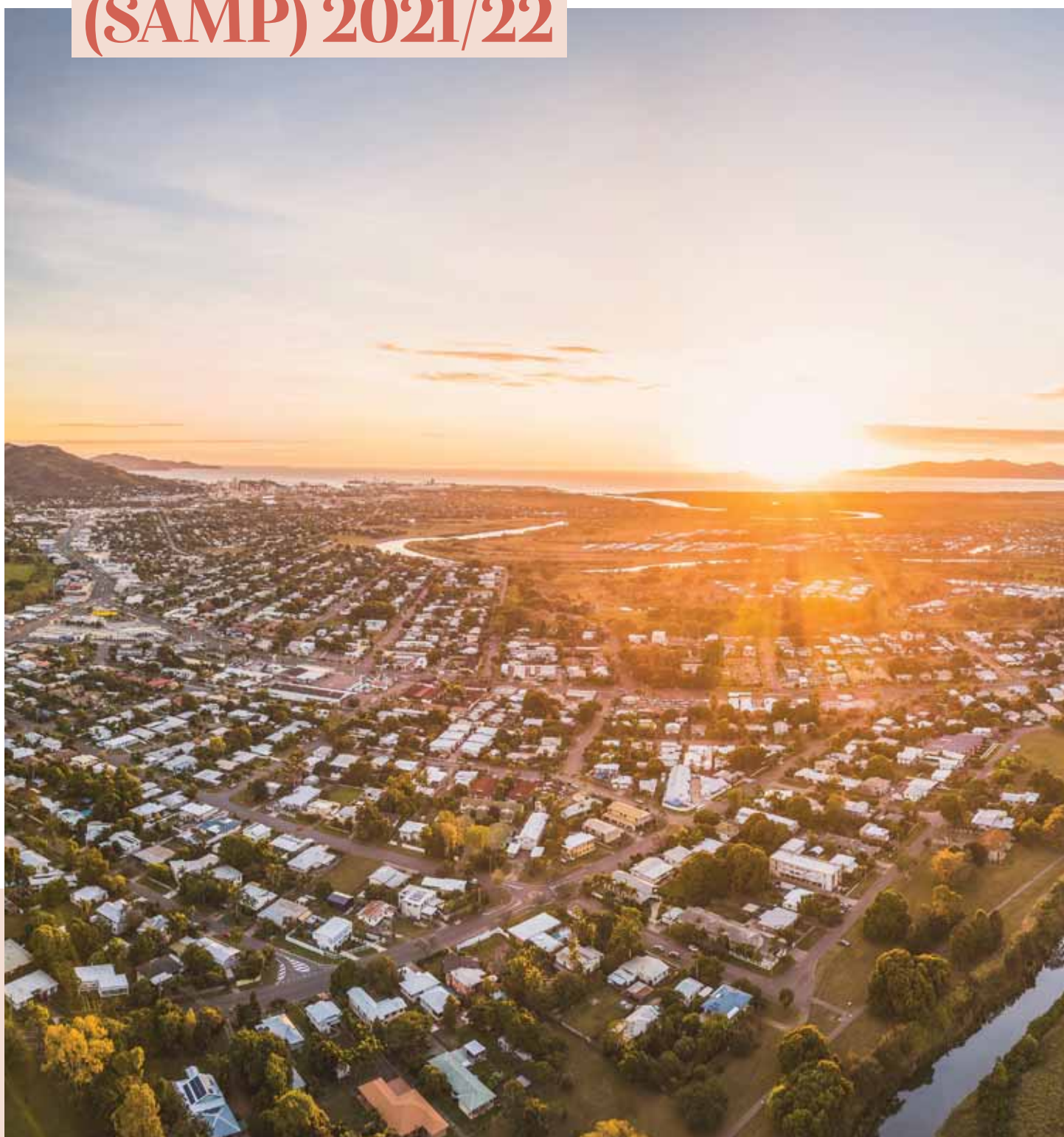# Strategic Asset Management Plan (SAMP) 2021/22

Our Vision
A globally connected community driven by lifestyle and nature

Our Purpose
Grow Townsville

Our Mission
Add 6,400 new jobs by 2026

City of
Townsville

Contact us

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Acknowledgment of Country

The Townsville City Council acknowledges the Wulgurukaba of Gurambilbarra and Yunbenun, Bindal, Gugu Badhun and Nywaigi as the Traditional Owners of this land. We pay our respects to their cultures, their ancestors and their Elders - past and present – and all future generations.

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Townsville City Council is proudly working towards becoming a White Ribbon accredited organisation.

DOCUMENT CONTROL

Document Status	Final	23 June 2021
Reviewed By	Sen Vigneswaran	01 June 2021
Approved for Release By	Council Adoption	June 2021
SAMP Owner and Next Update	Team Manager, Asset Strategy & Compliance	June 2022

Contents

1 Executive Summary

Townsville City Council (Council) has a responsibility to effectively and efficiently manage the services provided, by its assets, to its community.   This Strategic Asset Management Plan (SAMP) articulates the Asset Management System Model, Asset Management Framework and Asset Management Capability Delivery Model for Council. The Asset Management System Model illustrates the key components of Council's asset management system and how they relate. The Asset Management Framework schematically presents the Asset Investment Planning and Works Delivery with Innovative, Adaptive and Continuous Improvement focus, derived from the Lean Six Sigma concept. Finally, Council's Asset Management Capability Delivery Model illustrates the processes, within several disciplines, that are used in part or entirely, to deliver successful asset management at asset class levels. This SAMP summarises the link between Council's physical resources (infrastructure assets, funding and works delivery) and business enablers (people, process and technology) through the above-mentioned models and framework. This SAMP links to Asset Management Plans for each asset class through the Capability Delivery Model.

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 (Gross Replacement Cost).

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.

The organisational and 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 Council's asset scope in terms of gross replacement cost, and quantities. Further, forecasted Capital, Operation and Maintenance costs are summarised in line with Council's Long-Term Financial Management Plan.

This SAMP also demonstrates Council's commitment to aligning its management system for managing assets to the international Standard ISO55001: Management System - Asset Management.

2 Purpose

Providing effective and efficient management of assets is a key obligation of Council. As custodian of community assets, Council has the responsibility for managing these assets in the most cost-effective manner. This is achieved through Demand Management, Systems Engineering, Acquisition, Operations, Maintenance Configuration Management and Continuous Improvement. 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 ISO55001: Management System for Asset Management
- Describe the role of the Asset Management System (AMS) in supporting achievement of the Asset Management Objectives (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 AM Objectives and
- Inform the approach for developing Asset Management Plans (AMP) through Asset Management Capability Delivery Model.[1]

Council's Asset Management System (AMS)[1] Model is shown in the following figure:
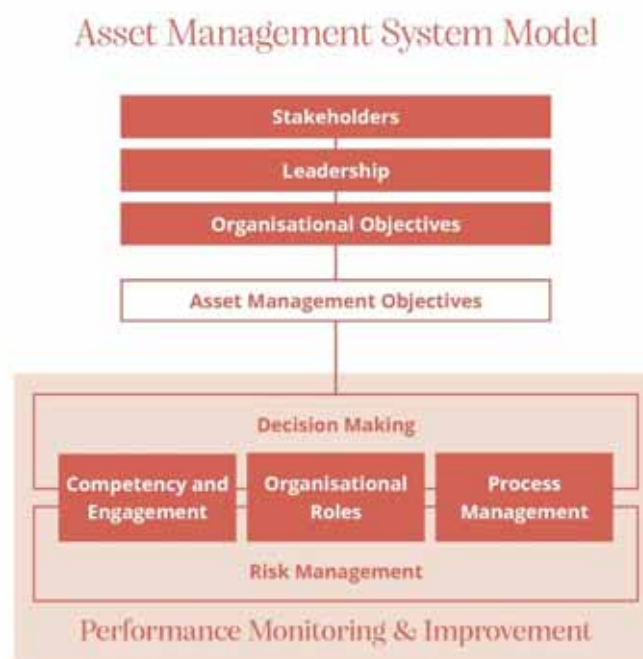
This SAMP is specific to Townsville City Council and its AMS.

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[1] AMS & Capability Delivery Models are in alignment with Asset Management Body of Knowledge Asset Management Council

Key fundamental objectives of this SAMP include:

- Setting out the foundations for managing its asset portfolios in a manner which ensures it can sustainably deliver services to the community, according to the community's expectations, and to meet legislative requirements
- Building strong stakeholder engagement, and leadership for informed and robust asset management decision making processes to support the functionality and sustainability of the AMS
- Developing the decision-making process that considers organisational roles (people), competency and engagement and process management with risk management for Council when managing assets and delivering services to the community
- Applying the Asset Management Policy (AM Policy) as determined and approved by the Council
- Optimising alignment of the AMS with the requirements prescribed in the International Standardisation Organisation ISO55001 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   Asset Management System Model

The purpose of Asset Management System Model is to articulate the key components of an asset management system and how they inter-relate. Council's asset management system model aligns with Asset Management Body of Knowledge of Asset Management Council.

3.1.   Stakeholders

3.3.1   Internal Stakeholders

Specific internal stakeholders of the AMS and their respective roles and responsibilities are outlined in Section 3.9. In general, these stakeholders fall into the following three key areas:

- **Councillors 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.

- **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.

3.3.2   External Stakeholders

The community (residents and visitors) are the primary external stakeholders in the AMS and 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 Queensland Government
- Financial Institutions, Insurers, Regulatory Authorities
- Developers
- Visitors.

External Stakeholder Engagement

The Department of Local Government, Racing and Multicultural Affairs administers the *Local Government Act 2009* 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 Communities, Housing and Digital Economy (Planning Act), the Department of Natural Resources, Mines and Energy and the Department of Environment and Science (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.

3.2.   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 the Asset Management Team which is responsible for developing and implementing the AM Strategy, AM Policy, and AMS.

3.3.   Organisational Objectives

Organisational objectives are short-term and medium-term goals that an organisation seeks to accomplish. The organisations 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.

3.3.1   Townsville City Plan

The Townsville City Plan has been prepared in accordance with the Planning Act 2016, 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.

3.3.2   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, Purpose and Mission statements:

Vision

A globally connected community driven by lifestyle and nature.

Purpose

Grow Townsville.

Mission

Add 6,400 new jobs by 2026.

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

3.4.   Asset Management 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.

3.4.1 Asset Management Policy

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

Responsibility

CEO, 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 and 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 using asset management systems, business processes and governance requirements with available technology for continuous improvement

- Improve through leadership, cross functional integration, effective communication, and culture

- 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 Engineering, & Asset Infrastructure Planning Section.

3.4.2   Asset Management Framework

The Asset Management Framework is derived from the concept of Lean Six Sigma to provide efficient and effective community services. The Framework focuses on two pillars:

1. A management operating system for asset works delivery to eliminate waste; and

2. Asset investment planning to achieve sustainability.

This focus has been mapped in the following diagram:
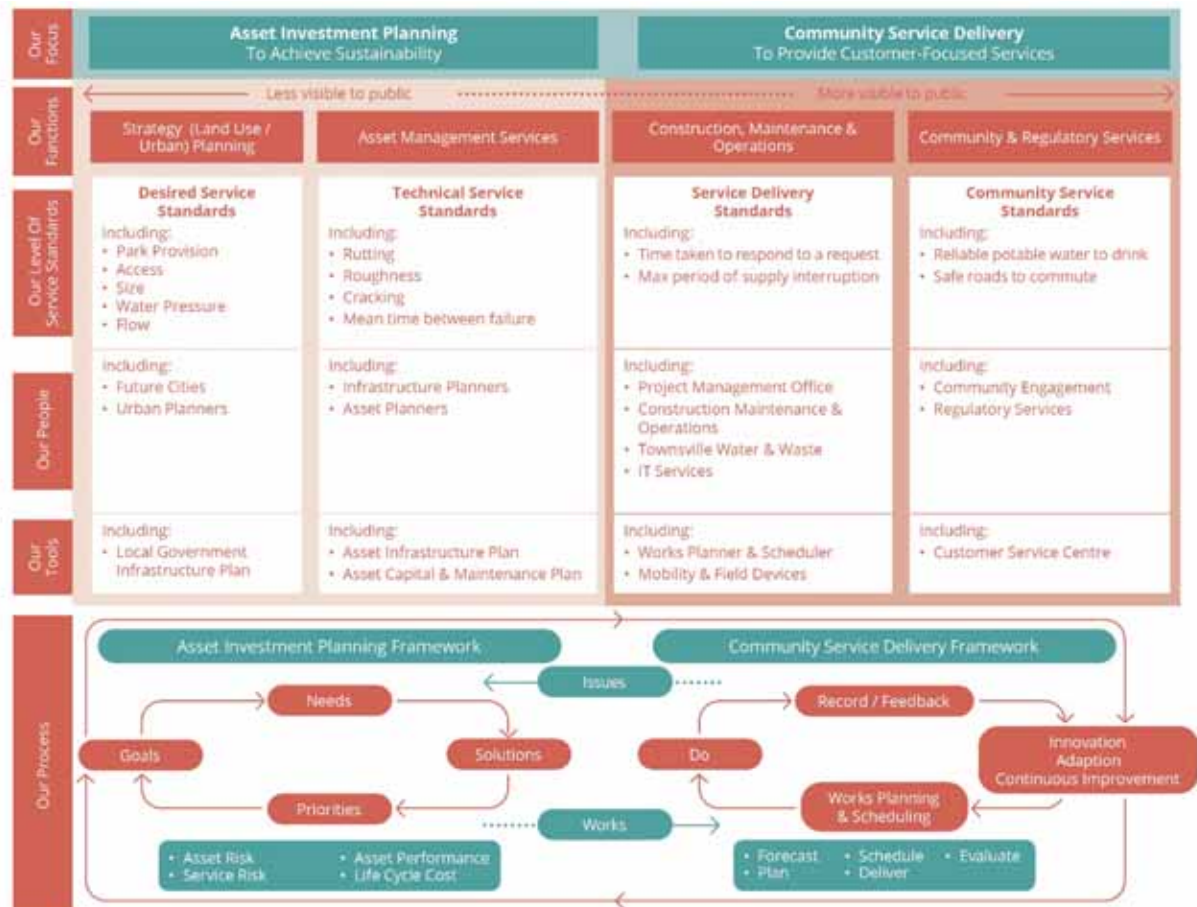
The AM Objectives below are derived from the asset related organisational goals, and outcomes published by Council in the Corporate Plan 2021-2026:

- **A city that connects you to what you need at the time you choose** – Townsville will continue its journey to being a Smart City, which focuses on enhancing technology that makes life easier, provides access to information faster and is more intuitive to people's needs.

- **A circular economy that advances business and moves towards zero waste** – Procurement that supports local businesses in the transition to a circular economy will be paramount. Innovation to deliver services and infrastructure for the region in a manner that trends towards zero waste will form a key requirement for the city.

- **The hub for modern industry** – Attracting industries of the future and world class research and education opportunities will drive population growth and retain our valuable residents.

- **A sustainable destination that embraces and participates in the arts, sports, events and recreational activities** – To retain residents of all ages, a key focus will be on developing our local visual and performing arts, grow our successful signature events, leverage our new Stadium and support connecting people with sporting organisations. Further developing events, cultural and sporting experiences will increase both social connectivity and visitation to the city.

- **A leading centre of education, training and research commercialisation** – As a research leader, it is essential to harness commercialisation of research products locally. This commercialisation of research will create jobs and demonstrate new pathways for school leavers to join jobs of the future in creation of new industries, developing local industry and supply chains, and support Defence initiatives.

There are legislated requirements regarding 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 regarding managing water quality and wastewater treatment include *Queensland Government Water Act: 2000* and *Planning Act: 2016*.

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

3.4.3   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 resources available to ensure 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.

3.4.4 Communicating the AM Policy and Objectives

External communication to stakeholders of the policy and objectives was undertaken through the publishing of the AM Policy, SAMP 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
- The risks associated with work activities are captured and available to internal stakeholders through the Corporate Risk Management Framework.

3.5. Performance Monitoring and Improvement

3.5.1 Performance Monitoring

The 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:

- Undertaking annual gap analysis in line with ISO55001 standard
- Continuously improving asset management activities and practices towards advanced level where applicable
- Achieving financial sustainability
- Maintaining legislative compliance against the *Local Government Act (2009)*, specifically *S104(5)* and *S105.*

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

3.5.2   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

- Develop a preventative action, correction action and continuous improvement process and register.

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

3.5.3   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

- Retain documented information as evidence of the audit.

3.5.4   Improvement Plan

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 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.

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:

- Prioritise the Asset Needs through recently implemented asset infrastructure plan to align business priorities in the next five years horizon with affordability targets.

- Optimise 10-year capital works plan based on the asset infrastructure plan and long-term financial management plan.

- Align individual asset management plans to this SAMP following Asset Management Capability Delivery Model.

3.5.5   SAMP and ISO55001 Relationship

This SAMP has been specifically developed to align with the requirements in ISO55001, 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 Council's 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:

ISO55001 Requirement Reference	Summary of Requirement	SAMP Reference
4.1	AM Objectives aligned and consistent	3.4
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	3.5
6.1	Risks to AMS identified	3.7
7.1	Appropriate resources	3.9 & 5

ISO55001 Requirement Reference	Summary of Requirement	SAMP Reference
7.3	Policy communicated	3.4.1
7.3	Are people aware of their contribution to the AMS	3.9 & 3.10
7.4	Determining the who, what, when, how and with whom of communication	3.4.4
7.5a	Risks to roles and responsibilities	3.7
7.5a	Consideration of roles and responsibilities	3.9
7.5a	AM processes	3.8
7.5a	Exchange of information of stakeholders	3.4.4
7.5a	Decision making process	3.6
7.5b	Asset attribute information & quality	4
7.5c	Information management	3.10
7.5d	Alignment of financial and non-financial information	4 & 5
7.5e	Consistency and traceability between financial and non-financial information	4 & 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	3.8
9.1	Monitoring, measurement, analysis and evaluation	3.5.1 & 3.5.2
9.2	Internal Audit	3.5.2
9.3	Management review	3.5.3
10	Improvement	3.5.4

3.6.   Decision Making

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 works.

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 to provide agreed level of service to the community

- Asset renewals and acquisitions, included in the Long-Term Financial Management Plan 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 as this level is based upon relative rankings, 'value for money', and availability of funding

- The draft optimised program is forwarded to the Council for further refinement and approval.

3.7.   Risk Management

Council manages risk in accordance with ISO 31000:2018 Risk Management Guidelines. Council incorporates a risk management approach to all decisions across its activities including asset management. Council wide strategic and operational risk assessments are conducted with the help of the Legal Services Section. To achieve strategic and operational objectives outlined in the Corporate and Operational Plans, the risk assessment process is crucial during the Council's budgeting process. The Asset Management Team continues to assess risk for any decision proposals relating to Council's assets and any new and emerging risks are kept on the radar.

To enable Council's strategic asset risk to be identified, documented, recorded and compared on a consistent basis, below is a snapshot of areas Council considers during the assessment of asset risk to Council and the community.

- Disaster events and recovery

- Asset disposal

- Asset valuation including clauses for leases

- Compliance with legislation

- Asset service delivery

- Project Management

- Donated assets

- Utilisation of plant/fleet

- Building/facilities asset management

- Community assets/infrastructure needs (Ageing, Condition & Performance)

- Supply and demand of Water

- Environmental harm and nuisance including public health issues.

3.8. Process Management

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 asset investment planning and works delivery processes are outlined in Appendix A, in line with Asset Management Framework.

3.9. Organisational Roles

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 and Maintenance Works Plan and Adopted Budget
- Reviewing and endorsing the Asset Management Policy
- 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
- 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

- 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

- Advancing AM training, leadership, practice and skills development across Council.

The Asset Management Team is structured to provide the effective asset investment planning services to the Council's infrastructure assets in line with Asset Lifecycle Framework.

3.10. Competency and Engagement

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 ISO55001 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.

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

- T1 Core Enterprise System (CES) – Enterprise Asset Management, Core Financials, Supply Chain, Property & Rating, Enterprise Content Management, etc.
- Tigernix Asset Predictive Models for balancing Cost, Risk & Performance
- ESRI GIS
- Human Resources Information System.

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 2021/22 financial year are summarised below:

Asset Type	Quantity	Replacement Value ($000)
Roads	1,823,528 m	1,576,831
Kerb and Channel	2,131,936 m	399,467
Pathways	543,407 m	216,718
Vehicular Bridges	204 ea	145,965
Pedestrian Bridges	210 ea	
Roadside and Pathway Furniture and Structures	256 ea	10,156
Bus Stops Facilities	1024 ea	18,870

Water, Wastewater and Solid Waste

The quantity and value of the water, wastewater and solid waste assets as at the beginning of the 2021/22 financial year are summarised below:

Asset Type	Quantity	Replacement Value ($000)
Dams	2 ea	502,123
Weirs	3 ea	9,470
Water Treatment Plants	4 ea	219,839
Water Pump Stations	23 ea	24,146
Reservoirs	41 ea	83,778
Water Mains	2,654 km	778,092
Water Meters	77,809 ea	6,067
Sewer Mains (Gravity and Pressure)	1,364 km	472,983
Sewer Service Connections	38,855 ea	16,432
Sewer Property Connection Points	48,013 ea	44,814
Wastewater Maintenance Holes	22,534 ea	85,608
Wastewater Pump Stations	192 ea	125,198
Wastewater Treatment /Recycling Plants	6 ea	322,361
Waste Transfer Stations	6 ea	31,662
Waste Landfill	3 ea	61,277

Stormwater

The quantity and financial value of the stormwater assets as at the beginning of the 2021/22 financial year are summarised below:

Asset Type	Quantity	Replacement Value ($000)
Underground Network	747	677,235
Open Drain Network	282 km	76,687
Tidal Protection Devices	5 ea	2,892
Pump Stations	7 ea	5,183
Water Quality Devices	145 ea	5,180
Rainfall Stations	22 ea	538
Sub Soil Drainage	396 km	15,851
Levee Banks	11 ea	8,801

Open Spaces

The quantity and financial value of the open space assets as at the beginning of the 2021/22 financial year are summarised below:

Asset Type	Quantity	Replacement Value ($000)
Arboriculture	33,180 ea	0
City of Townsville Art in Public Spaces	260 ea	6,802
Electrical	313 ea	322
Fencing	23,008 m	15,174
Furniture	4,257 ea	12,114
Horticulture	1,484 Ha	320
Irrigation Main Line	853 ea	39,165
Lighting	4,529 ea	5,948
Monuments	82 ea	68
Platform	50 ea	3,640
Play Equipment	1,074 ea	22,628
Signage	3,045 ea	5,183
Sporting	537 ea	17,410
Structures	624 ea	20,089
Wall	215 ea	9,242
Water Feature	36 ea	15,345

Buildings

The quantity and financial value of the building assets as at the beginning of the 2021/22 financial year are summarised below:

Asset Type	Quantity	Replacement Value ($000)
Cemeteries	6 ea	290
Galleries, Libraries & Theatres	10 ea	69,652
Hire – General Community	7 ea	14,254
Precincts & Areas	1 ea	1,377
Public Amenities	66 ea	9,224
Residency – Operational Buildings & Depots	194 ea	64,144
SES Facilities	13 ea	3,539
Sport & Recreational Facilities	30 ea	66,477
Tenancy – Child Care Centres	12 ea	5,520
Tenancy – Commercial Enterprise	16 ea	10,523
Tenancy – Community Group	28 ea	23,131
Vacant Land & Misc	8 ea	286
Fixed Plant	10 ea	309
Intangible	4 ea	91
Plant	304 ea	10,740
City of Townsville Art Collection	3,549 ea	8,761
Land	189 ea	97,106
Land Improvements	252 ea	13,286

Fleet

The quantity and financial value of the fleet assets as at the beginning of the 2021/22 financial year are summarised below:

Asset Type	Quantity	Replacement Value ($000)
Attachment	86 ea	2,425
Commercial Vehicle	277 ea	9,993
Compaction	15 ea	2,240
Construction Equipment	1 ea	5
Earthmoving	31 ea	5,363
Floor Scrubber	2 ea	37
Generator	20 ea	812
Landscaping Equipment	4 ea	62
Lifting Equipment	48 ea	2,063
Linemarking	6 ea	203
Marine	11 ea	285

Asset Type	Quantity	Replacement Value ($000)
Motorcycle	7 ea	79
Mower	53 ea	1,919
Passenger Car	47 ea	1,162
Paver	1 ea	456
Refuse Truck	37 ea	13,002
Tractor	23 ea	1,906
Trailer	66 ea	2,094
Transporter	22 ea	550
Truck	206 ea	24,438
Workshop Equipment	16 ea	187

Information and Communication Technology

The quantity and financial value of the Information and Communication Technology assets as at the beginning of the 2021/22 financial year are summarised below:

Asset Type	Quantity	Replacement Value ($000)
Infrastructure	197 ea	3,765
Printers	56 ea	192
Servers	61 ea	3,768
Software	249 ea	19,196
Work Stations	4,568 ea	8,155
CCTV	299 ea	3,523
GIS	13 ea	612

5 Asset Management Capability Delivery Model

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.

The key outcomes of Council's asset management capability delivery[1] model 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
- Continuously improving asset management processes and practices.

This focus has been mapped in the following diagram:

Process Monitoring (CI)
Process Audit (CI)
Support Change (CI, CM, SE)
Requirements Change (CI, SE)

Needs Analysis (DM)
Demand Analysis (DM, SE)
Needs Solutions (DM, SE)

Engineering Change (CM, SE, CI)

Concept Exploration and Validation (SE)
Specification (SE, CM)
Design Management (SE, CM, A)
Support Analysis (SE, CM, A)

Operations (OM)
Maintenance (OM)

Integrated Support (A)
Create and Dispose (A)
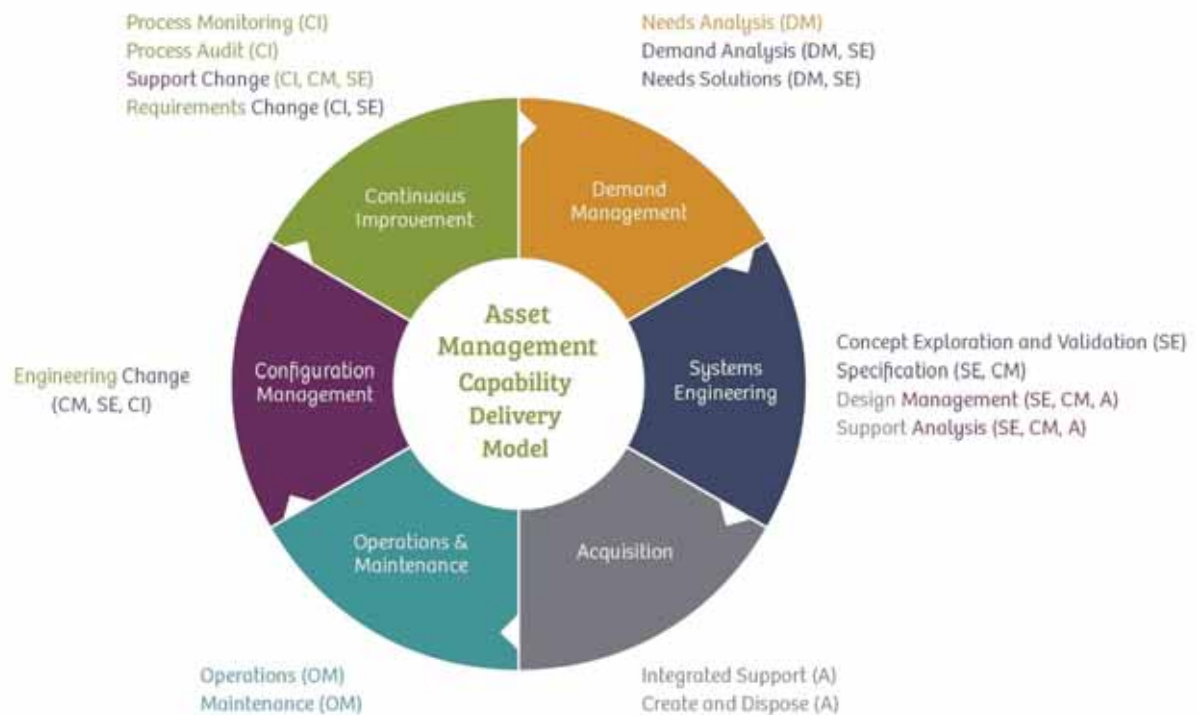
Asset Management Plans
DM – Demand Management SE – Systems Engineering A – Acquisition OM – Operations & Maintenance CM – Configuration Management CI – Continuous Improvement

AMPs for each asset class have been prepared in accordance with the above capability delivery model including 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

- **Demand Management**
  - 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

- **Systems Engineering** –

  - Asset Investment Planning - how Council will optimise the management of its existing and future assets to provide the required sustainable services

- **Acquisition -** Prioritised capital, renewal, operations and maintenance investment

- **Operational and maintenance works**

- **Configuration Management -** How risk is managed

- **Continuous Improvement** - what improvements are required to provide the agreed service levels.

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

- Works Delivery Practices including the outsourcing options

- The resulting budget, valuation and depreciation projections

- 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 the 10 Year Capital Plan as proposed to Council on 23 June 2021. Further, Appendix C shows the FY 2021/22 Operations and Maintenance Plan as proposed to Council on 23 June 2021.

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

5.1. 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 10 years is shown below for operations and maintenance, and renewal and asset creation activities.

Transportation Expenditure Summary ($M)

	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	30/31
Minor Capital	13.9	8.6	16.1	5.6	4.4	3.3	1.9	2.8	2.7	3.3
Major Capital	25.7	34.3	24.2	36.3	21.5	32.7	60.2	87.5	30.0	22.1
Operational	28.3	27.8	29.0	29.9	30.5	31.6	32.4	33.1	34.5	35.4
Maintenance	8.6	8.4	8.8	9.1	9.2	9.6	9.8	10.0	10.5	10.7
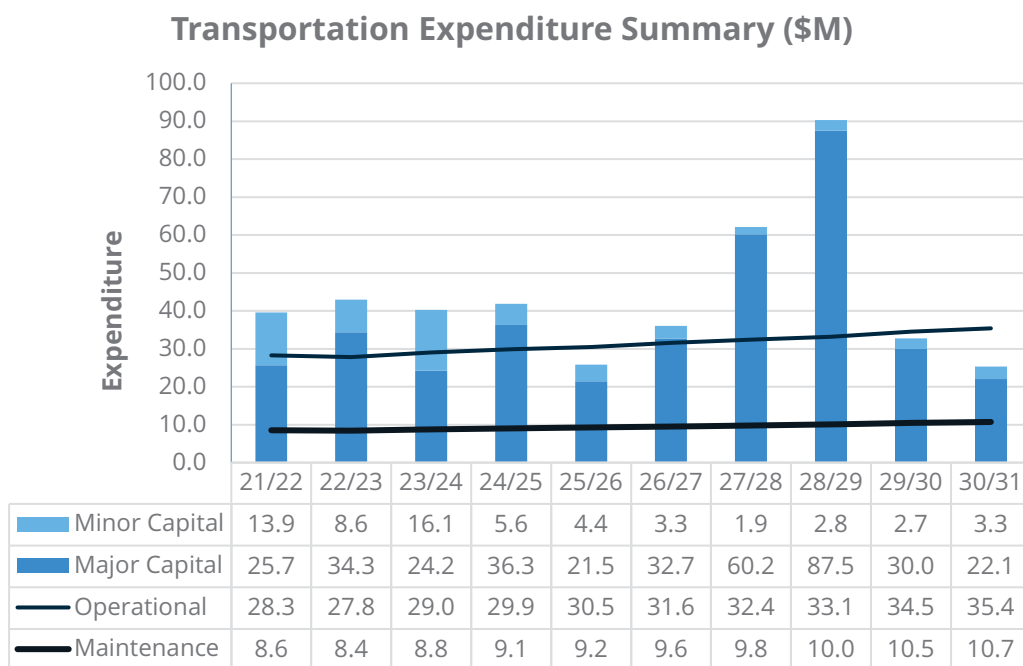
Current Financial Metrics	Value
Replacement Value (2021/22)	$2,368,007,000
O&M (2021/22)	$36,878,616
Average % O&M / RV	1.6%

5.2. Water and Wastewater

Management Objective

Townsville Water and Waste'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 wastewater service.

Financials

The summarised budget expenditure over the next 10 years is shown below for operations and maintenance, and renewal and asset creation activities:

Water and Wastewater Expenditure Summary ($M)

	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	30/31
Minor Capital	16.7	6.0	6.5	4.7	4.4	4.2	4.5	3.8	5.2	4.8
Major Capital	125.1	87.1	44.1	20.0	80.7	78.8	70.2	49.4	71.2	71.3
Operational	115.8	113.8	118.9	122.4	124.9	129.4	132.5	135.6	141.3	144.9
Maintenance	9.3	9.2	9.6	9.8	10.0	10.4	10.7	10.9	11.4	11.6
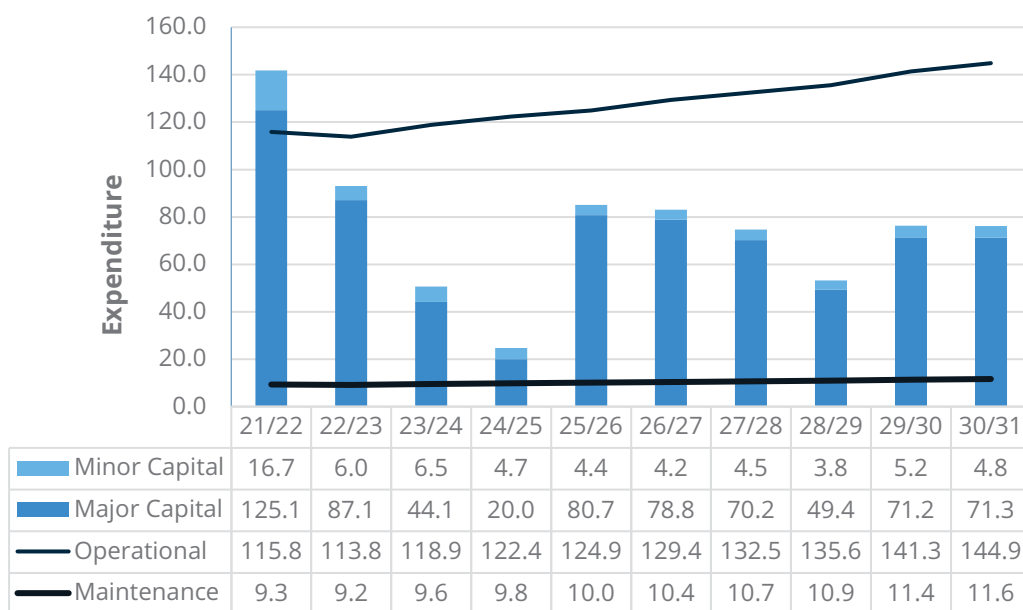
Current Financial Metrics	Value
Replacement Value (2021/22)	$2,690,911,000
O&M (2021/22)	$125,143,905
Average % O&M / RV	4.7%

5.3.   Solid Waste

Management Objective

Townsville Water and Waste'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 10 years is shown below for operations and maintenance, and renewal and asset creation activities:

Solid Waste Expenditure Summary ($M)

	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	30/31
Minor Capital	1.2	0.0	0.0	0.3	0.7	0.5	0.2	0.2	0.2	0.1
Major Capital	6.3	9.3	0.0	0.0	5.9	11.8	9.1	12.6	0.0	0.0
Operational	39.9	39.2	41.0	42.2	43.0	44.6	45.7	46.7	48.7	49.9
Maintenance	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
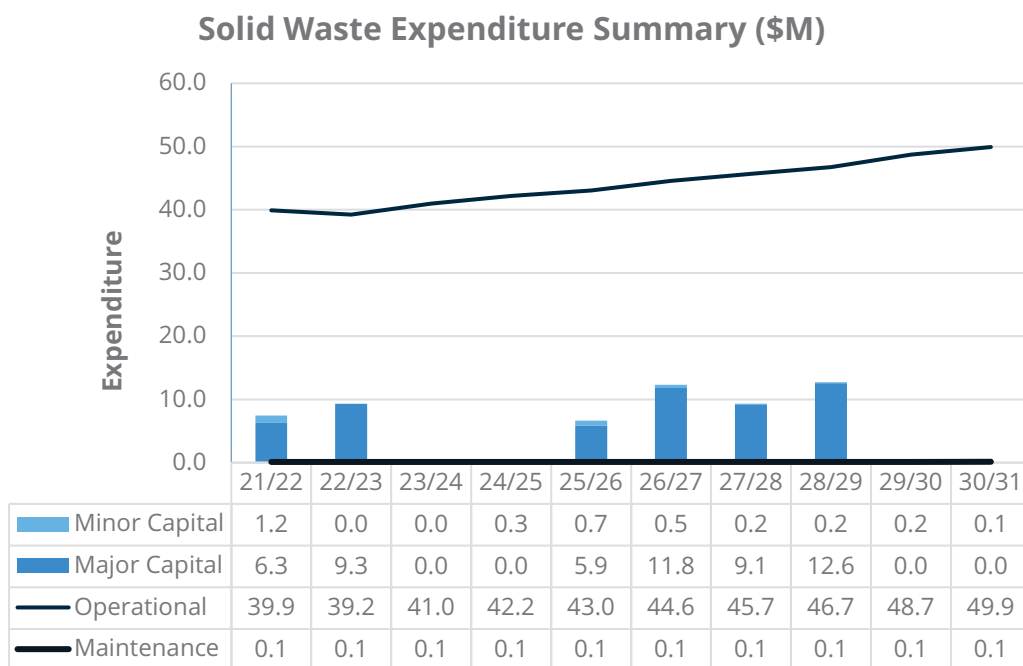
Current Financial Metrics	Value
Replacement Value (2021/22)	$92,939,000
O&M (2021/22)	$40,020,765
Average % O&M / RV	43.1%

5.4.   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 minimise 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 10 years is shown below for operations and maintenance, and renewal and asset creation activities:

Stormwater Expenditure Summary ($M)

	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	30/31
Minor Capital	3.0	11.8	2.3	1.8	1.3	1.2	1.1	1.3	1.6	1.3
Major Capital	0.8	14.2	4.9	24.4	4.9	6.4	6.7	6.5	6.5	5.0
Operational	2.1	2.0	2.1	2.2	2.2	2.3	2.4	2.4	2.5	2.6
Maintenance	1.2	1.2	1.2	1.3	1.3	1.3	1.4	1.4	1.5	1.5
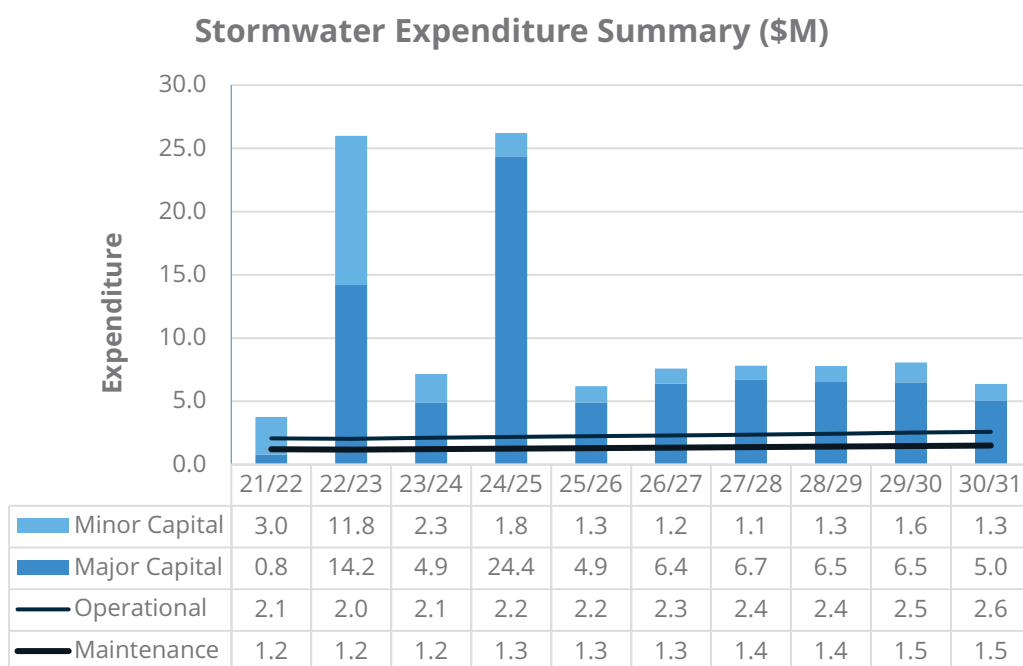
Current Financial Metrics	Value
Replacement Value (2021/22)	$792,367,000
O&M (2021/22)	$3,271,408
Average % O&M / RV	0.4%

5.5.   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 10 years is shown below for operations and maintenance, and renewal and asset creation activities:

Open Spaces Expenditure Summary ($M)

	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	30/31
Minor Capital	9.8	4.3	4.2	4.6	2.5	2.6	2.1	4.7	2.5	2.8
Major Capital	2.2	14.0	2.9	11.6	22.4	5.9	8.9	6.8	5.3	4.2
Operational	40.6	39.9	41.7	42.9	43.8	45.4	46.5	47.6	49.6	50.8
Maintenance	24.3	23.8	24.9	25.6	26.1	27.1	27.8	28.4	29.6	30.3
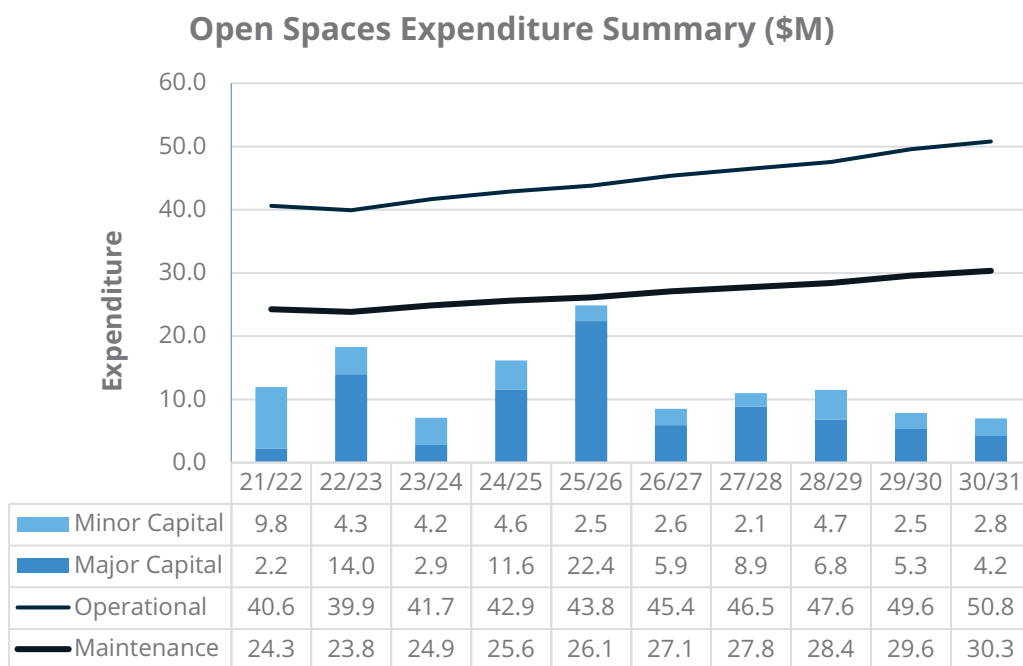
Current Financial Metrics	Value
Replacement Value (2021/22)	$173,450,000
O&M (2021/22)	$64,874,292
Average % O&M / RV	37.4%

5.6.   Coastal

Management Objective

In partnership with relevant state agencies Council provides coastal assets as a social infrastructure for the Community and 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 10 years is shown below for operations and maintenance, and renewal and asset creation activities:

Coastal Expenditure Summary ($M)

	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	30/31
Minor Capital	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Major Capital	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Operational	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7
Maintenance	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
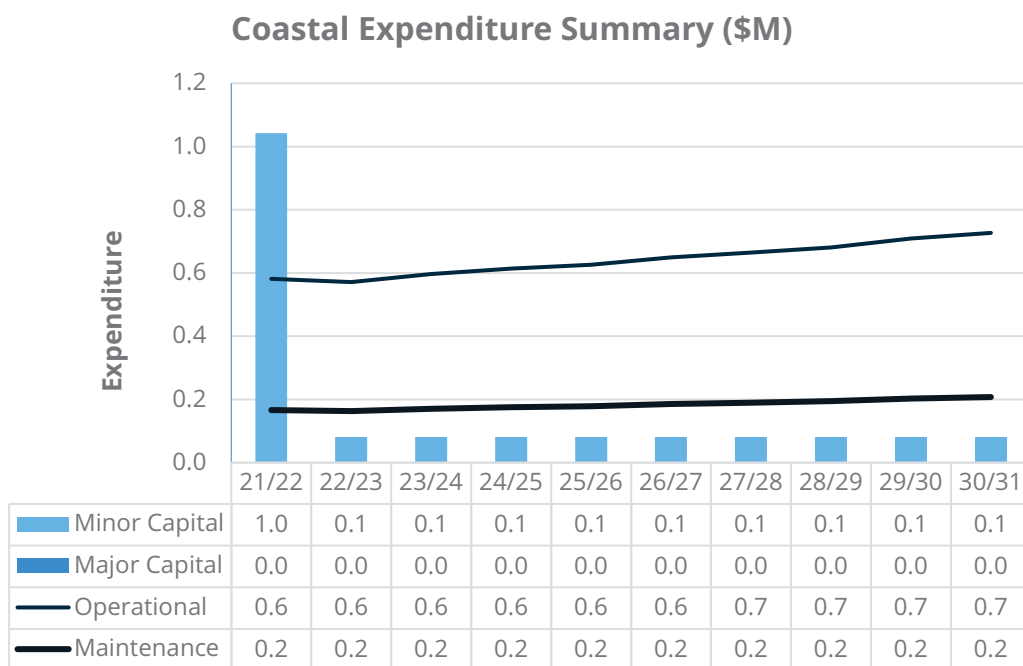
Current Financial Metrics	Value
Replacement Value (2021/22)	$20,793,171
O&M (2021/22)	$746,977
Average % O&M / RV	3.6%

5.7. 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 10 years is shown below for operations and maintenance, and renewal and asset creation activities:

Buildings Expenditure Summary ($M)

	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	30/31
Minor Capital	3.9	1.3	2.0	4.7	2.0	4.4	2.5	0.8	2.5	6.8
Major Capital	19.4	11.1	3.4	0.0	0.0	0.7	0.0	5.4	4.0	9.8
Operational	64.2	63.1	65.8	67.8	69.2	71.7	73.4	75.2	78.3	80.3
Maintenance	8.7	8.6	9.0	9.2	9.4	9.7	10.0	10.2	10.6	10.9
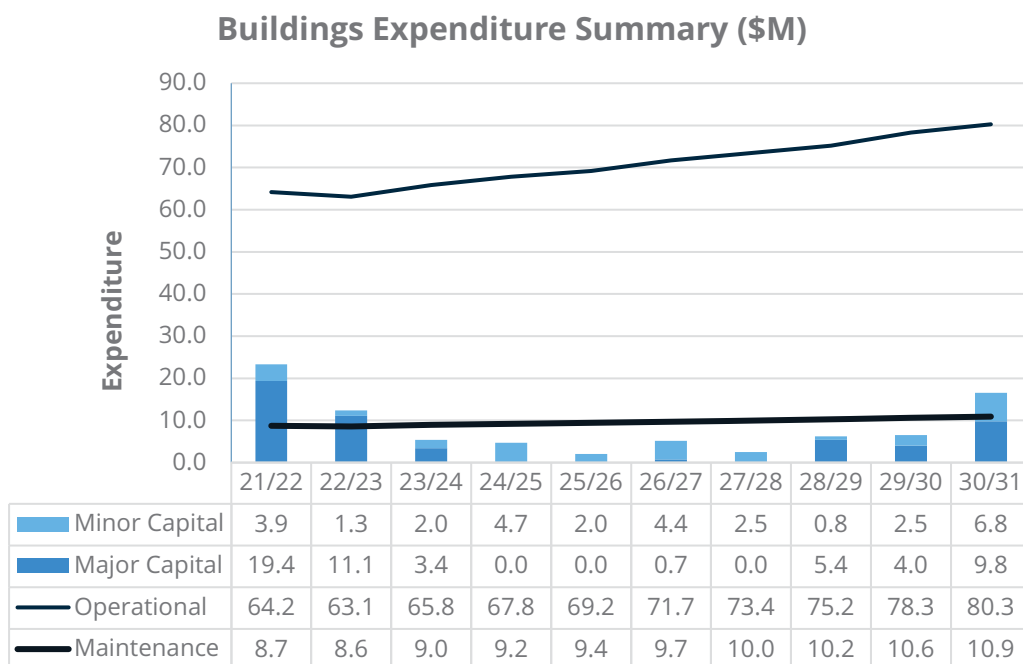
Current Financial Metrics	Value
Replacement Value (2021/22)	$398,710,000
O&M (2021/22)	$72,898,310
Average % O&M / RV	18.3%

5.8.   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 10 years is shown below for operations and maintenance, and renewal and asset creation activities:

Fleet Expenditure Summary ($M)

	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	30/31
Minor Capital	11.9	5.1	7.3	0.0	0.0	0.0	0.0	7.6	1.3	5.4
Major Capital	0.0	0.9	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Operational	14.2	13.9	14.5	15.0	15.3	15.8	16.2	16.6	17.3	17.7
Maintenance	6.9	6.7	7.0	7.2	7.4	7.7	7.8	8.0	8.4	8.6
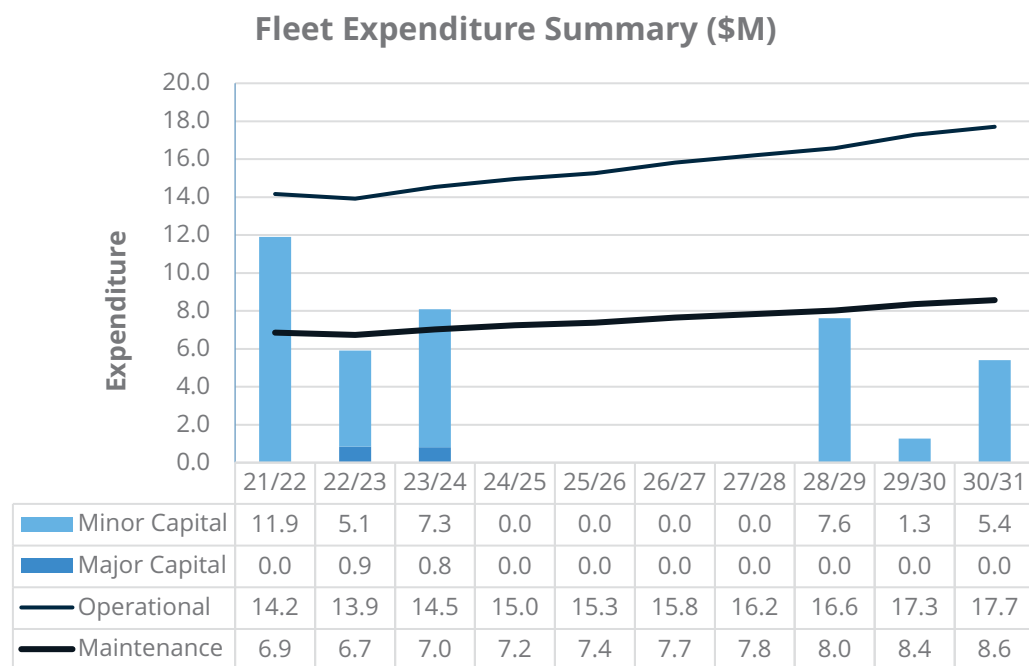
Current Financial Metrics	Value
Replacement Value (2021/22)	$69,281,000
O&M (2021/22)	$21,009,685
Average % O&M / RV	30.3%

5.9. Information and Communication Technology

Management Objective

Council provides Information and Communication Technology (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 10 years is shown below for operations and maintenance, and renewal and asset creation activities:

ICT Expenditure Summary ($M)

	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	30/31
Minor Capital	0.7	1.4	1.8	0.4	0.0	1.1	0.3	2.1	1.5	3.1
Major Capital	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Operational	24.6	24.2	25.3	26.0	26.5	27.5	28.2	28.8	30.0	30.8
Maintenance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
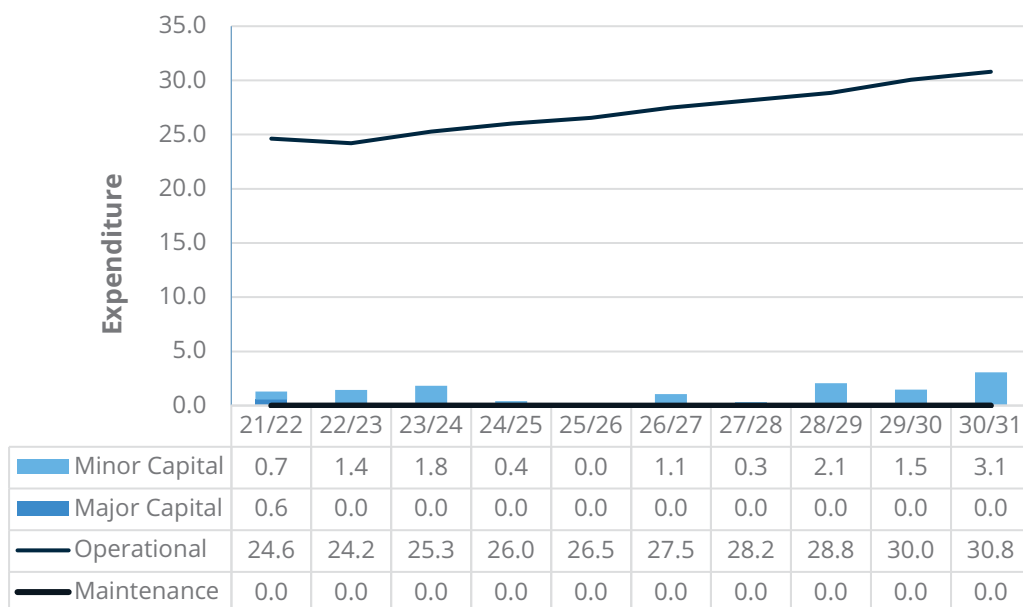
Current Financial Metrics	Value
Replacement Value (2021/22)	$39,211,000
O&M (2021/22)	$24,626,322
Average % O&M / RV	62.8%

5.10.   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 10 years is shown below for corporate overhead activities:

Corporate Overhead Expenditure Summary ($M)

	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	30/31
Minor Capital	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Major Capital	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Operational	125.6	123.4	128.8	132.7	135.3	140.2	143.6	147.0	153.2	157.0
Maintenance	0.8	0.8	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.1
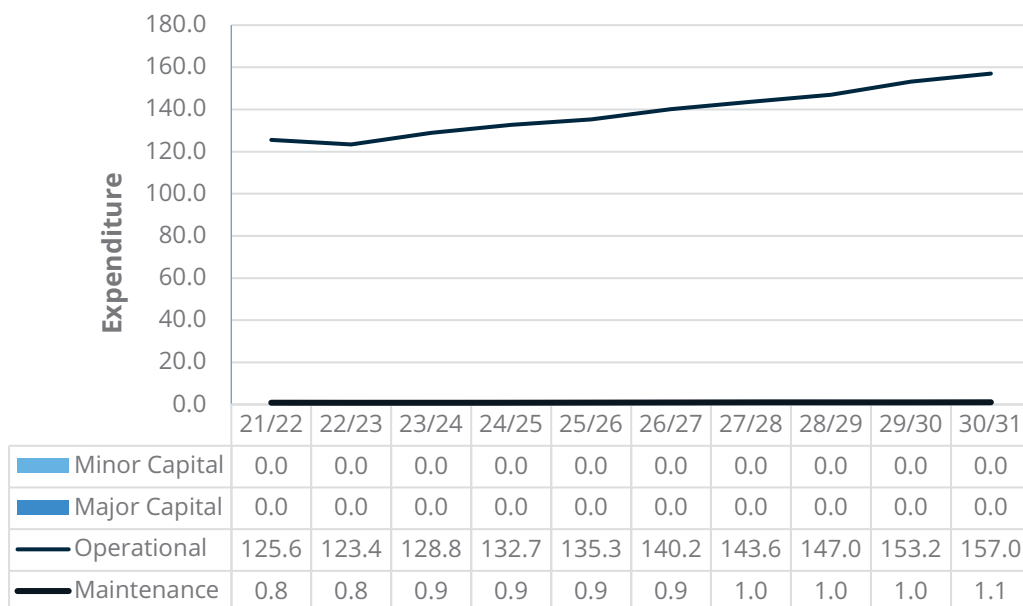
Current Financial Metrics	Value
Corporate Overheads (2020/21)	$126,402,769

Appendix A – COUNCIL Asset Investment Planning Process

ASSET WORKS PLANNING PROCESS IN LINE WITH COUNCIL'S ASSET LIFECYCLE FRAMEWORK

TIME LINE: July | August | September | October | November | February | April | May

PRIORITISED ASSETS WORKS PLAN ADOPTED BY COUNCIL

GOALS | STRATEGY

BUSINESS PLANNING — STRATEGY PLANNING

URBAN (TOWN) PLANNING
- Business Vision, Policy and Regulations
- Sustainable Community Infrastructure Development Strategy
- COMMUNITY | Level of Service, & | Risk Appetite, & | Affordability Targets

STRATEGIC INFRASTRUCT. PLANNING
- Infrastructure Portfolio Strategy (Open Space Strategy, Integrated Water Management Strategy, Transport Strategy, Waste Strategy, etc.)

ASSET MANAGEMENT SERVICES

INFRASTRUCTURE PLANNING
- New & Upgrade (Major) Infrastructure Strategy Based on Community Service Risk, Cost & Performance.
- ASSET | Technical Level of Service, | Risk Controls, & | Performance Targets

ASSET MANAGEMENT PLANNING
- Renewal (Minor) & Maintenance Asset Strategy Based on Community Service Risk, Cost & Performance.

OPERATIONS & ENVIRO' SERVICES
- Community Service Delivery Strategy
- OPERATIONAL & ENVIRONMENTAL Service Delivery Targets
- Asset Operations & Maintenance Strategy

FUTURE CITIES
- Future City Strategy

FINANCIAL SERVICES
- Long Term Finance Strategy
- FINANCIAL Sustainability | Consumption | Surplus Targets

NEEDS

- Community and Stakeholder Outcomes
- LGIP (Local Gov. Infra. Plan) Outcomes - Greenfield Trunk
- Developer Delivered Infrastructure Outcomes
- Priority Infrastructure Outcomes - Brownfield Trunk
- Community Complaints | Requests Analysis Outcomes
- Regulatory Requirements Analysis Outcomes
- Maintenance History | Asset Condition & Risk Outcomes
- Asset Remaining Life Analysis Outcomes
- Operational Efficiency Improvement Outcomes
- Operational Service Delivery Issues Analysis Outcomes
- Future City Outcomes

(October)
- Business Needs
- Optimised FUTURE TRUNK Infrastructure Needs (10 Years)
- Optimised FUTURE NON TRUNK Infrastructure & ASSET RENEWAL Needs (10 Years)
- Optimised IMMEDIATE Asset Needs (1 - 3 Yrs.)
- Needs

SOLUTIONS

- Future Infrastructure Solutions with Options
- Future Trunk Infrastructure Solutions with Options that Meet Community Expectations
- Future Non Trunk Infrastructure Solutions with Options that Meet Community Service Delivery Expectations
- Future Asset Renewal & Maintenance Solutions with Options that Meet Community Service Delivery Expectations
- Immediate Asset Solutions with Options that Meet Operational Efficiency and Service Delivery Expectations
- Future City Solutions
- Cost Benefit Analysis for Various Options

PRIORITIES

- BUSINESS PERFORMANCE & RISK TARGETS
- ASSET WORKS PRIORITISATION BASED ON COMMUNITY VALUE | SERVICE RISK | ASSET LIFECYCLE COST | ASSET PERFORMANCE.
- FINANCIAL AFFORDABILITY TARGETS

CORPORATE PLAN (TRANSFORMATIONAL PROJECTS | CITY DEALS | POLICY COMMITMENTS)

ASSET MANAGEMENT SERVICES - INFRASTRUCTURE PLANNING, ASSETS, & FLEET - 13/06/2019

Appendix A – COUNCIL Asset Works Delivery Process – Capital Works

Swimlanes: ASSET MANAGEMENT | PROJECT MANAGEMENT | PLANNERS/SCHEDULERS | DELIVERY

Phases: INITIATE | PLAN/SCHEDULE | DELIVER | FINALISE

INITIATE sub-phases: PRIOR BUDGET APPROVAL | AFTER BUDGET APPROVAL

ASSET MANAGEMENT lane
- Review Priorities & Issue Scope of works through WOs
- Confirm Detail Scope of works
- Under Construction Assets are created
- Labour, Plant & Materials
- Update Assets in CES and Review/Improve
- >Capitalisation of Assets >Review and Activate required Maintenance Schedules

PROJECT MANAGEMENT lane
- Internal vs External Delivery Strategy
- Review delivery & Procurement strategies
- Stakeholder Engagement (delivery teams, community, etc.)
- Revise Scope of works
- Validate scope against est. resources
- Variations Required? (YES / NO)
- Discuss with stakeholder/ technical team
- Organise required preparation for Works
- Complete plan/ permits/ safety checks
- Delivery Method (Internal / External)
- Complete all contract requirements
- Handover Scope/ Plan to contractor
- Finalise Paperwork/ Organise Handover packaged.
- Complete Project in CES. Asset work cost % breakdown
- As-cons/ O&M/QA/ Lessons Learned

PLANNERS/SCHEDULERS lane
- Complete Required Construction Documents and Organise resources Plant/Material/ Labour
- Organise permits/ traffic management/ safety checks
- Communicate Work Plan with Delivery Team
- (6 week plan)
- Team Lead confirm Plan & Priorities
- Confirm Sub WO's/ Stock and 1 week work schedule
- Allocate Work Teams (1 week Schedule)

DELIVERY lane
- Complete required Paperwork
- Pre-con survey/safety
- Complete Works as per Scope
- Handover all Paperwork and provide any Feedback

Appendix A – COUNCIL Asset Works Delivery Process – Preventive Maintenance Works

Phases: INITIATE (Budget Approved/Review for July start) | PLAN/SCHEDULE | DELIVER | FINALISE

Swimlanes: ASSET MANAGEMENT | PLANNERS/SCHEDULERS | DELIVERY

ASSET MANAGEMENT
- Forecast & Issue Scope of Works
- Release Work Orders *(Labour, Plant & Materials)*
- Confirm all Removed/New Assets → (End)
- Add to Corrective Maintenance Plan
- >Update Asset Register >Review CapEx plan for any changes due to works >Review/Activate Any Required Maintenance Schedules

PLANNERS/SCHEDULERS
- Review delivery & Procurement strategies *(Stakeholder Engagement / Internal vs External Delivery Strategy / Header work order created by Planners)* — YES
- Validate WO requirements against est. Resources
- Variations Required? — NO / Discuss with stakeholder/technical team
- Organise Works in Plan (6 Week Plan) *(Labour, Plant & Materials)*
- Delivery Method — External → Raise PO/Sub Work Orders for Contractor → Handover Scope/Plan to Contractor for delivery
- Delivery Method — Internal → Raise PO/Sub Work Orders/Stock Order → Team Lead Confirm Plan & Prioritise *(1 week schedule)* → WO Sent to Allocated Work Teams

DELIVERY
- Completes Paperwork Required
- Complete Works as per Scope *(JSA/Risk Assessment/Safety)*
- Handover all paperwork and any Feedback
- Further Work Required? — YES → Scope works with Estimates & Priority / NO → Complete W/O information and provide maintenance feedback (if necessary)

Appendix A – COUNCIL Asset Works Delivery Process – Corrective Maintenance Works

Appendix A – COUNCIL Asset Works Delivery Process – Reactive Maintenance Works

Phases: INITIATE | PLAN/SCHEDULE | DELIVER | FINALISE

Swimlanes: ASSET MANAGEMENT | BUSINESS SUPPORT | PLANNERS/SCHEDULERS | DELIVERY

Process steps

- Work Orders Received from Operations/CRM
- Inspection Required?
  - YES → Inspect works & Estimate Resource & Priority
  - NO → If required, Generate Sub Work Order (incl. estimates)
- Priority Within 1 Week?
  - YES → Stakeholder Engagement → Identify Delivery Strategy
  - NO → Organise 6 week Plan
- Identify Delivery Strategy
  - External → Raise PO/ Sub WO's for Contractor/ Supplier → Complete Works as per Scope
  - Internal → Raise PO/ Sub WO's → Team Lead Confirm Plan & Priorities (1 week schedule) → Allocate Work Teams (1 week schedule) → Complete paperwork (JSA/Risk Assessment/ Safety) → Complete Works as per Scope
- Complete Works as per Scope → Handover all paperwork and any Feedback
- Further Work Required?
  - YES → Scope works with Estimates & Priority → Discuss with Asset Team → Add to Corrective Maintenance Plan
  - NO → Complete W/O information and provide maintenance feedback → Confirm all Removed/New Assets → (End)

Asset Management notes
> Update CES Asset register
>Review CapEx plan for any changes due to works
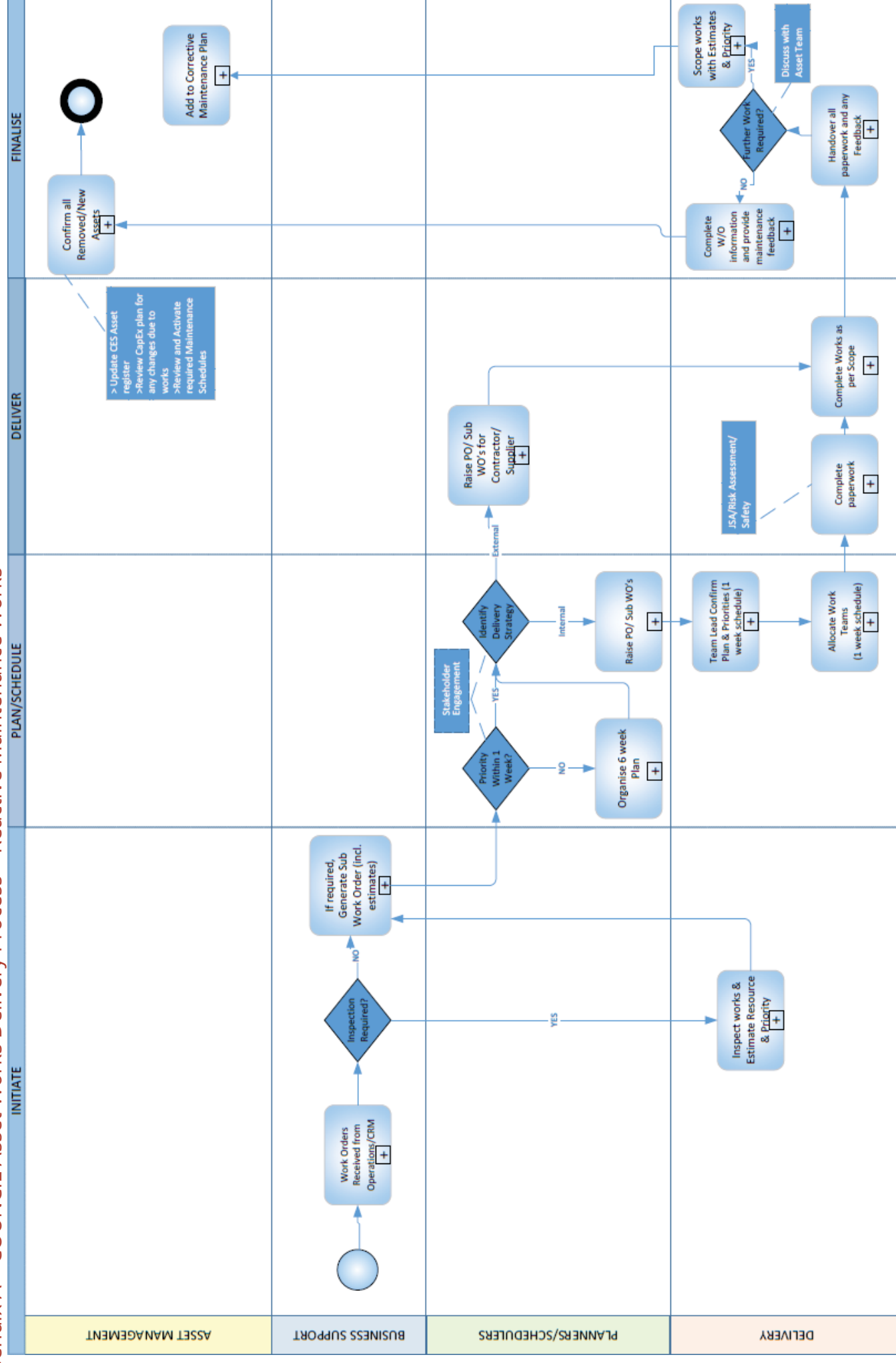>Review and Activate required Maintenance Schedules

Appendix B – COUNCIL 10 Year Capital Works Plan FY 2021/22 to FY 2030/31 (Gross Estimates)

Service	Program Description	Project Type	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
BUILDINGS & FACILITIES	Business Support - Property Management	Assets Request	50,000		16,210	82,500						
BUILDINGS & FACILITIES	Cemeteries Buildings	Assets Request	30,000			4,000			3,000			
BUILDINGS & FACILITIES	Galleries, Libraries & Theatres	Assets Request	5,651,000	400,000	62,000	388,660	796,000	417,000	536,954	43,000	125,000	1,758,930
BUILDINGS & FACILITIES	Hire-General Community	Assets Request	68,000	44,400	32,600	311,322		380,500	195,700	40,500		157,779
BUILDINGS & FACILITIES	Public Amenities	Assets Request	69,000	150,000	38,000				295,700	36,500	895,485	
BUILDINGS & FACILITIES	Residency-Operational Buildings & Depots	Assets Request	3,369,756	4,457,800	1,030,420	1,236,076	679,464	992,482	904,000	186,500	875,562	4,254,560
BUILDINGS & FACILITIES	SES Facilities	Assets Request	66,000				40,000	44,000	35,000			135,000
BUILDINGS & FACILITIES	Sport & Recreational Facilities	Assets Request	5,284,700		657,040	1,666,815	185,000	891,482	115,000	20,000	180,000	1,763,980
BUILDINGS & FACILITIES	Tenancy-Childcare Services	Assets Request	160,430		10,000	69,700	13,000	52,000	16,000	67,000	133,250	494,000
BUILDINGS & FACILITIES	Tenancy-Commercial Enterprises	Assets Request	154,000		4,981	32,000		48,000	141,000	233,000		415,500
BUILDINGS & FACILITIES	Tenancy-Community Group	Assets Request	47,000	50,000	13,000	134,000	31,000	248,500	16,000	25,000		205,000
BUILDINGS & FACILITIES	Vacant Land & Miscellaneous	Assets Request	45,000			45,000		230,000				
CEMETERIES	Cemeteries	Assets Request	100,000	44,488	48,808	48,259	60,000	60,000	60,000	60,000	60,000	60,000
COASTAL FACILITIES	Coastal Maintenance	Assets Request	1,042,263	80,800	80,800	80,800	80,800	80,800	80,800	80,800	80,800	80,800
COMMUNITY & CULTURAL SERV	Business Support-Performing Arts, Events & Protocol	Assets Request	423,800		45,000	185,000	100,000	147,300	100,000		150,000	
DRAIN & STORMWATER MGMT	Stormwater Drainage-Capital	Assets Request	3,757,813	25,991,728	7,151,658	26,211,800	6,192,000	7,585,000	7,819,000	7,804,000	8,066,000	6,363,000
DRAIN & STORMWATER MGMT	Stormwater Drainage-Capital	LGIP - Capital	0									
DRAIN & STORMWATER MGMT	Stormwater Drainage-Capital	LGIP - Donated	3,264,888	4,053,410	4,908,719	5,837,331	6,846,402	7,943,806	9,138,204	10,439,133	11,857,101	
FINANCIAL MANAGEMENT	Stores & Materials Management	Assets Request	10,340			36,714	10,340	10,340				
FLEET MANAGEMENT	Fleet Services	Assets Request	11,900,500	5,907,500	150,000	40,000						
FLEET MANAGEMENT	Heavy Fleet	Assets Request			4,793,975					3,389,967		3,891,967
FLEET MANAGEMENT	Light Fleet	Assets Request			2,709,885					4,145,056	1,142,730	1,170,084
FLEET MANAGEMENT	Minor Fleet	Assets Request			441,140					84,000	123,534	343,364
GALLERIES	Gallery Collections Management	Assets Request	143,500	25,000	25,000	95,000	105,000	192,000	120,000	105,000	105,000	206,000
INFORMATION COMMUNICATION	Library Administration	Assets Request	230,000		250,000							
INFORMATION COMMUNICATION	ZZKM Enterprise Resource Planning	Assets Request	6,252,007	8,652,762	4,964,777	150,000		100,000		4,450,000	4,450,000	4,750,000
INFORMATION COMMUNICATION	ZZKM Infrastructure	Assets Request	1,627,657			260,000		1,679,500	308,500	3,018,500	1,010,000	5,390,750
INFORMATION COMMUNICATION	ZZKM Infrastructure	Economy Activation Capital				5,000,000						
LABORATORY SERVICES	TWW Laboratory Services	Assets Request	570,000	75,000	159,113	233,167	262,046	187,597	228,400	303,400	103,400	103,400
LIBRARIES	Library Administration	Assets Request	260,000	1,000,000		390,000	40,000	700,000	15,000,000			20,000,000
OPEN SPACE MANAGEMENT	Cemeteries	Assets Request	155,000									
OPEN SPACE MANAGEMENT	Open Space Management - Capital	Assets Request	11,818,032	18,284,700	7,090,050	16,181,000	24,886,500	8,500,260	10,980,000	11,518,038	7,832,000	6,999,883
OPEN SPACE MANAGEMENT	Open Space Management - Capital	Economy Activation Capital	1,000,000	9,600,000	8,000,000							
OPEN SPACE MANAGEMENT	Open Space Management - Capital	LGIP - Capital	0	900,000								
OPEN SPACE MANAGEMENT	Open Space Management - Capital	Economy Activation Capital										874,000
OPEN SPACE MANAGEMENT	Open Space Management - Capital	LGIP - Donated	1,255,721	1,414,439	52,305,672	2,021,959	11,465,750	3,739,736	3,146,884	3,590,457	4,074,054	
ROADS & TRANSPORT MGMT	Engineering Services Operational Support	Assets Request		91,000	66,000	80,000	92,000	111,000	117,000	113,000	110,000	95,000
ROADS & TRANSPORT MGMT	North Shore Boulevard Duplication	Assets Request				12,750,000						
ROADS & TRANSPORT MGMT	Open Space Management - Capital	Assets Request	627,992									
ROADS & TRANSPORT MGMT	Open Space Management - Capital	Economy Activation Capital	8,000,000				30,300,000					
ROADS & TRANSPORT MGMT	Roads - Capital	Assets Request	38,776,553	42,680,125	40,062,245	28,852,396	25,543,739	35,627,588	56,684,150	89,870,760	32,323,700	24,956,893
ROADS & TRANSPORT MGMT	Roads - Capital	Disaster Funding		1,500,000								
ROADS & TRANSPORT MGMT	Roads - Capital	Economy Activation Capital	100,000	900,000								
ROADS & TRANSPORT MGMT	Roads - Capital	LGIP - Capital	400,000	700,000		24,883,000						36,000
ROADS & TRANSPORT MGMT	Roads - Capital	LGIP - Donated	10,962,155	16,720,216	25,649,467	21,633,283	40,619,412	27,742,786	50,081,341	35,050,329	39,811,285	
ROADS & TRANSPORT MGMT	Townsville Recreational Boat Park	Assets Request							5,000,000			
ROADS & TRANSPORT MGMT	V8 Supercar In Kind	Assets Request	200,000	208,000	163,000	198,000	231,000	277,000	319,000	311,000	300,000	260,000

Appendix B – COUNCIL 10 Year Capital Works Plan FY 2021/22 to FY 2030/31 (Gross Estimates) (continued)

Service	Program Description	Project Type	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
SOLID WASTE TREATMENT	TWW – Resource Recovery & Waste Disposal	Assets Request	7,437,071	9,307,239	16,161	293,661	6,366,785	12,287,738	9,325,939	12,719,361	166,161	51,161
SOLID WASTE TREATMENT	TWW Waste Management & Support	Assets Request					270,000					
SUSTAINABILITY SERVICES	Sustainability & Energy	Economy Activation Capital									22,461,401	11,863,420
WASTEWATER SUPPLY	TWW – Wastewater Collection	Assets Request	16,737,924	23,958,000	31,437,700	5,966,160	8,483,000	12,184,000	16,517,000	17,512,000	26,816,000	8,944,000
WASTEWATER SUPPLY	TWW – Wastewater Collection	LGIP - Capital	13,000,000	972,000	-261,000	791,220				557,000	18,616,000	
WASTEWATER SUPPLY	TWW – Wastewater Collection	LGIP - Donated	4,950,631	5,343,000	10,359,000	5,048,000	4,821,000	4,790,000	3,378,000	7,592,000	3,000	560,000
WASTEWATER SUPPLY	TWW – Wastewater Management & Support	Assets Request	400,000	0	0	0	0	0	870,000	0	0	
WASTEWATER SUPPLY	TWW – Wastewater Management & Support	LGIP - Capital	0									
WASTEWATER SUPPLY	TWW – Wastewater Management & Support	LGIP - Donated	2,575,123	3,197,055	3,871,666	4,604,092	5,399,979	6,265,537	7,207,597	8,233,683	9,352,080	150,000
WASTEWATER SUPPLY	TWW – Wastewater Treatment	Assets Request	34,037,998	2,855,000	2,435,000	2,122,000	2,445,000	3,935,000	3,099,000	2,992,000	2,899,000	2,507,000
WATER SUPPLY	Bulk Water Distribution	Assets Request	38,847,962	3,168,000	2,809,386	3,093,000	14,128,059	22,370,402	8,243,000	2,975,000	19,851,000	17,394,000
WATER SUPPLY	Bulk Water Distribution	LGIP - Capital	10,250,000									
WATER SUPPLY	Bulk Water Distribution	LGIP - Donated				1,011,000	50,000	925,000	10,770,000	350,000	1,325,000	
WATER SUPPLY	CBD Utilities - Water	Assets Request	305,000				3,000					
WATER SUPPLY	Haughton	Assets Request	4,341,046									
WATER SUPPLY	TWW – Dams	Assets Request	1,402,000	1,040,000	740,000	896,000	1,041,000	1,251,000	1,313,000	1,273,000	1,232,000	1,066,000
WATER SUPPLY	TWW – Water Management & Support	Assets Request		0	0	0	0	0	0	0	0	
WATER SUPPLY	TWW – Water Management & Support	LGIP - Capital	0									
WATER SUPPLY	TWW – Water Management & Support	LGIP - Donated	1,399,968	1,738,082	2,104,834	2,503,018	2,935,703	3,406,264	3,918,416	4,476,248	5,084,266	2,021,000
WATER SUPPLY	TWW – Water Treatment	Assets Request	10,759,000	11,970,000	6,802,000	1,696,000	10,071,000	2,668,000	2,938,000	6,311,000	10,433,000	2,021,000
WATER SUPPLY	Water Reticulation	Assets Request	35,008,597	49,032,000	6,215,000	10,667,000	48,690,000	40,474,162	26,519,000	21,812,000	15,030,000	24,076,000
WATER SUPPLY	Water Reticulation	LGIP - Donated	4,760,000	6,800,000	120,000	760,000		8,000	3,340,000	2,695,000	180,000	

Appendix C - COUNCIL FY 2021/22 to FY 2030/31 Operations & Maintenance Plan

Core Service Description	Service Description	Function	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
Community and Cultural Services	Cemeteries	Operations	614,502	619,698	623,342	640,009	652,742	677,404	692,306	707,556	733,709	751,236
Community and Cultural Services	Cemeteries	Maintenance	316,756	319,434	321,313	329,904	336,468	349,180	356,861	364,722	378,203	387,238
Community and Cultural Services	Community and Cultural Services	Operations	873,680	881,067	886,247	909,944	928,048	963,111	984,298	1,005,980	1,043,163	1,068,083
Community and Cultural Services	Community Support Program	Operations	4,589,019	4,627,819	4,655,030	4,779,498	4,874,589	5,058,761	5,170,046	5,283,928	5,479,234	5,610,125
Community and Cultural Services	Community Support Program	Maintenance	0	0	0	0	0	0	0	0	0	0
Community and Cultural Services	Enforcement Compliance	Operations	10,168,490	10,254,465	10,314,760	10,590,559	10,801,264	11,209,358	11,455,947	11,708,290	12,141,055	12,431,088
Community and Cultural Services	Enforcement Compliance	Maintenance	655	661	665	682	696	722	738	754	782	801
Community and Cultural Services	Events	Operations	8,418,147	8,489,323	8,539,239	8,767,564	8,942,000	9,279,846	9,483,989	9,692,895	10,051,167	10,291,275
Community and Cultural Services	Events	Maintenance	111,081	112,020	112,679	115,691	117,993	122,451	125,145	127,902	132,629	135,797
Community and Cultural Services	Facilities	Operations	439,164	442,877	445,481	457,392	466,492	484,117	494,767	505,666	524,356	536,882
Community and Cultural Services	Facilities	Maintenance	110	111	112	115	117	121	124	127	131	135
Community and Cultural Services	Galleries	Operations	2,640,176	2,662,499	2,678,155	2,749,764	2,804,472	2,910,431	2,974,456	3,039,975	3,152,339	3,227,644
Community and Cultural Services	Galleries	Maintenance	224	225	227	233	237	246	252	257	267	273
Community and Cultural Services	Libraries	Operations	17,077,056	17,221,443	17,322,704	17,785,883	18,139,744	18,825,100	19,239,223	19,663,011	20,389,801	20,876,885
Community and Cultural Services	Libraries	Maintenance	1,036	1,045	1,051	1,079	1,101	1,142	1,168	1,193	1,237	1,267
Community and Cultural Services	Sport and Recreation	Operations	966,566	974,738	980,470	1,006,686	1,026,715	1,065,506	1,088,945	1,112,932	1,154,068	1,181,637
Community and Cultural Services	Sport and Recreation	Maintenance	812,446	819,315	824,133	846,169	863,004	895,610	915,312	935,474	970,051	993,224
Enabling Services	Asset Management-Enabling	Operations	12,371,774	12,476,378	12,549,738	12,885,296	13,141,657	13,638,175	13,938,194	14,245,215	14,771,751	15,124,627
Enabling Services	Asset Management-Enabling	Maintenance	382	385	387	398	406	421	430	440	456	467
Enabling Services	Buildings and Facilities Management	Operations	29,621,940	29,872,395	30,048,042	30,851,474	31,465,283	32,654,104	33,372,445	34,107,549	35,368,243	36,213,140
Enabling Services	Buildings and Facilities Management	Maintenance	7,798,883	7,864,823	7,911,068	8,122,596	8,284,200	8,597,194	8,786,319	8,979,858	9,311,774	9,534,219
Enabling Services	Business Management	Operations	5,973,273	6,023,778	6,059,197	6,221,209	6,344,984	6,584,710	6,729,564	6,877,798	7,132,017	7,302,391
Enabling Services	Communication and Customer Relations	Operations	12,091,949	12,194,187	12,265,888	12,593,856	12,844,419	13,329,707	13,622,940	13,923,016	14,437,643	14,782,538
Enabling Services	Communication and Customer Relations	Maintenance	0	0	0	0	0	0	0	0	0	0
Enabling Services	Executive and Transformation	Operations	4,124,887	4,159,763	4,184,222	4,296,101	4,381,575	4,547,119	4,647,149	4,749,513	4,925,066	5,042,719
Enabling Services	Executive and Transformation	Maintenance	0	0	0	0	0	0	0	0	0	0
Enabling Services	Financial Management	Operations	36,641,889	36,951,698	37,168,970	38,162,804	38,922,076	40,392,630	41,281,207	42,190,519	43,749,979	44,795,103
Enabling Services	Financial Management	Maintenance	0	0	0	0	0	0	0	0	0	0
Enabling Services	Fleet Management	Operations	14,158,960	14,278,674	14,362,632	14,746,663	15,040,057	15,608,301	15,951,660	16,303,031	16,905,629	17,309,480
Enabling Services	Fleet Management	Maintenance	6,850,725	6,908,648	6,949,270	7,135,082	7,277,038	7,551,980	7,718,112	7,888,121	8,179,684	8,375,085
Enabling Services	Governance	Operations	7,504,616	7,568,068	7,612,567	7,816,114	7,971,620	8,272,804	8,454,793	8,641,029	8,960,422	9,174,474
Enabling Services	Information Communication Technology	Operations	24,625,751	24,833,962	24,979,984	25,647,905	26,158,186	27,146,495	27,743,676	28,354,794	29,402,853	30,105,245
Enabling Services	Information Communication Technology	Maintenance	572	577	580	596	608	630	644	659	683	699
Enabling Services	Laboratory Services	Operations	1,849,488	1,865,125	1,876,092	1,926,256	1,964,580	2,038,805	2,083,656	2,129,553	2,208,266	2,261,019
Enabling Services	Laboratory Services	Maintenance	5,718	5,766	5,800	5,955	6,073	6,303	6,441	6,583	6,827	6,990
Enabling Services	Mechanical and Electrical Services	Operations	5,313,949	5,358,879	5,390,389	5,534,518	5,644,631	5,857,896	5,986,761	6,118,633	6,344,792	6,496,360
Enabling Services	Mechanical and Electrical Services	Maintenance	138,285	139,454	140,274	144,025	146,890	152,440	155,793	159,225	165,111	169,055
Enabling Services	People	Operations	3,098,058	3,124,252	3,142,622	3,226,651	3,290,847	3,415,182	3,490,310	3,567,192	3,699,044	3,787,409

Appendix C - COUNCIL FY 2021/22 to FY 2030/31 Operations & Maintenance Plan (continued)

Core Service Description	Service Description	Function	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
Environment and Sustainability Services	Coast and Catchments (Creek to Coral)	Operations	2,549,468	2,571,024	2,586,141	2,655,290	2,708,119	2,810,437	2,872,262	2,935,530	3,044,034	3,116,752
Environment and Sustainability Services	Coast and Catchments (Creek to Coral)	Maintenance	1,465,540	1,477,931	1,486,621	1,526,371	1,556,739	1,615,556	1,651,096	1,687,465	1,749,837	1,791,638
Environment and Sustainability Services	Community Environmental Restoration	Operations	3,697,663	3,728,927	3,750,853	3,851,144	3,927,765	4,076,164	4,165,833	4,257,595	4,414,966	4,520,433
Environment and Sustainability Services	Community Environmental Restoration	Maintenance	842,133	849,253	854,247	877,088	894,538	928,336	948,757	969,656	1,005,497	1,029,517
Environment and Sustainability Services	Environmental and Natural Resource Mgmt	Operations	2,936	2,961	2,978	3,058	3,119	3,237	3,308	3,381	3,506	3,589
Environment and Sustainability Services	Environmental Operations	Operations	10,135,606	10,221,303	10,281,403	10,556,310	10,766,334	11,173,108	11,418,899	11,670,426	12,101,792	12,390,887
Environment and Sustainability Services	Sustainability and Solar Cities	Operations	1,505,636	1,518,367	1,527,295	1,568,132	1,599,331	1,659,757	1,696,269	1,733,633	1,797,712	1,840,657
Planning and Development	Urban Planning_Built Environment	Operations	21,067,800	21,245,930	21,370,854	21,942,273	22,378,828	23,224,345	23,735,245	24,258,068	25,154,703	25,755,613
Planning and Development	Urban Planning_Built Environment	Maintenance	1,427	1,439	1,448	1,486	1,516	1,573	1,608	1,643	1,704	1,745
Public Infrastructure	Coastal Facilities	Operations	581,081	585,994	589,440	605,200	617,241	640,562	654,653	669,073	693,804	710,378
Public Infrastructure	Coastal Facilities	Maintenance	165,896	167,299	168,282	172,782	176,220	182,878	186,901	191,018	198,078	202,810
Public Infrastructure	Drain and Stormwater Management	Operations	2,068,774	2,086,266	2,098,533	2,154,644	2,197,512	2,280,538	2,330,706	2,382,046	2,470,092	2,529,098
Public Infrastructure	Drain and Stormwater Management	Maintenance	1,202,634	1,212,803	1,219,934	1,252,553	1,277,473	1,325,739	1,354,903	1,384,748	1,435,931	1,470,234
Public Infrastructure	Open Space Management	Operations	40,002,029	40,340,248	40,577,445	41,662,416	42,491,315	44,096,722	45,066,783	46,059,481	47,761,946	48,902,911
Public Infrastructure	Open Space Management	Maintenance	23,941,004	24,143,426	24,285,388	24,934,737	25,430,828	26,391,656	26,972,232	27,566,357	28,585,274	29,268,135
Public Infrastructure	Public Infrastructure Management	Operations	7,007,583	7,066,832	7,108,385	7,298,451	7,443,658	7,724,894	7,894,830	8,068,732	8,366,971	8,566,846
Public Infrastructure	Public Infrastructure Management	Maintenance	48,278	48,687	48,973	50,282	51,283	53,220	54,391	55,589	57,644	59,021
Public Infrastructure	Roads and Transport Management	Operations	22,584,819	22,775,775	22,909,694	23,522,260	23,990,250	24,896,649	25,444,338	26,004,807	26,966,005	27,610,185
Public Infrastructure	Roads and Transport Management	Maintenance	8,523,705	8,595,773	8,646,316	8,877,503	9,054,126	9,396,209	9,602,912	9,814,438	10,177,202	10,420,321
Solid Waste Management	Solid Waste Business Management and Strategy	Operations	4,260,394	4,296,416	4,321,679	4,437,233	4,525,514	4,696,497	4,799,813	4,905,540	5,086,860	5,208,378
Solid Waste Management	Solid Waste Business Management and Strategy	Maintenance	7,555	7,619	7,663	7,868	8,025	8,328	8,511	8,699	9,020	9,236
Solid Waste Management	Solid Waste Collection and Recycling	Operations	19,887,412	20,055,561	20,173,485	20,712,889	21,124,985	21,923,129	22,405,405	22,898,935	23,745,333	24,312,575
Solid Waste Management	Solid Waste Collection and Recycling	Maintenance	23,740	23,941	24,081	24,725	25,217	26,170	26,746	27,335	28,345	29,022
Solid Waste Management	Solid Waste Treatment and Disposal	Operations	15,764,662	15,897,953	15,991,432	16,419,015	16,745,681	17,378,367	17,760,664	18,151,883	18,822,819	19,272,469
Solid Waste Management	Solid Waste Treatment and Disposal	Maintenance	77,002	77,653	78,110	80,198	81,794	84,884	86,752	88,663	91,940	94,136
Wastewater Services	Wastewater Supply	Operations	46,139,831	46,529,946	46,803,538	48,054,983	49,011,066	50,862,802	51,981,707	53,126,722	55,090,409	56,406,440
Wastewater Services	Wastewater Supply	Maintenance	4,957,058	4,998,971	5,028,364	5,162,814	5,265,531	5,464,473	5,584,683	5,707,699	5,918,669	6,060,057
Water Services	Water Supply	Operations	55,053,216	55,518,693	55,845,138	57,338,340	58,479,121	60,688,580	62,023,636	63,389,848	65,732,884	67,303,149
Water Services	Water Supply	Maintenance	2,744,388	2,767,592	2,783,865	2,858,301	2,915,169	3,025,310	3,091,862	3,159,967	3,276,767	3,355,044