Foreword

‘A strong North means a strong Nation.’

This is the theme promoted by the Federal Government’s ‘White Paper on Developing Northern Australia’, to transform the nation’s top-end into an economic powerhouse.

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.

Over the past six years, the people of the Townsville North Queensland region have experienced some of the toughest economic conditions in its 151 year history. The downturn in commodities, the drought and dramatic changes in the makeup of the economy saw unemployment in 2012 at an unprecedented 14%, with youth unemployment over 20%. A looming water security issue and skyrocketing energy prices threatened the closure of our remaining manufacturing and production industries and business confidence hit historic lows.

In 2019, the landscape is more optimistic and all levels of Government and the private sector have played a part in this economic recovery. Projects like the $250M North Queensland Stadium and $225M water pipeline are now becoming reality, the Port of Townsville’s $1.6B expansion project has been approved, the resources sector is ramping up, the private sector is investing again and we have Government policy agreements like the landmark Townsville City Deal and the Australia and Singapore Comprehensive Strategic Partnership providing momentum and funding for future developments.

The region is on the move again, but with unemployment still sitting uncomfortably at 8% and approximately 11,000 people still out of work, we need to work harder to ensure long term job creation now and into the future.

This document is the result of extensive consultation with Governments, regional stakeholders and our community and is presented to our Federal representatives for consideration. These targeted priorities have been defined based on their capacity to stimulate economic growth, encourage industry and private sector investment, influence business confidence and create jobs.

A strong North means a strong Nation and as the largest city and region in Northern Australia, the Federal Government must play an important role in ensuring Townsville North Queensland realises its true potential. The Federal Government must work in partnership with the North Queensland community to fast-track investment and implement policies that transform the region. The following priorities are the pillars upon which Townsville North Queensland’s future will be developed.
North Queensland is calling on the Federal Government to commit to the following:

**Getting the Basics Right**
- [COMMITTED] Hells Gates Dam
- [PARTIALLY COMMITTED] Mount Isa to Townsville Supply Chain – Logistics Corridor – $75M equates to 159 FTE jobs

**Industry Development**
- Galilee Basin – Policy
- Tropical Aquaculture Accelerator – $60M equates to 128 FTE jobs

**Enabling Infrastructure**
- Lower Energy Prices and Access – Policy
- Townsville Ring Road Upgrade – $144M equates to 306 FTE jobs

**Defence**
- The Commonwealth’s Forward Mounting Base for Defence Operations into the Asia–Pacific – $12M equates to 215 FTE jobs

**Capital of Northern Australia**
- Townsville North Queensland Population Target and Defined Regional Development Agenda – Policy
- Northern Australia SPARC (STEAM Precinct And Regional Collaborator) – $110M equates to 200 FTE operational jobs
- Townsville Smart Link: Electric Rapid Transit – $15M equates to 173 jobs
- Cowboys Community and Sports Excellence Centre – $35M equates to 15 FTE jobs

**Destination Development**
- Museum of Underwater Art (MOUA) – $2M equates to 72 FTE jobs
- Entertainment and Exhibition Centre – $150M equates to 319 FTE jobs
- Townsville Concert Hall – $46M equates to 98 FTE jobs
- Townsville Lagoon – $85M equates to 181 FTE jobs
- DriveIt NQ – $18.5M equates to 39 FTE jobs

**Supporting the Regions**
- Burdekin Shire Council – $12.8M equates to 22 FTE jobs
- Palm Island Aboriginal Shire Council – $52.7M equates to 81 FTE jobs
- Hinchinbrook Shire Council – $2.7M equates to 8 FTE jobs
- Charters Towers Regional Council – Policy

\[FTE = \text{Estimated direct construction jobs per year of construction, unless stated otherwise.}\]
The November 2018 commitment of the Federal Government, toward addressing the long overdue need to provide water security, is both welcome and critical. The Federal Government has been fulsomely thanked for that and it has essentially become a bipartisan commitment with some variations at the edges.

These announcements were made outside of an election cycle and it is important as we approach an election, whomever forms government remains committed and clearly defines a pathway to the delivery of the Haughton Pipeline Duplication Project. A secure and sustainable water supply is a basic necessity that the Townsville community has been denied for far too long, and we implore all parties to continue supporting the regions by ‘getting back to basics’ and ensuring regional communities have access to the same fundamentals as those in metropolitan areas.

Funding commitments towards the Port of Townsville’s Channel Widening Project and the Business Case supportive of the Hells Gates Dam Project was also welcomed by the North Queensland community in 2018. While we are already seeing the Port’s project progressing, we are however still awaiting further advice and clarity on the next steps in progressing the critical de-risking process associated with the realisation of Hells Gates Dam and Big Rocks Weir projects. We cannot stress enough the importance of maintaining momentum on these significant developments that will secure the long term future of North Queensland, providing thousands of jobs and investment opportunities for decades.

The balance of this document addresses the comprehensive pipeline of projects that will act as the catalyst to job creation and economic recovery underpinning the region’s future prosperity.
GETTING THE BASICS RIGHT

Water Security for Townsville

Recommendation

› Guarantee $200M in funding supportive of Phase 2 of the Haughton Pipeline Upgrade as referenced in the Townsville Water Security Taskforce Interim Report to ‘Secure Townsville’s Water Supply’ with the final report due to be delivered in September 2018; and
› Federal Government to work with the Queensland Government for a whole-of-catchment management and development plan for the Burdekin Basin, including long-term developmental considerations (i.e. Hells Gates Dam development).

THE ISSUES

› Townsville is unable to access water directly from the Burdekin Dam. Phase 1 of the Haughton Pipeline upgrade is currently under construction, involving duplication of the smaller operational pipeline. Both pipelines access water via an irrigation channel, however, accessing water via this channel is inefficient as water losses occur due to evaporation. Phase 2 of the pipeline project will enable those pipelines direct access to the Burdekin dam without the need to use the irrigation channel.

› No access to cost effective power supply to pump water across the pipelines:

› Limited access to cost-effective water for agricultural development in North Queensland.

BACKGROUND

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

Townsville North Queensland’s lack of water infrastructure and supply security 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.

1. Townsville Water Security

The Townsville Water Security Taskforce will hand down its final recommendations defining Townsville’s short to medium term priority investment and water security plan in September 2018. The 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 Haughton Pump Station to Ross River Dam;

(b) Increase the capacity by 234 ML/day of the existing SunWater pump station and gravity channel from Clare to Haughton 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 Haughton 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 both the State Government and Townsville City Council’s contribution of $225M to deliver the duplication of the Haughton Pipeline (Phase 1).
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 to adopt and fast-track the findings of the Townsville Water Security Taskforce final report, to be tabled in September 2018.

Phase 2 of the pipeline work will extend the pipeline to provide direct access to Burdekin Dam water without the use of the Haughton Irrigation Channel.

The prohibitive cost of pumping water ensures that Townsville will remain exposed to enduring water restrictions and usage measures associated with consecutive failed wet seasons and prolonged drought conditions. If Townsville is to achieve an acceptable level of water security, it must significantly increase delivery efficiencies 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 Haughton 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.

The Federal Government’s commitment to Phase 2 of the Haughton Pipeline Project is dependant upon the completion and findings of a business case process. It is in the best interests of the Project and the community to have this body of work fast-tracked in order to provide certainty and contribute to defining a long-term solution.

2. Regional Water Plan

The Burdekin River Basin covers an area of 136,000km², equating to almost 3/5ths of the size of the state of Victoria. The Burdekin River is Australia’s largest river by (peak) discharge volume. Located approximately 200km south of Townsville, the Burdekin Falls Dam is Queensland’s largest dam (1,860,000ML, or four 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).

Future agricultural and industrial demand for water, combined with Townsville’s increasing reliance on the Burdekin as its population increases, will place increasing pressure on dam water allocations. A dam safety upgrade and wall height upgrade of at least 2 metres is also required in order to comply with ANCOLD national safety standards and 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 pumped 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. 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 – in line with ANCOLD guidelines.

Federal Government to work with the Queensland Government for the establishment of a comprehensive whole-of-catchment Burdekin Basin Water Resources Plan. Priorities for the region include:

- Accelerated delivery and consideration of secure and affordable water for Townsville (both short and long term);
- Commission and complete business case studies for connecting the Haughton Pump station to the adjoining high-voltage transmission network and developing an integrated solar energy array to offset energy costs;
- Seek Federal Government assistance in lobbying the Queensland Government for a whole-of-catchment management and development plan for the Burdekin Basin, including considerations associated with long-term agricultural development opportunities (ie: Hells Gates Dam development); and
GETTING THE BASICS RIGHT

Hells Gates Dam

**Recommendation**

- Immediate allocation of assigned NWIDF funding, supportive of North Queensland’s desire to commence the Hells Gates Dam ‘Business Case’ process;
- Consensus from all federal political parties and federal representatives on the importance and need to fast-track the commencement of the Hells Gates Dam Business Case process; and
- Federal Government to proactively engage with the Queensland State Government to encourage increased allocations of water under the Burdekin Basin Water Plan, supportive of the long-term objectives associated with large scale agricultural development in the Upper Burdekin.

**THE ISSUES**

- The 2015 Northern Australia White Paper called for a 100% increase in irrigated agriculture across the North. The realisation of the Hells Gates Dam project has the potential to deliver up to 35% of that growth target (50,000+ha) in one large scale, scalable development that would harness rich soils adjacent to the largest peak flow river in Australia and in close proximity to critical logistical infrastructure supportive of efficient delivery to burgeoning export markets.

**BACKGROUND**

The agricultural sector is critical to the Townsville North Queensland economy, contributing 3,642 jobs (3.5%) and approximately $565M (3.8%) to Gross Regional Product. The Cooperative Research Centre for Developing Northern Australia (CRCNA), Townsville Enterprise Limited and the North Queensland Regional Organisation of Councils (NQROC) commissioned a 12-month study in early 2018 that will define North Queensland’s long-term approach to the development and investment in the region’s agricultural sector. In acknowledgement of Asia’s emerging middle class phenomenon, the scope of the study will take a demand led approach to the identification and forecasting of high value agricultural products and consumer market trends across Asia.

This information will form a baseline that North Queensland primary producers will utilise to inform future cropping and transitional activity in order to maximise return on investment. The study will also establish a developmental roadmap and market-based plan that will identify options for industry collaboration and define priority infrastructure and investment required to support the realisation of the sector’s potential.

Further supporting evidence demonstrating the need of a long-term planned/strategic approach to agriculture sector development across the North is the findings of the Hells Gates Dam - Feasibility Study. Funded under the Federal Government’s National Water Infrastructure Development Fund (NWIDF), the Hells Gates Dam Feasibility Study was completed by Townsville Enterprise and SMEC in July 2018. This study was primarily tasked with assessing the agricultural potential of the northern reaches of the Burdekin River catchment and surrounding land approximately 150km northwest of Townsville.

The study’s scope included the site’s potential to support large scale/broad acre agricultural development, irrigation network including the proposed Hells Gates Dam, water distribution, power generation and supply (pumped hydro). While the feasibility study primarily addressed the agricultural development potential of the northern reaches of the Burdekin, it also undertook a preliminary investigation assessing environmental and cultural heritage concerns unique to the area.

The North Queensland community wishes to acknowledge the Federal Government on its recent announcement of a half a billion dollar increase to the NWIDF to bolster the delivery of transformational water projects for regional communities, including a $234 million commitment toward the realisation of the Hells Gates Dam/Big Rocks Weir (near Charters Towers) projects and proposed Hughenden Irrigation Scheme in North Queensland.

The Hells Gates Dam Feasibility Study identified Big Rocks Weir as a first phase development priority supportive of establishing up to 5,000ha of high value irrigated agricultural land adjacent to the weir site. The next crucial body of work associated with the realisation of Big Rocks Weir (and importantly
the progression of the Hells Gates Dam project) will involve refined designs, environmental surety and satisfaction of cultural heritage interests, quantifying the Hells Gates hydroelectricity opportunity, enhanced economic modelling and a better understanding of the staging process required to ensure a viable scheme can be rolled out. The proposed ‘Business Case’ will assist Federal and State Governments, as well as regional stakeholders and private sector investors to de-risk the project and properly consider the scheme’s potential impacts and benefits, and its return on investment.

THE SOLUTION

The completed Hells Gates Dam Feasibility Study defined the Upper Burdekin Rivers potential to support a viable large-scale agriculture irrigation scheme that would also deliver considerable enabling infrastructure upgrades and economic uplift to the region, including transport infrastructure investment, renewable power generation and large-scale job creation.

The North Queensland community is seeking Federal Government support to immediately allocate the NWIDF’s assigned Hells Gates Dam - Business Case funding, supportive of advancing the next phase of investigation works with the aim of completion before 2021. Timely commitment by the Federal Government to commence the ‘Business Case’ process prior to the 2019 federal election would permit project continuity and allow for the momentum established by the feasibility process to be carried forward into the next body of work.

Given the federal election is now likely by May 2019, the potential impact of governmental ‘caretaker mode’ upon project continuity and policy objectives must be taken into account when considering the region’s desire to immediately commence the next important body of work – the Hells Gates Dam Business Case.
THE ISSUE

Critical supply chain infrastructure that is utilised by operating businesses in the North-West Mineral Province is failing to meet customer requirements in terms of cost, availability and travel times.

Current logistical infrastructure is restricting future developments in the North-West Mineral Province in terms of volume and price.

BACKGROUND

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’s enabling infrastructure 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 the Port of Townsville for export to global markets. Railing of product on the Mount Isa to Townsville Rail Line has decreased considerably 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 State 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.

Recommendation

- $75M for the Port of Townsville Channel Widening Project;
- Federal Government and Queensland State Government to work in partnership to identify public and private sector financing models that will ensure construction of the Townsville Eastern Access Rail Corridor (TEARC) can commence as soon as possible; and
- Federal Government to encourage Queensland Government to collaboratively engage with industry on the identification of a sustainable operating, funding and investment model supportive of the sustainable operation of the Mount Isa to Townsville Rail Line. The establishment of a nationally competitive and efficient freight corridor in this region will stimulate additional private sector investment, job creation and support the long-term contribution of the North West Minerals Province (NWMP) to the state and national economy.

GETTING THE BASICS RIGHT

Mount Isa to Townsville Supply Chain – Logistics Corridor

Recommendation

- $75M for the Port of Townsville Channel Widening Project;
- Federal Government and Queensland State Government to work in partnership to identify public and private sector financing models that will ensure construction of the Townsville Eastern Access Rail Corridor (TEARC) can commence as soon as possible; and
- Federal Government to encourage Queensland Government to collaboratively engage with industry on the identification of a sustainable operating, funding and investment model supportive of the sustainable operation of the Mount Isa to Townsville Rail Line. The establishment of a nationally competitive and efficient freight corridor in this region will stimulate additional private sector investment, job creation and support the long-term contribution of the North West Minerals Province (NWMP) to the state and national economy.
In the Queensland 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 to a competitive and efficient freight corridor rather than consider 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 (1.4km), 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.

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

The Mount Isa to Townsville Rail Line, TEARC and Port of Townsville upgrade should be seen as critical components of an integrated Mount Isa to Townsville ‘Supply Chain’. This critical enabling infrastructure should be assessed by all levels of government as interdependent and not segmented.

The Federal Government must be proactive in working with the Queensland Government toward the establishment of a nationally competitive and efficient freight corridor supportive of the North West Minerals Province (NWMP).
INDUSTRY DEVELOPMENT

Galilee Basin

RECOMMENDATION

› The North Queensland community seeks clarity from our nation’s Federal representatives (and all political parties), to define their position regarding the opening of the Galilee Basin and the delivery of thousands of desperately needed jobs across regional Australia.

THE ISSUE

With concerns raised by international investors in relation to Australia’s sovereign risk and the impact of perceived political interference in the development of the Galilee Basin, Australia’s political leaders must clearly state their position in relation to support of the mining and resource sector and the Carmichael Mine, in particular. With Queensland marginal seats and regional communities playing a critical role in deciding the next Federal Government in this year’s election, our Federal leaders must define their (and their party’s) position regarding the development of the Galilee and remain consistent in their messaging. The people of Northern Australia must have a clear understanding of the policy position of our potential political representatives and avoid ambiguity that is seen as an appeasement measure targeting southern constituencies. North Queensland communities deserve clarity on this critical issue to ensure they can make an informed decision come polling day.

BACKGROUND

The importance of the mining and resource sector to the Australian and Queensland economies cannot be overstated, with one in eight jobs across the state and 14,200 businesses linked with the industry. The resource sector is also responsible for contributing one in every five dollars generated by the Queensland economy. The resources sector is a strong and steady employer of Queenslanders, despite the fact that Queensland’s unemployment rate is among the highest in Australia. The sector delivered $5.28 billion in wages and salaries to approximately 35,649 direct fulltime resident employees in 2017-18, representing an average salary level across the industry of approximately $147,039 per annum. In addition, there were 18,367 fulltime equivalent contract workers employed in the resource sector in Queensland. Over 8,000 of these jobs were based in the State’s capital, Brisbane.

The Galilee Basin is a 247,000 square kilometre thermal coal basin in the central region of Queensland. It is one of the largest untapped coal reserves on the planet. Existing Galilee proposed coal mining leases have a combined footprint of approximately 1.38% of the entire basin, dominantly encompassing underground mining opportunities. Coal mining leases within the Galilee Basin have near term open-cut and long-term underground resources. The opening of the Galilee Basin will generate billions of dollars in taxes and royalties for the national and Queensland economies and create thousands of jobs, importantly many of these employment opportunities will be delivered to struggling regional communities. The most advanced proposal associated with the development of the Galilee is Adani Mining’s Carmichael Mine.

Citing concerns over the habitat of the southern black-throated finch, the Queensland Government established an environmental taskforce in January 2019 to vet the Carmichael Mine’s federal approvals associated with its comprehensive environmental and habitat management plans – even though Adani has agreed to 80 conditions to be monitored by independent experts. Whether it’s tourism, construction, education or mining, consistency and transparency from government is critical for investment certainty, regardless of industry.

Changing the goal posts on proposals associated with the development of the Galilee Basin and the Carmichael Mine project sends a concerning signal to any sector or investor that, even if you meet your obligations, the legislature might retrospectively change. This could set a precedent risking the multi-billion-dollar pipeline of projects across regional Queensland and future investment at a time our region and families need investment and jobs more than ever.

It’s critical that all proponents deliver what’s needed for management plans and environmental approvals. Adani has endured an eight-year approval process, tested in courts. The opening of the Galilee Basin after a long and tested environmental approval process will turbocharge jobs, business and confidence for us all – especially North Queensland.
There are six other mines that could proceed in the Galilee Basin potentially generating more than 15,000 direct jobs. The Galilee Basin would generate more than $40B in taxes, helping to fund more schools, hospitals and public services across the state. The Adani project will be the catalyst to the realisation of all six mines.

THE SOLUTION

After eight years of approvals and courts upholding judgements to support the opening of the Galilee Basin, of which the Carmichael Mine is critical, we note that Governments of both persuasions have allowed tenements and approvals to progress for up to six additional Galilee projects. A sustainable future in mining is critical to the future of North Queensland and the Galilee. Well paid mining jobs and investment realised with the development of the Bowen Basin and the North West Minerals Province experienced bipartisan support in the past and have underpinned regional development and significantly contributed to the wealth of the State and Nation. Governments should provide investment security and consistency of decision making. It's time for the Galilee to be opened and Townsville Enterprise will ask all parties in the region to support that agenda.

This principle does not only apply to the Carmichael Mine. It is essential that any major project and investment is offered a clear and consistent pathway to approvals and does not experience policy ambiguity and questions over sovereign risk to current and future investment.
The issue

- Limited access to enabling infrastructure, reducing research and development that supports the aquaculture industry and sustainability of the Great Barrier Reef.

Background

Townsville has a world-leading reputation in the marine sciences and is in the perfect location to leverage tropical marine science, engineering and industry skills to address research priorities. Townsville currently houses three leading international entities in marine and reef research and protection – James Cook University (JCU), the Australian Institute of Marine Science and Great Barrier Reef Marine Park Authority. Northern Australia is the epicentre 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 the aquaculture industry in Queensland, underpinning job creation and skilled workforce development, the ability to transfer knowledge and skills to the Asia pacific region and the opportunity to enhance tourism and edutourism prospects.

JCU is actively seeking to partner with industry to establish the Tropical Aquaculture Accelerator – 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 and will ensure the protection of current marine assets, growth of the domestic and export markets and the development of a skilled workforce.

Australian aquaculture production systems must be able to deliver high-quality, consistent volumes of produce, operate with minimal environmental impact, and use sustainable raw feed materials. Industry has stressed that the aquaculture industry needs innovation if it is to deliver its considerable (re) discovered potential. Townsville is the perfect location to leverage tropical marine science, engineering and industry skills to address research priorities. Investment in facilities supporting industry research and development will provide a critical mass and catalyst for links to other regional Australian and international institutions and industry. Key issues, opportunities and competitive advantage for the aquaculture industry in Northern Australia are:

- Maintaining technological competitive advantage including rapid phenotyping, energy efficiency, and sustainability;
- Disease management and genomic-informed breeding to achieve strong growth rates in high quality broodstock;
- Food security and biosecurity;
- Bioremediation, environmental and ecological sustainability innovation;
- Skilled workforce and industry exposed graduates;
- Innovation vs regulation; and
- Achieving scale.

Recommendation

Provide $60M to develop the Tropical Aquaculture Accelerator that will support the aquaculture industry and education, tourism, and longevity of the Great Barrier Reef.
THE SOLUTION

The Tropical Aquaculture Accelerator will be a key enabler of the Townsville City Deal designed to develop a plan for economic growth and a commitment to action, investment, reforms and governance needed to implement them. Townsville has industry strengths in Aquaculture and is a global leader in tropical and marine research and innovation.

Innovation has only been achieved in the aquaculture industry through partnerships with world leading research institutions in aquaculture and marine science, through infrastructure and technology, and skills and training.

The development of this Accelerator will reinforce Townsville’s reputation as a world leading city for marine sciences and tropical aquaculture and knowledge transfer and link the research experience explicitly to economic growth opportunities, drawing researchers and industry leaders from around the world and particularly from Asia to Townsville. Additionally, given Townsville’s proximity to the Asian ‘dining boom’, the facility will play a major role in enabling Northern Queensland to develop and export its tropical marine and aquaculture expertise – while protecting our greatest natural asset, the great Barrier Reef, which supports a tourism Industry worth $6B and over 64,000 jobs.

JCU’s acknowledged and acclaimed expertise matched with world-class facilities and industry partners will deliver ground-breaking outcomes in sustainable food production and marine resource management. Appropriate infrastructure will accelerate the capacity to deliver high impact research of economic, environmental, and social benefit to northern Queensland and the region, as well as building the human capital and expertise to: deliver increased research and development solutions, staffing requirements to the Australian and international tropical aquaculture sector, and enable the transfer of knowledge and technology into Australian firms for global export.
**ENABLING INFRASTRUCTURE**

**Lower Energy Prices and Access**

**THE ISSUES**

- Unsustainable and escalating power prices in North Queensland.
- Businesses face additional power costs when operating in North Queensland compared to other parts of the State.
- Townsville North Queensland is not connected to the national natural gas network.

**BACKGROUND**

North Queensland’s electricity prices are having a crippling effect on 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 2018) however a slight easing in prices has been seen over the past quarter as additional renewable supplies come online.

The current uncertainties over pricing and secure access to energy markets, including Townsville North Queensland’s lack of connection to the national natural gas network, is negatively impacting 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 world’s 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’s generation assets are more highly concentrated than other mainland NEM regions, located in the south east and central regions of the State. The Queensland 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 base load power in the region. GHD’s 2013 North
and North-West Queensland Sustainable Resource Feasibility Study affirms that the establishment of additional large-scale 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, mining, manufacturers and large businesses – have their energy costs made up 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.

The Federal Government recently allocated $4.7M in grant funding to accelerate development activities supportive of the CopperString 2.0 Project. The Project seeks to establish a transmission line to connect the North West Minerals Province to the east coast electricity grid. The Project will vastly improve the economics of energy supply across Northern Queensland. Construction of the CopperString transmission line would increase gas and renewable energy generation capacity in North Queensland by over 1,200MW. $1.2B of capital is sought to fund the Project with an expected financial close by Q3 2020.

Increases in network prices over 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 distributed also needs to be reconsidered.

The Federal Government faces increased pressure over energy policy as leaders of some of the nation’s major companies and most influential lobby groups have publicly lamented the removal of the National Energy Guarantee (NEG). The key message from all parties in the energy industry is that we need clarity and certainty at all levels on regulation and rules, from the upstream (gas wells) to the end consumer.

The ACCC’s report commissioned by the former Turnbull Government reaffirms the significance of the impact that energy pricing is having on businesses. The recommendations by the ACCC, including increased policing and competition for generators and retailers and reducing asset and transmission costs, must be prioritised by the Federal Government and this needs to be achieved through collaboration with the Queensland Government.

Prime Minister Morrison revised the Coalition’s energy plan, diverting from the NEG model in September.

The Federal Government announced in late October 2018 a series of measures that will seek to address energy prices and reliability. The Australian Energy Regulator (AER) will introduce a ‘price safety net’, which involves power retailers setting their prices against a default market price. This was a measure recommended by the ACCC’s inquiry into retail power prices.

The Federal Government also seeks to support the construction of new sources of energy generation through the Underwriting New Generation Investments program. Energy companies will be required to sign contracts guaranteeing enough energy to meet demand. The Government will also develop legislation for monitoring of electricity prices and this will include receiving recommendations from the ACCC for enforcement remedies and empowering the Treasurer to divest assets if the ACCC recommends.

THE SOLUTION

North Queensland requires a cohesive, effectively 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 to police the behaviour of generators so that wholesale prices match costs of production – not prices driven by market distortion. Many of the recommendations identified through the ACCC's inquiry into Retail Electricity Pricing work to address the imbalance and price gouging practices currently impacting energy costs across the nation.
THE ISSUE

The Townsville Ring Road suffers from congestion during peak commute times. This is impacting on the road's ability to service the local community and tourists visiting the region.

BACKGROUND

As Northern Australia’s key regional economy, Townsville’s reliance upon its major highway and road connections is fundamental to the region’s future economic growth and the wellbeing of its community. The Bruce Highway has been North Queensland’s critical logistical link for generations, however, ongoing seasonal issues associated with flood inundation is having a direct impact upon the Townsville North Queensland economy.

Following the catastrophic Queensland floods in 2010–2011 the Federal Government commissioned a feasibility study on flood-proofing the highway. Numerous stretches of the Bruce Highway are currently undergoing redevelopment, realignment, flood-proofing and extension of dual carriageway sections. These works are expected to total $2B and include 60 projects over a period of two decades.

A new route for the highway through Townsville is under construction with the first stage of the Townsville Ring Road (now called The Ring Road) already completed. An upgrade to a stretch of the highway north of Townsville has been given approval, with the Queensland State Government undertaking a $4.5M business case on The Ring Road and concept design. The Queensland State Government has suggested initial budget estimates forecasted at circa $180M, with the State Government already committing $36M to the project.

This section of The Ring Road will see the existing dual carriageway to the north extended by another 6km and runs from Vickers Bridge to Shaw Road interconnecting to the recently opened Stage 4 of The Ring Road. It will also include installation of traffic lights at Mt Low Parkway and will be the final stage of the Ring Road link up to this section. The Queensland Main Roads Department’s ultimate concept map of the development shows that the highway will progressively become Motorway standard, with the implementation of interchanges at various junctions.

North Queensland must secure Federal Government support to future-proof The Bruce Highway. The highway is the region’s principal link with major business centres north and south, enabling infrastructure and is responsible for the transport of millions of tonnes of export goods and services each year.

The Federal Government has allocated initial funding toward planning design activities associated with the Townsville Ring Road upgrade in the 2019–20 and 2020–21 budgets, with construction not expected to begin until at least 2022. This timeline is too slow for the people of North Queensland who are impacted by unreasonable congestion and safety concerns on this road network. Immediate Federal Government funding is required to duplicate the Vickers Bridge to Shaw Road section of the Townsville Ring Road to four lanes.

THE SOLUTION

The Townsville Ring Road is one of the busiest sections of the Bruce Highway, but there remains only one lane in each direction through the Upper Ross corridor. Stage 5 of the development will improve connectivity to James Cook University, Townsville Tertiary Hospital and Lavarack Barracks.

The Federal Government should look to reallocate $144M of projected Bruce Highway development savings toward fast tracking the completion of Stage 5 of the Townsville Ring Road project.
DEFENCE

The Commonwealth’s Forward Mounting Base for Defence Operations into the Asia-Pacific

Recommendation

› Commit to Townsville as a Defence Forward Mounting Base for the concentration, preparation, projection, sustainment and recovery of ADF deployable forces engaged in the delivery of “a secure nearer region, encompassing maritime Southeast Asia and the South Pacific”;

› Redefine the Royal Australian Navy’s (RAN) presence to enhance training and responsiveness of Joint Forces (especially amphibious) through an increased routine deployment to the region and increased visitation of the Navy’s vessels to Townsville; enabled by investment in the Port of Townsville;

› Establish Defence’s Amphibious Centre of Excellence in Townsville;

› $12M (over 4 years) Federal Government funding commitment establishing a ‘Northern Australia Defence Industry Readiness Program’; and

› Review existing procurement policies and prime contractor obligations in favour of delivering greater economic opportunity, direct engagement and ‘legacy’ outcomes for North Queensland business, transitioning military personnel and traditional owners, thereby enhancing Defence capability, reducing costs to the Commonwealth and supporting the region’s economy.

THE ISSUES

› Defence’s deployable joint capability is geographically dispersed and therefore full capability benefits for Defence assets cannot be realised. The amphibious force elements of the ADF are largely based in Townsville, but the primary RAN enabling vessels (incl. LHDs) are all based over 2,000km away. This reduces force capability by constraining training, responsiveness and sustainment options for the routine deployment and operating areas in the North. It also increases cost to Commonwealth (in lost opportunity and transit expense).

› Defence’s equipment support services are overly dispersed and far from the main operating areas to the North. Equipment support services, especially maintenance (such as that of RAN vessels, RAAF aircraft and increasingly Army vehicles), are performed thousands of kilometres away from where a large component of these major equipment capabilities are either permanently located or routinely (and increasingly) deployed for both training and operations. This reduces force capability due to avoidable unserviceability and is at a cost to the Commonwealth (in lost opportunity and transit expense).

› The above two issues both contribute to denying Townsville North Queensland SMEs and labour forces the opportunity to compete and support Defence more cost effectively than current sustainment and basing models. Despite efforts, there has been limited success supporting the region’s significant Defence presence by building local industry capacity and expertise. This is exacerbated by complex Defence procurement pre-qualification requirements and unfavourable subcontractor/ prime contractor arrangements.

› The Townsville North Queensland economy struggles to generate sustainable and meaningful employment opportunities for the large numbers of transitioning Defence personnel (up to 600 per year within the region).

BACKGROUND

Townsville is a Defence city. Defence is a key contributor to Townsville’s growth and economic prosperity. Any consideration of Townsville’s Defence role is also deeply interrelated with the development of the Townsville region itself. 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 is an exceptionally high number of ex-Defence personnel who remain in Townsville and make up a significant and influential component of the community. The relationship between Defence and regional economic development is not a choice between competing policy priorities, but rather the challenge of seizing opportunities whenever a mutually beneficial outcome between Defence, Commonwealth and regional developmental interests presents itself, maximising capability and economic benefits for all.

There are significant and obvious opportunities in Townsville to optimise Defence capability, whilst achieving the best value for money for the Commonwealth and supporting the region economically. Foremost amongst these opportunities is the recognition that a sovereign controlled, dedicated and enduring Forward Mounting Base (FMB) in Townsville could, and should, underpin the responsive capability of our Defence Forces required to deliver “a secure nearer region, encompassing maritime South-East Asia and the South Pacific”.

Townsville is already poised to become such an FMB for future Defence deployments by virtue of:

- Its location in the far North of Queensland being closer to the likely areas for future Defence intervention operations compared to any other Australian ports of embarkation of similar capacity (e.g. – Townsville is well placed to provide close mutual support to the proposed multinational Naval facility at Manus Island).

- Its significant in-place forces, including critical Defence Joint Capabilities (Land forces, Helicopter assets and Air Force detachments). Though notably limited RAN representation, despite the bulk of the Army’s amphibious forces being home based in Townsville.

- Its secure lines of communication – Well connected to the National Support Base and able to provide secure rear supply chains via all season land, air and sea lines of communication. Not only are these supply chains secure comparative to other Ports in the far North they are significantly shorter for the key deployed force enablers. RAAF Amberley is less than two hours’ flight time from Townsville and RAAF already utilises the joint user airport there routinely for air transport support to operations. Enoggera Barracks is within a single day’s drive of Townsville (approx. 15 hours) and is home base to many Land Force elements critical to deployed operations (e.g. a second Combat Brigade, the Deployable Joint Task Force Headquarters and key Land Force enablers such as Tactical UAV and Signals Units).

The Federal Government’s agenda for Townsville and North Queensland should include establishing Townsville as the ADF’s FMB for training and operations into Southeast Asia and the South Pacific, for reasons of Defence capability benefit and for the economic benefit of the Commonwealth.

The current immediate priorities should consolidate the extant advantages of Townsville as a FMB, as follows:

- Commit to invest in the Port of Townsville to include the development of a dedicated, secure berth for Defence vessels and associated port side facilities (Ref: Port of Townsville - the right choice for enabling an increased Royal Australian Navy presence in the North. Dated 12 Dec 18) a decision within the next 12 months will minimise cost and allow the greatest value for money as it can be incorporated into the approved Port Expansion Program (due to begin at the end of 2019).

This is turn will better enable the Government to:

- Commit to redefine the Royal Australian Navy’s (RAN) presence in the region to an increased rotational presence and routine berthing of the Navy’s amphibious fleet elements for joint training, embarkation, disembarkation, refuelling, supply and maintenance (both unscheduled and routine first line);

- Exploit this increased co-location to develop joint service capability and establish Townsville as the Centre of Excellence of the ADF’s Amphibious Warfare Capability, and;

- Further develop a local economic or ‘Townsville Defence Procurement’ Strategy to maximise the service and support opportunities made available via Townsville’s projected growth over the next 20 years. Defence procurement policies should be reviewed to allow for better and direct engagement with local Townsville firms. Local ‘content’ contracts should be replaced by local contracts.

In the longer term, evaluation of future Defence capability basing arrangements (of either in-service capability or future acquisitions) should include consideration of the significant advantages in joint capability development, responsiveness and cost of Townsville as a location of choice, for both the force elements themselves and their associated sustainment footprints.
The growth of a strong Defence services 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.

Federal Government support of a $12M (over 4 years) funding commitment is sought to establish a ‘Northern Australia Defence Industry Readiness Program’ that will work with Managing Contractors in targeting regional SMEs, provide business development, planning and compliance support with the objective of developing new local capability in support of Defence’s Integrated Investment Program (IIP). This program will leverage non-financial criteria to maximise direct economic benefits to regional economies where targeted Defence investment will take place, embracing and delivering upon the full intent of the ‘value for money’ objective of the Commonwealth Procurement Rules.

THE SOLUTION

We seek the Federal Government’s support in ensuring that Townsville both continues to deliver and increases its significant supporting role for Australia’s Defence now and into the foreseeable future.

Immediate priority should be given to securing Townsville’s capability as a FMB for Defence and the main effort for this should be to commit to the enhancement of the Port of Townsville to enable greater RAN presence in the North (especially for Amphibious Force enablers, such as the LHD). This will address the issue of dislocation of Defence deployable Joint Force Capability and will reduce the impact of the issue of dispersal of support services, such a supply and maintenance.

The impact of these investments both for Defence and the region should be optimised by supporting a review of Defence procurement policies to allow for direct engagement with local Townsville firms. Local ‘content’ contracts should be replaced by local contracts, providing greater value-for-money for Defence and significant economic opportunity to the region.
THE ISSUE

Townsville needs a sustainable population to support its mandate to become the Capital of Northern Australia.

BACKGROUND

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.

Governments of the day have a fundamental obligation to ensure fair and equitable distribution of wealth and opportunity 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. Not since the influence of Australia’s mining and resources boom (prior to the impact of the Global Financial Crisis) has our country found itself 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 are 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 Federal Government public servants employed nationally, with less than 2,000 residing in Townsville (ABS; June 2016).

CAPITAL OF NORTHERN AUSTRALIA

Townsville North Queensland Population Target & Defined Regional Development Agenda

RECOMMENDATION

› High growth population target commitment;
› Implement whole-of-government North Australia Population Policy;
› 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;
› Federal Government to fast-track review of Zone Tax Offset measures; and
› Support relocation research and marketing campaign for Townsville North Queensland.
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 Human Services
- Department of Education and Training
- Department of Jobs and Small Business
- Department of Infrastructure, Regional Development and Cities
- Department of the Environment and Energy

The Federal Government should be supportive of the economic and social benefits of relocating relevant Government agencies and jobs to regional communities. 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.

ZONE TAX OFFSETS

The Australian Productivity Commission announced in late November 2018 that it will conduct a study into Zone Tax Offsets and related remote area tax concessions and payments. This study is scheduled to commence in February 2019 and to report to government by February 2020. Regional communities and business require support and consideration immediately.

What is now the Zone Tax Offset was originally introduced in 1945 as the “Zone Tax Allowance”. Currently Ayr, Charters Towers, Ingham and Townsville (and adjoining areas) all fall within “Zone B” for Zone Tax Offset purposes – an individual living in Zone B has a Zone Tax Offset entitlement starting at $57 per annum (the individual receives this benefit by way of reduction of their income tax otherwise payable – it is not refundable in the event the individual does not pay tax).

The above offset amounts have not changed since 1993 – arguably it is long past the time at which they should be reviewed to ensure they continue to deliver on their original purpose. As a base case, it seems equitable that the Zone Tax Offset at least be indexed in line with inflation (with varying views from past submissions to Treasury as to whether that indexation should start from 1945, 1993 or some other date). The Zone Tax Offset provides direct relief to individuals who pay tax and increasing this offset will thus, all other things being equal, increase the after-tax cash position of individuals in the region which will in turn increase their consumption power and provide flow on benefits to the businesses in the region.

The Federal Government must fast track the Productivity Commission’s study or otherwise make pre-emptive changes to the Zone Tax Offset as part of the 2019/2020 Federal Budget, to ensure the offset once again is relevant in addressing the higher living costs that this regional community suffers relative to the residents of southern centres (especially in terms of energy and insurances).

THE SOLUTION

1. The Federal 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 North Queensland, 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 if supported by the right policy mix.

2. The Population Policy should focus not only on attracting new residents, but also on retaining existing residents, immigrant targets, 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;
   - Federal Government tax incentivisation and concessionary arrangements supportive of regional business development in the North Australian footprint; supporting new investment/development and the decentralisation of private sector operations;
   - A whole-of-government requirement for laws and policies that affect Northern Australia to explicitly consider how they will positively impact population growth targets; and
   - Support relocation research and marketing campaign for Townsville North Queensland.
CAPITAL OF NORTHERN AUSTRALIA
Northern Australia SPARC
(STEAM Precinct And Regional Collaborator)

THE ISSUE

In order to remain relevant in the future global economy and adjust to a shifting labour market, communities must equip the next generation with the necessary skills to leverage technology and apply lateral thinking to problem solving;

Students must be inspired and empowered to pursue careers in STEAM and not be impeded by their inability to access quality STEAM experiences and contemporary curriculum;

The National Education Centre for the Great Barrier Reef, Reef HQ Aquarium, is ageing and infrastructure is well beyond its effective life.

BACKGROUND

Future growth of the international economy will be driven by innovation, technology development and the ‘disruptor’ phenomenon. Without prioritisation of STEAM skills, Northern Australia runs the very real risk of establishing an unskilled and ill-equipped work force. Therefore, equitable access for regional communities to technology-based learning must become a targeted objective under the Federal Government’s National Innovation and Science Agenda.

Innovation and research are critical in accessing the full potential of Northern Australia, as identified in the White Paper on Developing Northern Australia. A PwC study found that shifting only one percent of the workforce into STEM roles would add $57.4B to GDP over the next 20 years (2015).

The local community is eager to partner with Questacon (the National Science and Technology Centre) and establish an education precinct in Townsville North Queensland unlike any other in the nation, and potentially the world.

The proposed Northern Australia SPARC would exist to promote STEAM disciplines and their influence upon our day-to-day lives, while also defining the spectrum of career opportunities and pathways associated with these occupations.

The strategic location of the proposed Northern Australia SPARC is at the southern end of Flinders Street in Townsville’s CBD. The positioning of Questacon in this location would result in the establishment of a ‘knowledge triangle’ of interactive regional learning, leveraging the presence of North Queensland’s existing community-based education assets including ReefHQ (the national education centre for the Great Barrier Reef) and the Museum of Tropical Queensland. The establishment of the Northern Australia SPARC would create a unique education and edu-tourism experience while also working to legitimise and support regional outcomes sought from the Federal Government’s National Innovation and Science Agenda. The inclusion of Questacon as a major stakeholder within the SPARC, and the additional shared facilities and resources associated with the development, would provide the Northern Australian community an unprecedented resource through which public

RECOMMENDATION

Proposed first steps towards the Northern Australia SPARC (STEAM Precinct And Regional Collaborator) can be achieved through $110M investment from the Federal Government to support the:

1. Business Case for the entire Northern Australia SPARC and investment into the short-term operation of Questacon in Townsville North Queensland ($2M).
3. Establishment and ongoing operation of the Northern Australia SPARC in Townsville North Queensland ($15M upfront plus ongoing costs dependent on Business Case).
4. Implementation of a tailored industry skilling program (RDA Hunter – ME Program), across North & North West Queensland ($5.2M Year 1–2, $6M Year 3–7 and $660,000 ongoing – $13M spend over 10 years).
engagement and open collaboration would be nurtured and regional projects and research would be celebrated.

The Northern Australia SPARC will catalyse the merging of the regions already diverse science community, including the Australian Institute of Marine Science (AIMS), Great Barrier Reef Marine Park Authority (GBRMPA), ReefHQ Aquarium, the Museum of Tropical Queensland, the Commonwealth Scientific Industrial Research Organisation (CSIRO), James Cook University (CU), Central Queensland University (CQU), TAFE North Queensland, the Queensland Department of Education and the proposed Museum of Underwater Art (MOUA). Partnering with Questacon, these institutions would be able to share the story of how STEAM skills and their application to real world problems are advanced. No other location in Northern Australia can claim being home to the country's leading marine science and research institutions, nor present a critical mass that collectively has the capacity to fast-track solutions to some of the nation's most pressing environmental and economic challenges. Harnessing the capabilities of these institutions and placing an emphasis upon STEAM skill development in regional Australia will cultivate Northern Australia's future leaders and strategic thinkers.

The revitalisation of ReefHQ, the National Education Centre for the Great Barrier Reef, must be prioritised as the first stage to realising the Northern Australia SPARC. To ensure that this national asset suitably represents the Federal Government's interest in creating education and public engagement facilities and guaranteeing that it will be a world-class education and EduTourism precinct.

Opened in 1987 as a Bicentennial initiative it is home to the world's largest living coral reef exhibit, a natural resource that provides in excess of 140,000 guests annually the opportunity to view and learn about the Great Barrier Reef. ReefHQ delivers both in-house and outreach education as well as EduTourism programs.

Since the establishment of ReefHQ in the 1980s, advancements in technology have made it possible to have bigger and better viewing spaces and exhibits using energy efficient and sustainable materials.

ReefHQ Aquarium has not been able to keep pace with these changes and as an example, the acrylic throughout the facility is for the most part, well beyond end-of-life. As developments surrounding Reef HQ Aquarium progress, the facility's appearance is outdated in contrast.

The critical component of the Northern Australia SPARC proposal is not the physical infrastructure nor the institutions that will support STEAM promotion, but the proposed ‘integrated industry skilling program’ that will interconnect industry and the jobs of tomorrow with the North's education system. The Federally funded ME Program has been successful in raising students’ awareness of career opportunities that will underpin future regional economies in the Hunter Valley. The program aims to make curriculum more interesting and workplace-relevant leading to a pool of job-ready, qualified and motivated workers.

Similar to the Hunter Valley's challenges in transitioning from the influence of a dominant mining and resource sector, North Queensland faces its own challenges in generating economic diversity and the technical skills and expertise required to secure its future. The successful adoption and integration of one of the nation's most successful integrated STEAM curriculum programs across Northern Queensland would prove a critical step forward in realising this objective.

A key contributor to the success of many students is the influence and the emphasis placed upon education by families and guardians - ‘education starts in the home’. The Northern Australia SPARC will seek to engage and inspire the entire community, clearly demonstrating that tomorrow’s quality of life and prosperity depends upon the thinking of today.

The SPARC will also specifically address several social and education development priority agenda, namely the promotion of women in STEAM, as well as targeting indigenous and remote community advancement and Defence veteran's reskilling and transitional programs.

THE SOLUTION

In support of the Northern Australia Agenda, we seek Federal Government support of North Queensland’s efforts to promote the engagement of STEAM literacy through:

- Allocation of funding to support the Business Case, short-term establishment and ongoing operation of a Questacon in Townsville North Queensland.

- In support of the immediate requirements of Reef HQ Aquarium requiring improved and contemporary technology and extensive infrastructure and asset maintenance, we seek the Federal Government’s support in ensuring Reef HQ Aquarium remains the National Education Centre for the Great Barrier Reef by committing $80M to upgrade the facility.

- Investment into an integrated industry skilling program (RDA Hunter’s ME Program) across North & North West Queensland.
CAPITAL OF NORTHERN AUSTRALIA
Townsville Smart Link: Electric Rapid Transit

THE ISSUE

› The Douglas Health and Knowledge precinct and the Townsville CBD are lacking in connectivity and amenity, which are impeding opportunities for growth and accessibility for the population.
› The transformation of Townsville from a regional centre to an important and progressive tropical city on the world stage is at an impasse.

BACKGROUND

Townsville, as the capital of Northern Australia and gateway to the tropics, is a growing metropolis with increasing growth management pressures including a need to maintain productive, sustainable and liveable planning responses. As the city grows, there is a need to ensure alignment between Federal, State and Local Government policy frameworks and private sector investment decisions to ensure that activity centres within the city provide the economic opportunities, services, residential and lifestyle opportunities that are reflective of a major urban centre of regional and national importance.

The Townsville City Deal includes a tri-lateral commitment to develop the Health and Knowledge Precinct and renew and revitalise the city’s urban centre. The Smart Link concept, has emerged from City Deal dialogues as a key enabler for the development of these key productive precincts in the city of Townsville. But it needs to be seen as more than just a PT solution, it is a city-making initiative, a key enabler in transforming Townsville from a regional centre to an important tropical city on the world stage.

Townsville Smart Link is a proposed electric rapid transit service and active transport corridor linking Townsville’s two most significant employment nodes and knowledge intense precincts, the CBD and the Douglas Health and Knowledge Precinct. The Smart Link carriageway would connect civic and commercial infrastructure, retail nodes, education and medical establishments and an abundance of established and burgeoning businesses and give Townsville the necessary preconditions for medium density, transport oriented development.

This proposition builds on research into contemporary Public Transport Technology (PTT) platforms for Australian cities undertaken by the Sustainable Built Environment National Research Centre (SBEnrc) led by Prof Peter Newman, Curtin University. This work has identified the ‘Trackless Tram’ as an innovative PTT that provides the benefits of light rail at around 1/10th the cost.

Townsville already has an existing broad road corridor of around 37m for a dedicated public transport lane for a Townsville Smart Link which, with the relatively simple addition of lane prioritisation, some intersection works and construction of dedicated ‘tram-like superstops’ could facilitate the commencement of the Townsville Smart Link.

By establishing a public transport solution, these two urban hubs will be linked, improving accessibility for students (domestic and international), employees within JCU and the hospital, and CBD workers residing in outer suburbs.

The Townsville Smart Link concept is strongly supported by James Cook University and Townsville Hospital and Health Service.

THE SOLUTION

In recognition of the City Deal, commitment to revitalise the Townsville CBD and establish a Health and Knowledge Precinct, a Smart Link should be established between these two hubs. The proposed trackless tram is an affordable and sustainable public transport option to efficiently connect the precincts. The total cost of development will be determined through the pre-feasibility process.
CAPITAL OF NORTHERN AUSTRALIA

Cowboys Community and Sports Excellence Centre

THE ISSUE

Townsville North Queensland currently lacks a contemporary elite sports training and performance facility and innovation centre to support the North's premier sporting club, the North Queensland Toyota Cowboys, and the associated development of the region's sporting teams and athletes through access to world-class sports science, medical and allied health services.

Establishment of a Community and Sports Excellence Centre in Townsville, located within the new North Queensland Stadium precinct, will provide significant economic and social benefits to the Townsville region, including the growth of Townsville as a new destination market for touring sporting teams.

Expansion of the Cowboys' headquarters is also crucial to enable the community-owned club to build and expand on an impressive 20 years of community leadership, corporate social responsibility and successful community project delivery, as the Cowboys Community Foundation increases its important work in making real change in employment, health and social outcomes for young North Queenslanders.

BACKGROUND

The Cowboys are strongly committed to the realisation of the Cowboys Community and Sports Excellence Centre, having secured a long-term land lease for a 17,000m² site adjacent to the new North Queensland Stadium through the Townsville City Council. This site incorporates 12,000m² for a full-sized training field and a 5,000m² footprint for the facility's building.

The Cowboys are one of only a few professional sporting organisations with a successful community-based ownership structure. The Cowboys consider the Centre to be critical to securing the club's success on the field and delivering positive outcomes off the field.

The club is proud to be a cornerstone of the regional economy, with its home games, brand, corporate activities and community engagement generating a significant, ongoing economic contribution.

The total economic output added to the region's economy annually is $94.6M which contributes $45.78M to the region's gross domestic product, including 459 jobs totalling $27M in wages*. (*Source: Empower Economics, 2016).

In addition to managing an NRL squad of 36 members, the club continues its commitment to homegrown talent through its close affiliation and support of three Queensland Cup feeder teams (Townsville Blackhawks, Cairns Pride, Mackay Cutters) and an Academy program focusing on high-school aged players that is spread throughout regional Queensland locations.

The Cowboys have the largest footprint in the NRL and maintain a strong presence in grassroots rugby league, visiting over 40 locations and reaching almost 30,000 students in 2018, as well as hosting competitions and carnivals for over 2,500 participants.

As the most-loved sporting brand in Northern Australia, the not-for-profit club has a strong commitment to, and history of, social responsibility and contributing to the growth of the communities of North Queensland.

Important community programs are delivered by the club through both the Cowboys' in-house community team and the Cowboys Community Foundation, the club's charity arm established in 2015 and operating as a community-owned charity (DGR endorsed) to actively improve employment, health and social outcomes for young North Queenslanders through education-based programs.

RECOMMENDATION

- Federal Government to provide $35M in initial capital investment to support the establishment of the Cowboys Community and Sports Excellence Centre in Townsville North Queensland.
Club community programs include:

- NRL Cowboys House (established 2017; for Indigenous secondary students from remote communities without access to complete secondary school) – 50 House Brothers in 2018; an additional 25 House Sisters in 2019

- The Resilience Project (established 2018; building a more resilient North Queensland community with parent, teacher and student information sessions) – 4000+ people attending sessions in 2018

- Adopt-a-School (established 2005; in-school program using ‘adopted’ Cowboys as role models for healthy choices) – 46 schools, 194 visits in 2018

- Dream, Believe, Achieve (established 2015; training and employment program delivering accredited courses to unemployed and disadvantaged North Queenslanders) – 105 participants in 2018; total of over 300 participants over three years

- Try for 5! (established 2013; in-school program focused on improving school attendance and engagement) – an improvement of 8.86% in primary school attendance in 2018

- Learn Earn Legend! (established 2012; in-school program focused on closing the education outcomes gap for Indigenous students, employing and training Indigenous mentors) – 30 Indigenous students mentored in 2018; total of over 800 Indigenous senior secondary students in 22 schools since the program began

With the ability to expand within a larger professional space, the community team will have the opportunity to extend their programs and their relative outcomes along with opportunity for inclusion of an identified need for focus on North Queenslanders with Pacific Island heritage.

THE SOLUTION

With a total project estimate of $50M, the Cowboys are seeking a $35M Federal Government investment for the Cowboys Community and Sports Excellence Centre and are currently raising the funding balance from club resources, as well as corporate, community and philanthropic sources.

The Cowboys Community and Sports Excellence Centre will generate significant economic and community benefits for the region, including:

- Sustainability of the North’s premier sporting club: The sporting excellence facility will be a state-of-the-art, high-performance training environment, inclusive of athletic training facilities, and will be reflective of the highly competitive environment of Australia’s elite National Rugby League. With more NRL clubs investing in bespoke training centres to help improve their athletic performance and to assist in the retention and attraction of players, partners, members and fans, the Cowboys have a once-in-a-generation opportunity but also a need to purpose-design a space to support their long-term visions of competitiveness and sustainability.

- Precinct revitalisation: The intention is for the centre to include a co-located sports science and research facility in collaboration with James Cook University. Similarly, Mater Health Services North Queensland are committed to delivering an on-site sports medical consulting and rehabilitation centre to add impact to the capabilities of the precinct.

- Destination for sporting teams: The Centre will create a new destination for visiting teams and athletic group training camps. Complemented by sports rehabilitation, science, research and medical services on-location, this facility will be a springboard for Townsville to attract interstate and Asia-Pacific based teams (professional and development squads) and athletes for various types of competitions and training camps. Services would include ‘heat training’, which is rapidly gaining popularity as a scientifically-verified alternative to altitude training (made famous by Arizona, USA). The economic uplift would be represented in international destination brand value and through specialist and ancillary employment and visitation revenue.
Community spaces: The community centre will be a hub for the club’s community team and the headquarters of the Cowboys Community Foundation, as they deliver the established community programs and initiatives that support our community and region. The Centre will create a centrally-located meeting space for program stakeholders, clients and community members where face-to-face communication with mentors and program staff is crucial for successful participation and engagement in education, employment and training-based programs. The ability of the club and the Foundation to expand the reach and impact of their community services will be significantly increased through relocation to this facility. The club is also incorporating accessible community spaces into the overall building and training amenity to ensure its grassroots and community connection continues. There would also be opportunity for the Centre to host an Indigenous history museum, open to the community and showcasing Indigenous sporting contribution and significant cultural memorabilia and history.

Creating opportunities, inspiring futures: NRL Cowboys House has been in operation for two years and has already made a significant impact on the lives of over 50 young Indigenous students from remote North Queensland communities. The Cowboys Community Foundation’s flagship initiative provides access to a secondary education and wrap-around health, wellbeing, remedial education and personal development support for Aboriginal and Torres Strait Islander young people from remote Indigenous communities who board at the House while they attend a Townsville school appropriate to their skills and aspirations. As the facility expands in 2019 with a Girls Campus, the club has identified key opportunities for the House to link with the Cowboys Community and Sports Excellence Centre. It is anticipated that the creation of the centre closer to home will also enhance the potential and promise of young Indigenous people.

Employment boost: Economic impact studies on this project are still being completed but initial indications are that the uplift from this facility will be in the order of an additional 15 FTE direct jobs.

Townsville Enterprise is calling on the Federal Government to invest in the community and the region with a one-off capital allocation to this important new facility.

Nurturing North Queensland’s elite female talent: The centre will create a new focal point for the Cowboys’ partnership with three-time WNBL champions the JCU Townsville Fire, the only professional women’s sporting club in Northern Australia. The clubs’ two-year Memorandum of Understanding was announced in September 2018 and will enable them to join forces to create opportunities and expand their social and economic contribution through a strategic alliance. The centre will also be a platform for the Cowboys’ expansion into the NRL Women’s Premiership, Australia’s national rugby league competition for female players established in 2018. The club is investing in developing female grassroots talent throughout North Queensland with a five-year plan of entering a Cowboys team in the NRLW filled with Northern Australian talent.
DESTINATION DEVELOPMENT
Museum of Underwater Art (MOUA)

RECOMMENDATION
› The Federal Government provide $2M to support the development of the Southern Hemisphere’s first Underwater Art Museum.

THE ISSUE
› Townsville North Queensland requires a point of difference to establish itself as a primary destination for domestic and international visitors.

BACKGROUND
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, rainforest, and 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 and Great Barrier Reef Marine Park Authority). The Townsville North Queensland tourism and events industry contributes just under $1B in output to the local economy annually and supports more than 5,500 local jobs.

Building on these solid foundations, Townsville North Queensland could further strengthen its position as a leading region in Northern Australia through the 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 deCaires 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 deCaires 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. 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 deCaires 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. (Geo-Mexico, 2017)

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 benefits 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 predominantly 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.

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 Port of Townsville, 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. It is proposed that a public/private partnership funding model is appropriate. The Queensland State Government has committed $2M to the project which has been supported by $750K from the corporate sector. We are directly seeking $2M in Federal Government funding for this project and its realisation in 2019. This application for $2M is currently under consideration through the Building Better Regions Fund.

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

Townsville, the largest city in Northern Australia is unable to attract major entertainment and exhibition events due to the condition and age of the current entertainment infrastructure.

BACKGROUND

The current Townsville Entertainment and Convention Centre is no longer considered fit for purpose and is beyond the end of its economic useful life with ongoing operational and maintenance issues. The venue lacks the flexibility, facilities and size required of a modern multi-purpose venue capable of attracting and hosting large exhibitions, conventions and entertainment and sporting events.

In 2017, Townsville City Council released the Pure Projects master plan for the Townsville CBD which identified that all performing centres throughout Townsville are at capacity, with a need for more facilities and variety identified. A new ‘Townsville Entertainment and Exhibition Centre’ has also been included as a commitment in the Townsville City Deal with a targeted delivery of 2020 – 2022.

A master plan for the site where the new North Queensland Stadium is being constructed is in development and will include provision for a future entertainment centre as part of an integrated precinct.

THE SOLUTION

A new Townsville Entertainment and Exhibition Centre is needed. It would need to be designed as a multipurpose flexible centre to accommodate a range of entertainment and sporting events as well as hosting meetings, conferences and conventions. This would maximize its use for a range of markets.

The work undertaken by Pure Projects identified that an entertainment and exhibition precinct adjacent the new stadium would complement the new stadium and provide stimulus to the area of frequent and continuous patronage which would help in contributing to the activation of the CBD. This would also have the flow on effect of being a good activator for CBD hotels and accommodation options.

The delivery of the project will reinforce the Townsville CBD and Priority Development Area, as well as leveraging the new North Queensland Stadium, to create an attractive destination, leverage additional short-term accommodation, entertainment, retail and leisure-based investment, promote tourism and events attraction and create additional jobs and skills in the service industry.

RECOMMENDATION

Estimated $150M funding support (reflective of the pre-feasibility report due early 2019) to enable the realisation of a new multipurpose ‘Townsville Entertainment and Exhibition Centre’ venue by 2020 – 2022.
DESTINATION DEVELOPMENT

Townsville Concert Hall

THE ISSUE

» Extensive utilisation of current concert facilities (booked out two years in advance) and the increasing community and cultural events/activities are at risk due to limited access to a suitable facility.

BACKGROUND

Townsville has a significant population of nearly 200,000 people, with a regional population of close to 400,000. It is diverse in terms of its people and industry sectors.

Townsville has a significant gap in its capacity for cultural facilities (ie physical infrastructure) and the supply of these facilities. There is a significant lack of suitable venues for the full spectrum of arts activities from touring concerts and productions to community cultural events. Townsville has a very active arts community, particularly in music. It also hosts the Australian Festival of Chamber Music, the largest chamber music festival in the Southern Hemisphere, which attracts well over half its audience annually from interstate. Townsville is also the home of the nationally and internationally acclaimed contemporary dance company, Dancenorth. It hosts a huge range of music/performance bodies including the Barrier Reef Orchestra and the NQ Eisteddfod.

The Townsville Civic Theatre (TCT) is booked out at least two years in advance. Community groups whose activities are planned well in advance with a predictable calendar can secure bookings long before touring companies are in a position to book tours. The lack of space in the TCT’s forward calendar also affects the possibilities of building audiences and nurturing local talent through collaborations, festivals, local productions and other entrepreneurial opportunities. The dominance of community bookings (70%) also negatively impacts on the economic model for Townsville Civic Theatre operations. This is negatively affecting the local community in its music-making and audience engagement and also significantly impedes the growth and vitality of the city’s entertainment and cultural life because it limits the presentation of exciting and attractive national and international presentations. This in turn has an effect on the tourist experience of Townsville – exacerbated by the absence of a vibrant and diverse CBD.

Not only is there a need for another cultural facility – but this is also an opportunity to fill the gap in the nature of the venue – ie a Concert Hall which would meet the demand locally and externally for music presentations. There is also significant shortage of corporate and commercial spaces for functions, conferences and events in the CBD. In addition, the viability of such a venue would be significantly enhanced by its ability to generate commercial hires – not only in the Hall but in associated venues and foyers.

RECOMMENDATION

› Fund the master plan, feasibility and design of the Townsville Concert Hall ($1M); and
› Fund the delivery of an 800-1,000 seat Concert Hall located at Central park (Estimated $45M) as reflective of the feasibility report.
Investment in cultural infrastructure in Townsville and specifically a fit for purpose Concert Hall will help achieve priority areas outlined within the Townsville Community Development Strategy. There is not only a high level of skilled engagement in music and the arts in Townsville, but there is great potential for more attractive offerings and for growing audiences and participants.

Jennifer Bott AO was engaged by Townsville City Council in 2017 to undertake a feasibility study for a Concert Hall in Townsville. The study recommendations included the following:

- Build a concert hall with 800–1,000 seats – raked floor, shoe-box design with a stage (no proscenium arch or carpets);
- In the surrounding cultural complex ensure there is:
  - A flat-floored small gallery/room (ceiling height of four to eight metres) for social functions, events, trade exhibitions, rehearsals, workshops and music;
  - A small black box studio space for theatre, workshops, rehearsals, a recording studio, etc;
  - Storage for instruments, props and equipment.
- The new Concert Hall/Cultural Facility should have well positioned, large foyers which can be used for functions and can be easily serviced by attractive bars and a café/restaurant on site;
- Improved facilities at existing outdoor venues – storage for instruments and audio equipment, shade for performers and audience, etc;
- With enhanced space from new facilities will come scope for developing new programs at all venues including:
  - Producing local shows;
  - Present Dancenorth in larger local venues;
  - Expanding arts education options on weekends;
  - Cross-over activities with cinema presentations;
  - Greater scope for business functions and community events such as trade fairs, speech days and graduations, memorials, tributes and annual general meetings;
  - Seek to exhibit more of the city’s 3,000 strong art collection in other spaces such as the new cultural complex as well as other foreshadowed developments.
**THE ISSUE**

- Rejuvenation of The Strand precinct and investment in major tourism infrastructure in proximity to Townsville’s CBD will complement the new North Queensland Stadium, improve liveability and attract visitors to the region.

**BACKGROUND**

In 2017, Townsville City Council enacted a strategic review, incorporating the existing CBD and the designated Priority Development Areas (PDA), with the objective of providing an integrated Master Plan that defines the reactivation of Townsville’s City Centre. The scope of the review was expanded to include key tourist and recreational destinations and other development opportunities including Castle Hill, the Strand, and Rowes Bay and Radical Bay on prestigious Magnetic Island, to create “a clear vision for our city”.

This vision, “Townsville 2020” identifies that the rejuvenation of The Strand and investment in tourism infrastructure in proximity to the CBD, would complement the new North Queensland Stadium and promote foot traffic to and from the CBD. This investment would provide a positive impact for CBD and Strand hospitality providers and promote further investment into the sector.

The Strand is Townsville’s premier destination for residents and visitors alike to relax, socialise and exercise. Its aspect overlooks the majestic Cleveland Bay and Magnetic Island, with Magnetic Island acknowledged as the jewel in Townsville’s crown. Townsville 2020 identifies the need to create a brand and generate greater interest in Townsville by leveraging the natural beauty of The Strand through the strategic placement of improved public infrastructure. The Strand was last upgraded 17 years ago and there is opportunity to provide a flagship public amenity and tourism product to drive a step change in the Townsville economy.

The Master Plan identifies that safe all-year-round water-based activities will redefine and enhance the city and provide a definitive local, domestic tourist attraction and statement.

The Townsville Lagoon will be the largest man-made pool in northern Australia providing the opportunity to swim all year round in Townsville’s most idyllic location. This crucial project will make The Strand even more popular with locals and visitors and open new commercial opportunities in the area.

Crystal Lagoons has been approached by Townsville City Council to develop the concept plans for the development. Crystal Lagoons is an internationally recognised innovation company, which has developed a patent-protected technology that allows the construction and maintenance of unlimited-size clear water lagoons at very low costs.

The Crystal Lagoons concept design of the ‘Townsville Lagoon’ is based on the development of a 6-hectare recreational precinct offering a variety of leisure activities and water sports uses. The scale of the proposed lagoon would make it the largest of its kind in the Southern Hemisphere, and one of the hottest tourist attractions in Queensland.

Townsville City Council has invested $1 million into furthering the environmental and engineering studies to support early commencement of construction.

**THE SOLUTION**

THE ISSUE

- No driver education or hard stand motorsport facility exists in North Queensland, the most populated region in Northern Australia.

BACKGROUND

DriveIt NQ Limited is a not for profit (NFP) Company Limited by Guarantee, made up of organisations, clubs and individuals dedicated to the primary purpose of establishing a permanent driver education and motorsport precinct in the Townsville Local Government Area (LGA).

The proposed upgraded motorsports facility at Charters Towers, together with a new Driver Education and Motorsport Precinct for Townsville, will enable North Queensland to cement its positioning as an events and adventure destination and, in particular, to become a leading motorsports destination.

DriveIt NQ has a lease agreement in place with Townsville City Council to establish a new community owned and managed facility based at Calcium. It has received a $5M grant from the Federal Department of Infrastructure, Regional Development and Cities which is being committed to a large highway grade concrete hard stand to be used for driver education including multi-combination and other heavy vehicle rollover training.

Townsville North Queensland has been largely without a dedicated motorsport facility since the closure of the Townsville Dragway in 2012 (for the land to be used for residential housing development) and the closure of the Townsville Speedway in 2007. The DriveIt NQ precinct will address this need to support driver education and motorsport in Townsville, generating significant economic and community benefits, including:

- Reduced incentive for illegal and dangerous street racing and dragging;
- Expanded driver education activities in the areas of L-P Programs, Defence and Emergency Services, Heavy Vehicle and other industry specific training, with the potential for significant positive road safety impacts for the greater North Queensland community;
- Enhancing Townsville’s profile as a motorsport events destination, building on the success of the annual Townsville Supercars (which draws crowds of around 150,000 over three days) and contributes a significant amount to the local economy;
- Improving the tourism and events profile of the Townsville region generally, particularly in conjunction with an upgraded motorsports facility at Charters Towers;
- Increased sporting, recreation and entertainment options and amenities for residents.

RECOMMENDATION

- The project secured $5 million from the Federal Government in September 2017. An $18.5 million commitment is still required.
THE SOLUTION

DriveIt NQ proposes to establish a permanent driver education and motorsport precinct, which would also be utilised for other recreational purposes (such as concerts, field days, auctions, etc).

The precinct facility is proposed to include:

- A skid pan for all levels of driver education including heavy vehicles (covered by the DOIRP grant);
- A network of interconnected roads that can be utilised for driver education;
- A 3.0–3.5km bitumen circuit track;
- A range of off-road rally tracks ranging from 1-5 km;
- International standard drag strip and speedway with grandstand seating; and
- Common use and large event area facilities.

The precinct is designed to host weekly club level motorsport in addition to being able to attract and service state and national level rallies and events across:

- Circuit racing (cars and bikes);
- Speedway racing;
- Drag racing;
- Off road racing; and
- Kart racing.

The precinct will also support ongoing driver education and advanced training programs throughout the week.

Townsville Enterprise acknowledges the Federal Government’s existing $5M commitment. A further $18.5M is required to complete the project.
**THE ISSUES**

**USE OF MACRO-ALGAE TO REMEDIATE SEWERAGE EFFLUENT – $5M 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 phosphorus by 61%.

The scope of works is to construct and operate, as a trial proof of concept, a 3.0 ha 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 Federal Government funding is required.

The project will build capacity for an increase in irrigated agricultural production within and adjacent to Lower Burdekin Water authority area; an increase in reliability of aquifer recharge during peak flow periods and an expansion in both the extent and the capacity of Lower Burdekin Water 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 ha of agricultural land ready to go into production with all necessary planning and development approvals in place for a further 2,000 ha of agricultural land, and the potential for another 2,000 ha 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 $5M in funding to support the use of macro-algae to remediate sewerage effluent harmful to the Great Barrier Reef; and
- Provide $7.8M in funding to improve distribution infrastructure to provide water delivery to the southern end of the Burdekin Shire.

**RECOMMENDATION**

- Federal Government to provide $5M in funding to support the use of macro-algae to remediate sewage effluent harmful to the Great Barrier Reef; and
- Federal Government to provide $7.8M in funding to improve distribution infrastructure to provide water delivery to the southern end of the Burdekin Shire.
THE ISSUES

RETAIL & COMMERCIAL PRECINCT
The project involves construction of Stages 2 and 3 of a retail and commercial precinct on the underutilised waterfront land on Great Palm Island. The precinct will provide a vibrant mix of retail and specialty shops and is designed to bring mainland shopping and service opportunities to the Island, increase employment, community capacity and pride and stem the leakage of vital expenditure from the Island. It will provide a safe and inviting environment to support Palm Island Aboriginal Shire Council’s Tourism and Event Strategy.

PALM ISLAND ECONOMIC TRANSFORMATION AGENDA
A Federal Government funding commitment of $15M (over 5 years) is sought to support the establishment and implementation of the ‘Palm Island Economic Transformation Agenda.’ This targeted program will seek to address the unique social and market conditions that remote Australia presents, particularly for indigenous community members and traditional owners who wish to pursue self-employment and small business development opportunities. The program will work directly with Palm Island’s community to nurture local micro and small business concepts, providing tailored support to develop business plans, skills, access to business networks and capital, and ensure that business development is linked to community economic objectives and broader job creation. The program will also look to assess and alleviate enabling infrastructure impediments supportive of long-term economic development activity. The core objective of the Palm Island Economic Transformation Agenda is to establish a bench-mark community led SME developmental framework that can be used as an eventual national pilot supportive of other Aboriginal and Torres Strait Islander communities’ economic and social development ambitions.

SPLASH PARK
This project will not only provide a safe place for families and children to socialise and play together, the Palm Island Splash Park is expected to boost attendance at primary school through a ‘no school, no water park’ policy.

MULTI-PURPOSE TRAIL NETWORK
The project involves installation of a network of graded, scenic tracks for walkers, cyclists and horse riders. Tracks will include breakout platforms, signage and interpretation along the way to pause and enjoy the coastline and views across the Coral Sea. The trail network will contribute to island health and liveability and support economic development through Palm Island Aboriginal Shire Council’s Tourism and Event Strategy.

AERODROME TERMINAL UPGRADE
The current Aerodrome Terminal on Palm Island requires an upgrade to improve the safety and experience of passengers and increase the efficiency of vital transport. The terminal upgrade will include improved terminal facilities, shaded outdoor areas and carparking and storage improvements.

THE SOLUTION
Townsville Enterprise is seeking Federal Government support for the realisation of the following priorities:

- $30M to support construction of Stages 2 and 3 of a retail and commercial precinct on Great Palm Island;
- $15M (over 5 years) to support the establishment of the ‘Palm Island Economic Transformation Agenda’;
- $1.2M to support construction and installation of Splash Park;
- $1.5M to support installation of multi-purpose Trail Network; and
- $5M to support the Aerodrome Terminal Upgrade.
SUPPORTING THE REGIONS

Hinchinbrook Shire Council

RECOMMENDATION

- Federal Government to provide $360K in funding to undertake a Coastal Processes Assessment Study (including comprehensive EIS);
- Federal Government to provide $900K in funding to undertake the business case (including comprehensive EIS) for establishment of ramp and jetty facilities at Forrest Beach;
- Federal Government to provide $900K in funding towards heated silo storage facilities for pulse, rice and comparable grain production; and
- Federal Government to provide $540K in funding towards a business case (including comprehensive EIS) for establishment of an in-stream weir facility within the Herbert River.

THE ISSUES

IMPROVED MARINE ACCESS AT DUNGENESS

A Coastal Processes Assessment Study will seek to understand options available to improve marine access at Enterprise Creek navigation channel.

NEW BOAT RAMP/JETTY FACILITIES AT FORREST BEACH

There are limitations to accessing marine waters in the region, including:

- Access restrictions at low tide, with limited to no access for small shallow draft vessels;
- Lack of all-tidal marine access facilities within reasonable proximity to the Hinchinbrook region;
- Marine access is limited to casual recreational purposes (tide dependent), with the exception of the jetty, operated by Queensland Sugar Limited;
- Limited ability to provide safe and efficient marine access for people and goods within the region, including access to Palm and Orpheus Islands and access for Maritime Safety Queensland (MSQ) vessels, a major concern in emergency situations.

HEATED SILO STORAGE FACILITIES

This project will encourage and promote diversification in agriculture, complementary to sugar cane production, by value-adding during crop rotational/fallow cycles, utilising dryland rice cropping and legumes.

A lack of suitable storage facilities is impacting transport costs as smaller truck loads need to travel between Hinchinbrook and Burdekin. Efficiencies and improved profitability can be achieved through increased storage capacity, enabling individual farmers the ability to deliver loads to a local depot for collection by bigger units when appropriate quantities have accumulated.

HERBERT RIVER WEIR PROJECT

An in-stream weir facility within the Herbert River will seek to:

1. Protect salt water intrusion of fresh water supplies;
2. Increased opportunity for irrigated horticulture, complementary to sugar cane production by availability of supplementary irrigation; and
3. Increase recreational opportunities for fishing, water sports and tourism adjacent to the township of Ingham.

THE SOLUTION

Townsville Enterprise is seeking Federal Government support towards the improvement of key tourism and enabling economic infrastructure in the Hinchinbrook Shire by funding:

- The Coastal Processes Assessment Study;
- The Business Case for ramp and jetty facilities at Forrest Beach;
- Heated silo storage facilities; and
- The Business Case for the Herbert River Weir Project.
SUPPORTING THE REGIONS

Charters Towers Regional Council

RECOMMENDATION

› Federal Government to appoint Charters Towers Regional Council as the project management proponents of the Big Rocks Weir Project;
› Federal and State Governments adopt a bipartisan, coordinated and whole-of-government response to the impacts of ongoing drought in Queensland communities;
› Provide support to undertake measures to reduce the significant impact of flying fox, including change in legislation for the State Government to take complete responsibility for flying fox management;
› Federal Government support long-term planning for strategic regional freight and tourism routes through the region;
› Federal Government fund state-identified works on the Gregory Development Road that is currently inadequately funded by the State;
› The Federal Government restores Financial Assistance Grants funding to local government to a level of at least 1% of Commonwealth taxation revenue;
› Continue to liaise closely with Charters Towers Regional Council regarding Australia-Singapore Military Training Initiative (ASMTI) opportunities within the region, following confirmation of a regional training area in our Local Government Area (LGA); and
› Nominate the Charters Towers region for the provision of telecommunication infrastructure through the Mobile Black Spot Program.

THE ISSUES

BIG ROCKS WEIR
The Charters Towers region requires water security to develop prime agricultural land and adequately support residential growth and commercial and industrial development as a direct result of the agricultural opportunities and future tourism opportunities.

DROUGHT ASSISTANCE
With agriculture currently a key economic pillar for the Charters Towers region, ensuring the industry remains viable is a central challenge of serving the wider community. The Charters Towers region has been partly or wholly drought declared since 2013. In 2018, part of the region’s drought declaration was revoked however 45.7% of the region remains drought declared.

FLYING FOX MANAGEMENT
Increasing numbers of flying foxes are significantly impacting our community economically and environmentally as well as reducing the quality of life for residents.

TRANSPORT INFRASTRUCTURE
Given the Charters Towers region’s strategic location at the centre of a designated triple-road-train network, the Flinders Highway and Gregory Development Road requires essential upgrades to serve as an alternative North-South route to the Bruce Highway to service ongoing beef and agricultural trade and unlock pending economic development opportunities such as Defence training and further emerging projects.

FINANCIAL ASSISTANCE GRANTS
Given the steady, long-term decline of Financial Assistance Grant funding to local government from 1996 onwards, Charters Towers Regional Council has been under immense pressure to meet ongoing and increased demand for essential services and infrastructure. The growth in Commonwealth taxation revenue over the past 20 years has not been matched by a growth in distributions to Local Government; nor has the growth in partnership funding – although very welcome – filled the gap.

DEFENCE
With a proposed training area marked for Greenvale in the Charters Towers region, Charters Towers Regional
Council is determined to retain business opportunities within the LGA, avoiding excess leakage and fulfil the opportunities under the Australia-Singapore Military Training Initiative (ASMTI).

**TELECOMMUNICATIONS**

The Charters Towers region is vast in area (70,000km²) and has insufficient and/or unreliable mobile coverage, within the city and surrounding areas. Improving connection and reliability is paramount to the health, wealth and quality of life of Charters Towers residents and visitors.

**THE SOLUTION**

Charters Towers Regional Council is seeking Federal Government support towards the following priorities:

**BIG ROCKS WEIR:** Fast-track and initiate Phase 1 of the Hells Gates Dam Project by reengaging the Townsville Enterprise/SMEC Feasibility Study consortia to deliver the Business Case stage and appoint Charters Towers Regional Council to construct the project.

**DROUGHT ASSISTANCE:** Adopt a strong policy platform with a more insightful and responsive approach to drought policy which considers the impact on regional economies, the level of assistance required by primary producers and landholders and the role local government plays in securing communities against ongoing threats such as drought.

**FLYING FOX MANAGEMENT:** Commit to continued and ongoing support of Charters Towers Regional Council to develop sustainable solutions.

**TELECOMMUNICATIONS:**

1. Continue the Mobile Black Spot program with consideration of Charters Towers region localities for current and future rounds, prioritising the following rationalised locations:

   a) Disaster Management: Burdekin Falls Dam locality; Gregory Development Road, particularly south.

   b) Economic development of high-value agriculture and Defence: Gregory Development Road (north and south).

2. Support the recommendations of the 2018 Regional Telecommunications Review, particularly ‘Recommendation 10 c’ Encouraging the agricultural sector to provide industry-specific advice about the Internet of Things and other digital applications that will drive productivity gains in the sector.

**TRANSPORT INFRASTRUCTURE:**

1. Federal Government use wider economic and social benefits analysis to inform and support decision making for investment decisions for roads in the regional area.

2. Support the state application for upgrades via the Northern Australia Infrastructure Facility.

**FINANCIAL ASSISTANCE GRANTS:** Commit to restoring a more sustainable approach to Federal Financial Assistance Grant funding to Local Government; i.e. 1% plus partnership programs.

**DEFENCE:** Commit to fulfilling local procurement from within the LGA for regional investment and business opportunities to be realised.