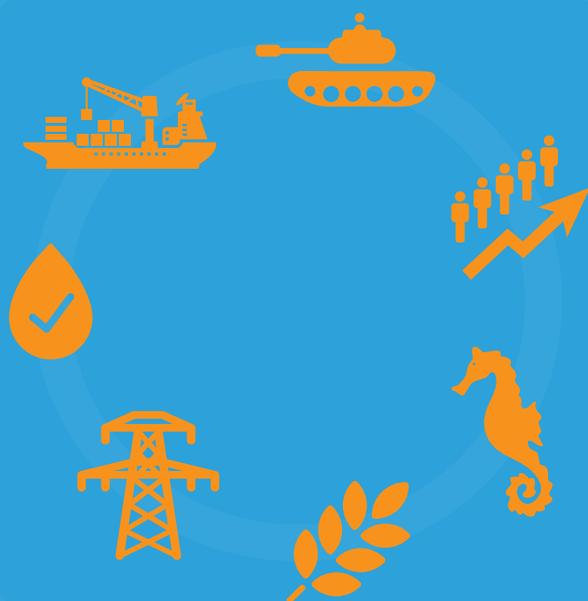
PORT CITY

PORT OF TOWNSVILLE CHANNEL CAPACITY UPGRADE PROJECT

- › The Federal Government to match the State Government's commitment of \$75M towards the \$193M Port of Townsville Channel Capacity Upgrade Project to enable the project to proceed.

TOWNSVILLE EASTERN ACCESS RAIL CORRIDOR (TEARC) AND THE MOUNT ISA TO TOWNSVILLE RAIL CONNECTION

- › Federal Government and State Government to work in partnership to identify public and private sector financing models that will ensure construction of TEARC can commence as soon as possible;
- › Prioritise and financially support a long-term operating, funding and investment model for the Mount Isa to Townsville Rail Line that ensures it is a nationally competitive and efficient freight corridor.



DEFENCE

TOWNSVILLE – AUSTRALIA’S NORTHERN DEFENCE DEEP MAINTENANCE, SUSTAINMENT AND LOGISTICS HUB

- › Acknowledge the role and State imprimatur of the newly established ‘North Queensland (NQ) Defence Advisory Board’;
- › Support allocation of relevant elements of the Defence CRC for ‘Trusted Autonomous Systems’ to Townsville;
- › Undertake a study evaluating the economic and operational considerations supportive of centralising the Army’s Rotary-Wing Fleet and maintenance in Townsville NQ;
- › ADF to conduct a study to determine infrastructure enhancements, road, rail, warehousing, required to support the increased presence of the Singapore military in North Queensland;
- › In support of 2nd Battalion’s role as the Australian Army’s principal amphibious force, establish a permanent Navy presence (through rotation) of one of the RAN’s three amphibious ships berthed at Townsville Port from 2019; and
- › Support for the co-location/ relocation of Defence trade training schools and maintenance units with corresponding force elements presently stationed in Townsville.

CENTRE FOR ADF AMPHIBIOUS CAPABILITY

- › In support of 2nd Battalion’s role as the Australian Army’s principal amphibious force, establish a permanent Navy presence (through rotation) of one of the RAN’s three amphibious ships berthed at Townsville Port from 2019;
- › Establish an Amphibious Centre of Excellence in Townsville; and
- › Relocate certain maintenance, administrative, training and logistics activities from Fleet Base East to Townsville from 2019.

CAPITAL OF NORTHERN AUSTRALIA

HIGH GROWTH POPULATION TARGET & RELOCATION OF GOVERNMENT BODIES

- › High growth population target commitment;
- › Implement whole-of-government North Australia Population Policy; and
- › Legitimate consideration of the relocation of relevant Federal Government department and agency functions to Townsville North Queensland, supportive of long-term growth and regional sustainability.

DESTINATION DEVELOPMENT

AUSTRALIAN TROPICAL MARINE AND AQUACULTURE CENTRE

- › Provide support for the development of the Australian Tropical Marine and Aquaculture Centre to be based in the Townsville CBD.

MUSEUM OF UNDERWATER ART (MOUA)

- › The Federal Government provide \$5M to support the development of the Southern Hemisphere’s first Underwater Art Museum.

SUPPORTING THE REGIONS BURDEKIN SHIRE COUNCIL

USE OF MACRO-ALGAE TO REMEDIATE SEWERAGE EFFLUENT

- › Federal Government to provide \$2M in funding to support the use of macro-algae to remediate sewerage effluent harmful to the Great Barrier Reef.

WARREN’S GULLY SYSTEM CAPACITY UPGRADE

- › Provide funding support to improve distribution infrastructure to provide water delivery to the southern end of the Burdekin Shire and maximise the region’s agricultural capacity.

ENABLING INFRASTRUCTURE WATER SECURITY FOR TOWNSVILLE

Recommendation

- › Commission and complete business case studies for connecting the Houghton Pump station to the adjoining high-voltage transmission network and developing an integrated solar energy array to offset energy costs;
- › Progress the final investment decision for the development of Stage 2 of the Burdekin Falls Dam within the next term of the Queensland Parliament, dependent on the Burdekin Falls Dam Raising Feasibility Study;
- › Commit to a whole-of-government approach to the development of the Big Rocks Weir and the increased allocation of water under the Burdekin Basin Water Plan.

The Issue

South East Queensland normally has around 10 years' water supply in storage, whereas the Townsville North Queensland region only has around two years' supply.

Townsville North Queensland's lack of water infrastructure is constraining development across the region. While the Burdekin is the third largest river system in Australia, only 2% of its water is currently captured.

The Townsville City Council Local Government Area is on Level 3 Water Restrictions and commenced pumping from the Burdekin Dam on 13 November 2017.

1. Townsville Water Security

The Townsville Water Security Taskforce handed down its Interim Report to Local, State and Federal Governments in June 2017. This report recommended that the following works commence immediately:

- a) Build an additional 1,800mm diameter steel pipeline and install additional pumps (of 234ML/day capacity) from Houghton Pump Station to Ross River Dam;
- b) Increase the capacity by 234ML/day of the existing SunWater pump station and gravity channel from Clare to Houghton Pump Station; and
- c) All levels of Government to work towards more appropriate energy solutions including:
 - › Sourcing cheaper energy by connecting new and existing pumps at the Houghton Pump Station to nearby high voltage lines; and
 - › Embracing green energy via the installation of battery-ready 5MW solar energy array to offset energy costs and sell excess into the National Energy Market.

Townsville Enterprise recognises and commends the bipartisan political commitment of \$225M to deliver the duplication of the Houghton Pipeline. Given the significant constraints and risks inherent in the existing pipeline, the ongoing nature of water shortages for Townsville, and Townsville North Queensland's unacceptably high level of unemployment, Townsville Enterprise is seeking Federal Government support for the acceleration of funding for this project over two years and not the four years currently forecast.

As yet there has been no commitment to investigate and/or implement recommendation c). The prohibitive cost of pumping ensures that Townsville remains on level 3 water restrictions. If Townsville is to viably achieve the required level of water security, it must significantly increase the efficiency and reduce the cost of pumping from the Burdekin system. Townsville Enterprise is seeking support for the timely completion of feasibility studies and business cases for the connection of the Houghton Pump Station to the adjoining Powerlink high-voltage network and the potential development of an integrated solar energy array to reduce and offset energy costs.

2. Regional Water Security

The Burdekin River Basin covers an area of 136,000 km², equating to almost 3/5^{ths} of the size of the state of Victoria. The Burdekin River is Australia's largest river by (peak) discharge volume. Located approximately 200 km south of Townsville, the Burdekin Falls Dam is Queensland's largest dam (1,860,000ML or 4 times the capacity of Sydney Harbour). The Dam supplies irrigation in the Lower Burdekin as well as mining in the Bowen Basin. It is currently an alternative source of urban water supply for Townsville (pumping commenced on 13 November 2017).

<< *Continued*

Future agricultural (Water for Bowen) and industrial (Mining Galilee Basin) demand for water, combined with Townsville's increasing reliance on the Burdekin as population increases, will place increasing pressure on Dam water allocations. Dam safety upgrade is also required to meet State guidelines.

The Burdekin Falls Dam was designed and developed to go to Stage 2 (Dam wall raised 2 metres, to deliver 150,000ML). In addition to increased water supply, the raising of the wall will improve the viability of the proposed pump hydro and increase the long-term efficiency of directly supplying Townsville's water. There are benefits in incorporating Stage 2 into the Dam safety upgrades required by 2035.

The Department of State Development is undertaking a feasibility study into raising the Burdekin Falls Dam. The study is due for completion in the first quarter of 2018. Dependent on the recommendations of the Burdekin Falls Dam Raising Feasibility Study, Townsville Enterprise is seeking a commitment to progress the final investment decision for the raising of the Burdekin Falls Dam.

3. Developing the Upper Burdekin – The Dalrymple Scheme

Townsville Enterprise is currently undertaking the Hells Gates Dam Feasibility Study. This Study is looking at the opportunity for large-scale irrigated agriculture within the Upper Burdekin (The Dalrymple Scheme).

It will also investigate the viability of a water pipeline to Townsville. The Study will be completed in the second quarter of 2018. It is a strategic project, which, if feasible, will be developed over a 10–20 year plus timeframe.

Initial findings indicate the availability of approximately 60,000 hectares of soil suitable for irrigated agriculture in proximity to the Burdekin River. The likely water delivery and storage mechanisms will be a series of weirs supported by a drought and flood mitigation Dam at Hells Gates. The Charters Towers Regional Council has strongly advocated for the building of the Big Rocks Weir over many years. The Weir would augment urban and industrial supply of Charters Towers and ultimately facilitate and support the development of up to 20,000 hectares of irrigated agriculture. The project has the support of local landholders, who are prepared to make significant on-farm investments to make the project viable. Big Rocks Weir is critical to the development of the Dalrymple Scheme and would be required at an early stage in the Scheme's development.

Townsville Enterprise is seeking a commitment to a whole-of-government approach, led by the Coordinator General, to the design, approval and development of the Big Rocks Weir supporting economic development within the Upper Burdekin. Townsville Enterprise is also calling on the Queensland Government to increase the water allocation for the Upper Burdekin (currently restricted to 20,000ML) as part of the review of the Burdekin Basin Water Plan.

The Solution

Townsville Enterprise is seeking Government support for the whole-of-catchment management and development of the Burdekin Basin water resources. Priorities for the region are:

- › Accelerated delivery of secure and affordable water for Townsville;
- › Finalisation of the business case for Burdekin Falls Dam Stage 2 with a final investment decision;
- › Whole-of-government approach to the assessment, approval and development of Big Rocks Weir and the establishment of large-scale irrigated agriculture in the Upper Burdekin.

ENABLING INFRASTRUCTURE SUSTAINABLE NORTH QUEENSLAND ENERGY PRICING / ACCESS

Recommendation

- › Fast-track the establishment of cost effective 'clean technology' base load generation in North Queensland (seek diversification of ownership);
- › The next 2,000MW of electricity generation to be licensed in Queensland must be based in North Queensland and connected to the grid north of Collinsville;
- › Federal Government must use its influence to police the behaviour of the generators so that wholesale prices match the costs of production – not prices driven by market distortion;
- › A review of the existing regulatory framework must be expedited in order to address North Queensland's particular issues (this may require the establishment of a different regulatory framework to that of South East Queensland); and
- › Ensure North Queensland has future access to competitively priced natural gas.

The Issue

North Queensland electricity prices are having a crippling affect upon industry and the local economy. Base electricity prices, exclusive of network and environmental charges, have more than doubled in the past three years (between 2015 and 2017) and continue to increase at a rate of 30% year on year.

The current uncertainties over pricing and secure access to energy markets, including Townsville's lack of connection to the national natural gas network, is negatively impacting upon the national and international competitiveness of North Queensland industry, the region's capacity to attract investment and the economy's ability to generate sustainable employment.

Australia's real electricity prices have increased far more than any other OECD nation. In terms of competitive position, Queensland has moved over the past five years from among the most cost-effective electricity producers to among the most expensive. This has occurred in an environment of the Queensland market being oversupplied with generation capacity by around 30% (Queensland Productivity Commission, 2016).

Wholesale electricity prices have increased significantly across the National Electricity Market (NEM) since 2012, with Queensland (168% increase to 2017) and South Australia (178% increase) experiencing particularly rapid price rises. Queensland prices have thus far risen by 30% in 2017.

Queensland's generation assets are more highly concentrated than other mainland NEM regions, located in the south east and central regions of the State. The State Government owns or controls the dispatch of nearly two-thirds of the generation capacity through Stanwell and CS Energy and nearly all of the State's network infrastructure/ companies. Queensland's network (and distribution) costs have primarily been responsible for the increase in electricity costs over recent decades, contributing 82% of the growth in the real cost of electricity (Queensland Productivity Commission, 2016).

For North Queensland business and industry to be competitive, there is a vital need to generate more power in North Queensland. GHD's 2013 North and North-West Queensland Sustainable Resource Feasibility Study affirms that the establishment of additional largescale base load generation in the north would apply significant downward pressure to power pricing across the region – simply because of the way prices are defined by the existing flow of energy within the system. The fact is that large energy users in Northern Australia – industry, manufacturers and big business – have their energy costs made of 'energy prices', 'losses' (through transmission) and 'energy charges'. These are all government regulated charges that in many cases are determined by the flows (and losses) of energy from south to north.

<< *Continued*

By generating 2,000MW of energy in North Queensland, this established power flow from north to south would thereby reverse the cycle and the impact of transmission losses and reduce regulated energy charges.

Simply put, by allowing the north to generate more energy we would be able to drive down energy costs to levels similar to major industrial centres such as Gladstone which currently enjoy a significant power price advantage. 2,000MW could be made up of a variety of energy sources, including renewables. Townsville Enterprise believes the State should use its regulatory powers to ensure that licences for the next 2,000MW of energy should be allocated to North Queensland and connected to the grid north of Collinsville.

The increases in network prices in the past decade have been largely due to significant investment by the State in network infrastructure over this period to support increased reliability and service standards and strong projected demand growth. The combination of rapid price increases and soft economic conditions have caused average consumption to fall across parts of the NEM, meaning that the projected increases in average consumption have not occurred. However, under the existing revenue cap regulatory framework lower electricity use has resulted in higher electricity prices, as fixed network costs (which are the basis for cost recovery) are spread across smaller volumes of electricity. The allocation of how network charges are allocated also needs to be reconsidered.

The Solution

North Queensland requires a cohesive, properly formulated national energy policy that will work to realise sustainable/ competitive energy (electricity/ gas) solutions supportive of the region's future.

The Federal and State Governments have an obligation to work together on behalf of the North Queensland community in pursuit of this agenda. The Federal Government should use its significant influence and establish policy that:

- › Fast-tracks the establishment of cost effective 'clean technology' base load generation in North Queensland (seek diversification of ownership);
- › The next 2,000MW of electricity generation to be licensed in Queensland must be based in North Queensland and connected to the grid north of Collinsville;
- › Through COAG mechanisms secure State Government commitment to use its influence to police the behaviour of generators so that wholesale prices match costs of production – not prices driven by market distortion;
- › A review of the existing regulatory framework must be expedited in order to address North Queensland's issues (this may require the establishment of a different regulatory framework to that of South East Queensland); and
- › Ensure North Queensland has future access to competitively priced natural gas.

PORT CITY PORT OF TOWNSVILLE CHANNEL CAPACITY UPGRADE PROJECT

Recommendation

- The Federal Government to match the State Government's commitment of \$75M towards the \$193M Port of Townsville Channel Capacity Upgrade Project to enable the project to proceed.

The Issue

Townsville Port is the largest container and automotive port in Northern Australia, supplying a population of nearly 800,000 people with essential goods and materials such as fuel, gas, food, furniture, electrical goods, clothing, cement, bitumen and vehicles. Farmers export products like sugar, frozen meat, cattle, fruit and vegetables and mining companies ship out commodities like copper, lead, zinc and silver. It also supports critical Defence operations and cruise tourism in the region and will welcome more than 33,000 passengers and crew during 2017/2018.

At present the Townsville Port can only accept ships up to 238 metres in length. Over the past 40 years ship sizes have grown significantly and are continuing to get bigger. Townsville's channel has not kept up with this growth and is approximately half the width of access channels as other major ports.

If the channel is not widened, North Queensland will be dependent on trucking and rail freight over 1,300 km south. This will add increased cost and time for North Queensland and also be detrimental to the land based environment. More cruise ships will also bypass Townsville, having detrimental impacts on tourism opportunities.

The Solution

The \$193M Channel Capacity Upgrade Project is recognised as a key priority under the 'Port City' initiative of the Townsville City Deal agreed between the Federal Government, State Government and Townsville City Council.

Widening of the sea channels to Townsville Port will:

- Enable vessels longer than 238 metres to safely access Townsville Port;
- Significantly reduce freight on road/rail networks between Northern Queensland and Brisbane;

- Increase the capacity of existing berths at the Port of Townsville to allow for trade growth.

Positive outcomes of this solution include:

- Cost savings, improved efficiency, safety and environmental outcomes for freight movement;
- Increased resilience for North Queensland, particularly when transport connections to the south are cut due to severe weather and flood events;
- Reduced congestion on road and rail networks;
- Increased capacity of Townsville Port to facilitate domestic and international trade growth;
- Creating 120 FTE jobs in Townsville during construction and support 245 FTE jobs in Queensland;
- \$580M present value of benefits – a Benefit Cost Ratio of 2.90 and aggregated benefits over 40 years of \$380M.

The business case for the project has been approved by Port of Townsville shareholding Ministers. An Environmental Impact Statement has been completed and Federal Government and State Government approvals are in place.

The State Government has allocated \$75M towards the project, and has sought a matched \$75M grant funding contribution from the Federal Government, with the balance of the project to be funded by Port of Townsville Limited.

PORT CITY

TOWNSVILLE EASTERN ACCESS RAIL CORRIDOR (TEARC) AND THE MOUNT ISA TO TOWNSVILLE RAIL CONNECTION

Recommendation

- Federal Government and State Government to work in partnership to identify public and private sector financing models that will ensure construction of TEARC can commence as soon as possible;
- Prioritise and financially support a long-term operating, funding and investment model for the Mount Isa to Townsville Rail Line that ensures it is a nationally competitive and efficient freight corridor.

The Issue

The Mount Isa to Townsville Rail Line is a critical piece of freight infrastructure supporting mining, agricultural and manufacturing industries in North and North-West Queensland, and servicing the freight needs of communities across the region.

Townsville North Queensland services the North-West Minerals Province (NWMP) as well as the broader Mount Isa to Townsville Economic Development Zone (MITEZ). The NWMP is one of the world's richest mineral producing areas containing copper, lead and zinc as well as major silver and phosphate deposits and strong rare earth potential. Over 2015/16 the NWMP produced 3.4 million tons of throughputs valued at \$4B. The region holds approximately 75% of Queensland's base metals supply.

Product from the NWMP is railed and trucked to Townsville Port for export to global markets. Railing of product on the Mount Isa to Townsville Rail Line has decreased in recent years with increased trucking of product. A lack of reinvestment in the rail line has resulted in inefficiencies of rail line speed/ restrictions, lack of passing loops, and lack of multi-user terminals for loading and unloading of product which has led to a modal shift of product to road transport. This modal shift places greater pressure and cost onto the road network and has resulted in inefficiencies in the logistical supply chain.

The Northern Territory and Queensland Governments are currently undertaking a feasibility study of establishing a new rail line linking the NWMP to the Port of Darwin. The proposed Mount Isa to Tennant Creek Railway is a \$2-\$3B project aimed at expanding the Mount Isa to Townsville Railway to Tennant Creek and joining it to the existing Tarcoola to Darwin Railway in the Northern Territory.

There is a significant risk to the Queensland economy, and in particular the ongoing contribution made by the North and North-West Queensland region to the State's prosperity, that a Mount Isa to Tennant Creek Rail Line will result in products from the NWMP being diverted to the Port of Darwin.

In the State Infrastructure Plan (March 2016), Infrastructure Australia has earmarked upgrading the Mount Isa to Townsville Rail Corridor (which includes TEARC) as a priority project. However, the State Infrastructure Plan did not allocate funding to the project over the forward estimates. It is therefore critical to investigate a 50 year investment and operating model for the Mount Isa to Townsville Rail Line that will restore it as a competitive and efficient freight corridor and become a foremost priority of the Queensland Government rather than consideration of a new rail link to the Port of Darwin.

The Townsville Eastern Access Rail Corridor (TEARC) presents the immediate opportunity to efficiently connect the Mount Isa Rail Line (and the North-West Minerals Province) with the Port of Townsville and resolve existing rail bottlenecks within the Port.

The construction of TEARC is vital to the future growth of the Port of Townsville and the economic growth of the broader Townsville North Queensland region. TEARC would take rail traffic out of Townsville's growing urban areas, allow for longer trains (1.4 km), reduce bottlenecks in the Port and provide vital capacity for the growing tonnage demand on the Mount Isa Rail Line. The construction of TEARC would also support the Queensland Ports and National Ports Strategies.

PORT CITY

TOWNSVILLE EASTERN ACCESS RAIL CORRIDOR (TEARC) AND THE MOUNT ISA TO TOWNSVILLE RAIL CONNECTION

<< *Continued*

In May 2016, the Federal Government announced that it would provide \$150M in grant funding to the TEARC project. Building Queensland has completed the detailed business case in partnership with the Department of Transport and Main Roads. The detailed business case investigated options for a new freight rail link with greater capacity connecting the Mount Isa line and North Coast line, through the Townsville State Development Area to the Port of Townsville. The analysis considered the planned expansion of the Port of Townsville, including associated investment and land use planning activities.

The Solution

Federal Government and State Government to work in partnership to identify public and private financing models that will ensure construction of TEARC can commence as soon as possible.

Determine, adopt and financially support a long-term operating, funding and investment model for the Mount Isa to Townsville Rail Line that ensures it is a nationally competitive and efficient freight corridor.

DEFENCE

TOWNSVILLE – AUSTRALIA’S NORTHERN DEFENCE DEEP MAINTENANCE, SUSTAINMENT AND LOGISTICS HUB

Recommendation

- › Acknowledge the role and State imprimatur of the newly established ‘North Queensland (NQ) Defence Advisory Board’;
- › Support allocation of relevant elements of the Defence CRC for ‘Trusted Autonomous Systems’ to Townsville;
- › Undertake a study evaluating the economic and operational considerations supportive of centralising the Army’s Rotary-Wing Fleet and maintenance in Townsville NQ;
- › ADF to conduct a study to determine infrastructure enhancements, road, rail, warehousing, required to support the increased presence of the Singapore military in North Queensland;
- › In support of 2nd Battalion’s role as the Australian Army’s principal amphibious force, establish a permanent Navy presence (through rotation) of one of the RAN’s three amphibious ships berthed at Townsville Port from 2019; and
- › Support for the co-location/ relocation of Defence trade training schools and maintenance units with corresponding force elements presently stationed in Townsville.

The Issue

Defence has long been one of the key contributors to Townsville’s growth and economic diversity. Within this context, the consideration of Townsville’s Defence role is also deeply inter-related with the development of the Townsville region itself. There has been considerable long-term Defence investment in North Queensland that, combined, delivers a premier force generation environment and a proven mounting base for major operations to the north of Australia.

Presently, it is estimated that approximately 7,500 service men and women are based in Townsville. In all, Defence personnel and their dependents constitute about 15,000 people or 8% of Townsville’s population. There are a high number of ex-Defence personnel who remain in Townsville and make up a significant and influential component of the community.

Townsville is a valuable asset for Australia’s Defence Force capability that must continue to be recognised and strengthened. Moreover, there is tangible mutual benefit to be attained through Defence investments within the Townsville region. Among these are community support and lifestyle satisfaction, which are increasingly vital factors in the attraction and retention of Defence Force personnel.

In this sense, the relationship of Defence and regional economic development is not merely a choice between competing policy priorities, but rather the challenge of maximising capability and economic outcomes whenever a complementarity between Defence and developmental interests occurs. The continued consolidation of Force capabilities within multi-user bases helps support more rationalised logistics arrangements, while also promoting innovation, local economies and skills sharing between Defence and industry.

In acknowledgement of the region’s ongoing strategic importance and potential, Federal Government should look to capitalise upon Townsville North Queensland’s geographic, operational and strategic advantages and work in partnership with the Department of Defence to redefine the State’s strategic priorities and alignment of relevant government resources. This agenda should seek to establish Townsville North Queensland as the ADF’s North Australian – ‘Deep Maintenance, Sustainment, Logistics and ADF Preparation Hub’ – servicing 1st Brigade operations in the Northern Territory, tracking east/ south east to support operations in the Far North and North Queensland (Cairns and Townsville) and all the way south to Central Queensland and Shoalwater Bay.

<< *Continued*

The further development of a local economic or 'Townsville Defence Procurement' Strategy would maximise the service and support opportunities made available via Townsville's projected growth over the next twenty years. The ADF's Integrated Investment Program (IIP) and procurement policies should be adjusted to allow for better and direct engagement with local Townsville firms. In particular, these would include extended scope for specialised services in medical development and research, vehicle and aeronautical maintenance/ repair, family support and mental health. Local "content" contracts should be replaced by local contracts. Defence, in Townsville, should have the capacity to deal directly with local suppliers and businesses. There are opportunities for greater public/ private partnerships.

Furthermore, there are a number of initiatives available to facilitate force concentration within the Townsville region. These would involve, firstly, the continued relocation to Townsville of elements of the Defence Materiel Organisation, Defence Science and Technology Organisation (DSTO), intelligence agencies, service, health and logistics headquarters, that support operations in the Asia Pacific. Organisations, like the DSTO, would be better able to leverage and share information with key regional agencies currently developing tropical solutions in energy and health.

The growth of a strong Defence industry in North Queensland would prove a significant regional job creator for generations to come, benefiting not only transitioning and ex-military personnel but also providing opportunity for the broader community, local business and neighbouring regions.

The Solution

In support of the 'Defence Hub' agenda defined under Townsville's City Deal, we seek the Federal Government's support in ensuring that Townsville continues to play a significant role in the Australian Defence landscape through:

1. Acknowledgement of the role and State imprimatur of the newly established 'North Queensland (NQ) Defence Advisory Board';
2. Support allocation of relevant elements of the Defence CRC for 'Trusted Autonomous Systems' to Townsville;
3. Undertake a study evaluating the economic and operational considerations supportive of centralising the Army's Rotary-Wing Fleet and maintenance in Townsville North Queensland;
4. ADF to conduct a study to determine infrastructure enhancements, road, rail, warehousing, required to support the increased presence of the Singapore military in North Queensland;
5. In support of 2nd Battalion's role as the Australian Army's principal amphibious force, establish a permanent Navy presence (through rotation) of one of the RAN's three amphibious ships berthed at Townsville Port from 2019; and
6. Support for the co-location/ relocation of Defence trade training schools and maintenance units with corresponding force elements presently stationed in Townsville.

DEFENCE

CENTRE FOR ADF AMPHIBIOUS CAPABILITY

Recommendation

- › In support of 2nd Battalion's role as the Australian Army's principal amphibious force, establish a permanent Navy presence (through rotation) of one of the RAN's three amphibious ships berthed at Townsville Port from 2019;
- › Establish an Amphibious Centre of Excellence in Townsville; and
- › Relocate certain maintenance, administrative, training and logistics activities from Fleet Base East to Townsville from 2019.

The Issue

There is a historic opportunity to establish Townsville as the epicenter of the ADF's new amphibious warfare capability. As a strategically important mounting and force projection base, Townsville is the natural home of the ADF's amphibious capability.

Port infrastructure

- › The Port of Townsville can already accommodate Navy's Landing Helicopter Dock (LHD) ships at Berth 10A.
- › Under a planned \$1.6B Port Expansion Project (PEP), six new berths able to accommodate LHDs and various support boats will be created.
- › Port land is available for maintenance and personnel facilities, including a ship-lift capability and medium-density accommodation.
- › As the Port is the development authority for the PEP, development of facilities can be completed cost-effectively and flexibly to suit Navy's needs.

Connection with supporting elements

- › The Port is 6km from Lavarack Barracks – home of Army's specialist amphibious unit the 2nd Battalion, Royal Australian Regiment (2RAR).
- › The Port is 5km from RAAF Base Garbutt – home of Army's fleet of amphibious helicopters.
- › The 3rd Combat Engineers Regiment (3CER) also at Lavarack Barracks is a short-notice response force for humanitarian assistance and disaster relief missions. Porting an amphibious ship in Townsville would enable 3CER's heavy vehicles to be more efficiently deployed.

Cost of living

- › Townsville's cost of living is significantly lower than Sydney's. Relocating personnel to Townsville would reduce ADF housing and operational costs.

Proximity to Australia's near neighbours

- › Launching humanitarian assistance and disaster relief missions from Townsville would enable a more timely response to regional crises and reduce the ADF's fuel, food and technical support costs.

SAILING TIME (assuming speed of 10 knots per hour)

	Port Vila, Vanuatu	Port of Suva, Fiji	Port Moresby, PNG
Townsville	1,316 nm (5.5 days)	1,914 nm (8.0 days)	590 nm (2.5 days)
Sydney	1,567 nm (6.5 days)	2,114 nm (8.8 days)	1,664 nm (6.9 days)
Darwin	2,605 nm (10.9 days)	3,223 nm (13.4 days)	1,137 nm (4.7 days)

The Solution

The RAN should seek to establish a continuous amphibious ship presence based out of Townsville from 2019, with a permanent berth commitment at the Port of Townsville from 2020. Relevant supporting elements currently stationed at Fleet Base East and HMAS Kuttabul at Garden Island should also be gradually relocated. This is consistent with the acknowledgment in the Defence White Paper 2016 that there are long term viability issues with Garden Island, including capacity constraints and urban encroachment.

Townsville's current amphibious role should also be consolidated. The Australian Strategic Policy Institute has recommended that the ADF establish an Amphibious Centre of Excellence to evolve doctrine and train personnel. Development of this facility should be prioritised, and it should be based in Townsville. Proposed Budgetary recommendations include:

- › In support of 2nd Battalion's role as the Australian Army's principal amphibious force, establish a permanent Navy presence (through rotation) of one of the RAN's three amphibious ships berthed at Townsville Port from 2019;
- › Establish an Amphibious Centre of Excellence in Townsville; and
- › Relocate certain maintenance, administrative, training and logistics activities from Fleet Base East to Townsville from 2019.

CAPITAL OF NORTHERN AUSTRALIA HIGH GROWTH POPULATION TARGET & RELOCATION OF GOVERNMENT BODIES

Recommendation

- › High growth population target commitment;
- › Implement whole-of-government North Australia Population Policy; and
- › Legitimate consideration of the relocation of relevant Federal Government department and agency functions to Townsville North Queensland, supportive of long-term growth and regional sustainability.

The Issue

Townsville North Queensland needs the right policy settings in place to retain and attract the population needed to underwrite its future economic growth. The Developing Northern Australia White Paper 2015 recognised that rapid population growth is fundamental to unlocking Northern Australia's economic potential and capitalising on its proximity to the burgeoning economies of Asia and the Tropics.

The broad objective of macroeconomic policy is to contribute to economic and social wellbeing in an equitable and sustainable manner.

Unless as a nation we are prepared to make a strong commitment to address factors that support the sustainability of regional communities, we will continue to see the exodus of educated and skilled labour to capital cities in pursuit of opportunity and employment. The Federal Government, through the Northern Australia Agenda vehicle, should deliver sustainable public-sector employment opportunities and career paths for locals whilst attracting those that are living in cities to regional communities.

Governments of the day have a fundamental obligation to ensure fair and equitable distribution of wealth across the nation, supporting and contributing to the regeneration and sustainability of regional cities and communities. If governments fail to support proactive regional development, they run the risk of economic instability or the establishment of a 'two-speed' economy. In the Australian post mining boom era our country finds itself yet again in the midst of a two-speed economy, this time comprising: (i) NSW and Victoria (driven largely by Sydney and Melbourne); and (ii) the rest of Australia (ROA). The size and relative strength of the NSW and Victorian economies means that economic data presented at the national level is masking weaknesses throughout the ROA, particularly that of regional centres. Without an interventionist approach by Government to regional development stimulus, the economic divide between southern

capitals and regional communities will continue to widen.

Australia's southern capital cities are burdened by a lack of affordable housing options and unable to address cost of living pressures supportive of their growing populations. It would only seem practical that the Federal Government would seek to alleviate this pressure through the decentralisation and relocation of departmental and agency operations to regional centres, seeking to turn the tide of regional migration. If we take current serving Defence personnel out of consideration, there are over 243,300 Commonwealth Government public servants employed nationally, with less than 2,000 residing in Townsville (ABS; June 2016). Commonwealth Departments whose partial operation or sub-departmental agencies may be considered for rural relocation include:

- › Australian Taxation Office (ATO)
- › Department of Agriculture and Water Resources
- › Department of Communications and the Arts
- › Department of Defence
- › Department of Veterans Affairs
- › Department of Education and Training
- › Department of Jobs and Small Business
- › Department of Infrastructure, Regional Development and Cities
- › Department of the Environment and Energy

<< *Continued*

The Federal Government should not be influenced by the bureaucracy in its evaluation of the economic and social benefits of relocating relevant Government agencies and jobs to regional communities, supportive of long-term growth and sustainability. Consideration must also be given to the indirect outcomes associated with this agenda, with the potential to alleviate major city congestion and cost of living pressures. The Townsville Enterprise Senate Enquiry Response to Department Relocation explores this in detail.

The Solution

1. The Government must put in place a dedicated Population Policy for Northern Australia and commit to population targets for each of its component regions. In Townsville, a population increase target of 140,000 more people by 2030 is appropriate. This is consistent with high-growth scenarios considered by Infrastructure Australia, but will only be achieved with the right policy mix.
2. The Population Policy should focus not only on attracting new residents, but also on retaining existing residents, and should include:
 - › a commitment to invest in the economic infrastructure, social infrastructure and Government services needed to support the population target;
 - › legitimate consideration of the relocation of relevant Federal Government department and agency functions to Townsville North Queensland;
 - › a whole-of-government requirement for laws and policies that affect Northern Australia to explicitly consider how they will positively impact population growth targets.

DESTINATION DEVELOPMENT AUSTRALIAN TROPICAL MARINE AND AQUACULTURE CENTRE

Recommendation

- › Provide support for the development of the Australian Tropical Marine and Aquaculture Centre to be based in the Townsville CBD.

The Issue

Townsville has a world-leading reputation in the marine sciences. Townsville currently hosts the three leading international entities in marine and reef research and protection – James Cook University, the Australian Institute of Marine Science and the Great Barrier Reef Marine Park Authority. At the same time, Northern Australia is the epi-centre for some of Australia’s biggest aquaculture industries, including farmed prawns, barramundi, pearls and crayfish, which collectively account for around \$300M of aquaculture product annually. There is significant transformative capacity and economic potential for aquaculture industry in Queensland, leading to job creation and skilled workforce development, the ability to transfer knowledge and skills to the Asia Pacific region and with potential flow on effects to tourism and edu-tourism.

James Cook University is actively seeking to partner with industry and Townsville research and tourism organisations to establish the Australian Tropical Marine and Aquaculture Centre – an international marine research precinct that will promote advancements in marine and aquaculture commercialisation, research and innovation. This enabling infrastructure will underpin regional capabilities to ensure our marine industry is able to grow in a competitive and sustainable way. Employment and local capacity will flow from the development of this facility but also ensure the protection of current marine assets and industry, growing domestic and export markets and the development of a skilled workforce.

The development of this Centre will cement Townsville’s reputation as the world’s leading city for marine science and link the research experience explicitly to tourism opportunities, drawing

researchers and industry from around the world and particularly from Asia to Townsville. This project will also connect into other proposed marine tourism projects in the CBD. Additionally, given Townsville’s proximity to the Asian “dining boom”, the facility will play a major role in enabling Northern Australia to develop and export its tropical marine and aquaculture expertise – while also protecting our greatest natural asset, the Great Barrier Reef, which supports a tourism industry worth nearly \$5.2B and over 64,000 jobs.

The Solution

Development of this precinct celebrating the world-leading marine science research in the Townsville CBD will play an important role in achieving the development aims of the Waterfront Priority Development Area, which has designated a specific ‘Research and Tourism Precinct’ – a mixed use area which will accommodate residential and short-term accommodation alongside tropical, marine and research-based tourism activities.

The precinct will stimulate further development in the area by enabling critical mass of industry, researchers and students. It will attract new ‘edu-tourists’ and help build a reputed precinct for knowledge workers within the CBD. It will also activate construction of supporting infrastructure including pedestrian walkways and create a vibrant inner-city location by increasing demand for higher-density housing within the CBD.

The Federal Government should ensure that adequate funding is provided to the project, so that it is able to meet the infrastructure and other costs associated with the facility and the precinct being based within the Townsville Priority Development Area.

DESTINATION DEVELOPMENT MUSEUM OF UNDERWATER ART (MOUA)

Recommendation

- › The Federal Government provide \$5M to support the development of the Southern Hemisphere's first Underwater Art Museum.

The Issue

Townsville North Queensland has a growing reputation for providing unique and enriching experiences for residents and visitors alike. These are founded on an inspiring combination of assets, including the natural environment (reef and rainforest, weather, etc), international-quality cultural activities (Strand Ephemera, Australian Festival of Chamber Music, etc) and world leading scientific and educational institutions (James Cook University, Australian Institute of Marine Science, Great Barrier Reef Marine Park Authority). The Townsville North Queensland tourism and events industry contributes \$1.034B in output to the local economy annually and supports more than 5,500 local jobs.

Building on these strengths, Townsville North Queensland could further strengthen its position as a leading region in Northern Australia through facilitation of an underwater art museum.

Underwater art museums are artistic installations, usually involving sculptured works placed on the seafloor or riverbeds to provide fascinating visual, emotional and physical experiences for visitors. Among the most famous and effective examples of this art form are works by Jason de Caires Taylor, who has installed major works in several Northern Hemisphere locations, including the Bahamas and Grenada (Caribbean), Cancun (Mexico) and London (Thames River).

High-quality, large-scale installations such as those done by de Caires Taylor attract very large numbers of visitors and high-profile media coverage. Such installations in the waters adjacent to Townsville would be the first of their kind in the Southern Hemisphere. They could be a powerful way to strengthen the city's connection to the marine environment, enhance its international profile, and attract increased visitation from domestic and international tourists. It could be a dramatic and enduring way to further differentiate Townsville North Queensland as an attractive and progressive region with unique connections between the Reef, Art and Research.

In 2016, Mr de Caires Taylor's works achieved a global press reach of 700M viewers. The world's first underwater sculpture park, created by Taylor off the coast of Grenada in 2006, is now listed by National Geographic as one of the Top 25 Wonders of the World. The Museo Subacuático de Arte off the coast of Cancun, Mexico, created by Taylor in 2009, resulted in an increase of annual visitor numbers of almost 400,000.

Townsville North Queensland is well positioned as the centre of excellence globally for marine science, education and research. The Museum of Underwater Art (MOUA) provides an opportunity to further extend the region's existing educational reef and tourism offerings to create a seamless learning journey between the land and ocean.

The Solution

The overarching vision for MOUA is to create a global art attraction for Townsville North Queensland that provides a point of differentiation, tells the stories of the land, people and environment, provides ongoing economic benefit to the local economy and builds the capacity of operators and businesses within the local tourism industry.

The economic impact assessment developed for MOUA indicates that the project will provide long-term and sustainable economic benefit to the Townsville North Queensland region. The MOUA is an \$8M project which will be developed over four locations predominately within the Great Barrier Reef. During the construction phase, the project will create 72 jobs, deliver more than \$20M in economic output and will boost the Gross Regional Product (GRP) by \$9.1M. However, it is the flow-on tourism impacts of this project that are the most remarkable. MOUA proponents have estimated that the development would increase tourism to the region by 50,000 visitors suggesting an economic output of \$42M, creation of 182 jobs and an addition to gross regional product of \$20M.

<< *Continued*

The proposed approach is to establish an Underwater Art Museum in the waters off Townsville and Palm Island. In addition to experiential and artistic goals, the installations would have strong environmental and educational themes. They would explicitly support Australia's major strategic and policy initiatives relating to the Great Barrier Reef, notably the Reef 2050 Long Term Sustainability Plan and Great Barrier Reef Marine Park Authority's management program.

The vision is to create reconciliation and environmentally themed sculptural installations at one or two inter-tidal locations (entrance to Townsville Port, Geoffrey Bay, Magnetic Island (snorkel trails)), one offshore location (John Brewer Reef) and an installation off the coast of Palm Island that would be reflective of its 100 year anniversary celebrations.

The estimated total project cost is \$8M over a three year period. We propose that a public private partnership funding model is appropriate, supportive of the project's realisation. The Queensland State Government has committed \$2M to the project which has been supported by \$750K from the corporate sector. We are directly seeking \$5M in Federal Government funding support for this project and its realisation in 2018. An application has been made through the Building Better Regions Fund supporting this recommendation for \$5M.

Townsville Enterprise is calling on the Federal Government to support the development of the Southern Hemisphere's first Underwater Art Museum.

SUPPORTING THE REGIONS

BURDEKIN SHIRE COUNCIL

Recommendation

- › Federal Government to provide \$2M in funding to support the use of macro-algae to remediate sewerage effluent harmful to the Great Barrier Reef; and
- › Federal Government to provide funding support to improve distribution infrastructure to provide water delivery to the southern end of the Burdekin Shire and maximise the region's agricultural capacity.

The Issues

Use of Macro-Algae to Remediate Sewerage Effluent – \$2M project

The project involves the cultivation of the freshwater macro-algae, *Oedogonium Intermedium*, to remediate nitrogen and phosphorous from the discharge effluent of the Ayr/Brandon Sewage Treatment Plant. These two nutrients represent a significant threat to the ongoing health of the Great Barrier Reef. Research conducted over a six week trial period by James Cook University (JCU) revealed the *Oedogonium* consistently reduced the inorganic nitrogen content of the wastewater from the Ayr/Brandon Wastewater Treatment Plant to trace levels and reduced total nitrogen by 84% and total phosphorous by 61%.

The scope of works is to construct and operate, for a twelve month period, a 1.0 hectare algal bioremediation facility at the Burdekin Shire Council (BSC) Ayr/Brandon Wastewater Treatment Plant. The project will be able to be duplicated at numerous similar sites in Queensland discharging into the Great Barrier Reef lagoon at a significantly reduced cost to conventional upgrade options.

Warren's Gully System Capacity Upgrade

Lower Burdekin Water requires funds to improve distribution infrastructure to provide water delivery to the southern end of the Burdekin Shire.

The project is designed to increase the peak flow of capacity of the Warren's Gully Aquifer Recharge and Water Distribution System from 140 to 250 ML per day. In order for Lower Burdekin Water to undertake the works costing in excess of \$7.8M the assistance of Government funding is required.

The project will build capacity for an increase in irrigated agricultural production within and adjacent to Lower Burdekin Water's authority area; an increase in reliability of aquifer re-charge during peak flow periods and an expansion in both the extent and the capacity of Lower Burdekin Water's infrastructure through the system.

Currently, there is an increasing demand for water in the area presently supplied by the Warren's Gully Irrigation System and this project will allow for future agricultural land development in adjoining areas. There is currently 1,000 hectares of agricultural land ready to go into production with all necessary planning and development approvals in place for a further 2,000 hectares of agricultural land, and the potential for another 2,000 hectares of agricultural land.

This project has many positive outcomes which will benefit the region including:

- › Additional employment in the construction phase;
- › Ongoing employment as a result of the increased agricultural land developed; and
- › Increased household revenue based on the additional employment generated by the works and the increase in agriculture and industry.

The Solution

Townsville Enterprise is calling on the Federal Government to:

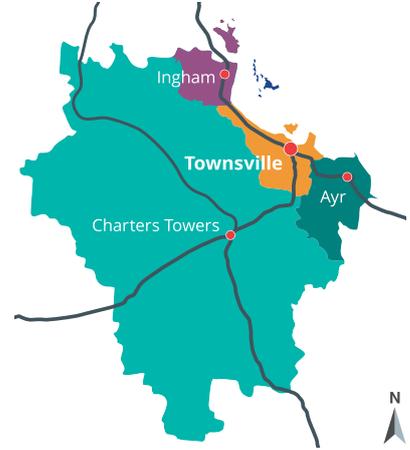
- › Provide \$2M in funding to support the use of macro-algae to remediate sewerage effluent harmful to the Great Barrier Reef; and
- › Provide funding support to improve distribution infrastructure to provide water delivery to the southern end of the Burdekin Shire and maximise the region's agricultural capacity.

Townsville Enterprise

Purpose: Connect, grow and promote Townsville North Queensland.

For over 25 years Townsville Enterprise has been a key driver in attracting major investment to the region.

It ensures that Townsville, Magnetic Island, Palm Island, the Burdekin, Hinchinbrook and Charters Towers benefit from investment and economic prosperity, tourism opportunities and the business events market.





Building the region is everyone's business.

As a member of Townsville Enterprise, your business will be supported by the strategic activities that attract investment, create jobs and improve liveability in Townsville North Queensland.

Townsville Enterprise may be leading the charge, but it cannot operate alone. It is only with the support of its partners and members that it can continue to drive growth for the Townsville North Queensland region.

Join with us.

Visit our website or call us on +61 7 4726 4728 to find out more about how a membership with Townsville Enterprise will help connect, grow and promote your business.

townsvilleenterprise.com.au





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