

STRATEGIC ASSET MANAGEMENT PLAN 2019/2020

A smarter, faster, better Council

Townsville

TOWNSVILLE CITY COUNCIL

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Contents

DOCUMENT CONTROL..... 1

1 Executive Summary 4

2 Purpose..... 5

3 Organisational Objectives 7

 3.1 Townsville City Plan..... 7

 3.2 Corporate Plan..... 8

 3.3 Organisational Leadership 8

 3.4 Asset Management Services..... 10

4 Asset Scope 11

 4.1 Asset Classes Summary 11

5 Asset Management Policy and Objectives 16

 5.1 Asset Management Policy 16

 5.2 AM Objectives..... 18

 5.3 Reviewing the AM Objectives..... 19

 5.4 Communicating the Policy and Objectives..... 20

6 Asset Management Stakeholders..... 21

 6.1 Internal Stakeholders..... 21

 6.2 External Stakeholders 21

7 Asset Management System..... 23

 7.1 Organisational Management Systems Integration 23

 7.2 Asset Management System..... 27

 7.3 People 27

 7.4 Processes..... 28

 7.5 Technologies..... 31

 7.6 Funding 32

 7.7 Works Delivery..... 33

8 Asset Management Planning..... 35

 8.1 Transport 38

 8.2 Water and Wastewater 39

 8.3 Solid Waste 40



8.4 Stormwater 41

8.5 Open Spaces 42

8.6 Coastal 43

8.7 Buildings 44

8.8 Fleet..... 45

8.9 ICT 46

8.10 Business Services (Corporate Overheads) 47

9 Performance Evaluation and Improvement..... 48

9.1 Performance Evaluation 48

9.2 Internal Audits 48

9.3 Management Review 49

9.4 Improvement Plan 49

9.5 SAMP and ISO 55001 Relationship 50

Appendix A – Asset Management Services 0

Appendix B – TCC Asset Works Planning Process 1

Appendix C – TCC 10 Year Capital Works Plan FY 2019/20 to FY 2028/29 (Gross Estimates)..... 2

Appendix D - TCC FY 2019/20 Operations & Maintenance Plan 4

1 Executive Summary

Townsville City Council has a responsibility to effectively and efficiently manage the services provided, by its assets, to its community. This Strategic Asset Management Plan (SAMP) provides the linkage between the organisational objectives of Council and the assets management objectives to be delivered by the assets. It also provides the portfolio wide asset lifecycle management framework that considers customer value, performance, risk, and cost in community service delivery. Council has a strong vision for the future of asset management which includes sustainable services delivery, community satisfaction, sustainable financial position and acceptable risk exposure.

Council has developed its organisational objectives to focus its services on the communities it serves. These objectives have been developed in consultation with the Stakeholders to achieve agreement on the scope and level of service provided. Council owns, operates, and maintains assets valued at over \$7 billion.

The asset management vision is to provide effective control and governance to infrastructure assets to realise value through managing risk and opportunity, in order to achieve the desired balance of cost, risk & performance.

The asset management objectives were established to reflect the Corporate Plan where Council commits to delivering quality services to facilitate sustainable growth through economic activation, community engagement and sustainable financial management. Council is governed by the principles of the *Local Government Act 2009* of sustainable development and management of assets, infrastructure planning and delivery of effective services. These requirements are being addressed in individual Asset Management Plans (AMPs), as these plans deliver the asset outcomes, within the budgets and with the resources available, while ensuring that appropriate levels of service are achieved.

This SAMP summarises the link between Council's physical resources (infrastructure assets, funding and works delivery) and business enablers (people, process and technology).

This SAMP also demonstrates Council's commitment to aligning its management system for managing assets to the international Standard ISO 55001: Management System - Asset Management.



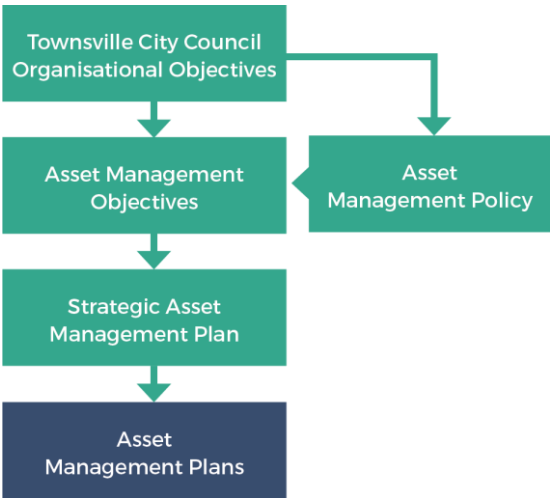
2 Purpose

Providing effective and efficient management of assets is a key obligation of Townsville City Council (Council). As custodian of community assets, Council has the responsibility for managing these assets in the most cost effective manner. This is achieved through asset planning, creation, acquisition, maintenance, operation, rehabilitation and disposal. These actions are undertaken in order to continue to provide efficient, safe and reliable services for current and future generations. Asset Management is a widely accepted term to describe this responsibility of Council.

The purpose of this Strategic Asset Management Plan (SAMP) is to:

- Demonstrate that Council’s Asset Management System (AMS) is aligned with the requirements of ISO 55001: Management System for Asset Management;
- Describe the role of the AMS in supporting achievement of the AM Objectives, delivering appropriate Level of Service (LOS) cost effectively, and meeting legislative requirements;
- Document information that specifies how organisational objectives have been realised as Asset Management Objectives (AM Objectives); and
- Inform the approach for developing Asset Management Plans (AMP)¹.

The functional relationship between the SAMP and other organisational leadership documents is shown in the following figure:



¹ Infrastructure-based AMPs are in alignment with International Infrastructure Manual (2015) guidelines.

This SAMP is specific to Townsville City Council and its AMS.

Key fundamental objectives of this SAMP include:

- Setting out the foundations for managing its asset portfolios in a manner which ensures it is able to sustainably deliver services to the community, according to the community's expectations, and to meet legislative requirements;
- Developing the decision making process that considers costs, human resources, risks, performance and improvement opportunities for Council when managing assets and delivering services to the community;
- Building staff engagement and competency, strong stakeholder engagement, informed and robust asset management decision making processes to support the functionality and sustainability of the AMS;
- Applying the Asset Management Policy (AM Policy) as determined and approved by the Council Executive; and
- Optimising alignment of the AMS with the requirements prescribed in the International Standardisation Organisation ISO 55001:2014 Asset Management Systems.

Council continuously considers the current and future needs of the community and Council's ability to provide asset solutions which contribute to meeting these needs. Council also considers the financial implications of maintaining community assets and the balancing of this expenditure and operational realities against other community priorities and regulatory requirements. Ongoing development and review of this SAMP will promote the viability and long term use of assets in line with Council's organisational objectives.

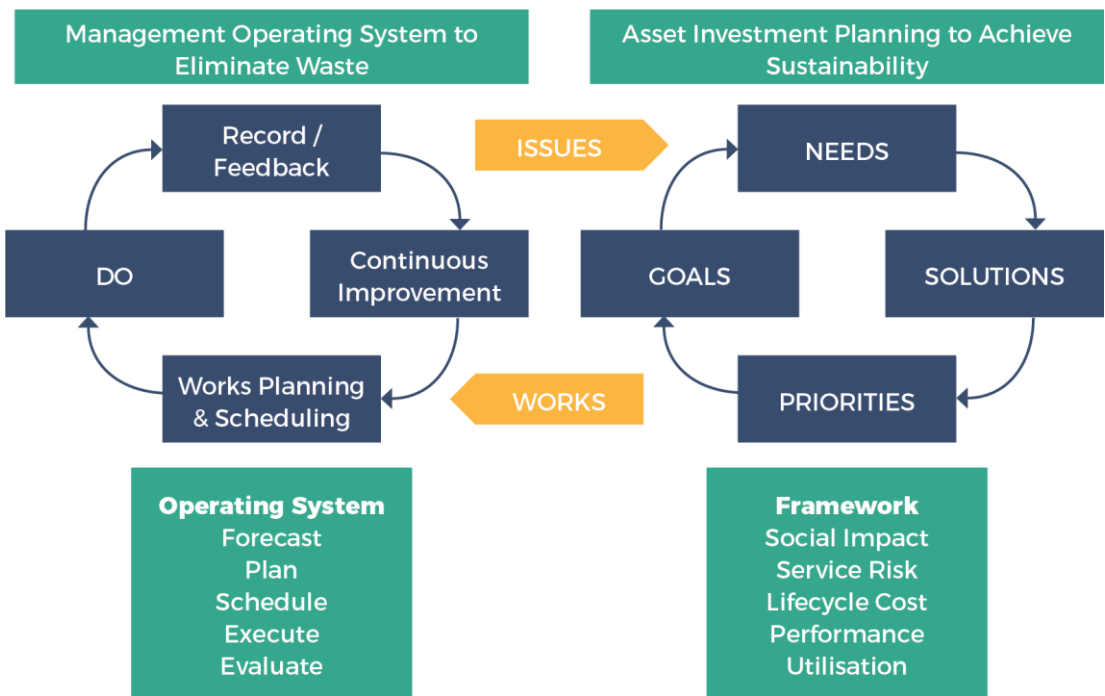


3 Organisational Objectives

Organisational objectives are short-term and medium-term goals that an organisation seeks to accomplish. An organisation’s objectives play a large part in developing organisational policies and determining the allocation of organisational resources.

Council has developed its organisational objectives to focus its services on the communities it serves. These objectives have been developed in consultation with the Stakeholders to achieve agreement on the scope and level of service provided.

The AMS Asset Lifecycle Framework is shown in the following diagram:



3.1 Townsville City Plan

The Townsville City Plan has been prepared in accordance with the *Sustainable Planning Act 2009*, as a framework for managing development in a way that advances the purpose of the Act. In seeking to achieve this purpose, the planning scheme sets out Council’s intention for the future development in the planning scheme area, over the next 25 years.

3.2 Corporate Plan

This document sets out high level strategic information for Townsville and the surrounding region, much of which is common to functional asset management plans, including information about population, growth expectations, social composition and community engagement.

Council has published its Corporate Plan with the following Vision and Mission statements:

Vision

Townsville, Capital of Northern Australia, a City of Opportunity and Great Lifestyle.

Mission

We are committed to delivering quality services to facilitate growth through inspired leadership, community engagement, and responsible financial management.

Council's goals, objectives, and measures are also outlined in the Corporate Plan.

3.3 Organisational Leadership

Council leadership is provided by a Strategic Leadership Team that includes selected Elected Members, the Audit Committee, and the Executive team within Council.

Asset management leadership is provided by Asset Management Team which is responsible for developing and implementing the AM Strategy, AM Policy, and AMS.

The respective roles and responsibilities of these Stakeholders with respect to the AMS follows:

Elected Members

- Representing their community ensuring sustainable service delivery from the assets;

- Reviewing and endorsing the 10 year Capital & Maintenance Works Plan and Adopted Budget;
- Reviewing and endorsing the Asset Management Policy; and
- Reviewing Audit Committee reports.

Council's Audit Committee

- Reporting to Council via the Chief Executive Officer on AMS;
- The scope of the Audit Committees responsibilities, in the current terms of reference, includes the following activities that all have an influence on the AMS:
 - Governance Processes;
 - Financial Compliance;
 - Information Technology (IT) Management;
 - Internal Controls;
 - Internal and External Audits;
 - Risk Management;
 - Legal and Legislative Compliance; and
 - Asset Management Governance.

Executive Team

- Advising Council and the Audit Committee on asset management activities;
- Ensuring asset risk management is aligned with the organisational risk management framework; and
- Ensuring the implementation of the AMS meets relevant legislation, policies and plans across the organisation.

Asset Management Team

- Ensuring a whole-of-council approach to the effective and efficient delivery of AM objectives through organisational independence from Council's financial, planning and service sections;
- Ensuring the Policy, SAMP, and objectives are compatible with the Council's objectives (reviewed with Council Corporate Plan updates);
- Undertaking quarterly monitoring through the Service Potential Reporting to ensure appropriate stewardship and leadership;

- Ensuring full integration of all supporting systems into the AMS through systematic internal audits;
- Undertaking internal audits to ensure the AMS is achieving intended outcomes and raising improvement actions where gaps are identified;
- Identifying gaps in resource requirements from feedback provided by the internal and external stakeholders;
- Providing input into regular Council internal communications to promote a strong asset management culture, and to effectively engage the internal stakeholders with the AMS;
- Supporting key internal stakeholders to contribute to the effectiveness and raise improvement actions to improve the effectiveness of the AMS;
- Promoting cross-functional collaboration across all systems that provide input into the AMS; and
- Advancing AM training, leadership, practice and skills development across Council.

Asset Management Vision

Provide effective control and governance to infrastructure assets to realise value through managing risk and opportunity, in order to achieve the desired balance of cost, risk & performance.

3.4 Asset Management Services

Asset Management Team is structured to provide the effective infrastructure planning services to the Council's infrastructure assets in line with Asset Lifecycle Framework. The Appendix A identifies the Asset Management Services that link to the Council's Corporate Plan.

4 Asset Scope

4.1 Asset Classes Summary

Council owns, operates, and maintains assets valued at over \$7 billion. This SAMP provides guidance on all Council assets, which are grouped into the following key asset classes:

Transport

The quantity and value of the transport assets as at the beginning of the 2019/20 financial year are summarised below:

Asset Type	Quantity	Replacement Value (\$000)
Roads	1,803,687 m	1,549,857
Kerb and Channel	2,110,931 m	389,794
Pathways	537,495 m	204,356
Vehicular Bridges	204 ea	142,096
Pedestrian Bridges	210 ea	
Roadside and Pathway Furniture and Structures	279 ea	10,072
Bus Stops Facilities	964 ea	16,843

Water, Wastewater and Solid Waste

The quantity and value of the water, wastewater and solid waste assets as at the beginning of the 2019/20 financial year are summarised below:

Asset Type	Quantity	Replacement Value (\$000)
Dams	2 ea	502,666
Weirs	3 ea	35,041
Water Treatment Plants	4 ea	233,453
Water Pump Stations	25 ea	29,703
Reservoirs	33 ea	105,842
Water Mains	2,633 km	771,501
Water Meters	77,615 ea	7,425

Asset Type	Quantity	Replacement Value (\$'000)
Sewer Mains (Gravity and Pressure)	1,360 km	491,806
Sewer Service Connections	38,239 ea	15,798
Sewer Property Connection Points	47,816 ea	46,509
Wastewater Maintenance Holes	22,325 ea	92,605
Waste Water Pump Stations	197 ea	129,948
Wastewater Treatment /Recycling Plants	6 ea	299,796
Waste Transfer Stations	6 ea	10,357
Waste Landfill	3 ea	14,289

Stormwater

The quantity and financial value of the stormwater assets as at the beginning of the 2019/20 financial year are summarised below:

Asset Type	Quantity	Replacement Value (\$'000)
Underground Network	1,128 km	621,266
Open Drain Network	62 km	55,239
Tidal Protection Devices	3 ea	5,492
Pump Stations	7 ea	3,407
Water Quality Devices	126 ea	3,675
Rainfall Stations	22 ea	538
Sub Soil Drainage	384 km	19,639
Levee Banks	11 ea	8,801

Open Spaces

The quantity and financial value of the open space assets as at the beginning of the 2019/20 financial year are summarised below:

Asset Type	Quantity	Replacement Value (\$'000)
Arboriculture	341 ea	97
City of Townsville Art in Public Spaces	260 ea	6,802
Electrical	143 ea	244
Fencing	1,095 ea	21,349

Asset Type	Quantity	Replacement Value (\$000)
Furniture	3,564 ea	25,954
Horticulture	1,388 ea	7,804
Irrigation Main Line	826 ea	8,467
Lighting	351 ea	2,311
Monuments	46 ea	15
Platform	74 ea	400
Play Equipment	1,221 ea	6,413
Signage	1,711 ea	1,601
Sporting	415 ea	7,955
Structures	551 ea	17,589
Wall	172 ea	2,583
Water Feature	36 ea	9,313

Buildings

The quantity and financial value of the building assets as at the beginning of the 2019/20 financial year are summarised below:

Asset Type	Programme	Quantity	Replacement Value (\$000)
Buildings	Cemeteries	5 ea	424
	Galleries, Libraries & Theatres	8 ea	74,266
	Hire – General Community	7 ea	17,085
	Precincts & Areas	1 ea	3,452
	Public Amenities	66 ea	17,047
	Residency – Operational Buildings & Depots	177 ea	60,032
	SES Facilities	13 ea	2,495
	Sport & Recreational Facilities	26 ea	59,437
	Tenancy – Child Care Centres	8 ea	6,023
	Tenancy – Commercial Enterprise	11 ea	11,261

Asset Type	Programme	Quantity	Replacement Value (\$'000)
	Tenancy – Community Group	21 ea	18,583
	Vacant Land & Misc	4 ea	409
Fixed Plant		8 ea	837
Intangible		1 ea	11
Plant		267 ea	9,700
City of Townsville Art Collection		3,549 ea	8,761
Land		44 ea	48,969
Land Improvements		201 ea	8,467

Fleet

The quantity and financial value of the fleet assets as at the beginning of the 2019/20 financial year are summarised below:

Asset Type	Quantity	Replacement Value (\$'000)
Heavy Plant	64 ea	11,064
Light Plant	92 ea	3,651
Minor Plant	493 ea	290
Heavy Truck	183 ea	30,364
Light Truck	42 ea	2,782
Minor Truck	21 ea	440
Light Vehicle	317 ea	10,985
Heavy Vehicle	6 ea	1,161
Minor Vehicle	144 ea	830
Heavy Equipment	10 ea	860
Light Equipment	93 ea	2,379

ICT

The quantity and financial value of the ICT assets as at the beginning of the 2019/20 financial year are summarised below:

Asset Type	Quantity	Replacement Value (\$'000)
Infrastructure	197 ea	3,805
Printers	56 ea	89
Power Management	48 ea	534
Servers	61 ea	963
Software	249 ea	3,668
Switches	223 ea	2,316
Telephones	1,280 ea	706
Work Stations	4,568 ea	4,525
CCTV	299 ea	1,016
GIS	13 ea	922

5 Asset Management Policy and Objectives

The asset management vision is to provide effective control and governance to infrastructure assets to realise value through managing risk and opportunity, in order to achieve the desired balance of cost, risk and performance in community service delivery.

Council has a strong vision for the future of asset management which includes sustainable services delivery, community satisfaction, sustainable financial position and acceptable risk exposure.

5.1 Asset Management Policy

The leadership commitment is stated under section 4 of this policy and states:

Responsibility

Directors, General Managers, Team Managers, and Asset Management Staff are responsible for ensuring this policy and associated documents are understood and adhered to by all staff.

The policy states:

Policy

Council will manage assets to realise value through managing risk and opportunity, in order to achieve the desired balance of cost, risk & performance in service delivery.

The management of assets and service potential will be achieved by:

- Developing and maintaining long-term Strategic Asset Management Plan and Strategic Service Management Plan and Asset Management Plans;
- Preparing Business Case, Planning Reports, Evidence Based Prioritisation prior to the introduction of a new service or the procurement of a new asset or for rehabilitation or renewal of existing assets;
- Integrating customer experience, strategy planning, financial affordability and capital works planning;
- Maintaining a long term financial plan which demonstrates that the full costs of an asset are borne equitably by all users (including future users) of

the asset, including using the utility delivered to customers as the basis for allocating depreciation and obsolescence;

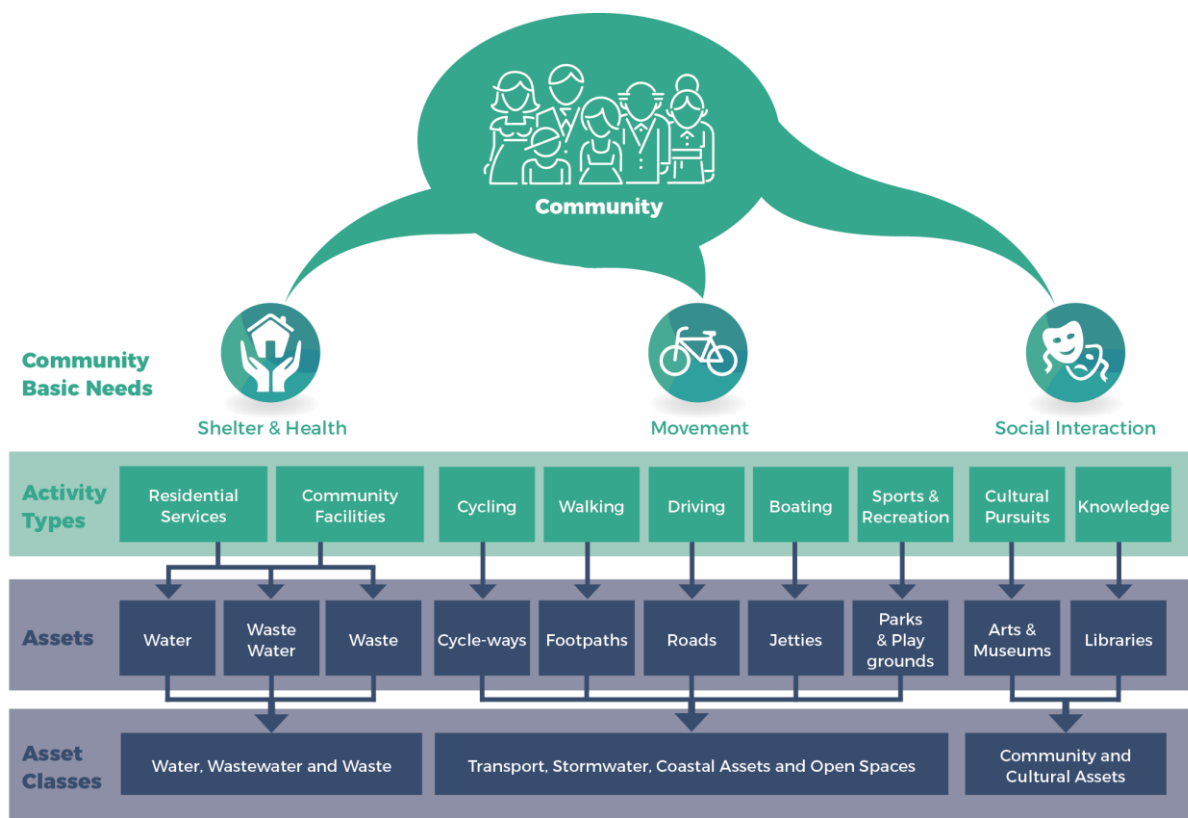
- Ensuring that the lowest lifecycle cost of an asset is achieved while maintaining agreed levels of services and an acceptable risk exposure level;
- Annually prioritising capital investment plan and reviewing asset management strategies and plans;
- Measure, monitor and review, asset and service management values and performance;
- Ensuring consistency through the use of asset management systems, business processes and governance requirements with available technology for continuous improvement;
- Improve through leadership, cross functional integration, effective communication, and culture; and
- Assure ISO55000 alignment as a minimum requirement for asset management practices.

The policy was developed in accordance with the Administrative Directive for the Development of Council Policies, Associated Procedures and Administrative Directives. This directive is owned and maintained by Infrastructure Planning, Assets and Fleet Section.



5.2 AM Objectives

The AM Objectives, at an organisational level, have been defined in terms of the community services and their needs. This focus has been mapped in the following diagram:



The AM Objectives below are derived from the asset related organisational goals, and outcomes published by Council in the Corporate Plan 2020-2024:

- **A Prosperous City** - Plan, support, provide and advocate for infrastructure and investment that supports innovation, residential and economic growth.
- **A City for People** – Provide services and local infrastructure that meet community expectations, support growth, build resilience and provide for the needs of our community.
- **A Clean and Greener City** – Plan, design and deliver sustainable development and support this by actively managing the natural environment and increasing green infrastructure at a city, suburb and place level. Develop and implement long term waste and water security solutions that are socially, financially and environmentally sound.

- **A Smarter, Faster and Better Council** – Create and maintain assets that; 1. Provide customer-focused services meet the expectations of our community in a dynamic and adaptive manner; 2. Ensure Council's plans, services, decisions and priorities reflect the needs and expectations of the community; 3. Improve financial sustainability and provide value and accountability to the community for the expenditure of public funds; 4. Ensure that public funds are expended efficiently and that Council expenditure represents value for money whilst supporting the local economy.

There are legislated requirements in regards to asset management in the *Queensland Local Government Act: 2009*. Section 104(3) (f) states that a long term AMP is required. This is further defined under section 104(6).

Regulatory requirements in regards to managing water quality and wastewater treatment include *Queensland Government Water Act: 2000* and *Sustainable Planning Act: 2009*.

Each of the asset class AMPs refers to the applicable standards, codes and laws directly relevant to the asset class.

5.3 Reviewing the AM Objectives

The AM Objectives were established to reflect the Corporate Plan where Council commits to delivering quality services to facilitate sustainable growth through inspired leadership, economic activation, community engagement and sound financial management. Council is governed by the principles of the *Local Government Act 2009* of sustainable development and management of assets, infrastructure planning and delivery of effective services.

These requirements are being addressed in each of the individual AMPs, as these plans deliver the AM Objectives, within the budgets and with the resources available and ensuring that appropriate levels of service are achieved.

In establishing the objectives, community consultation was undertaken through specifically designed customer surveys and workshops. In addition the community can interact with Council through various media types such as the feedback link on the public website, reviewing publicly available reports and various other publications on the Council website.

5.4 Communicating the Policy and Objectives

External communication to stakeholders of the policy and objectives was undertaken through the publishing of the AM Policy, Strategy Asset Management Plan and the Corporate Plan on the Council website.

Internal communication of the AM Policy, AM Objectives and other AM activities are primarily undertaken through:

- The Corporate Induction of new staff;
- AM training sessions;
- AM related meetings and workshops;
- The intranet; and
- The risks associated with work activities are captured and available to internal stakeholders through the Corporate Risk Management Framework.

6 Asset Management Stakeholders

6.1 Internal Stakeholders

Specific internal stakeholders of the AMS and their respective roles and responsibilities are outlined in Section 6. In general these stakeholders fall into the following three key areas:

- **Councillor's and Executive:** Responsible for the setting of the Council's vision, mission, objectives and the approval of the asset management policy and objectives;
- **Senior Council Officers:** Responsible for the development and implementation of the asset management and operational plans to deliver the asset outcomes; and
- **Council Officers:** Responsible for the implementation of the operational plans.

Internal Stakeholder Engagement

Engagement with internal stakeholder groups is achieved through a variety of formal and informal communication channels including; email, meetings, performance appraisals, workshops and formal asset management training.

6.2 External Stakeholders

The community (residents and visitors) are the primary external stakeholders in the AMS and also the main beneficiaries of the services. They also contribute the bulk of the operating funds through rates, charges and fees. There are other groups with external stakeholder interests including:

- Goods and services providers to Council;
- The Government of Queensland;
- Financial Institutions, Insurers, Regulatory Authorities;
- Developers; and
- Visitors.

External Stakeholder Engagement

Council engages with the community via Community Council Meetings for each electorate divisions to gauge the community's service level expectations. This information informs Council and enables it to structure and prioritise its service delivery programs.

The Department of Infrastructure, Local Government and Planning administers the Local Government Act which stipulates various Council obligations, duties and administrative requirements. The Department also ensures that activities at the local level are aligned with the Queensland Government's local and regional priorities. Council's management is audited by the Government Audit Office and Treasury sets out the accountability and reporting requirements.

Regulations governing Council activities are also administered by *The Department of Infrastructure, Local Government and Planning (Sustainable Planning Act)* and the *Department of Natural Resources and Mines (Water Act)*.

Developers rely on Council to provide guidance and planning approvals that ensure the desired levels of service are delivered in new developments. It is common practice that Developers contribute infrastructure assets (e.g. water and wastewater infrastructure, roads, drainage, footpaths, parks, and lighting) to Council when new developments are commissioned. These assets expand the asset base which Council manages.

Visitors are stakeholders as they not only use Council infrastructure but also support the viability of the community through spending, which in turn creates employment in both the private and local Government sectors.



7 Asset Management System

7.1 Organisational Management Systems Integration

The AMS is part of a suite of management systems used by Council. The following diagram and associated table shows the AMS and its interdependencies on the other Council management systems:



System Description	AMS Interdependencies
Asset Management System: The approach used by Council to ensure that physical assets remain safe, fit-for-purpose and commercially sustainable throughout the whole asset lifecycle.	<ul style="list-style-type: none">• SAMP.• AM objectives.• AMP.• Development of LTFMP.• Decision making process.

System Description	AMS Interdependencies
<p>Strategic Management System: The system involves the formulation and implementation of the major goals and initiatives taken by an organisation, based on consideration of the demands, opportunities and limitations of the internal and external environments in which Council operates.</p>	<ul style="list-style-type: none"> • Council Vision & Mission. • Policies. • Executive commitment. • Council objectives. • LTFMP approval. • Stakeholder communications / consultation.
<p>IT Management System: Any software that facilitates the storage, organisation, and retrieval in information within a computer system. The information held may include sounds fragments, images, and video, in addition to textual and numerical information.</p>	<ul style="list-style-type: none"> • Information storage and retrieval. • Hardware/ Software provision. • Technological innovation.
<p>Quality Management System: The system that ensures that the products or services of Council are consistent by the application of quality planning, quality control, quality assurance and quality improvement. Quality management is focused not only on product and service quality, but also on the means to achieve it. A key aspect of the quality system is the auditing of processes and outcomes.</p>	<ul style="list-style-type: none"> • Asset delivered/ constructed to the appropriate standards. • Continuous improvement in asset service delivery. • H&S audits. • Quality audits (including ISO9000 & ISO14000 for water business unit). • Internal ISO55001 audits. • Statutory compliance audits.

System Description	AMS Interdependencies
<p>Human Resource Management System: This system includes the management of human resources and includes suite of software programs for managing business processes related to human resource management. It is the link between the strategy of Council and its people that includes resource planning, recruitment, workplace communication, employee relationship management, career planning and tracking, performance management and employee information.</p>	<ul style="list-style-type: none"> • Position description. • Performance reviews. • Training provision. • Performance management. • Recruitment.
<p>Health and Safety Management System: This system is a combination of planning, implementing and reviewing organisational arrangements, consultative arrangements, hazard identification, risk assessment and control, information sharing, records and training that work together to improve health and safety performance.</p>	<ul style="list-style-type: none"> • H&S training. • H&S risk assessment. • SWMS. • PPE provision and training. • Accident investigation.
<p>Financial Management System: This system is the methodology and software that Council utilises to oversee and govern its income and expenditure and assets to identify and support growth opportunities and accomplish the objectives of the organisation.</p>	<ul style="list-style-type: none"> • Determine funding available for delivery of all aspects of the AMS. • Project budget control. • LTFMP. • Utilities Charges Model. • Rates Income Model

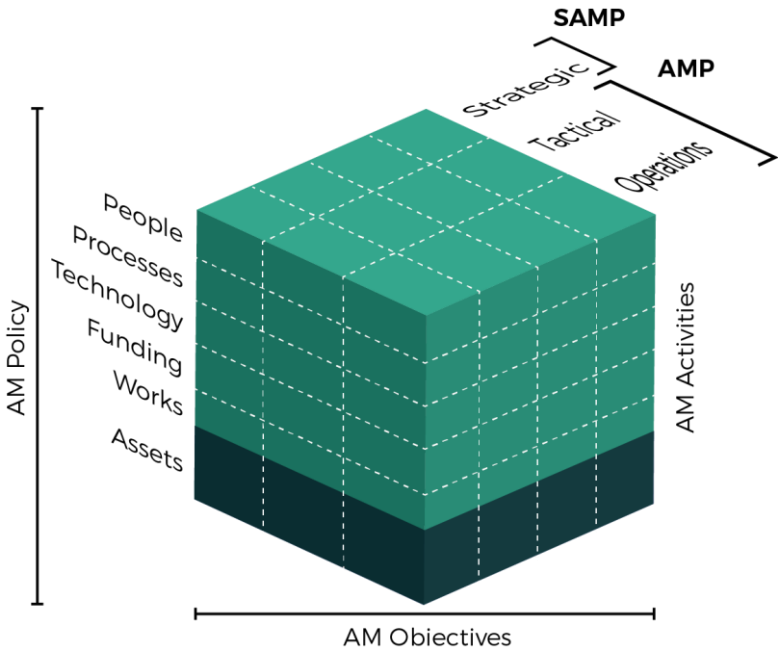
System Description	AMS Interdependencies
<p>Project / Contract Management System: This system relates to the procurement of various products and services for Council and the implementation of the procedures to ensure budgets are met and products and services are to the required standards.</p>	<ul style="list-style-type: none"> • Procurement. • Contract supervision. • Contract management. • Commissioning. • Project Management Framework.
<p>Risk Management System: The system provides the formal process for the identification, assessment and prioritisation of risks, followed by coordinated and allocation of resource to minimise, monitor and control the likelihood and consequence of negative risks or to maximise the realisation of opportunities.</p>	<ul style="list-style-type: none"> • Identification and assessment of risks. • Implementation of process to minimise impact of negative risks.
<p>Environmental Management System: The EMS is a set of processes and procedures that enables Council to reduce its environmental impact. It provides a structured approach to planning and implementing environmental protection measures.</p>	<ul style="list-style-type: none"> • Minimise negative impact assets have on the surrounding/receiving environment. • Promotes more environmentally sustainable objectives.



7.2 Asset Management System

The AMS is a set of interrelated and interacting elements allowing an organisation to establish policies and objectives and processes to achieve the AM Objectives.

Councils AMS is shown diagrammatically as follows:



7.3 People

Those whose duties fall under the AMS shall be competent to perform the duties. Council will stipulate the position requirements. At the leadership and management levels a combination of financial and technical skills is required to be able to competently contribute to and assume responsibility and accountability for the AMS, including updating and reviewing AMPs, assisting with the preparation of Works Plans, critically examining asset performance against service delivery requirements, risk management, benefit-cost analyses, performance reporting and examining the System to recognise the effectiveness and improvement opportunities.

Individual Position Descriptions shall reflect these responsibilities, accountabilities and authorities.

The AMS shall be adequately staffed to ensure that all functions required to sustain and improve on the system have been resourced. The risk of inadequate resourcing is that the AMS will weaken. A needs assessment process is established and reviewed annually under the Strategic Workforce Plan, Asset Portfolio AMP and SAMP Review to ensure that

workloads are equitable, that competence requirements are being met and that the AMS requirements are aligned to ISO 55001 and being achieved.

The key roles and responsibilities of the team members are documented in the position descriptions held within the Human Resources Management System.

7.4 Processes

Within Council the inputs and analysis are generally determined at the operational and tactical levels at an asset component level, with the decision making process being at a strategic level considering the entire portfolio. The overall AM process is outlined below:

Risk Management

Council incorporates a risk management approach to all decisions across its activities including asset management. Risk management occurs at different levels from strategic risk through to operational risk.

Governance Team has undertaken an organisational level risk assessment identifying a broad range of risks and has subsequently developed appropriate risk mitigation strategies.

High Risk Infrastructure

High risk assets are defined as those assets where the likelihood of an asset failure, under a given scenario, would cause sufficiently negative consequences.

The high risk assets identified, across these asset classes, are all within Water Operations as shown in the table below:

Department	Asset Details	Risks/ Hazards	Causes of Risk	Existing Control Measures	Likelihood	Consequences	Action Required
Water Operations	Ross River Dam Pipeline	Water Supply Failure (Pipeline under road)	Power Outage / Equipment failure / Natural Disaster / System failure	Routine inspections Routine maintenance	Possible= 20-50% chance of occurring within 2-5yrs	Catastrophic = Deaths, toxic release off-site with detrimental effect, huge financial loss (more than \$1M)	Risk mitigation is under review and development
Water Operations	Douglas Water Treatment Plant	Electricity Supply failure	Loss of Power		Possible= 20-50% chance of occurring within 2-5yrs	Catastrophic = Deaths, toxic release off-site with detrimental effect, huge financial loss	Emergency Generator is being installed.

Department	Asset Details	Risks/ Hazards	Causes of Risk	Existing Control Measures	Likelihood	Consequences	Action Required
						(more than \$1M)	
Water Operations	Crystal Creek Intake & Northern Treatment Plant	Electricity Supply failure	Loss of Power		Likely= 50-90% Chance of occurring within a year	Major = Extensive injuries, loss of production capacity, off-site release with no detrimental effects, major financial loss (\$200,000 - \$1,000,000)	Risk mitigation is under review and development
Water Operations	Haughton Pipeline	Pipe failure	Pipe break / damage by external entities	Routine inspections and maintenance Signage Notify Landholders (where pipe travels through)	Possible= 20-50% chance of occurring within 2-5yrs	Catastrophic = Deaths, toxic release off-site with detrimental effect, huge financial loss (more than \$1M)	Haughton Pipeline Duplication Project under way

This review also included information sessions with council emergency services staff to ensure that risks associated with emergency shelters and refuges were considered.

Most of the identified high risk assets have risk mitigation plans and actions in place to manage the risks.

Operations and Maintenance Processes

Council undertakes a number of operational and maintenance activities to manage the assets, which are categorised into the following groups:

Operational Activities – the active process of utilising the asset. This may consume labour, materials, energy, etc. These activities also include routine inspections and testing to monitor asset condition and to identify the need for routine maintenance and repair works.

Maintenance Activities – The work needed to keep the asset serviceable to prevent premature deterioration or failure. Maintenance activities can be further divided into the following categories:

- Scheduled maintenance – Planned or programmed activities; and
- Unscheduled maintenance – Unplanned or emergency activities.



Council has developed the Maintenance Management Administrative Directive and associated strategy to optimise operations and maintenance expenditure.

Portfolio Optimisation (Decision Making Process)

The decision making process that develops and optimises the annual program of works, across Council’s portfolio of assets, follows a two staged approach (asset class and organisation). This applies to both operations and maintenance works, and capital projects.

Optimisation is the process where priorities for asset works are identified, analysed, and justified for funding. Priorities are set based upon social impact, service risk, lifecycle cost and performance in relation to community service delivery.

The following diagram presents the decision making process;



Specific details on this process include:

- The operations and maintenance requirements are determined at an asset class level by the respective teams responsible for the delivery of the physical works.
- Asset renewals and acquisitions, included in the LTFMP for the financial year under consideration, have the justifications developed to determine the priority ranking based on social impact, risk, cost and performance in community service delivery. This program of works is optimised by the asset planners in collaboration with the operational and maintenance planners, on a risk prioritised and ‘value for money’ basis;
- This process enables the total asset management program to be established and to develop the draft optimised program. Optimisation at this level is based upon relative rankings, ‘value for money’, and availability of funding; and
- The draft optimised program is forwarded to the Council for further refinement and approval.

7.5 Technologies

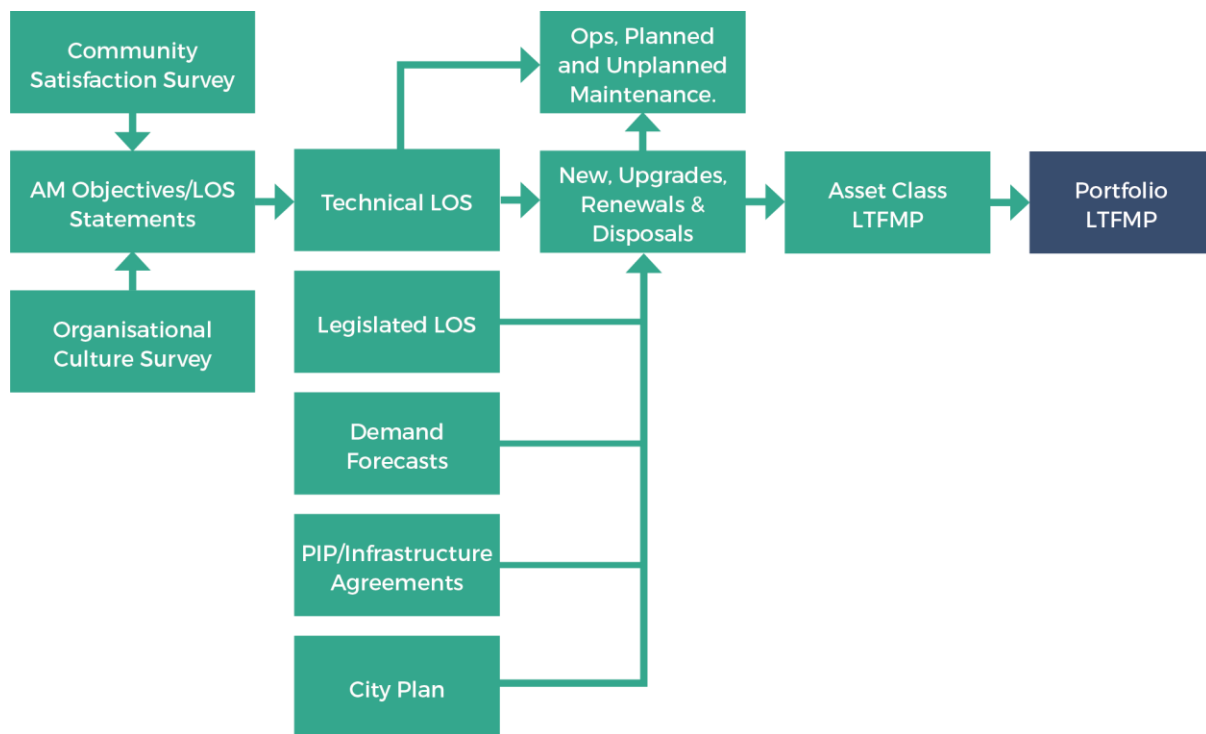
A number of technical solutions have been implemented by Council that link with the AMS. These are listed below:

- T1 Core Enterprise System (CES) – Budgeting, Finance, Supply Chain, Enterprise Works and Asset Management, Mobility and Corporate Performance Management;
- T1 Enterprise Content Management (ECM);
- Human Resources Information System (HRIS) – CHRIS21, HR21, KRONOS Workforce, KRONOS Workforce Manager, Crystal Reports;
- ESRI GIS System and
- T1 – Property & Rating (P&R).

7.6 Funding

Funding Constraints / Limitations

Funding constraints and limitations are determined from the Long Term Financial Management Plan (LTFMP). In addition, funding constraints and limitations can be driven by changes in the borrowing decisions, and political commitments.



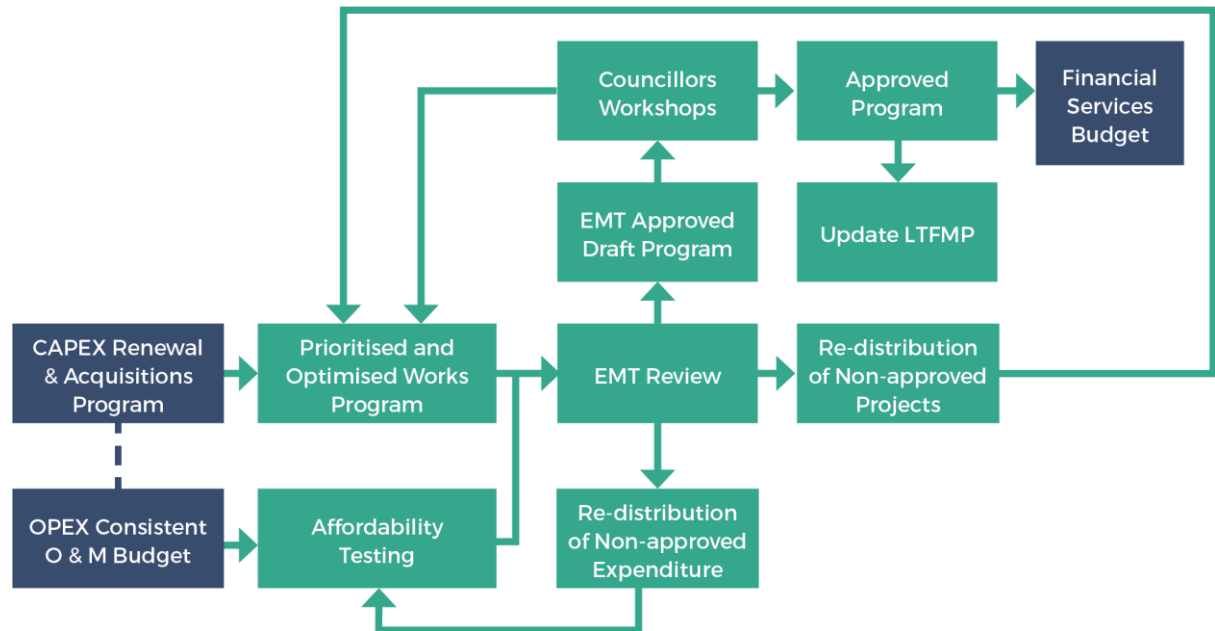
Cost Recording

Costs are captured within the Technology One Core Enterprise System. Council utilises the following modules for the capture and sharing of cost information:

- Core Financial Management;
- Enterprise Asset Management;
- Financial Supply Chain Management;
- Enterprise Budgeting; and
- Mobility (Internal Works requests).

Annual Works Funding Approval Process

The annual funding approval process is outlined below:



The annual funding approval process is implemented in a number of steps as outlined below:

- The draft optimised program is forwarded to the Council Executive Management Team (EMT) for further refinement and approval;
- Following Council EMT approval, the program is workshopped with the elected members, to allow for any political imperatives to be incorporated and approved by Council;
- The approved budgets are forwarded to the finance team for establishing the projects within the financial management system; and
- The LTFMP is then updated to account for the approved annual works program.

7.7 Works Delivery

Procurement of Additional Resources

The full process for the procurement of additional resources is contained within the Procurement Policy and Procedure.

The Procurement Procedure sets the financial limits at which formal tenders or written quotes are required. The procedure stipulates that:

- The Purchasing Officer must ensure that there is sufficient budget allocation to cover the purchase;
- All purchases must be made in accordance with the financial delegation and in accordance with *Chapter 6, Part 5, section 238* of the *Local Government Regulation 2012*; and
- Only council staff listed in the Register of Financial Delegations may authorise purchase requisitions, in accordance with their approved financial delegation. By authorising a requisition, they confirm that they have taken full notice and will comply with the requirements of the Procedure.

In addition to the above procedure the following procedures and policies also apply:

- Purchase Card Procedure;
- Corporate Procedure to Acquire Extra Vehicles-Plant;
- Trunk Infrastructure Acquisition Procedure and Policy; and
- Strategic Land Acquisitions Disposals Procedure and Policy.

8 Asset Management Planning

The objective in managing assets is to meet the agreed level of service in the most cost effective manner for the benefit of the present and future Townsville community. Following the major restructure and streamlining of the Infrastructure and Operations division, Council is in the process of re-defining the individual Asset Management Plans (AMP) to address each asset class with a mix of high level objectives linked to the operational plan, performance management objectives and improved granular processes.

The key elements of AMPs are:

- Taking a life cycle approach to managing assets;
- Developing a cost-effective management strategy for the long term;
- Providing a defined level of service for assets;
- Providing defined performance monitoring processes;
- Understanding and meeting the demands of growth, legislative change, legal/statutory requirements and infrastructure investment;
- Managing risks associated with the asset;
- Providing long term financial projections for asset sustainability; and
- Continuously improving asset management processes and practices.

AMPs for each asset class have been prepared in accordance with the relevant industry standards, in line with Council's vision, mission, goals and objectives.

Each AMP includes provision for capital, renewal, operational and maintenance works which will provide infrastructure with the necessary resources in an endeavour to meet community expectations for agreed service standards and capacity. The AMPs outline processes and principles used to plan capital, renewal and maintenance works for key assets and prioritise capital works in the asset class throughout the local government area.

The AMPs will help to guide the Council in making decisions within its 10 year objectives. The result is a long-term planning framework, including expenditure forecasts which will assist in making informed decisions on future maintenance programs and renewal and capital projects.

AMPs include documentation on:

- Asset data summaries – what Council owns, what the network is valued at and its most recent assessed condition;
- Leadership and Structure
- Resources capability reference
- Levels of service – defining the quality of the service to be delivered by the asset;
- Future demand – how this will impact on future service delivery and how this is to be met;
- Life cycle management – how Council will optimise the management of its existing and future assets to provide the required services;
- Prioritised capital, renewal
- Operational and maintenance works;
- How risk is managed; and
- Financial summary – what funds are required to provide the agreed service levels.
- Improvements plan

The information linkages to the AMPs include:

- The asset register data on location, size, age, value, condition and remaining life of the asset network;
- The unit rates for classes of work/resources and materials;
- Performance relative to adopted service levels;
- Projections of factors affecting future demand for services;
- Correlations between maintenance and renewal, including asset condition/service performance models;
- Data on new assets developed or acquired by Council;
- Data on assumed works programs and trends;
- The resulting budget, valuation and depreciation projections; and
- Lifecycle analysis data.
- Risk, Performance and Cost data

This information impacts the Council's long term financial plan, strategic business plan, annual budget and departmental business plans and budgets. The Appendix B shows Council's Assets Works Planning Process. The Appendix C shows the 10 Year Capital Plan as proposed to Council on 25 June 2019. Further, Appendix D shows the FY 2019/20 Operations and Maintenance Plan as proposed to Council on 25 June 2019.

The following sections provide an overview of each of the asset classes, extracted from the existing AMP's.



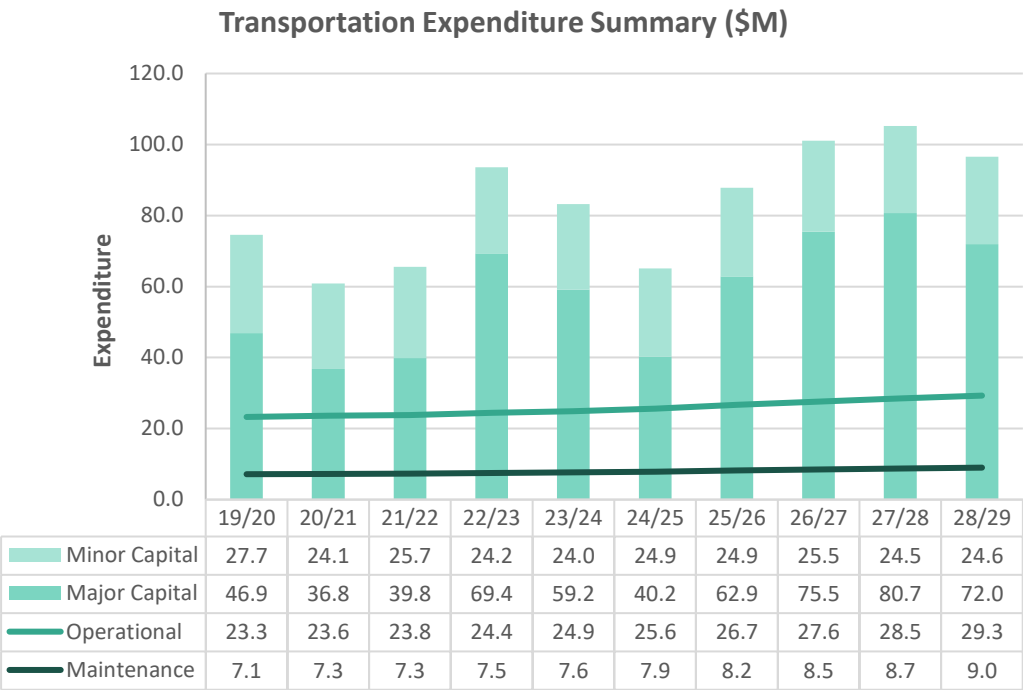
8.1 Transport

Management Objective

Council provides a Transport network in partnership with relevant state agencies to enable the community to efficiently and safely travel across the region for private and business purposes.

Financials

The summarised budget expenditure over the next ten years is shown below for operations and maintenance, and renewal and asset creation activities.



Current Financial Metrics	Value
Replacement Value (19/20)	\$2,313,018,984
O&M (19/20)	\$30,424,301
Average % O&M / RV	1.3%



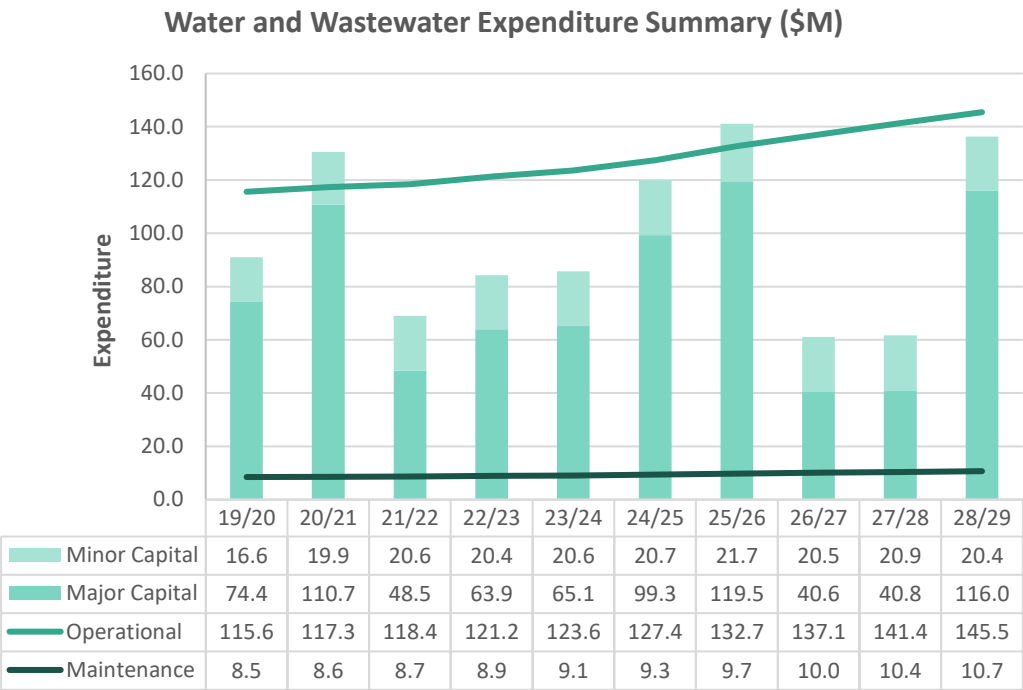
8.2 Water and Wastewater

Management Objective

TWW’s main strategy while meeting the desired Level of Service (LOS) is to ensure that all residents and business are provided with safe, reliable and sustainable water and waste water service.

Financials

The summarised budget expenditure over the next ten years is shown below for operations and maintenance, and renewal and asset creation activities:



Current Financial Metrics	Value
Replacement Value (19/20)	\$2,762,093,807
O&M (19/20)	\$124,078,066
Average % O&M / RV	4.5%

8.3 Solid Waste

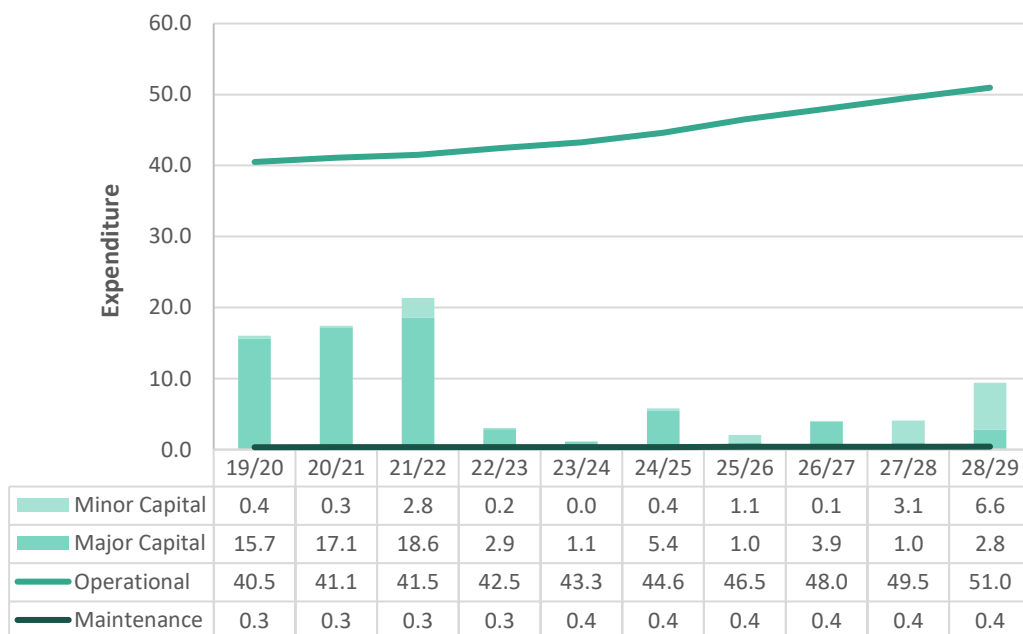
Management Objective

TWW's main strategy while meeting the desired LOS is to reduce waste going into landfill. The strategy aligns with the Waste Management and Resource Recovery Strategy.

Financials

The summarised budget expenditure over the next ten years is shown below for operations and maintenance, and renewal and asset creation activities:

Solid Waste Expenditure Summary (\$M)



Current Financial Metrics	Value
Replacement Value (19/20)	\$24,646,885
O&M (19/20)	\$40,832,563
Average % O&M / RV	165.7%

8.4 Stormwater

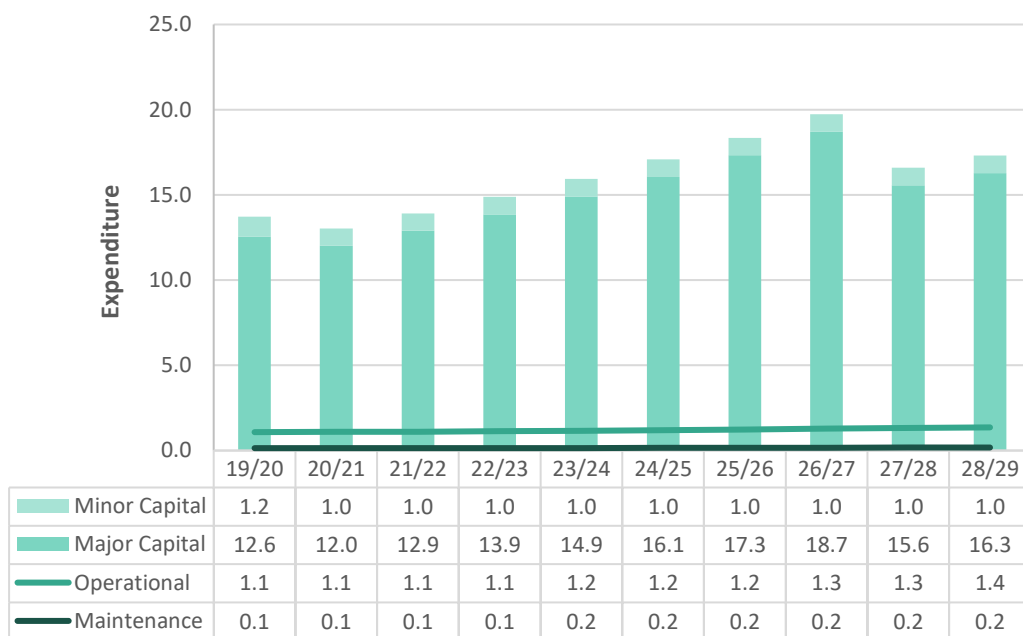
Management Objective

Council provides a stormwater network in partnership with relevant state agencies to manage stormwater runoff in a safe, efficient, and cost effective manner. The network caters for minor and major flows and the system is designed to minimize the risk of flooding and property damage to the community while addressing associated health and environmental issues.

Financials

The summarised budget expenditure over the next ten years is shown below for operations and maintenance, and renewal and asset creation activities:

Stormwater Expenditure Summary (\$M)



Current Financial Metrics	Value
Replacement Value (19/20)	\$718,057,270
O&M (19/20)	\$1,222,003
Average % O&M / RV	0.2 %

8.5 Open Spaces

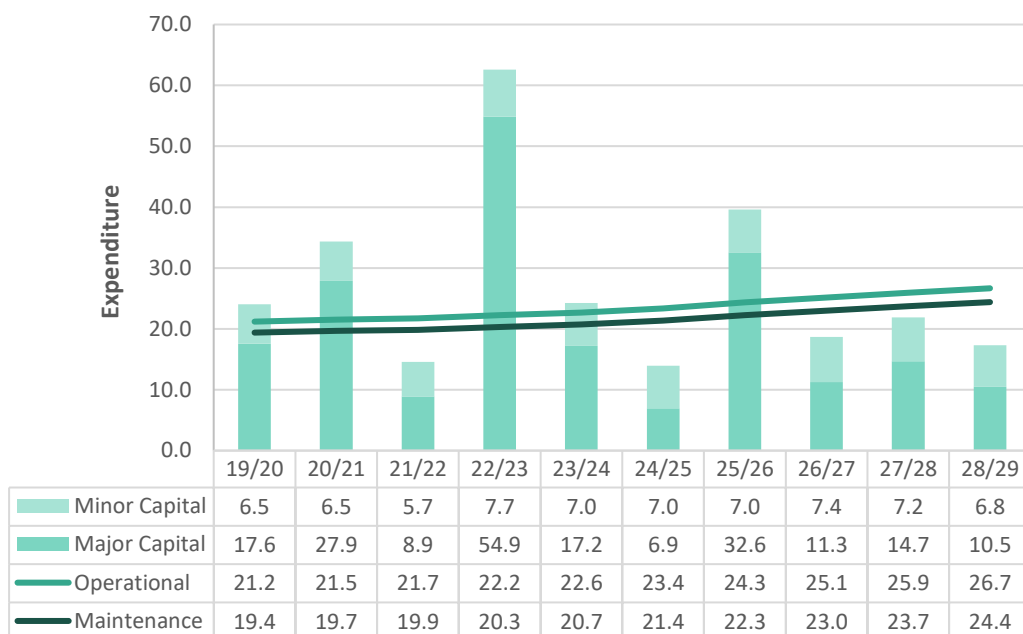
Management Objective

Council will provide parks and open spaces that provide a range of passive and active recreation opportunities for all members of the community, that meet the legislative and LOS sustainably.

Financials

The summarised budget expenditure over the next ten years is shown below for operations and maintenance, and renewal and asset creation activities:

Open Spaces Expenditure Summary (\$M)



Current Financial Metrics	Value
Replacement Value (19/20)	\$118,897,556
O&M (19/20)	\$40,572,759
Average % O&M / RV	34.1%



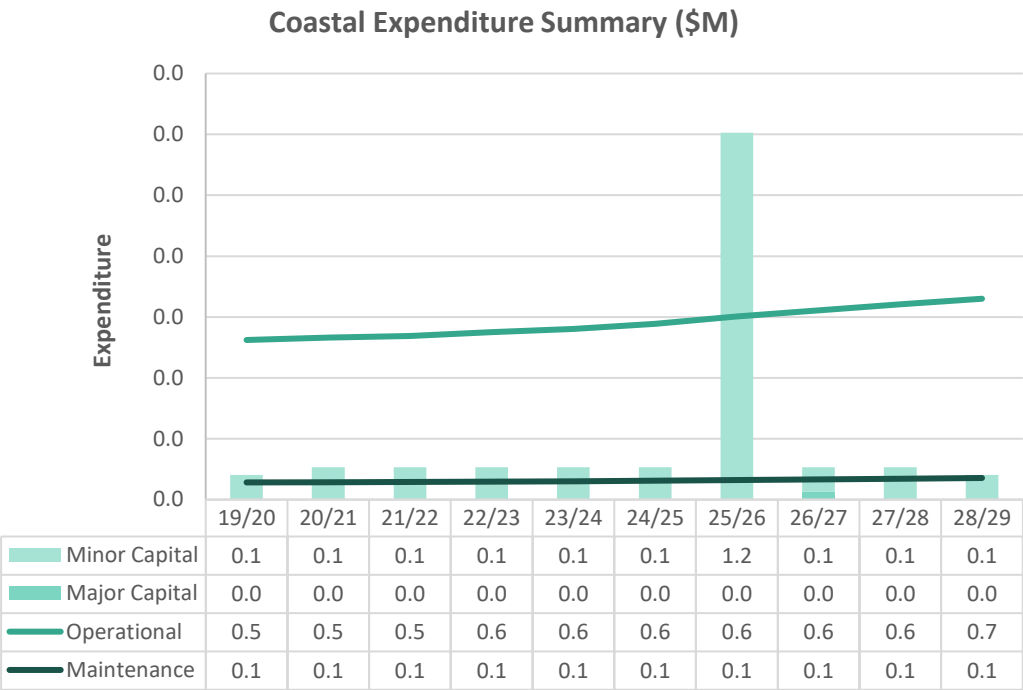
8.6 Coastal

Management Objective

In partnership with relevant state agencies Council provides coastal assets as a social infrastructure for the Community and also for the protection of properties from adverse coastal conditions in the most efficient and cost-effective manners.

Financials

The summarised budget expenditure over the next ten years is shown below for operations and maintenance, and renewal and asset creation activities:



Current Financial Metrics	Value
Replacement Value (19/20)	\$18,590,575
O&M (19/20)	\$580,848
Average % O&M / RV	3.1%

8.7 Buildings

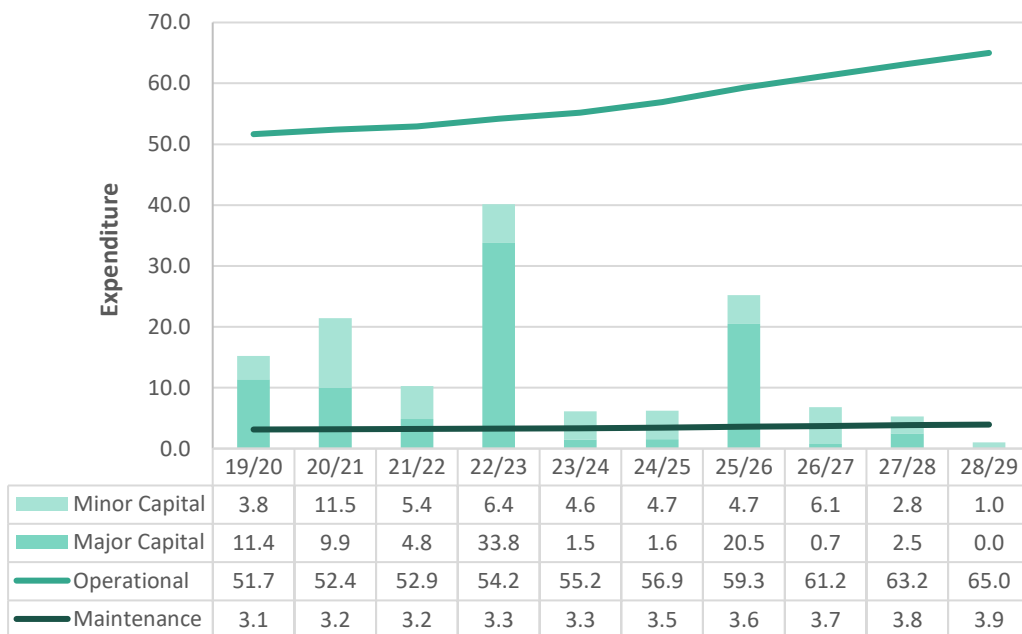
Management Objective

Council provides property assets to enable the provision of services to the community. This includes a range of building types including Operational Buildings, Depots, Public Buildings, Rented Buildings, Community Centres, SES Buildings, Child Care Centres, Public Swimming Pools and Miscellaneous Properties.

Financials

The summarised budget expenditure over the next ten years is shown below for operations and maintenance, and renewal and asset creation activities:

Buildings Expenditure Summary (\$M)



Current Financial Metrics	Value
Replacement Value (19/20)	\$347,259,710
O&M (19/20)	\$54,787,093
Average % O&M / RV	15.8%

8.8 Fleet

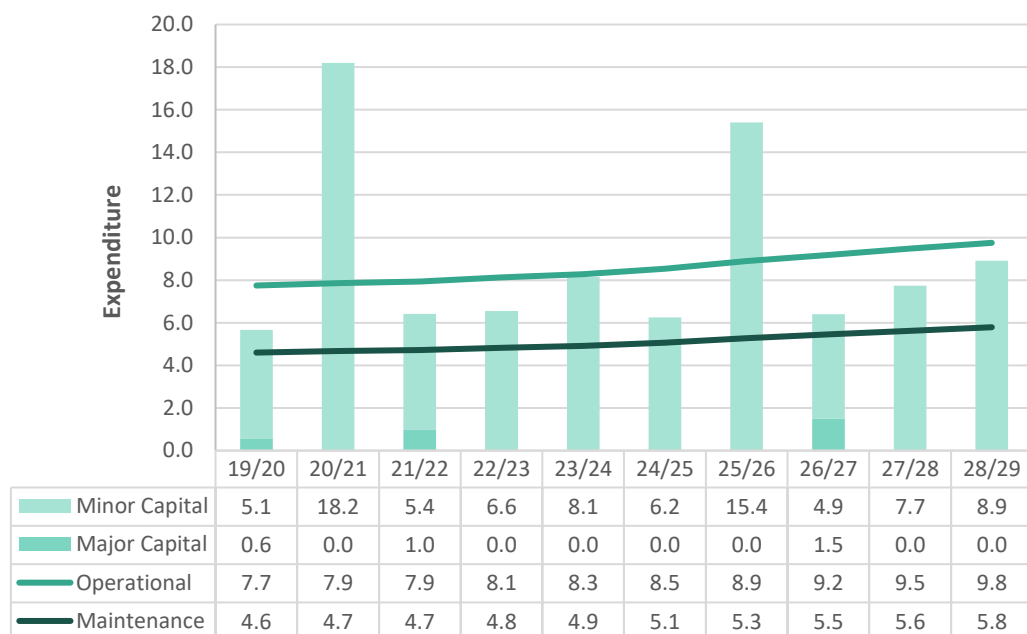
Management Objective

Council provides fleet assets to facilitate the provision of services to the community. This includes a range of light vehicles, heavy plant and equipment, and minor plant and fixed equipment.

Financials

The summarised budget expenditure over the next ten years is shown below for operations and maintenance, and renewal and asset creation activities:

Fleet Expenditure Summary (\$M)



Current Financial Metrics	Value
Replacement Value (19/20)	\$64,806,000
O&M (19/20)	\$12,349,397
Average % O&M / RV	19.1%



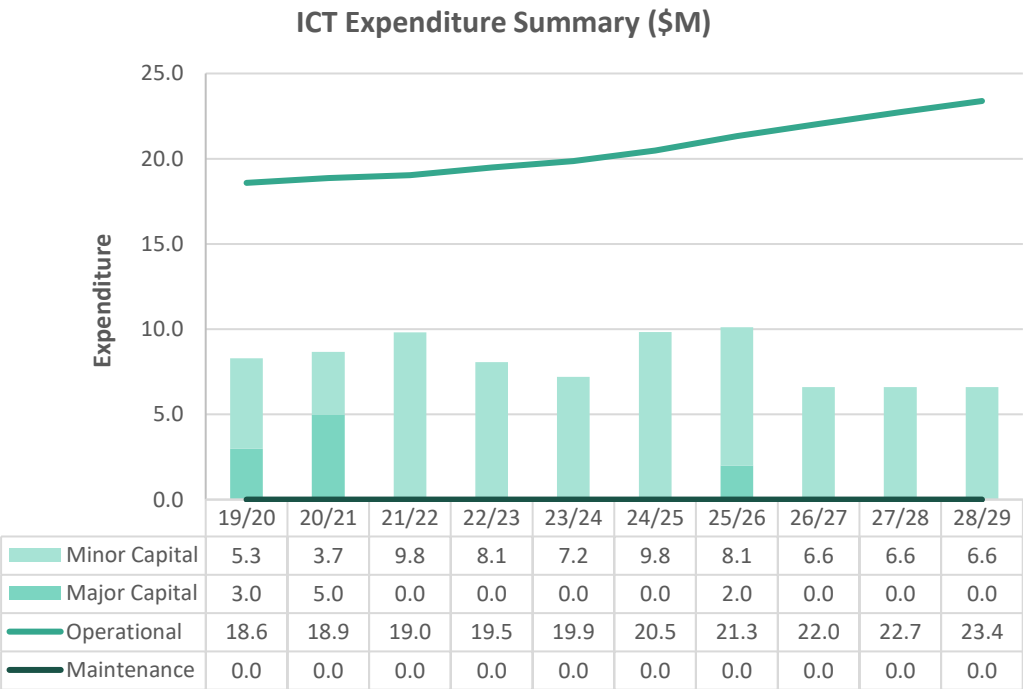
8.9 ICT

Management Objective

Council provides ICT services and ensures it is maintained in partnership with other levels of government and stakeholders to maximise the efficiency of services provided. The ICT Department aims to deliver responsive and efficient systems, institute a strategic direction that defines the needs of council and champions continuous improvement.

Financials

The summarised budget expenditure over the next ten years is shown below for operations and maintenance, and renewal and asset creation activities:



Current Financial Metrics	Value
Replacement Value (19/20)	\$18,544,000
O&M (19/20)	\$18,583,458
Average % O&M / RV	100.2%



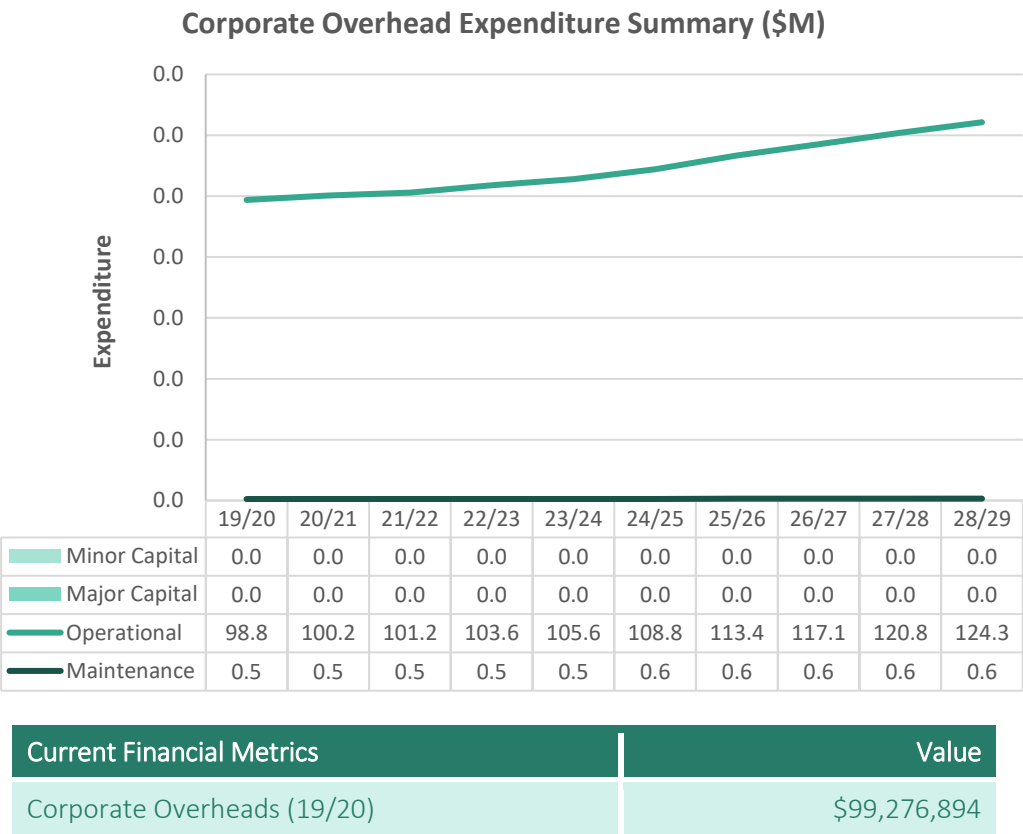
8.10 Business Services (Corporate Overheads)

Management Objective

Council’s business services section provides enabling services to core services providers (planning, community, operations and maintenance) and ensures it is maintained in partnership with other levels of government and stakeholders to maximise the efficiency of services provided. The business services section aims to deliver responsive and efficient services, institute a strategic direction that defines the needs of council and champions continuous improvement.

Financials

The summarised budget expenditure over the next ten years is shown below for corporate overhead activities:



9 Performance Evaluation and Improvement

9.1 Performance Evaluation

Asset Management Team is responsible for the annual AM performance review. The methodology and results of the system evaluations is reported in the AM Performance Assessment, which is updated after each review.

The objectives of the evaluation include:

- Achieving Core Level Asset Management initially (IIMM);
- Continuously improving asset management activities and practices towards advanced level where applicable;
- Achieving financial sustainability; and
- Maintaining legislative compliance against the *Local Government Act (2009)*, specifically *S135, S136, S104(3)*.

The outcomes from this evaluation are reported to the Executive Management Team and national AM bodies (e.g. ALGA National State of the Assets).

9.2 Internal Audits

At present there is no system in place for the on-going audit of the AMS. This process will need to include the following requirements specific to ISO55001:

- Plan, establish, implement and maintain an audit program;
- Define the audit criteria and scope for each audit;
- Select auditors and conduct audits who are objective / impartial;
- Ensure that the audit results are reported to management;
- Retain documented information as evidence of the audit; and
- Develop a preventative actions, correction action and continuous improvement process and register.

The annual performance evaluation is currently reported within the annual AM Performance Assessment management reviews.

9.3 Management Review

At present there is no system in place for the management review of the AMS. This process will need to review the following in terms of ISO55001:

- Status of actions from previous management reviews;
- External / internal issues that are relevant to the AMS;
- Information on the asset management performance, including: nonconformities and corrective actions and monitoring and measurement results;
- Asset management activity;
- Opportunities for continual improvement;
- Changes in the profile of risks and opportunities; and
- Retain documented information as evidence of the audit.

9.4 Improvement Plan

Townsville City Council generates and leverages performance, risk and cost information to inform business decisions. A wide variety of metrics are currently in place to enable measurement of the performance of Townsville City Council's assets.

A new asset lifecycle framework will monitor asset performance outcomes, against predetermined business outcome targets as per the SAMP, and other indicators that inform asset management. The framework will also support review of the critical business processes and organisational enablers that need to function effectively in order to deliver the business outcomes. Asset performance reporting will support a variety of 'evidence based' decision making throughout the works planning process:

- Process 1 – short term amendments to process operating plans, maintenance plans and budgets, and process performance improvements
- Process 2 – medium to long term updates to AMPs, SAMP and wider asset management and business strategy planning.

Townsville City Council further seeks to improve its underlying asset management capability through continuous improvement to its processes and systems. Such improvements will be informed by both assessing the applicability of external best practice developments, as well as through the feedback on existing processes and systems enabled through the performance monitoring described previously in this

section. Major changes to these processes and systems will be documented in periodic updates to the SAMP.

The following are proposed improvement areas:

- Implement the asset infrastructure plan to align business priorities in the next five year's horizon with affordability targets.
- Reprioritise 10 year capital works plan based on the asset infrastructure plan
- Align individual asset management plans to this SAMP that focuses community level of service, risk appetite, and financial affordability targets

9.5 SAMP and ISO 55001 Relationship

This SAMP has been specifically developed to align with the requirements in ISO 55001: 2014, Asset Management System. While this Standard is not prescriptive in terms of content, this SAMP is intended to be an effective planning instrument with respect to Councils AMS and to respond to certain requirements in the Standard.

Accordingly, this SAMP provides relevant evidence and demonstrates compliance on the requirements referenced in the table below. In some instances this information is supplemented by other artefacts such as the AMP, or other Council management systems (as shown in section 6.1):

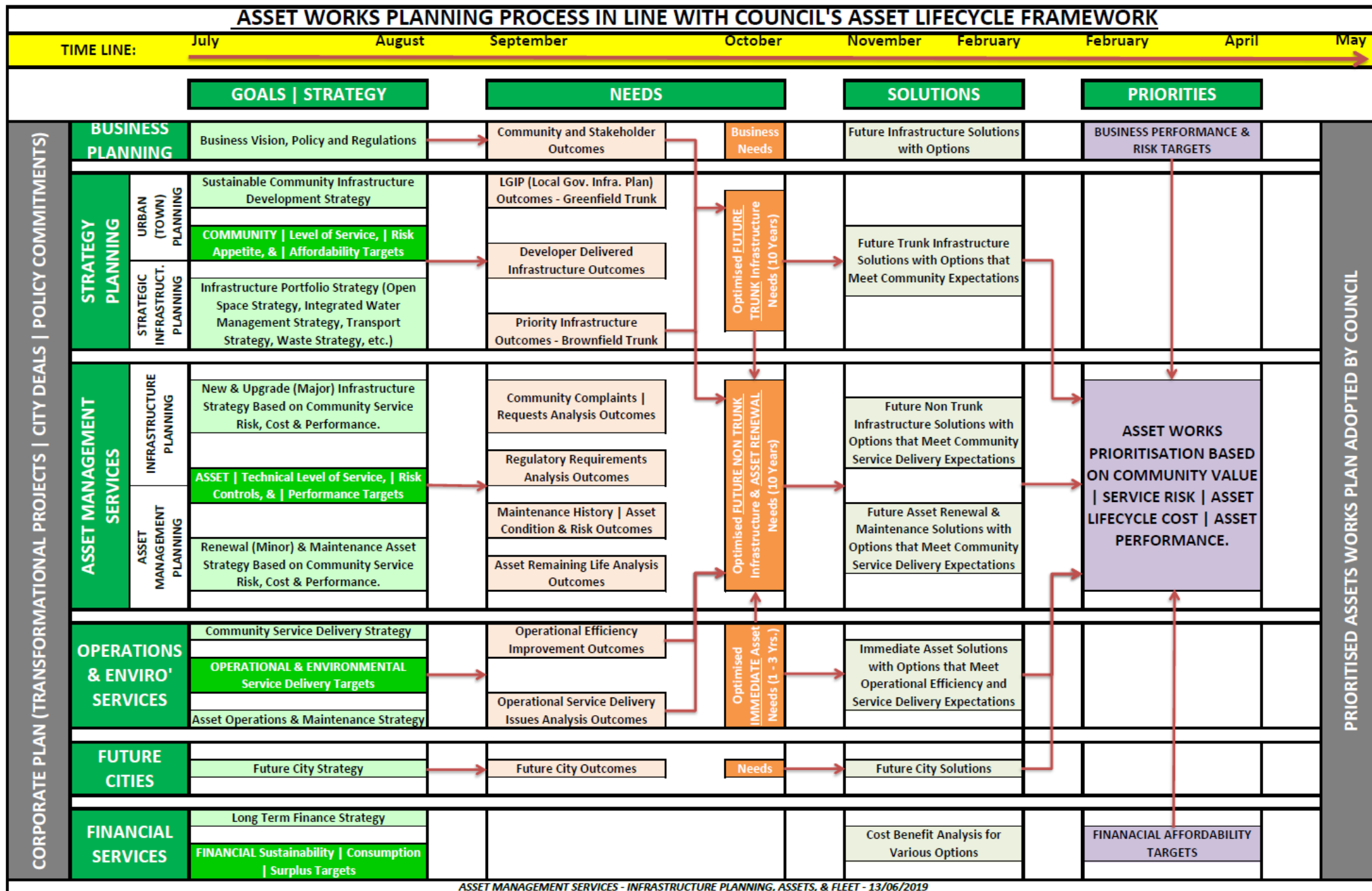
ISO 55001 Requirement Reference	Summary of Requirement	SAMP Reference
4.1	AM Objectives aligned and consistent	5.2
4.4	SAMP developed	SAMP
5.3a	SAMP updates	SAMP Document Control
5.3c	AMS conforms to requirements of 55001	SAMP
5.3f	Reporting on performance	9
6.1	Risks to AMS identified	7.4
7.1	Appropriate resources	7.3
7.3	Policy communicated	5.4
7.3	Are people aware of their contribution to the AMS	7.3 & 5.4
7.4	Determining the who, what, when, how and with whom of communication	5.4

ISO 55001 Requirement Reference	Summary of Requirement	SAMP Reference
7.5a	Risks to roles and responsibilities	7.4 & 7.3
7.5a	Consideration of roles and responsibilities	7.4
7.5a	AM processes	7.4
7.5a	Exchange of information of stakeholders	5.4
7.5a	Decision making process	7
7.5b	Asset attribute information & quality	7.5 & 8
7.5c	Information management	7.5
7.5d	Alignment of financial and non-financial information	7.5
7.5e	Consistency and traceability between financial and non-financial information	7.5
7.6.1	Documented information required by ISO55000	SAMP
7.6.1	Documented information applicable to meet legal and statutory requirements	SAMP
7.6.1	Documented information for an effective AMS	SAMP
8.3	Outsourcing of activities	7.7
9.1	Monitoring, measurement, analysis and evaluation	9.1, 9.2
9.2	Internal Audit	9.2
9.3	Management review	9.3
10	Improvement	9.4

Appendix A – Asset Management Services

ASSET MANAGEMENT (AM) FUNCTIONS AND SERVICES TEMPLATE			
AM FUNCTION	DEFINITION	AM SERVICES	CORPORATE PLAN LINKAGE
Asset Mgmt. System Administrator	It is a set of documents, systems and processes that addresses an organisation's asset management responsibilities. E.g. Asset Management Policy, Strategy, & Plans.	1. Align & Deploy AM actions in line with Corporate Strategy 2. Provide AM Advice and Leadership 3. Develop & Implement AM Policy, Strategies & Plans	Goal 4 - A Smarter, Faster, Better Council (Corporate Plan) Deliverable - Ensure effective policies, systems, and processes are monitored to maintain the integrity of public funds expenditure.
Asset Mgmt. Process Owners for I&O	Accountable for the proper design, execution and improvement of the asset management related processes, but do not run the day-to-day operation of the process.	1. Develop, Implement & Continuously Improve AM Processes in relation to Operations & Maintenance Asset Service Delivery 2. Responsible for Asset Handover Process (CAPEX & DONATED)	Goal 2 - A City for People (Corporate Plan) Deliverable - Improve Council services' responsiveness to meet community expectations.
Asset Inventory	It is the process of extracting asset information from various as constructed sources, creating and maintaining the information into an asset management system (GIS/ EAM).	1. Own & Optimise Asset Registers including Spatial Data 2. Asset Information Management including asset validation 3. Create Bill of Materials as applicable	Mandatory requirement to recognise the assets
Asset Level of Service	It is the agreed and documented most appropriate service quality (asset performance) expected from a particular asset against which asset performance may be measured.	1. Determine & Document Asset related Level of Services 2. Seek Council Approval with Asset related Level of Services 3. Participate in Community Satisfaction Surveys	Goal 4 - A Smarter, Faster, Better Council (Corporate Plan) Deliverable - Ensure the Council Customer Strategy for services and facilities remains effective and responsive.
Asset Risk Assessment	It is the application of a formal process to the range of possible values relating to key factors associated with asset related risks in order to determine the consequences and likelihood.	1. Facilitate Asset Risk Assessment sessions with Operations 2. Determine Asset Risk & Criticality Ratings at Asset Level 3. Review Insurance Needs based on Asset Risk Ratings	Goal 4 - A Smarter, Faster, Better Council (Corporate Plan) Deliverable - Support an iterative and integrated application of Enterprise Wide Risk Management Framework that effectively informs the risk management process.
Asset O & M Strategy	It is the optimised asset related actions that O&M crews should perform on a particular asset at the right time for the right reason for providing the highest level of service over time with the lowest cost options.	1. Develop & Optimise O&M strategies with Risk profiles 2. Perform Root Cause Analysis & FMEA (Failure Mode Effect Analysis) based on asset performance in service delivery 3. Evaluate & Recommend Asset Redundancy Requirements	Goal 1 - A Prosperous City (Corporate Plan) Deliverable - Deliver affordable water and utilities strategies for residents and businesses of Townsville
Schedule Maintenance	It is the preventive maintenance carried out to a predetermined interval of time, meter readings, etc. to the assets.	1. Own & Optimise Preventive Maintenance Schedules 2. Develop annual preventive maintenance budget	Assets are proactively maintained.
Asset Performance	It is the analysis that connects disparate asset information and uses advanced analytics to turn that data into actionable insights while fostering collaboration and knowledge management across business.	1. Conduct Asset Performance Verification based on Asset Risk, Condition & Life Cycle Cost Data 2. Measure & Analyse Asset Feedback from O&M Tasks 3. Present the results in the form of Dashboards, & Enquiries	Goal 4 - A Smarter, Faster, Better Council (Corporate Plan) Deliverable - Effectively communicate council plans, priorities and results to key stakeholders, ratepayers and the broader community
Asset Regulatory Compliance	It is the process of monitoring asset performance against the laws, regulations and guidelines related to its business. Violations of asset regulatory compliance result in federal fines.	1. Monitor Asset Performance against Legislative Requirements 2. Inform Maintenance & Renewal Needs based on Regulatory Requirements.	Goal 3 - A Clean and Green City (Corporate Plan) Deliverable - Champion sustainable solutions, environmental systems and innovative technologies, which encourage resilience
Asset Condition Assessment	It is the process of continuous or periodic inspection, assessment, measurement and interpretation of the asset or performance data to determine the condition of specific asset.	1. Perform Asset Condition Monitoring & Assessment 2. Perform Asset Degradation & Utilisation Modelling 3. Perform Asset Remaining Life & Capacity Assessment	Goal 4 - A Smarter, Faster, Better Council (Corporate Plan) Deliverable - Ensure effective policies, systems, and processes are monitored to maintain the integrity of public funds expenditure.
Asset Valuation	It is the process of assigning a monetary value to an asset or group of assets. It is an obligation to accurately value the assets under various accounting standards and regulations.	1. Perform Annual & Five Yearly Revaluation Functions 2. Participate in Reviewing Long Term Financial Plan Inputs 3. Review the Annual Depreciation Budget	
Asset Maintenance Programming	It is the process of deciding in advance (1, 2, 3 & 10 Years) the specific times ranges within which specific maintenance tasks should be carried out to the assets.	1. Develop & Optimise Maintenance Programmes & Budget 2. Recommend Renewal Needs from Maintenance Optimisation 3. Prioritise based on Asset Risk, Condition, Cost & Utilisation	Goal 2 - A City for People (Corporate Plan) Deliverable - Manage suburb-based, structured Local Suburb Improvement Plans focused on key infrastructure elements.
Asset Capital Works Programming	It is the process of deciding in advance (1, 3 & 10 Years) the make up and timing of asset renewal works.	1. Develop & Optimise Renewal Programmes & Budget 2. Prioritise based on Asset Risk, Condition, Cost & Utilisation	Ensure the Capital Plan provides infrastructure to support the City's economy and growth.
Asset Financial Forecast	It is the process of estimating the asset related expenditure (OPEX & CAPEX) trends based on historic information that may have an immediate or long-term influence on policies, strategic goals and community services.	1. Forecast 1, 3, & 10 years Maintenance & Renewal Budget Requirements by BALANCING Asset Risk, Condition, Life Cycle Cost & Utilisation Factors for Service Delivery	Goal 4 - A Smarter, Faster, Better Council (Corporate Plan) Deliverable - Limit rates growth at, or around, Consumer Price Index (CPI)
Asset Disposition	It is the process of disposal of assets through the sale, exchange, abandonment & involuntary termination of the asset's service.	1. Document the Asset Disposal Information 2. Process the Asset Disposal in a Timely Manner.	Mandatory requirement to dispose the assets

Appendix B – TCC Asset Works Planning Process



Appendix C – TCC 10 Year Capital Works Plan FY 2019/20 to FY 2028/29 (Gross Estimates)

Service	Program Description	Project Type	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29
BUILDINGS & FACILITIES	Business Support - Property Management	Minor Capital		121,210	32,000	21,000		59,000	30,000			
BUILDINGS & FACILITIES	Cemeteries Buildings	Minor Capital			13,000		3,000		3,000			
BUILDINGS & FACILITIES	Galleries, Libraries & Theatres	Major Capital		6,000,000	600,000	550,000						
BUILDINGS & FACILITIES	Galleries, Libraries & Theatres	Minor Capital	215,100	935,850	191,500	1,504,950	563,000	468,000	979,080	969,850	320,500	
BUILDINGS & FACILITIES	Galleries, Libraries & Theatres	T2020	0	2,500,000								
BUILDINGS & FACILITIES	Hire-General Community	Minor Capital	139,770	568,348	319,950	366,400	516,910	263,090	700,275	786,770	301,060	10,500
BUILDINGS & FACILITIES	Precincts & Areas	Minor Capital		720,000								
BUILDINGS & FACILITIES	Precincts & Areas	T2020	3,600,000	0								
BUILDINGS & FACILITIES	Public Amenities	Minor Capital	150,000	564,200	257,050	398,985	201,000	205,000	49,000	150,000	35,000	125,000
BUILDINGS & FACILITIES	Residency-Operational Buildings & Dep	Major Capital		600,000	2,000,000		1,400,000	12,500,287		0	500,000	0
BUILDINGS & FACILITIES	Residency-Operational Buildings & Dep	Minor Capital	737,928	2,913,800	1,885,350	950,500	941,500	2,303,040	393,500	1,695,750	1,091,000	111,500
BUILDINGS & FACILITIES	SES Facilities	Major Capital		0								
BUILDINGS & FACILITIES	SES Facilities	Minor Capital		190,740	179,000	45,000	104,500	38,000		6,000	23,000	
BUILDINGS & FACILITIES	Sport & Recreational Facilities	Major Capital	11,398,000	0		840,000		750,000	5,500,000	530,000		
BUILDINGS & FACILITIES	Sport & Recreational Facilities	Minor Capital	738,600	2,712,310	1,499,980	1,543,130	1,580,710	763,350	975,460	1,399,890	433,160	540,000
BUILDINGS & FACILITIES	Tenancy-Childcare Services	Minor Capital	253,620	380,105	337,930	341,730	241,880	402,230	501,505	495,300	149,450	58,970
BUILDINGS & FACILITIES	Tenancy-Commercial Enterprises	Minor Capital	175,500	242,850	57,000	415,500	130,000	9,000	413,000	310,000	5,000	
BUILDINGS & FACILITIES	Tenancy-Community Group	Major Capital			0							
BUILDINGS & FACILITIES	Tenancy-Community Group	Minor Capital	513,750	94,000	61,500	214,000	90,000		308,500	77,000	143,300	
BUILDINGS & FACILITIES	Vacant Land & Miscellaneous	Minor Capital	0	45,000					70,000			
CEMETERIES	Cemeteries	Minor Capital	34,956	37,480	44,488	48,808	48,259	60,000	60,000	60,000	60,000	60,000
COASTAL FACILITIES	Coastal Maintenance	Major Capital								25,000		
COASTAL FACILITIES	Coastal Maintenance	Minor Capital	80,800	105,800	105,800	105,800	105,800	105,800	1,205,800	80,800	105,800	80,800
COMMUNITY & CULTURAL SERVICES	Business Support-Performing Arts, Events	Minor Capital	139,500	595,000	427,300		100,000		100,000		100,000	
COMMUNITY & CULTURAL SERVICES	Cemeteries	Major Capital						100,000	300,000	3,000,000		
COMMUNITY & CULTURAL SERVICES	Community Leased Facilities	Major Capital	0	256,750		872,950				200,000	2,000,000	
COMMUNITY & CULTURAL SERVICES	Community Leased Facilities	Minor Capital	253,327									
COMMUNITY & CULTURAL SERVICES	Community Leased Facilities	T2020	0	500,000								
DRAIN & STORMWATER MGMT	Stormwater Drainage-Capital	Major Capital	12,564,296	12,008,487	12,891,205	13,855,346	14,909,161	16,061,775	17,323,283	18,697,908	15,563,960	16,281,400
DRAIN & STORMWATER MGMT	Stormwater Drainage-Capital	Minor Capital	1,152,880	1,028,560	1,028,560	1,028,560	1,028,560	1,028,560	1,028,560	1,028,560	1,028,560	1,028,560
FINANCIAL MANAGEMENT	Stores & Materials Management	Major Capital	0									
FINANCIAL MANAGEMENT	Stores & Materials Management	Minor Capital			10,340	10,340	10,340					
FLEET MANAGEMENT	Heavy Fleet	Major Capital	567,000		1,000,000					1,500,000		
FLEET MANAGEMENT	Heavy Fleet	Minor Capital	3,688,500	7,174,000	3,680,000	4,865,000	4,510,000	3,675,000	7,092,000	3,035,000	5,305,000	4,873,963
FLEET MANAGEMENT	Light Fleet	Major Capital	0									
FLEET MANAGEMENT	Light Fleet	Minor Capital	1,053,200	10,697,300	1,615,000	1,538,952	3,514,200	2,384,964	7,833,320	1,537,000	2,214,952	3,663,200
FLEET MANAGEMENT	Minor Fleet	Minor Capital	357,000	329,924	125,000	151,314	115,000	188,424	483,000	325,924	218,390	377,924
GALLERIES	Business Support-Galleries	Major Capital		3,081,000	2,243,420	31,500,000						
GALLERIES	Business Support-Galleries	Minor Capital	18,000									
GALLERIES	Gallery Collections Management	Major Capital	0									
GALLERIES	Gallery Collections Management	Minor Capital	94,500	105,000	105,000	105,000	105,000	105,000	105,000	105,000	105,000	105,000
INFORMATION COMMUNICATIONS	ZZKM Enterprise Resource Planning	Major Capital	2,300,000	1,314,500	1,656,000							
INFORMATION COMMUNICATIONS	ZZKM Enterprise Resource Planning	Minor Capital	3,225,000	1,206,000	4,750,000	4,500,000	4,500,000	4,750,000	4,500,000	4,500,000		
INFORMATION COMMUNICATIONS	ZZKM Enterprise Resource Planning	T2020		950,000								
INFORMATION COMMUNICATIONS	ZZKM Infrastructure	Major Capital	700,000		2,000,000				2,000,000			
INFORMATION COMMUNICATIONS	ZZKM Infrastructure	Minor Capital	2,071,000	2,495,750	5,057,750	3,555,750	2,695,750	5,070,750	3,620,750	2,095,750		
INFORMATION COMMUNICATIONS	ZZKM Infrastructure	T2020	1,500,000	5,000,000								
LABORATORY SERVICES	TWW Laboratory Services	Major Capital	1,000,000									
LABORATORY SERVICES	TWW Laboratory Services	Minor Capital	252,680	148,443	203,501	159,113	233,167	262,046	187,597	228,400	303,400	103,400
LIBRARIES	Library Administration	Minor Capital	374,400	850,000	450,000	422,000		12,000	22,000			

Service	Program Description	Project Type	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29
OPEN SPACE MANAGEMENT	Open Space Management - Capital	Major Capital	17,560,000	26,797,500	9,972,500	51,287,500	17,192,140	6,920,000	32,044,000	8,705,000	7,497,500	1,390,000
OPEN SPACE MANAGEMENT	Open Space Management - Capital	Minor Capital	6,479,901	5,281,160	6,645,210	7,382,060	7,040,560	7,040,570	7,040,570	7,202,570	7,195,570	6,840,570
OPEN SPACE MANAGEMENT	Open Space Management - Capital	T2020	14,330,000	85,500,000	9,000,000							
OPEN SPACE MANAGEMENT	TWW Laboratory Services	T2020		3,000,000								
OPEN SPACE MANAGEMENT	ZZKM Infrastructure	T2020	315,000									
ROADS & TRANSPORT MGMT	Engineering Services Operational Support	Minor Capital	46,530	91,700		67,210	191,290		47,570			
ROADS & TRANSPORT MGMT	Investigations-Roads & Transport	Minor Capital			6,730	13,460						
ROADS & TRANSPORT MGMT	North Shore Boulevard Duplication	Major Capital			2,500,000	12,750,000						
ROADS & TRANSPORT MGMT	Open Space Management - Capital	Minor Capital	90,000									
ROADS & TRANSPORT MGMT	Roads - Capital	Major Capital	47,272,635	35,996,264	37,311,828	56,615,199	59,151,219	40,232,302	57,876,300	75,482,080	80,718,005	71,975,410
ROADS & TRANSPORT MGMT	Roads - Capital	Minor Capital	27,368,509	23,750,462	25,501,370	23,925,785	23,605,682	24,641,245	24,617,315	25,272,675	24,232,315	24,617,315
ROADS & TRANSPORT MGMT	Roads - Capital	T2020	14,150,000	3,500,000								
ROADS & TRANSPORT MGMT	Townsville Recreational Boat Park	Major Capital							5,000,000			
ROADS & TRANSPORT MGMT	V8 Supercar In Kind	Minor Capital	180,000	225,000	225,000	225,000	250,000	250,000	250,000	275,000	275,000	
SOLID WASTE BUSINESS MGMT	TWW Waste Management & Support	Major Capital	270,000			2,380,000						
SOLID WASTE TREATMENT	TWW – Resource Recovery & Waste Diversion	Major Capital	15,384,500	17,130,477	18,605,000	500,000	1,100,000	5,437,970	1,025,940	3,915,660	1,012,676	2,774,412
SOLID WASTE TREATMENT	TWW – Resource Recovery & Waste Diversion	Minor Capital	369,000	318,661	2,771,161	171,161	46,161	371,161	1,051,161	146,161	3,091,161	6,616,161
SPORT & RECREATION	Community Leased Facilities	Major Capital							513,500	2,054,000	1,500,000	
SPORT & RECREATION	Community Leased Facilities	Minor Capital								200,000		
SPORT & RECREATION	Swimming Pools	Major Capital									5,135,000	
SPORT & RECREATION	Tony Ireland Stadium Operations	Major Capital				3,594,500				513,500	4,621,500	
SPORT & RECREATION	Tony Ireland Stadium Operations	Minor Capital			205,400	308,100						
SUSTAINABILITY SERVICES	Natural Resources Management	Minor Capital							50,000	50,000		
SUSTAINABILITY SERVICES	ZZCarbon Cycle	Major Capital	549,000		3,040,000					400,000	3,925,000	4,450,000
SUSTAINABILITY SERVICES	ZZCarbon Cycle	Minor Capital							93,670			
SUSTAINABILITY SERVICES	ZZSustainability Education Awareness	Major Capital				192,500	385,000	2,695,000				
WASTEWATER SUPPLY	Bulk Water Distribution	Major Capital	2,102,700	8,000								
WASTEWATER SUPPLY	CBD Utilities - Water	Major Capital	0									
WASTEWATER SUPPLY	TWW – Wastewater Collection	Major Capital	33,092,500	4,280,000	26,033,000	9,079,000	15,577,000	12,391,000	18,013,000	2,150,700	13,092,000	10,606,000
WASTEWATER SUPPLY	TWW – Wastewater Collection	Minor Capital	4,918,000	7,208,320	6,833,320	6,833,320	6,833,320	6,833,320	6,833,320	6,833,320	6,773,320	6,773,320
WASTEWATER SUPPLY	TWW – Wastewater Management & Support	Major Capital	14,689,470	4,564,071	10,941,279	5,365,965	5,807,868	6,266,988	6,749,064	8,112,618	7,772,867	8,637,650
WASTEWATER SUPPLY	TWW – Wastewater Treatment	HPDP	4,550,000									
WASTEWATER SUPPLY	TWW – Wastewater Treatment	Major Capital	8,952,000	4,015,000	33,000	1,590,000	52,000	100,000	1,654,400	1,654,400	1,551,000	60,000,000
WASTEWATER SUPPLY	TWW – Wastewater Treatment	Minor Capital	2,436,030	2,652,210	2,657,210	2,652,210	2,652,210	2,652,210	2,652,210	2,652,210	2,652,210	2,652,210
WATER SUPPLY	Bulk Water Distribution	Major Capital	5,427,000	10,162,000	21,038,000	22,303,000	8,438,000	190,000	4,600,000	8,380,000	2,210,000	10,455,000
WATER SUPPLY	Bulk Water Distribution	Minor Capital	2,046,904	1,335,170	2,369,170	2,369,170	2,369,170	2,369,170	2,369,170	2,369,170	2,369,170	2,369,170
WATER SUPPLY	CBD Utilities - Water	Major Capital		1,490,000	3,000						1,500,000	
WATER SUPPLY	TWW – Wastewater Management & Support	Major Capital	907,200	5,000		10,000	175,000	5,340,000	15,550,000	4,185,000	270,000	12,500,000
WATER SUPPLY	TWW – Wastewater Management & Support	Minor Capital		550,000	7,000							
WATER SUPPLY	TWW – Water Management & Support	Major Capital	2,277,600	2,461,680	2,686,320	2,917,200	3,157,440	3,407,040	3,669,120	3,937,440	4,221,360	4,695,100
WATER SUPPLY	TWW – Water Treatment	Major Capital	1,305,500	5,000	15,500,000	600,000	450,000	3,900,000	3,900,000	65,000,000	63,000,000	2,000,000
WATER SUPPLY	TWW – Water Treatment	Minor Capital	741,600	1,849,800	1,915,800	2,139,430	2,139,430	2,139,430	2,139,430	2,139,430	2,139,430	2,139,430
WATER SUPPLY	Water Reticulation	HPDP	117,950,828	0	0	0						
WATER SUPPLY	Water Reticulation	Major Capital	4,107,200	13,421,000	20,387,000	14,780,400	24,918,081	12,385,000	22,150,000	9,880,000	6,217,000	4,645,000
WATER SUPPLY	Water Reticulation	Minor Capital	6,214,452	6,150,000	6,570,000	6,205,000	6,370,000	6,394,000	7,330,000	6,185,000	6,625,000	6,354,000
WATER SUPPLY	Water Reticulation	T2020	2,990,000	18,000								
N/A	N/A	N/A	0									
N/A	Roads - Capital	Major Capital	696,101									
N/A	(blank)	Major Capital	0									

Appendix D - TCC FY 2019/20 Operations & Maintenance Plan

Core Service Description	Service Description	Function	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29
Community And Cultural Services	Cemeteries	Maintenance	50,000	50,732	51,222	52,440	53,440	55,096	57,401	59,279	61,145	62,918
Community And Cultural Services	Cemeteries	Operations	956,763	970,774	980,155	1,003,456	1,022,587	1,054,276	1,098,392	1,134,315	1,170,025	1,203,955
Community And Cultural Services	Community And Cultural Services	Operations	65,803	66,767	67,412	69,015	70,330	72,510	75,544	78,015	80,471	82,804
Community And Cultural Services	Community Support Program	Operations	5,864,381	5,950,259	6,007,758	6,150,578	6,267,842	6,462,076	6,732,481	6,952,666	7,171,548	7,379,515
Community And Cultural Services	Enforcement Compliance	Maintenance	8,636	8,763	8,848	9,058	9,231	9,517	9,915	10,239	10,561	10,868
Community And Cultural Services	Enforcement Compliance	Operations	10,148,713	10,297,330	10,396,836	10,643,996	10,846,929	11,183,063	11,651,019	12,032,064	12,410,853	12,770,755
Community And Cultural Services	Events	Maintenance	50,000	50,732	51,222	52,440	53,440	55,096	57,402	59,279	61,145	62,918
Community And Cultural Services	Events	Operations	9,407,619	9,545,383	9,637,624	9,866,735	10,054,849	10,366,438	10,800,221	11,153,442	11,504,570	11,838,191
Community And Cultural Services	Facilities	Maintenance	10,697	10,854	10,959	11,219	11,433	11,788	12,281	12,682	13,082	13,461
Community And Cultural Services	Facilities	Operations	581,948	590,470	596,176	610,348	621,985	641,260	668,093	689,943	711,664	732,301
Community And Cultural Services	Galleries	Operations	2,956,420	2,999,713	3,028,700	3,100,700	3,159,817	3,257,736	3,394,056	3,505,058	3,615,403	3,720,246
Community And Cultural Services	Libraries	Operations	7,731,064	7,844,277	7,920,079	8,108,360	8,262,950	8,519,009	8,875,487	9,165,759	9,454,312	9,728,478
Community And Cultural Services	Sport And Recreation	Maintenance	92,000	93,347	94,249	96,490	98,329	101,377	105,619	109,073	112,507	115,769
Community And Cultural Services	Sport And Recreation	Operations	2,100,667	2,131,429	2,152,026	2,203,185	2,245,190	2,314,765	2,411,627	2,490,499	2,568,904	2,643,399
Enabling Services	Asset Management-Enabling	Maintenance	490,000	497,175	501,980	513,913	523,711	539,940	562,534	580,932	599,221	616,597
Enabling Services	Asset Management-Enabling	Operations	4,003,837	4,062,469	4,101,726	4,199,235	4,279,295	4,411,906	4,596,522	4,746,851	4,896,290	5,038,277
Enabling Services	Buildings And Facilities Management	Maintenance	2,980,123	3,023,763	3,052,983	3,125,561	3,185,151	3,283,855	3,421,268	3,533,160	3,644,390	3,750,074
Enabling Services	Buildings And Facilities Management	Operations	23,619,617	23,965,500	24,197,088	24,772,316	25,244,612	26,026,914	27,116,010	28,002,837	28,884,412	29,722,031
Enabling Services	Business Management	Operations	3,909,105	3,966,350	4,004,678	4,099,880	4,178,046	4,307,519	4,487,767	4,634,539	4,780,442	4,919,070
Enabling Services	Communication And Customer Relations	Operations	10,477,363	10,630,793	10,733,522	10,988,686	11,198,191	11,545,210	12,028,319	12,421,705	12,812,760	13,184,317
Enabling Services	Executive And Transformation	Operations	5,610,217	5,692,372	5,747,380	5,884,010	5,996,191	6,182,007	6,440,693	6,651,335	6,860,730	7,059,684
Enabling Services	Financial Management	Operations	24,471,603	24,829,963	25,069,904	25,665,881	26,155,214	26,965,734	28,094,115	29,012,931	29,926,305	30,794,137
Enabling Services	Fleet Management	Maintenance	4,600,804	4,668,178	4,713,288	4,825,335	4,917,333	5,069,716	5,281,858	5,454,601	5,626,320	5,789,478
Enabling Services	Fleet Management	Operations	7,748,593	7,862,062	7,938,036	8,126,744	8,281,685	8,538,325	8,895,611	9,186,541	9,475,748	9,750,535
Enabling Services	Governance	Operations	6,916,901	7,018,191	7,086,010	7,254,463	7,392,773	7,621,867	7,940,804	8,200,507	8,458,672	8,703,965
Enabling Services	Information Communication Technology	Operations	18,583,458	18,855,592	19,037,800	19,490,378	19,861,972	20,477,472	21,334,352	22,032,090	22,725,696	23,384,718
Enabling Services	Laboratory Services	Maintenance	1,329	1,348	1,361	1,393	1,420	1,464	1,525	1,575	1,625	1,672
Enabling Services	Laboratory Services	Operations	2,216,344	2,248,800	2,270,531	2,324,508	2,368,826	2,442,233	2,544,428	2,627,643	2,710,366	2,788,964
Enabling Services	Mechanical and Electrical Services	Maintenance	207,774	210,816	212,853	217,913	222,068	228,950	238,530	246,331	254,086	261,454
Enabling Services	Mechanical and Electrical Services	Operations	3,705,881	3,760,150	3,796,485	3,886,738	3,960,840	4,083,582	4,254,460	4,393,602	4,531,919	4,663,340
Enabling Services	People	Operations	8,144,148	8,263,410	8,343,262	8,541,603	8,704,453	8,974,194	9,349,719	9,655,501	9,959,472	10,248,286
Environment And Sustainability Ser	Coast and Catchments (Creek to Coral)	Maintenance	4,138	4,198	4,239	4,340	4,423	4,560	4,750	4,906	5,060	5,207
Environment And Sustainability Ser	Coast and Catchments (Creek to Coral)	Operations	2,248,601	2,281,529	2,303,576	2,358,338	2,403,301	2,477,777	2,581,459	2,665,886	2,749,812	2,829,554
Environment And Sustainability Ser	Community Environmental Restoration	Operations	2,881,406	2,923,601	2,951,853	3,022,026	3,079,642	3,175,077	3,307,938	3,416,124	3,523,669	3,625,852
Environment And Sustainability Ser	Environmental And Natural Resource Mng	Operations	25,869	26,248	26,502	27,132	27,649	28,506	29,699	30,670	31,635	32,553
Environment And Sustainability Ser	Environmental Operations	Maintenance	800	812	820	839	855	882	918	949	978	1,007
Environment And Sustainability Ser	Environmental Operations	Operations	672,083	681,925	688,515	704,883	718,322	740,582	771,571	796,806	821,890	845,724
Environment And Sustainability Ser	Sustainability and Solar Cities	Operations	1,352,595	1,372,403	1,385,665	1,418,606	1,445,652	1,490,451	1,552,819	1,603,604	1,654,088	1,702,055
Planning And Development	Urban Planning_Built Environment	Operations	18,173,132	18,439,257	18,617,443	19,060,028	19,423,417	20,025,326	20,863,286	21,545,619	22,223,909	22,868,380
Public Infrastructure	Coastal Facilities	Maintenance	56,390	57,216	57,769	59,142	60,270	62,138	64,738	66,855	68,960	70,959
Public Infrastructure	Coastal Facilities	Operations	524,458	532,138	537,280	550,052	560,539	577,910	602,093	621,784	641,359	659,958
Public Infrastructure	Drain And Stormwater Management	Maintenance	141,245	143,313	144,698	148,138	150,962	155,641	162,153	167,457	172,728	177,737
Public Infrastructure	Drain And Stormwater Management	Operations	1,080,758	1,096,585	1,107,181	1,133,502	1,155,113	1,190,908	1,240,742	1,281,320	1,321,658	1,359,985
Public Infrastructure	Open Space Management	Maintenance	19,331,942	19,615,036	19,804,584	20,275,390	20,661,951	21,302,241	22,193,633	22,919,475	23,641,016	24,326,582
Public Infrastructure	Open Space Management	Operations	20,234,054	20,530,359	20,728,752	21,221,528	21,626,127	22,296,296	23,229,285	23,988,997	24,744,209	25,461,766
Public Infrastructure	Public Infrastructure Management	Maintenance	336,542	341,470	344,770	352,966	359,695	370,842	386,360	398,995	411,557	423,491
Public Infrastructure	Public Infrastructure Management	Operations	17,178,879	17,430,445	17,598,882	18,017,253	18,360,761	18,929,740	19,721,855	20,366,857	21,008,038	21,617,250
Public Infrastructure	Roads And Transport Management	Maintenance	6,813,045	6,912,815	6,979,616	7,145,539	7,281,773	7,507,426	7,821,575	8,077,379	8,331,668	8,573,278
Public Infrastructure	Roads And Transport Management	Operations	10,730,292	10,887,425	10,992,634	11,253,957	11,468,520	11,823,916	12,318,688	12,721,570	13,122,065	13,502,592
Solid Waste Management	Solid Waste Business Management And S	Maintenance	2,425	2,461	2,485	2,544	2,592	2,672	2,784	2,875	2,966	3,052
Solid Waste Management	Solid Waste Business Management And S	Operations	5,157,750	5,233,280	5,283,851	5,409,462	5,512,596	5,683,425	5,921,248	6,114,902	6,307,409	6,490,317
Solid Waste Management	Solid Waste Collection And Recycling	Maintenance	25,914	26,294	26,584	27,179	27,697	28,556	29,751	30,724	31,691	32,610
Solid Waste Management	Solid Waste Collection And Recycling	Operations	13,334,586	13,529,856	13,660,600	13,985,348	14,251,986	14,693,638	15,308,494	15,809,157	16,306,854	16,779,737
Solid Waste Management	Solid Waste Treatment And Disposal	Maintenance	303,972	308,423	311,403	318,806	324,884	334,952	348,968	360,381	371,727	382,506
Solid Waste Management	Solid Waste Treatment And Disposal	Operations	22,076,889	22,400,180	22,616,642	23,154,298	23,595,746	24,326,952	25,344,913	26,173,816	26,997,810	27,780,719
Wastewater Services	Wastewater Supply	Maintenance	4,581,394	4,648,483	4,693,403	4,804,978	4,896,587	5,048,327	5,259,574	5,431,588	5,602,583	5,765,052
Wastewater Services	Wastewater Supply	Operations	41,033,583	41,634,474	42,036,804	43,036,128	43,856,633	45,215,700	47,107,751	48,648,407	50,179,937	51,635,104
Water Services	Water Supply	Maintenance	3,680,764	3,734,664	3,770,754	3,860,394	3,933,995	4,055,905	4,225,624	4,363,823	4,501,203	4,631,733
Water Services	Water Supply	Operations	63,012,067	63,934,809	64,552,635	66,087,219	67,347,205	69,434,219	72,339,692	74,705,558	77,057,408	79,291,996