

# Cassowary Coast Regional Council



## ASSET MANAGEMENT STRATEGY 2017 – 2022

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## EXECUTIVE SUMMARY

Council is currently in the early stages of asset management system development and is focused on core level activities for the next two years with some advanced system development over the coming five years. Sections within Council are at various levels of Asset Management Maturity and the improvement of processes and systems will vary across the organisation. This document describes asset management drivers, objectives and targets for the Cassowary Coast Regional Council.

There are numerous asset management system development activities occurring concurrently with many more planned as outcomes of this strategy. Given the development of new systems and planning tools across council, asset management development will require an iterative approach to ensure all processes align and provide cost effective and efficient solutions. Ever changing technology, user demands and changes in staff also offer challenges and opportunities.

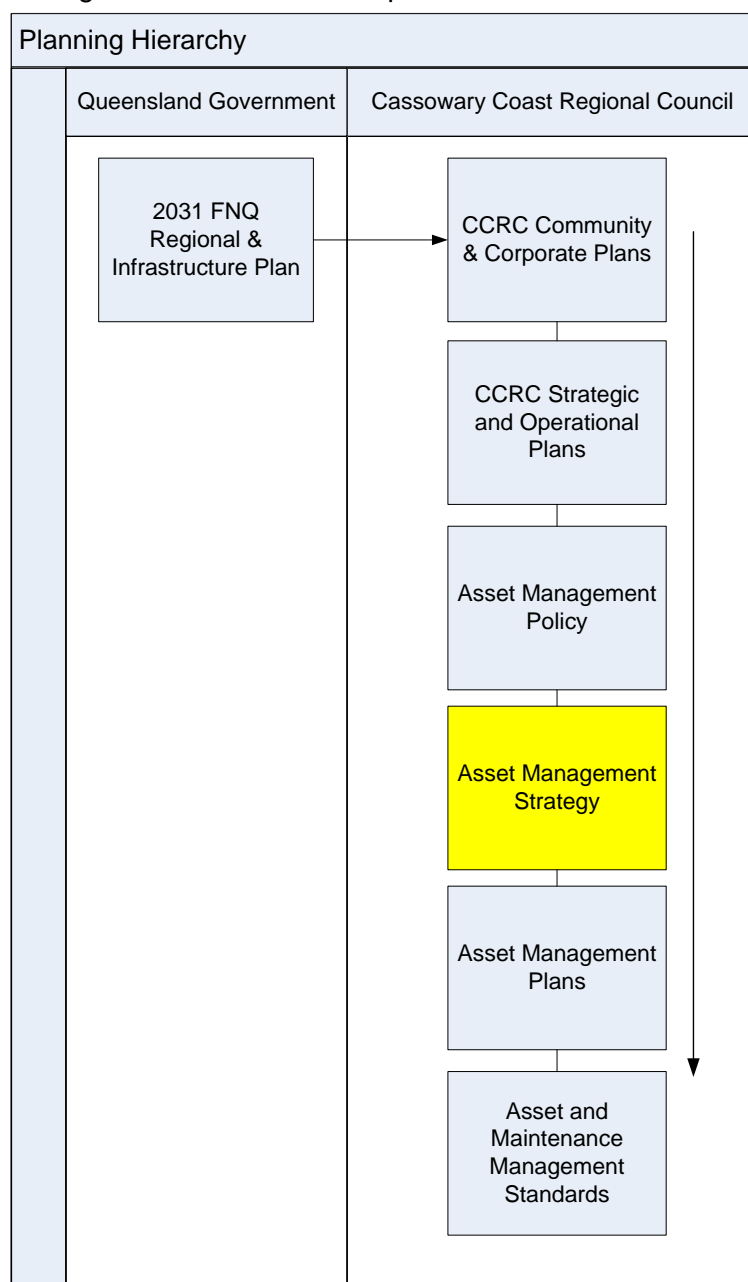
One of the underlying drivers of asset management system development for council is to improve the understanding:

- The services Council provides the community
- The assets that support the delivery of these services
- The size of the asset base
- The value of the asset base
- The funding required to maintain, operate, depreciate and replace the assets
- The actual level of service that is consistently delivered across the region
- The risk associated with owning and operating assets

The outcome of this is to promote informed decision making that the community can understand and accept.

## Document Hierarchy

The hierarchy of planning tools and the order of precedence is as follows:



The key objectives of Asset Management planning documents are:

- 1. Asset Management Policy**
  - a. To establish the framework for implementing consistent asset management processes across the organisation
- 2. Asset Management Strategy**
  - a. Defines the processes, objectives and targets on how to achieve policy intent
- 3. Asset Management Plans**
  - a. Define the details of each asset class and how it is being managed to optimise long term financial sustainability, levels of service and growth
- 4. Asset and Maintenance Management Standards**
  - a. Details standards for construction, maintenance, intervention and general operations for council staff

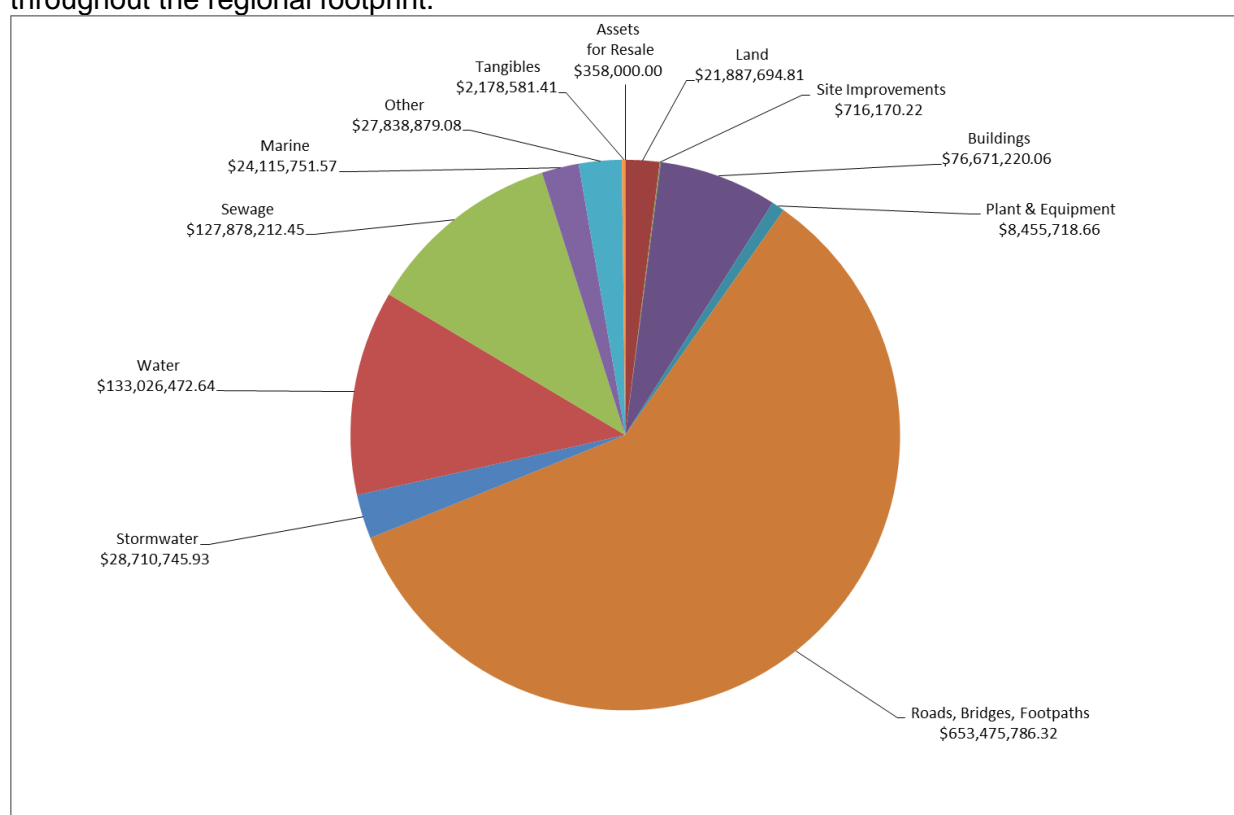
## Scope and Physical Environment

The Cassowary Coast region has:

- an area of 4,701 square kilometres
- an estimated population of 30,800
- a mix of town, rural and coastal communities
- World Class natural beauty

The region is managed by a mayor, six councillors and approximately 340 council staff.

Council manages assets with an approximate replacement value of \$1.5bn, which span almost all traditional local government asset classes, including roads, bridges, water, sewerage, parks, community facilities, marine facilities, fleet and ancillaries. The Council is comprised of approximately 340 staff within four departments with numerous office and depot locations throughout the regional footprint.



**Figure 1 – CCRC 2015-16 Asset Fair Value Chart**

The Region's relatively low population is generally well serviced by an extensive infrastructure network which is well above other Council's with a similar population. This may imply that the Level of Service provided by council to the public is in excess of minimum requirements.

The Cassowary Coast region resides within the single wettest environment found in Australia and records an average rainfall of between three and four meters per year from Cardwell to Innisfail. This tropical environment is also well known for significant flood events and cyclones which have all impacted the strategic thinking applied to asset management. NDRRA and Insurance funds following 2 major cyclones has seen a major investment into Council's road and building classes and has resulted in many of Council's assets being in better condition than they would have been without the events. However the buried infrastructure (stormwater, water, sewer) has had very little expenditure and many assets are approaching end of life.

Changes in NDRRA arrangements, increasing costs and declining revenue are new challenges facing Council. The expansion of services, increase in asset base and recognition of previously unrecognised assets is placing increased pressure on Council's budget. As Council's data improves it is becoming clearer that if increasing numbers of assets are to be provided service levels will decrease and risk exposure will increase.

Considering the above mentioned challenges, the issues identified in asset management gap analysis process and the value of assets under management within a unique physical environment, there are numerous competing priorities that must be considered when setting asset management objectives, targets and strategies.

## ***Community Profile***

The Cassowary Coast Region has a predominantly Agriculture, Forestry and Fishing based economy with some other major sectors including industry, retail and healthcare. The Gross Domestic Product of the region has been relatively static for many years.

Job numbers have been on a steady decline since 2011 and due to a reduction in available jobs employees have been forced to transition away from generally higher income industries to Agriculture, Forestry and Fishing. Unemployment fluctuates due to seasonal variations, however has been increasing since 2011.

The average household income is around 17% lower than the State Average meaning the community of the Region is not in a position to afford increased infrastructure and service costs. Council assets per rate payer is 40% higher than the State average which places more pressure on a financially modest community. Approximately 80% of Council's income is generated by rates and Council's rating effort (rates as a ratio of Gross Regional Product) is one of the highest in Queensland. This demonstrates that Council's ability to increase rates to improve / maintain existing services is limited.

## ***Asset Management Strategic Objectives***

The strategic objectives for asset management can be described by the tools, processes and outcomes that are planned to be produced within the next ten years, being:

- 1) Fully developed and revised Asset Management Plans completed by the Asset Owner for each asset class based on an organisationally consistent framework
- 2) Technically accurate Asset Register including structures that enable analysis and planning at the network level
- 3) Detailed long term financial plans
  - a) Risk based, optimised 10 year capital works schedules
  - b) Optimised operations and maintenance cost recording across all of Council's services using the Technology One works system.
- 4) Partially integrated asset/work management systems (including risk, cost and resource management)
  - a) Transparent intervention level and risk assessment processes

- b) Technology that recognises and supports the varied services and assets maintained by Council while still maintaining the ability to link data through modern database protocols.
- 5) Network planning tools (Infrastructure network planning such as water, sewerage and road networks)
- 6) Councillors and staff being well informed and educated in the area of asset management
  - a) Development of education materials and delivery of training/information sessions
- 7) Council wide asset data availability (geographical with details)
- 8) Asset management managed to a level that is within the resourcing and financial capabilities of council.

Core Asset Management Plans were completed by December 2010. These plans were sound but based on a large number of assumptions with lower than desirable levels of asset owner and Council input. The progressive review of these plans will be undertaken in line with available data and with a view to make the plans a working document.

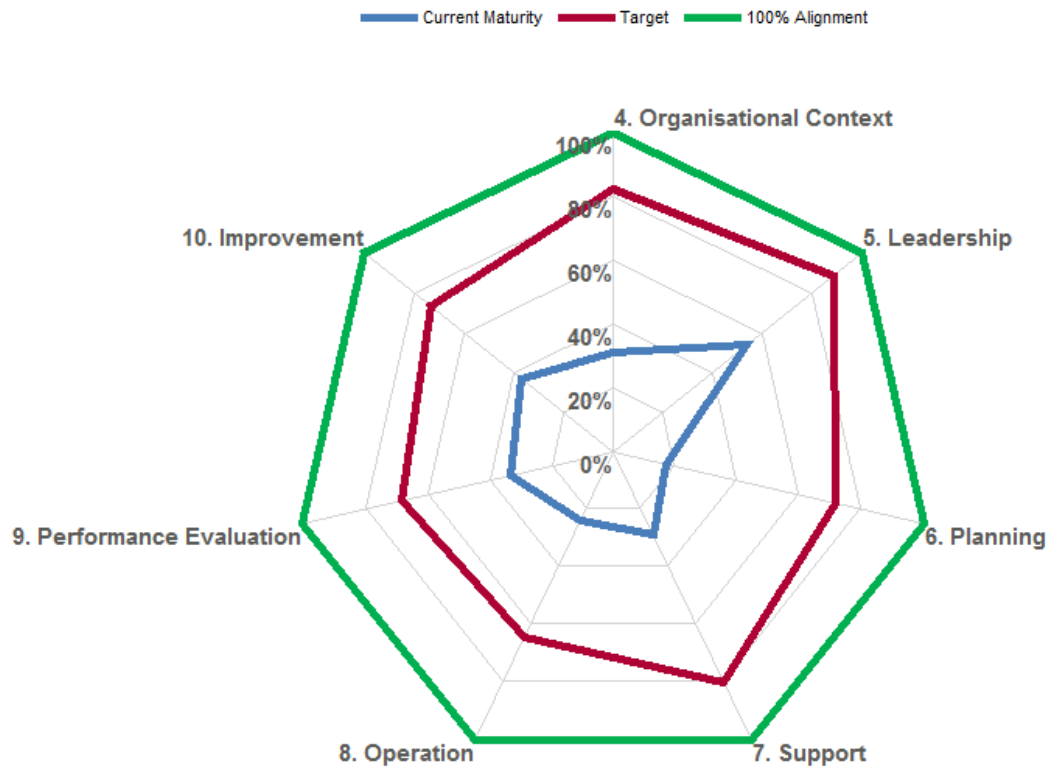
Council has invested significantly in recent years on a number of data improvement projects which will vastly improve the quality of asset data used for the reporting and modelling components of the plan. Further data improvement is required to enable more detailed program planning and maintenance management.

The next review of Asset Management Plans will include greater asset owner input and will be undertaken to ensure the plans are a true representation of Council's current asset management approach. Councillors will also be consulted to ensure a thorough understanding of all asset related services and risks are understood and endorsed. Where gaps in information exist they will be noted in the improvement strategy attached with each plan.

### ***Asset Management Maturity Assessment***

The NAMS Plus Asset Management Maturity Assessment was undertaken by the Asset Management Working Group in 2015. The assessment remains current with only isolated improvements in some sections. The summary of this assessment is detailed in figure 2.

## ISO 55001 Maturity Assessment - Cassowary Coast RC - Assessment Id. 104 in 2015



**Figure 2 - ISO55001 Asset Management Maturity Assessment**

A review of asset management processes was actioned during 2015 with the following key findings:

- Existing Water and Sewerage Strategic Asset Management Plans were in place and functioning, although not all items were reportable in real time.
- Asset management plans are in place for all major asset classes, however significant review is required, particularly around levels of service.
- Technology One is being utilised as Councils Financial Asset Register (FAR). The system is functioning adequately however there are system and configuration improvements required.
- There was no corporate Work Management System in place to centrally record work history and maintenance data. Departments have varied approaches to work management.
- The process to update asset technical records requires a more formalised process
- Detailed 10 year forward works schedules were in place for water and sewage however other asset classes require significant improvement.
- Condition data on some asset classes was up to 4 years old with others having limited condition data to reference.
- Council's data has significantly improved with most assets now being located spatially in GIS and sharing the same asset ID as Technology One.



## ***Asset Management Objectives and Targets***

The asset management objectives of Council are fundamentally linked to generation of sound long term financial plans, based on clearly defined service standards and growth planning. The development of long term financial plans is based upon comprehensively managing and planning for assets during their entire lifecycle.

A mature long term financial plan is informed by a detailed and regimented asset management system that provides optimised expenditure forecasts designed to meet the demands and expectations of the community that the asset base is serving.

With council having an adopted long term financial plan in the form of a Queensland Treasury Corporation (QTC) Model that includes 10 years of asset capital works, a primary objective of asset management is to develop systems that improve the quantity and quality of these projections. There are numerous streams of information within asset management that are utilised to generate quality forecasting projections which include:

- 1) Asset technical and valuation data
- 2) Asset condition, life and remaining life projections
- 3) Asset service levels (design and operational)
- 4) Intervention levels and risk management with cost/effectiveness analysis
- 5) Growth forecasting and changes in technology; and
- 6) Legislative impacts driving change

The strategic outcomes for asset management include more than defining the future financial liabilities that come with owning and managing infrastructure. They also include defining cost effective engineering solutions, minimising and mitigating risk issues, minimising harm for asset users, reducing environmental impacts in design and asset operations, as well as providing assets that are fit for purpose and have relative utilisation rates.

The current maturity of asset management systems within Council is demonstrating a need to develop and enhance core aspects as a priority, then advance into strategic areas once a solid platform is in place. A core or advanced asset management approach will only be pursued only for classes of assets where the advantages of improvement yield strategic benefits. The current status would suggest that development of core systems will occur over the next three to five years (2017-2022), however there will be numerous elements that will require concurrent development.

Considering the above projected outcomes and contrasting this with issues identified in the current status of asset management, there are numerous project elements that are priorities for developing detailed objectives and targets over the next five years.

## Objectives and targets for 2017-2022:

Objective	Target
<p>Improve the quality, accuracy and availability of data contained within the asset register</p> <ul style="list-style-type: none"> <li>a) Correct identified inaccuracies and omissions</li> <li>b) Improve asset age data</li> <li>c) Improve asset condition data</li> <li>d) Improve asset utilisation data</li> <li>e) Review Useful Life assumptions and where beneficial and justifiable pursue customised useful lives for individual assets</li> <li>f) Incorporate segmentation and hierarchies to better inform business decisions</li> <li>g) Development of updated CCRC geographic datasets</li> <li>h) Utilise improved technology to make relevant asset data available across the organisation.</li> </ul>	2017-22
<p>Implementation of condition monitoring programs</p> <ul style="list-style-type: none"> <li>a) Using a risk based approach and giving consideration to Council's resources implement condition monitoring programs for all asset classes.</li> <li>b) Create a centralised dataset for asset condition. Includes collation of data from existing systems and capture of new data.</li> </ul>	2019-22
Generate a more detailed 10 year capital forecast models for all asset classes Condition and risk based programs	2019-22
Alignment of Risk Management and Financial Management Systems with Asset Management principles.	2018-20
<p>Document and monitor service levels for all asset classes</p> <ul style="list-style-type: none"> <li>a) Quantify what level of service is currently being provided to the community.</li> <li>b) Document current levels of service.</li> <li>c) Review and rationalise levels of service on a regional priority and risk basis.</li> <li>d) Develop risk based strategies to minimise reduction of service levels resulting from increasing asset base and servicing costs.</li> </ul>	2017-21
<p>Link intervention levels to above service levels</p> <ul style="list-style-type: none"> <li>a) Set technical/engineering functions that are congruent with the service level attributes</li> </ul>	2019-22
Integrate asset management and long term financial planning with Council's Local Government Infrastructure Plan and Town Planning to asset forecasting models	2017-18
Develop and implement a detailed processes for asset and GIS data maintenance	2017
<p>Quality assurance and revision</p> <ul style="list-style-type: none"> <li>a) Define current business practices.</li> <li>b) Develop and implement process based quality models to improve the accuracy, reliability and usefulness of all asset data</li> <li>c) Regularly review the effectiveness and efficiency of the asset management system.</li> <li>d) Develop Councillor and Staff training to increase asset management awareness and obtain improved feedback on Asset Management performance</li> </ul>	2018-20
<p>Rationalising the Asset Base</p> <ul style="list-style-type: none"> <li>a) Pursue asset disposal opportunities to improve the efficiency of Council's service delivery and business units.</li> <li>b) Pursue opportunities to transfer maintenance responsibility for community infrastructure to community based organisations.</li> </ul>	2017-2020

Table 1 – 2017-2022 Asset Management Objectives and Targets

## ***System Development Dependencies***

Given the development of asset management systems is heavily constrained by interdependent processes, most of the short to medium term objectives will require concurrent development. This generally means that each process line is developed or enhanced iteratively to align to other activities within council.

Alignment of Risk Management and Financial Management with Asset Management principles is required to enable Council to progress to a more advanced maturity level. The implementation of this strategy will rely heavily on the enabling services provided by Council's Information Services section and software vendors. Council's current resourcing is insufficient to allow for the Enterprise Business Solution to provide all of this functionality therefore more cost effective alternatives will be pursued.

The above concept will apply to many of the objectives and targets listed in Table 1, therefore ongoing adjustments to timeframes and priorities will be required.

## ***The Next Phase***

This strategy will be reviewed and enhanced biennially, which will include the expansion and further definition of objectives and targets listed within.