

# Smart Townsville





# Townsville City Council is committed to improving the lives of all citizens, while maximising the use of ratepayer's valuable funds.

Through strong financial management, Council is delivering a record infrastructure spend of \$433 million in our capital works program and has a projected surplus in this fiscal year.

Townsville's prosperity is reliant on continued financial practicality, jobs growth and a clear vision for our city.

We know that today, residents expect simpler and more personalised services that respond to their individual needs without increasing financial burden. At the same time our economy needs support as it transitions towards a more knowledge-based industry.

That's why Townsville City Council has committed to embracing the principles of Smart Cities and will be encouraging our partners, community groups, businesses and members of the community to join us on the journey.

This new Smart Townsville Partnership will ensure our city is connected, competitive and resourceful. Above all, this will be a partnership for everyone, focusing on how technology can improve living and opportunity in Townsville.

We have already begun the transformation in Council to use data and information to determine the most efficient use of public money and to enable positive outcomes for residents. We are investing in the next generation of economic infrastructure for Townsville, including support for the Imperium3 Battery Plant and the North Queensland Regional Data Centre.

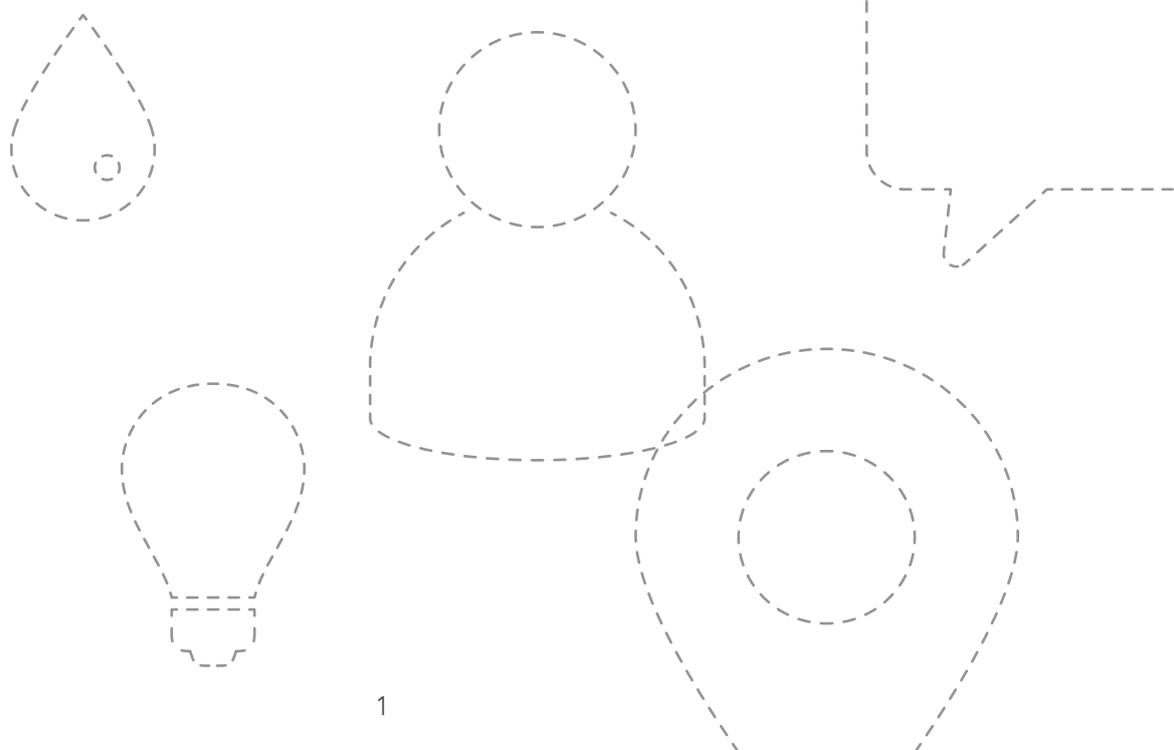
Community-facing online dashboards will present how we measure what is important to residents. These dashboards will build upon the success of the disaster dashboards used during recent weather events, which became the central point of information residents could rely on. Their use will allow Council to better focus on creating and enabling measurable change in the community in areas that really matter.

This is only the start of an ongoing process which will:

- > apply the principles of Smart Cities to recognised problems within Townsville
- > improve the way Townsville City Council operates and responds to community needs and ideas
- > develop our innovation ecosystem to support local entrepreneurs to solve local problems which may lead to the creation of global businesses.
- > protect our unique North Queensland lifestyle
- > provide the economic framework and infrastructure for the jobs of the future.

This partnership along with our record infrastructure program, water security solution and Townsville 2020 projects will result in a stronger community, jobs creation and will propel our city forward.

**Jenny Hill**  
Mayor of Townsville



# What is a Smart City?

Smart Cities are not about technology; they are about empowering people to make better decisions.

Those decisions may be things like where best to park their car, which road should be prioritised for an upgrade, when to fix a leaking pipe and what type of business to start. While people and councils make these decisions every day, they become even more effective when they are based on evidence.

For instance, a decision on where to park a car is simplified when you know where the nearest empty carpark is. Organising a plumber to fix a leaking pipe can occur sooner when you are made aware of excess water use by an SMS on your phone, rather than receiving an excessive water bill months later.

While Smart Cities use technology to give those insights, technology itself does not make a Smart City.

For Townsville, a Smart City is where technology is leveraged to improve the relationship between citizens and their city, to create more opportunity and prosperity for today and for the future. Our Smart City is one where citizens, business, academia and community groups collaborate with local government to improve service delivery, design their community, and co-create solutions to improve their quality of life.

# Why Townsville is becoming a Smart City?

Smart Cities use technology to change the relationship between councils and the communities they serve.

Instead of council making decisions and residents being subject to them, Smart City technologies allow an active continual conversation, collaboration and a partnership approach.

Townsville City Council (Council) understands that using these techniques is the most effective and efficient way to increase outcomes for the community.

This process will result in Council being able to:

- > Provide services to the community more efficiently.
- > Be more transparent about how rates are used for community benefit.
- > Be more responsive to both individual and community needs.
- > Provide a targeted economic stimulus to the community.

At the same time there are a number of community challenges which can be alleviated using these techniques. In Council, we have successfully reduced energy costs by implementing smart technology solutions, including using sensors and intelligent systems to manage our power consumption. Ultimately, this kind of initiative provides savings to ratepayers and enables us to provide more public value.

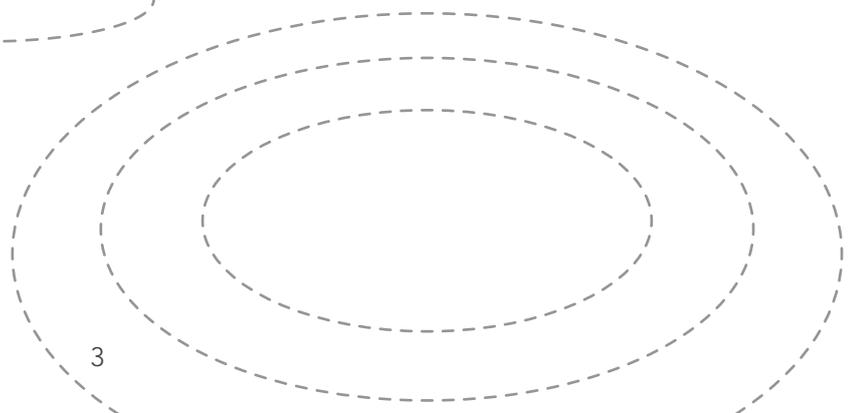
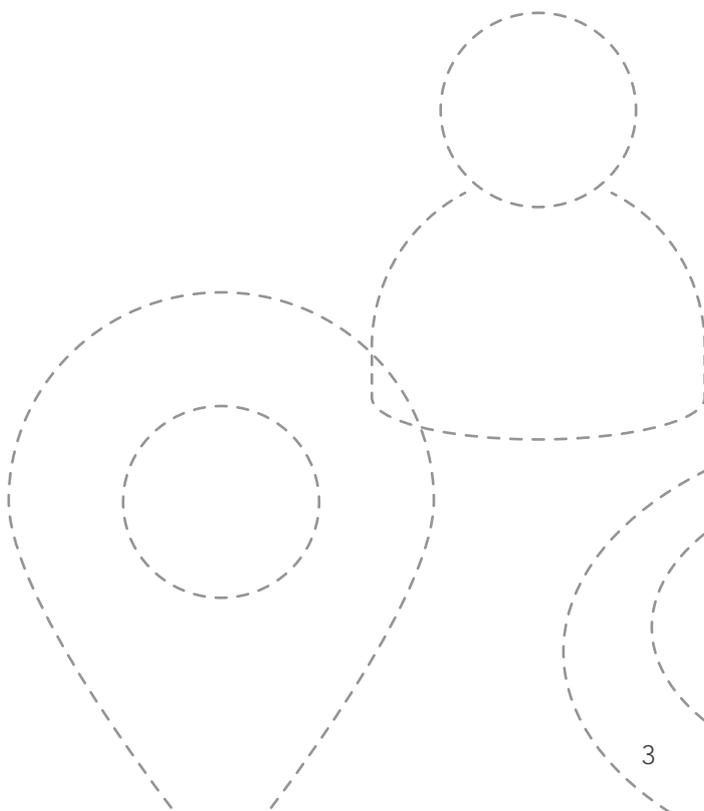
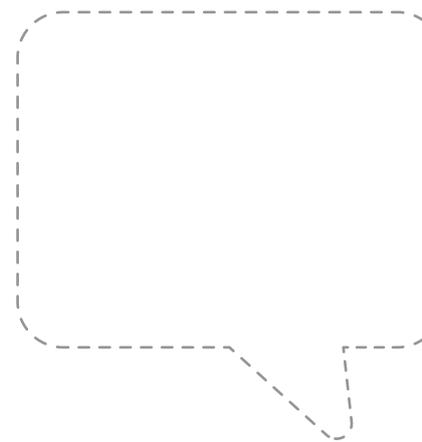
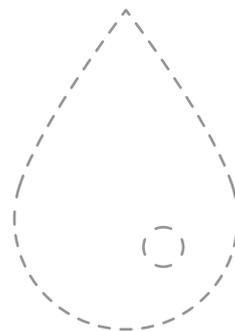
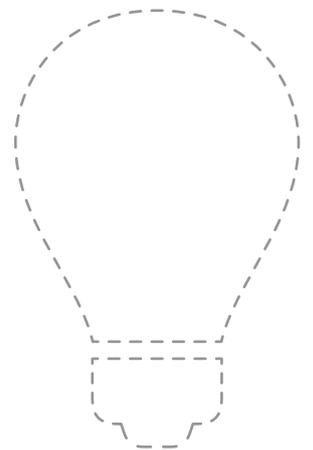
Only through embracing the opportunity created by leveraging data and information and the philosophy of a Smart City can we achieve the change we desire within our means, while focusing on building economic security for families in Townsville and protecting the community's lifestyle.

# Our process

To ensure Council is focused on solving real local challenges we have engaged with stakeholders to determine which challenges are most important to our residents and to validate potential solutions.

A series of workshops and one-on-one sessions were conducted to determine the strengths, weaknesses, opportunities and threats to the City of Townsville. In addition, we have conducted many informal discussions with potential investors and residents of the region, as well as with tourists and tourism operators.

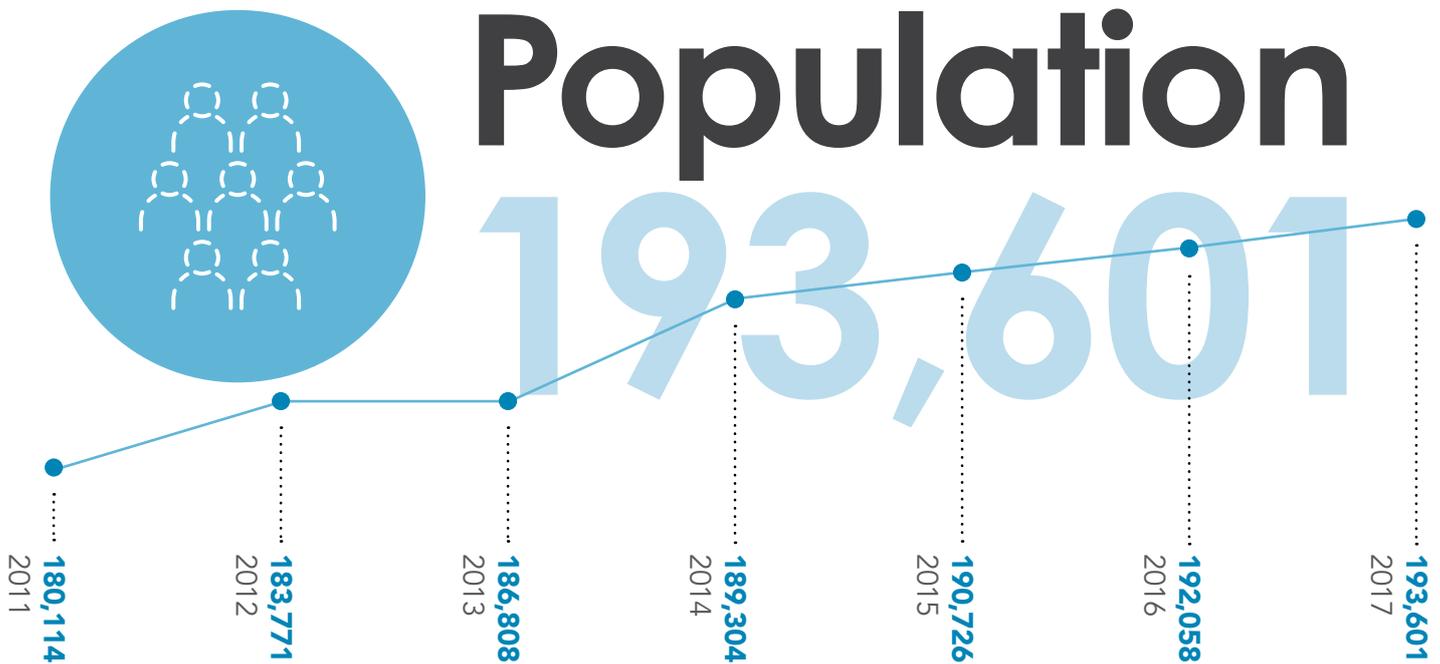
This engagement uncovered a near uniformity of opinion between key stakeholders and residents of the region. Consequently, we feel confident that the issues raised through the consultation are largely shared by the community.



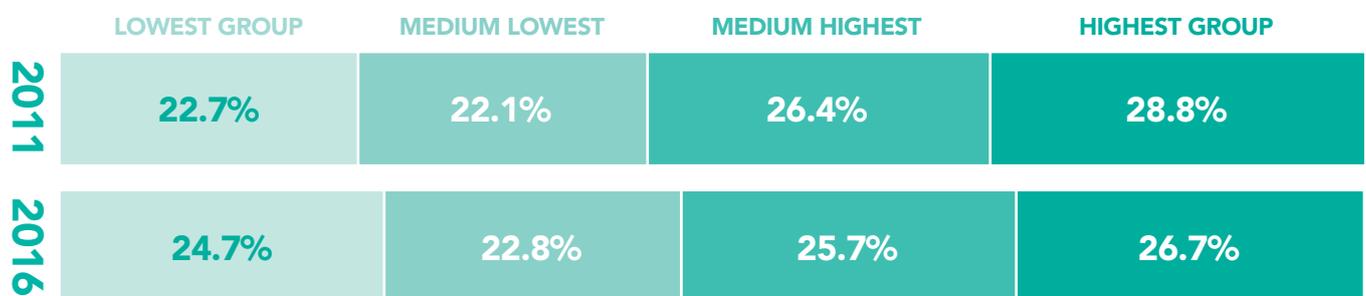
# Townsville – A snapshot

## Population

193,601

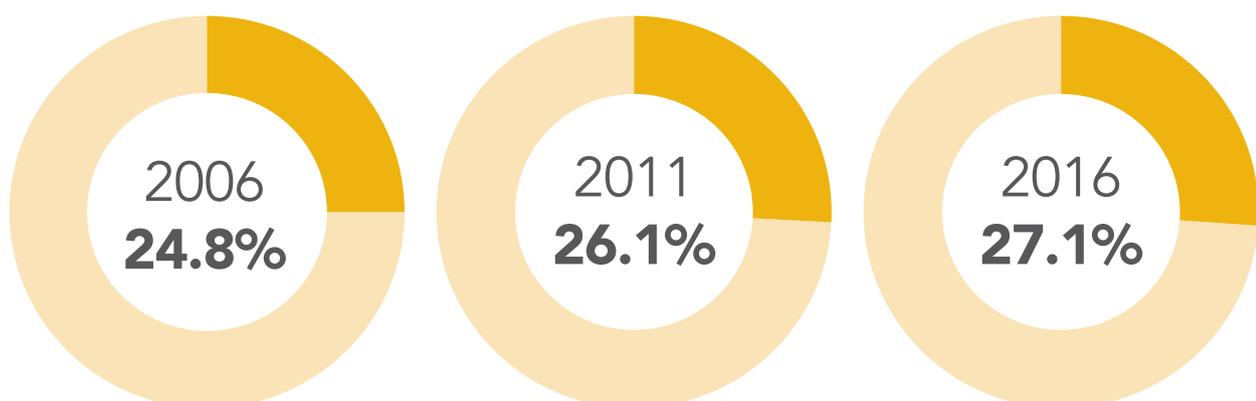


## Income quartiles



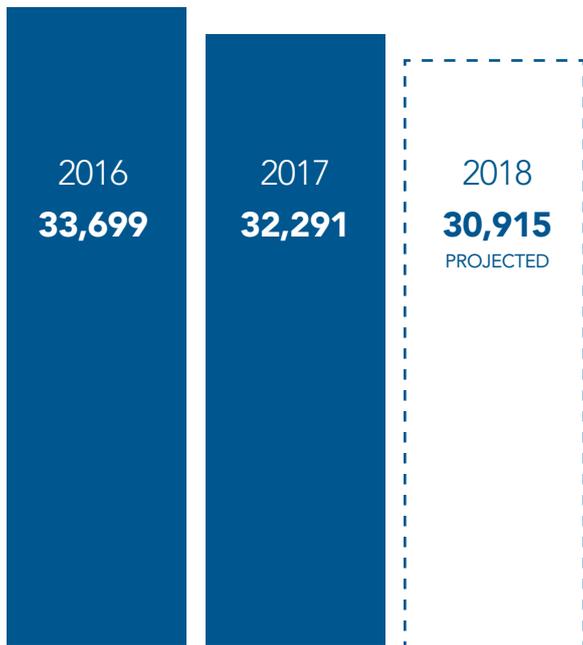
## Higher education degrees

per head of population (15 years and older)

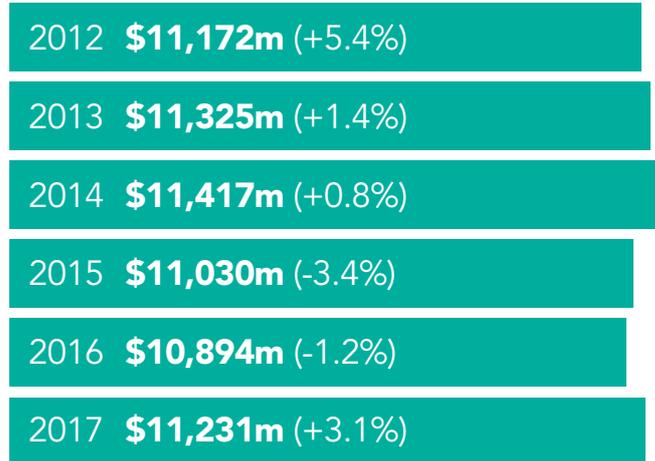


# Crime rate

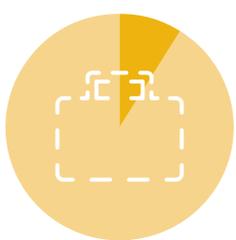
total number of offences



# Gross Regional Product



# Unemployment rate

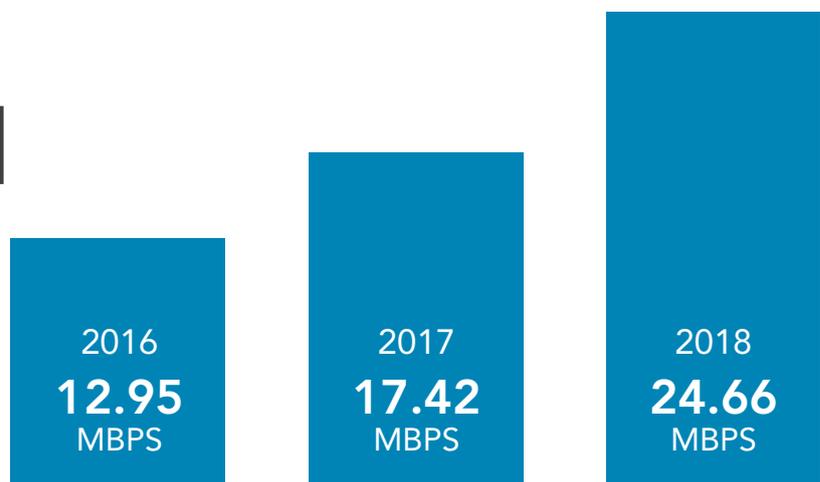


# 8.9%

2016

Increase of 3.8% from 2011

# Average download speed



# What this will mean for the community

Enacting this vision using smart city concepts will mean that citizens and visitors to Townsville have access to a Council entirely focused on their needs. Council will create a high level of public value through their activities.

Council will be a partner and a collaborator and there will be ongoing two-way conversations about priorities and needs.

It also means that interactions with Council will be much simpler and more convenient.

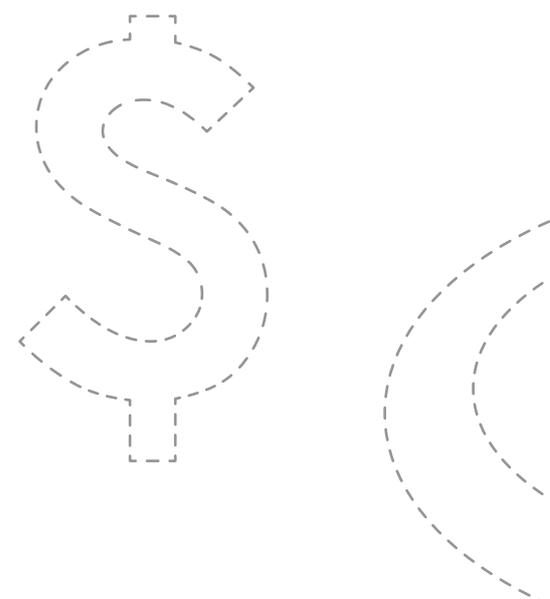
Residents and their families will have access to more information and new knowledge-based jobs that are more resistant to economic change. Through our Smart Precinct NQ initiative we will stimulate the creation of jobs in innovation, technology and business incubation.

# What this will mean for Council

Council will continue to be more open and focused on responding to the challenges of our community. We will work out the best way to collaborate with other levels of government, businesses, innovators, entrepreneurs and our residents to create the economic, social and other changes required to thrive into the 21st Century.

It will result in Council increasingly taking the role of advocate, co-ordinator and facilitator. Council will define the priority areas for the community to collaborate on, support others to deliver public value and assess the impacts.

At the same time, we will continually look at our own systems to determine how efficient and effective they are in solving real community problems, like unemployment, economic participation and disengagement. This will provide clear parameters for our businesses to grow, thrive and create more jobs.



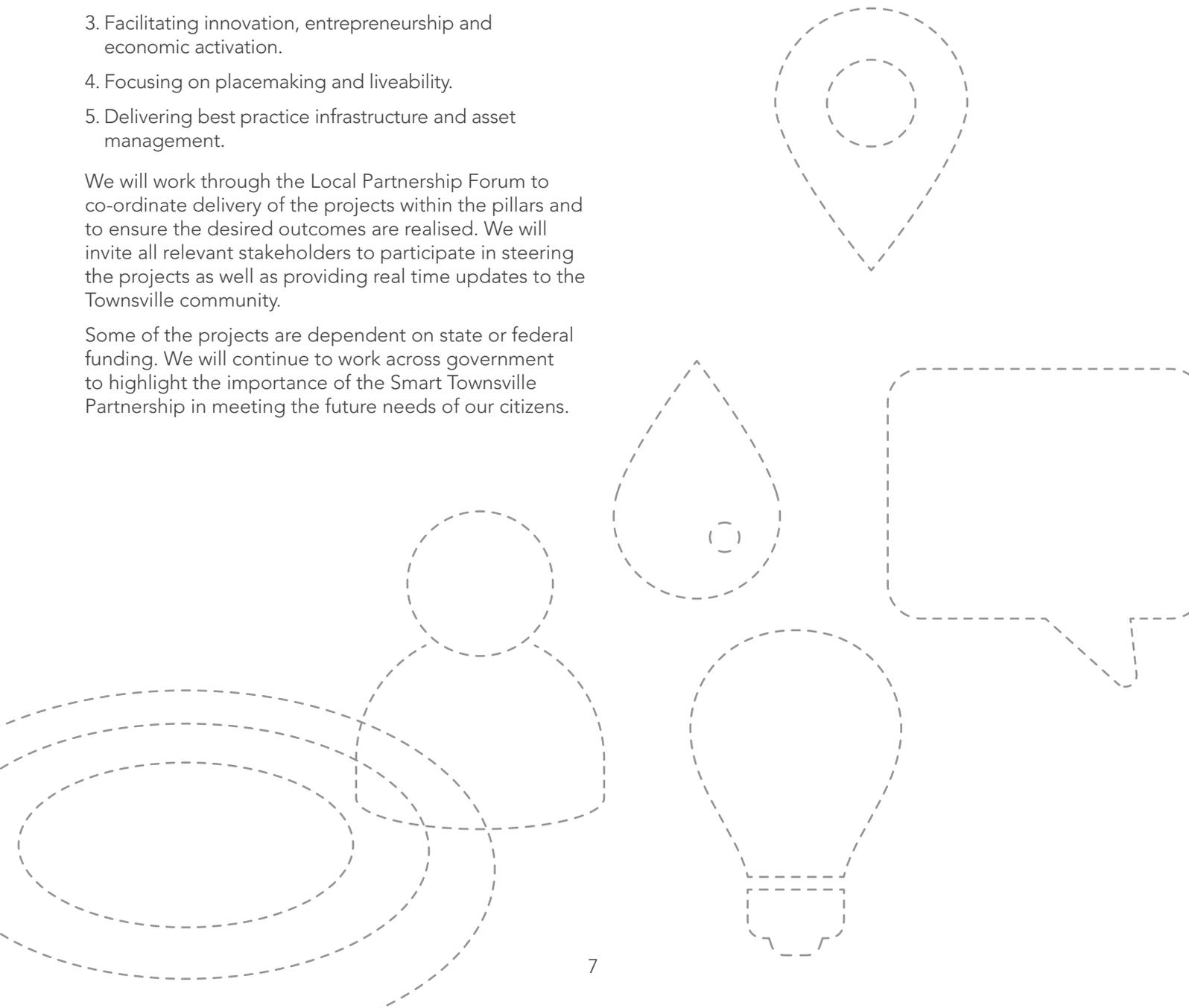
# How we will enable the Smart Townsville community partnership

Council will work with the community, business, academia and government using the principles of a Smart City through **five core pillars of work:**

1. Delivering an open and engaged Council.
2. Implementing a citizen centric Council.
3. Facilitating innovation, entrepreneurship and economic activation.
4. Focusing on placemaking and liveability.
5. Delivering best practice infrastructure and asset management.

We will work through the Local Partnership Forum to co-ordinate delivery of the projects within the pillars and to ensure the desired outcomes are realised. We will invite all relevant stakeholders to participate in steering the projects as well as providing real time updates to the Townsville community.

Some of the projects are dependent on state or federal funding. We will continue to work across government to highlight the importance of the Smart Townsville Partnership in meeting the future needs of our citizens.



# Our Smart City pillars

1



2



## Objectives

### Open and engaged Council

- > Key information is readily available to citizens to support decision making.
- > Citizens contribute to key projects, decisions and outcomes.
- > Local expertise is leveraged to add value to key outcomes.
- > Opportunities are created for targeted citizen feedback using channels and sharing platforms.
- > There is transparency of new projects, processes, progress on commitments and works within the region.
- > There is an increase in the level of satisfaction for residents engaging with Council.

### A Citizen centric Council

- > Targeted services are provided to citizens based on feedback and evidence.
- > Citizens can self-service their needs and track delivery progress online.
- > Service delivery is responsive with defined service level agreements.
- > Citizens are informed about issues and requests that they have raised with Council.
- > Creation of new models for Council to create and fund community initiatives.
- > Key information is readily available to citizens to support decision making.
- > Citizen feedback channels and sharing platforms are being used.

3



## Innovation, entrepreneurship and economic activation

- > Entrepreneurialism is promoted and supported within the community.
- > Local workers are engaged in the development of new and existing business in future growth industries.
- > The working population of Townsville has the skills to meet demand for future growth industries.
- > Council assists in the development of new and current businesses to participate in future growth industries.
- > Establish the right economic conditions including affordable power to attract new investors to fund growth industries in the city.
- > A culture of continual innovation and improvement is established.
- > Drive growth in the knowledge economy.

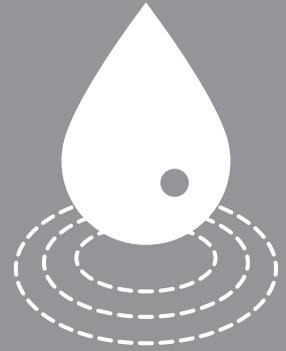
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## Placemaking and liveability

- > Supporting art and cultural development.
- > Create accessible, digitally connected, vibrant and safe precincts.
- > Improve access to real-time journey planning for public transport.
- > Improve data collection relating to event attendance to support future design, implementation and decision making.
- > Develop a Townsville barometer.
- > Establish Townsville as a "20 minute city".

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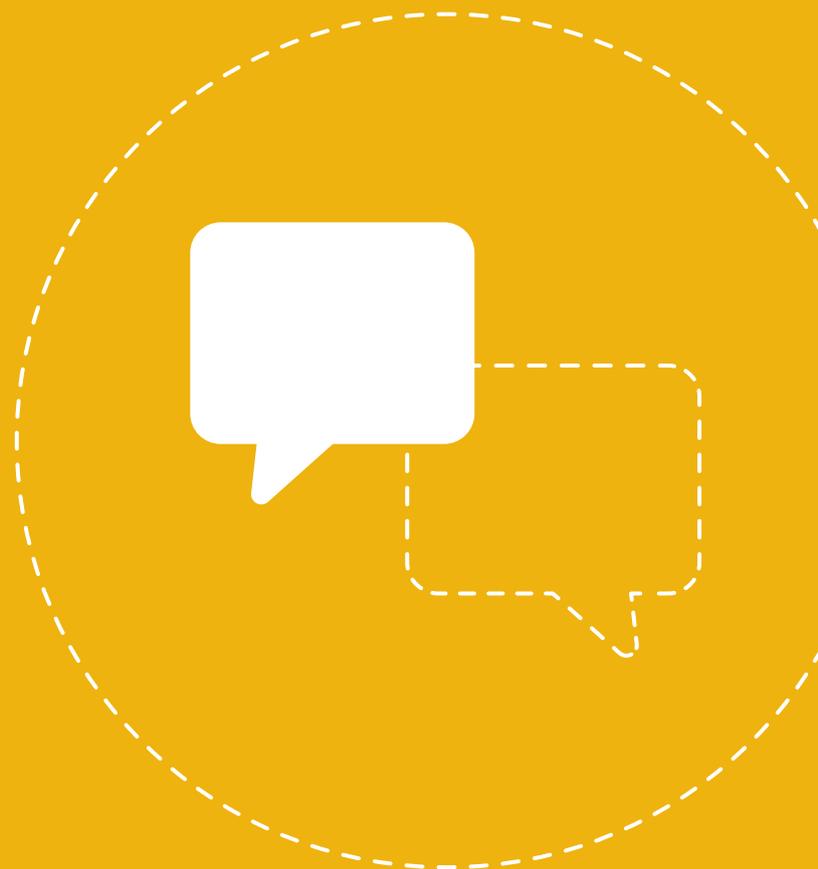
## Infrastructure and asset management

- > Continue the creation and promotion of a water wise region.
- > Improve the efficiency and effectiveness of current infrastructure and assets.
- > Provide transparent, real-time insights into asset and resource availability.
- > Develop collaboration mechanisms to enhance asset management.
- > Ensure sufficient bandwidth for the internet, IOT and other digital industries.
- > Council supports the growth of an energy efficient city.

# 1 Open and engaged Council

An open and engaged council enables an increase in trust and participation in the community. It allows collaboration between the community and council to solve community problems.

This pillar will allow collaboration to occur by providing a level of transparency around the delivery of promises, creating an environment of participation and feedback, and empowering citizens to contribute towards key discussions that affect their community, allowing public information to be used for public good.



## Objectives

- > Key information is readily available to citizens to support decision making.
- > Citizens contribute to key projects, decisions and outcomes.
- > Local expertise is leveraged to add value to key outcomes.
- > Opportunities are created for targeted citizen feedback using channels and sharing platforms.
- > There is transparency of new projects, processes, progress on commitments and works within the region.
- > There is an increase in the level of satisfaction for residents engaging with Council.

## Key Projects

### Townsville dashboard

The dashboards will provide a single landing page where the community can access relevant information. The topics will reflect Council's transparency agenda, OpenGov and the community's interests.

Townsville dashboards will provide high quality, current data and information that adds value to the lives of the citizens of Townsville.

It will be the single point of truth, informing and empowering Townsville citizens and those with an interest in investing in the region. It will build public trust and confidence through transparency, accountability and citizen-centric practice.

### Open conversation and feedback loops

Use of social media or specialist digital platform to encourage continuous conversation with multiple contributors around current and future works, events and other topics.

### Open Council

Ensuring that Council's agendas, minutes, resolutions and processes are accessible and easily searchable. This includes visual and audio feeds from public Council meetings.

### Dashboards from third parties including government agencies

It is acknowledged that the community's interests extend beyond Council's information assets so relevant integrations and linkages will provide a one-stop portal for citizens. Information may be sourced on subjects such as local crime, health services, weather, demographic and economic trends.

The use of applications and other digital tools that increase usability and deliver additional value are being explored and will be incorporated into the platform as it matures.

### Townsville City Council data sets (open data)

This data, including Geographic Information System (GIS) data, will be made available for download and utilisation by innovators and entrepreneurs. Research indicates that open data has the power to generate new careers, more efficient government revenues, improved business practices and better public engagement.

### Measures of success

- > Reduced timeframes for Council processes.
- > Increased trust in Council.
- > Evidence of community engagement around major projects.
- > Increase in the level of satisfaction for residents engaging with Council.

## ② A citizen centric Council

The digitally connected citizen is looking to engage with Council in different, more collaborative ways.

Citizens have a legitimate belief that Council is there to serve them, at their convenience and in ways they choose. Council processes should not unduly delay the delivery of service.

This pillar establishes mechanisms for citizen feedback and creates the circumstances for Council to take ownership of citizen requests. It will ensure that citizens are informed and can engage with timely outcomes. Utilising these feedback mechanisms along with relevant service delivery data, Council can target our future services based on evidence.



## Objectives

- > Targeted services are provided to citizens based on feedback and evidence.
- > Citizens can self-service their needs and track delivery progress online.
- > Service delivery is responsive with defined service level agreements.
- > Citizens are informed about issues and requests that they have raised with Council.
- > Creation of new models for Council to create and fund community initiatives.
- > Key information is readily available to citizens to support decision making.
- > Citizen feedback channels and sharing platforms are being used.

## Key Projects

### Anytime eService

Allowing citizens to access all services online will ensure increased citizen satisfaction. Council will also create efficiencies in delivery by having these services readily available.

### “Closing the Loop” policy

Citizens who notify Council of an issue will be kept informed about the progress. This will include receiving correspondence when the matter has been received, when it is scheduled, when work is happening and when it is complete.

### Development/application tracking

A portal where members of the community can easily track the progress of development applications will help to define processes and timing and will result in increased investment confidence.

### Community co-creation

Community groups and individuals can work with Council to plan and organise community projects using a platform provided by Council.

### Human centred design capability

A creative approach to problem solving with the resident at its core. The process starts with the people you’re designing for and ends with new solutions that are tailor made to suit their needs. Relevant Council staff will be upskilled in Human Centred Design.

### Measures of success

- > Increased use of self-service by the community.
- > Increased interactions between the community and Council.
- > Improved delivery of services.
- > Evidence of significant community engagement around major projects.
- > Increased engagement of residents.
- > Established Human Centred Design competency in Council.

# ③ Innovation, entrepreneurship and economic activation

We're deeply invested in the financial success and economic independence of all Townsville residents. Smart Townsville is expected to attract new employment and diversify Townsville's economy by building on natural advantages, embracing digital solutions, supporting local start-ups and developing an appropriately skilled workforce. It also establishes mechanisms to attract and grow business in Townsville to stimulate the economy and improve the value proposition of the area for people looking for new opportunities. Council has a significant role in building innovation capacity within the region and in co-ordinating relevant stakeholders to activate the local economy.



## Objectives

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- > A culture of continual innovation and improvement is established.
- > Drive growth in the knowledge economy.

## Key Projects

### Smart Precinct NQ

Council has submitted a proposal for a Smart City grant that will contribute to establishing Smart Precinct NQ. The Precinct will provide a centre to support businesses and entrepreneurs to prototype, test and scale innovative business models. That facility will also provide design thinking workshops and access to the next generation of digital tools. This precinct will collaborate with existing and new players in the Townsville start-up and innovation ecosystem.

### Support industry 4.0 activation

As new technologies influence industry and employment, regions are competing to establish a foothold and critical mass of future growth industries. Townsville will work with Advance Queensland to support specific advanced industry initiatives. Our aim is to establish Townsville as the home of specific Future Industry initiatives that will build upon the strengths of our existing industry links, including defence and agriculture, that are enhanced by the local presence of the Townsville Data Centre and the Lithium Battery Plant. We will also co-ordinate with other activation partners to attract private sector investment.

### Ecosystem approach to future skills

We are working with Jobs Queensland on a collaboration with industry and the education sector, particularly CQUniversity and JCU, to prepare for the future skill requirements of the region. This will include aligning the roles and responsibilities of government, academia, business and the community, as required to lead the development of workforce capabilities to match future demand.

### Council Innovation Team

A small internal team, led by Future Cities, will have a mandate to investigate specific areas of Council that would benefit from innovation. The team will be empowered to achieve small wins and fast fails through lean innovation processes. We will support the creation of the Townsville Innovation Network, engaging the community, participants in the future Smart Precinct NQ, the innovation ecosystem and the business community to solve local challenges. Part of the Innovation Team's mandate will be to consider potential projects such as participatory budgeting.

### Regional energy strategy

Council will work with relevant stakeholders to develop and execute the Townsville City Deal-energy strategy to drive energy as a competitive advantage for Townsville in both retaining current energy intensive industries as well as attracting new growth industry.

### Measures of success

- > Increased economic participation of Townsville citizens.
- > The quality and accessibility of incubation and acceleration services for Townsville entrepreneurs.
- > Increase in innovation and digital opportunities.
- > The relative ranking of Townsville as an attractive city to base a growth business.
- > The proportion of Townsville business engaged in future growth industries.
- > Be in the lowest 10% for energy cost for industry in Australia.
- > Additional jobs in future industries.

# 4 Placemaking and liveability

Creating places that are accessible and encourage opportunities for collaboration and community connection are important to the liveability of an area, job growth and its overall prosperity.

This pillar focuses on improving the liveability of Townsville by exploring opportunities to enhance citizen ownership of their space through community events and infrastructure assets, as well as tapping into technologically advanced transport services. This will provide opportunities to navigate the city and create a stimulus to attract people to Townsville.



## Objectives

- > Supporting art and cultural development.
- > Create accessible, digitally connected, vibrant and safe precincts.
- > Improve access to real-time journey planning for public transport.
- > Improve data collection relating to event attendance to support future design, implementation and decision making.
- > Develop a Townsville barometer.
- > Establish Townsville as a "20 minute city".

## Key Projects

### Townsville 2020

As we deliver the Townsville2020 projects we will continue to integrate digital technology to enhance the citizen experience at the Stadium Precinct, Central Park, Mount Louisa, Flinders Lane, Castle Hill and the new Strand Lagoon. We are continuing to work with State and Commonwealth Governments to secure funding to deliver community infrastructure that interacts with citizens in ways that meaningfully enhance their experience. Examples include digital information boards, real-time data about car parking availability, charging stations and access to Wi-Fi.

### Revitalising the CBD

Council's Future Cities Division will use existing and new data sources to analyse the utilisation of the current mix of retail, office and residential in the area to inform revitalisation strategies and renew our central business area. Building the case for change to grow our innovation and technology industries and to promote the reuse and conversion of offices into residential accommodation are areas being explored.

### Vibrancy and activation program

Deliver a year-round program of events, digital engagement and precinct-wide Wi-Fi to increase the value for people to visit and live in Townsville. Options include the installation of interactive smart screens used for games, educational activities, special events, cultural activation and the display of art.

### Improve commute times and share data

We are working with Department of Transport and Main Roads to provide Council data to contribute to the transport mobility study to enable our "20 minute city" goal.

### Safer Townsville

There are many digital technologies being piloted globally contributing to citizens feeling safer in their cities. We will review existing solutions and co-ordinate with relevant authorities, community groups and service providers to realise a safer Townsville.

### Townsville liveability barometer

The barometer will communicate the value proposition of the city's liveability by measuring aspects of Townsville's lifestyle and displaying the information on a community accessible site. Capturing and displaying this information will allow Council and the community to measure the impact of decisions and special initiatives and will inform future decision-making processes.

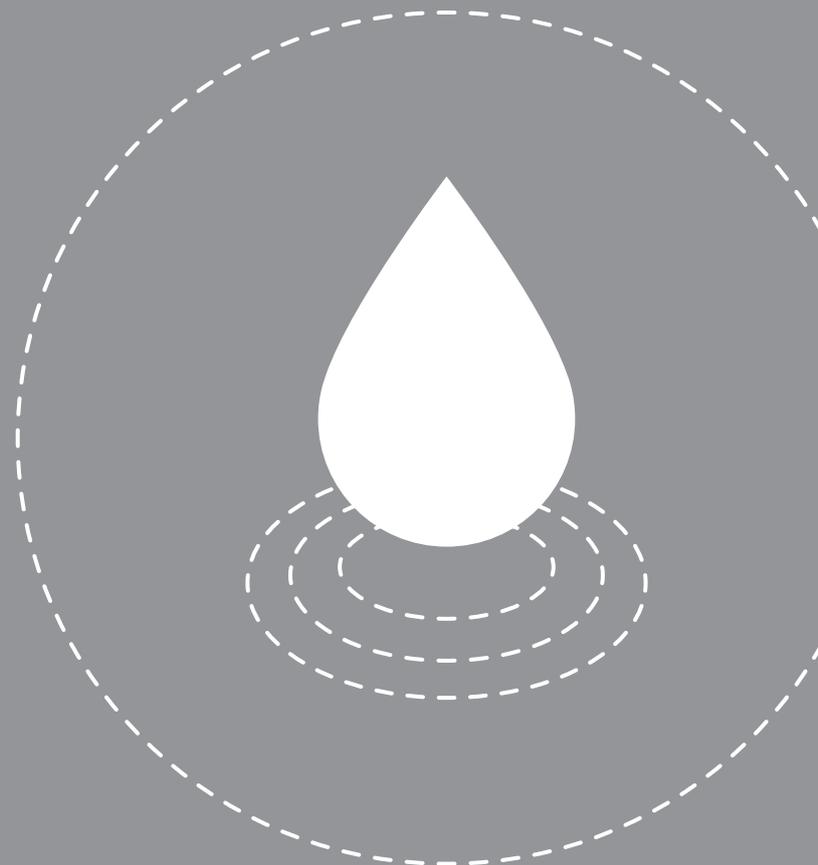
### Measures of success

- > Increased visitation and uptake and level of satisfaction with the digital technology integrated into Townsville 2020 projects.
- > Increased use of public transport.
- > Successful patronage of spaces enhanced for activation.
- > Growth of innovation and technology jobs in the CBD.

# 5 Infrastructure and asset management

This pillar will help evolve the way the community's assets are managed, using just-in-time approaches driven by data and novel methods to preserve our resources and maximise the use of our existing assets. These approaches will lead to smarter, more efficient resource management – and higher quality infrastructure projects.

Through distributed and integrated sensor networks, Council and the community will have better knowledge and visibility of the true condition of its infrastructure and assets. This will provide data driven optimisation and decision making on capital investment, asset renewal and maintenance programs so that money isn't spent replacing things that don't need replacing, and investment can be made fixing things that are important to the community.



## Objectives

- > Continue the creation and promotion of a water wise region.
- > Improve the efficiency and effectiveness of current infrastructure and assets.
- > Provide transparent, real-time insights into asset and resource availability.
- > Develop collaboration mechanisms to enhance asset management.
- > Ensure sufficient bandwidth for the internet, IOT and other digital industries.
- > Council supports the growth of an energy efficient city.

## Key Projects

### Smart infrastructure maintenance and renewal

Council will determine the loss of water in the network and approximate locations of leaks using a smart water system. By capturing better data Council will be able to improve planning, maintenance and renew water infrastructure as required.

### Real-time water management

Rolling out real-time or smart water meters will enable residents and businesses to monitor and manage their water consumption and alert them to usage spikes that are consistent with a water leak. This will allow Council to respond faster to significant leaks or issues.

### Smart watering

A combination of weather data, sensors and monitors will enable targeted advice to residents about the most efficient and effective time to water gardens.

### Smart asset management

A coordinated approach to the utilisation and management of Council's assets will allow more efficient use of Council's resources and ultimately improve investment planning.

### Underpinning digital infrastructure and projects

Council will coordinate with our partners, major employers and precinct owners to maximise digital assets across the city. This will build on our existing investment in infrastructure like MiTownsville and the North Queensland Regional Data Centre. This will also include scoping of options for new data capacity including the option of submarine cable connectivity through Asia.

### Measures of success

- > Increased utilisation of Council's assets.
- > Less water being lost through the water network.
- > Increased satisfaction in the state of Townsville parks.
- > Reduced consumption of water by Townsville City Council.
- > A future proof plan for internet connectivity and access.
- > Reduced cost for Council energy management, increased energy productivity and optimised electricity accounts.

# Conclusion

## **Townsville has set a course for change**

This change will enable us to embrace the benefits of a smart city, while upskilling the community to take advantage of the new knowledge jobs of the future. Townsville 2020, our clear vision for the city, is continuing to take shape and is driving new infrastructure and projects making our city even better for locals and tourists.

This strategy and Townsville 2020 allows us to make the required change in a deliberate and determined way, while **cementing our place as the capital of North Queensland, a centre of lifestyle and employment, a contemporary, vibrant and connected regional economy.**

As a result of implementing this plan, residents will have access to a Council entirely focused on the things that are most important to them. We will be a simpler, faster and better Council focussed on sharing our information and delivering on public expectations.

We will continually try to find better ways to create value from the money the community has entrusted to us. Council will be responsive and a trusted partner in solving community issues and creating engaging spaces. The Townsville Dashboards by OpenGov will fundamentally change how we engage with our key stakeholders and residents and ensure we stay focused on addressing the issues that matter most.

Of course, this approach will also create the demand for a different type of job in Townsville; one focused on data, information, technology and problem solving.

Taken together these elements will make Townsville an even better place to live, grow a career, raise a family, attract investment and enable substantial community growth.



**Townsville has  
set a course  
for change**

