TOWNSVILLE CITY COUNCIL

# Strategic Asset Management Plan

# 2023/24

townsville.qld.gov.au

## Our Vision

A globally connected community
driven by lifestyle and nature

## Our Purpose

Grow Townsville

City of Townsville

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### ACKNOWLEDGEMENT 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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# 1 Executive Summary

Townsville City Council provides vital infrastructure services that facilitate and grow the local economy. These services necessitate councils to manage large numbers of complex, long-life assets. Council is responsible for acquiring, operating, maintaining, renewing, and disposing of an extensive range of assets valued at over $7 billion. These assets include Water, Resource Recovery, Sewerage, Stormwater, ICT, Fleet, Land, Buildings and Facilities, Parks, Recreation Areas, Coastal, Roads, Footpaths, and associated operating assets and provide services essential to the community's quality of life.

Council's Strategic Asset Management Plan (SAMP) provides a clear framework for strategic asset decision-making that aligns with organisational performance objectives and the goals set out in the Corporate Plan. This supports Council's vision of "A globally connected community driven by lifestyle and nature". It has been developed to be consistent with:

- legislative and regulatory obligations as Council is governed by the principles of sustainable development and management of assets, infrastructure planning and effective service delivery as embodied in the *Local Government Act 2009*
- current standards for asset management (AM)
- the existing management systems and frameworks of Council.

Council aims to understand the requirements of ratepayers, customers, businesses, and visitors to the region and deliver the required functionality, specified performance and compliance requirements sustainably over the entire life of the infrastructure assets.

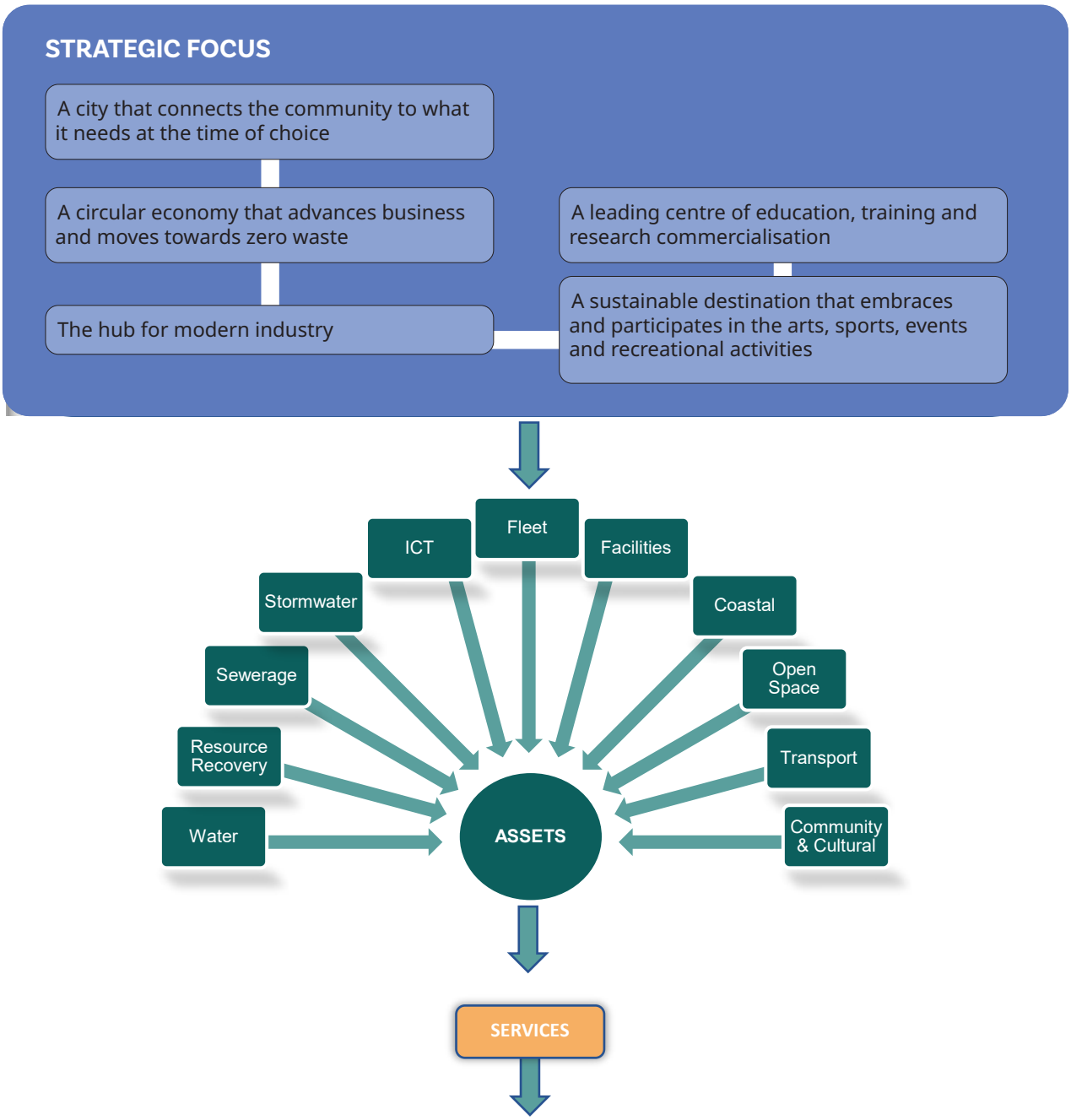
Today, as in many Australian communities, many Council assets are aging and require significant ongoing maintenance. The community is growing, and expectations are increasing, along with the demand for new and improved services. The assets are also vulnerable to climate change impacts. Due to inflationary pressures, community expectations and levels of service (LoS), the cost to renew or build new assets to meet these LoS will also increase substantially in the long term. It is important that investment decisions on the infrastructure are based on the whole-of-life approach to determining the cost of owning and managing infrastructure.

Council's strategic approach is to leverage AM to streamline and align the delivery of infrastructure services to community requirements, and to provide effective control and governance to its infrastructure assets to realise value through managing risk and opportunity to achieve the desired balance of performance, risk, and cost. AM is critical to the overall performance of Council in delivering services to the Townsville community and provides the key link between processes, strategies and systems.

This SAMP recognises the foundations already in place at Council with respect to asset management, but it also looks further ahead to ensure Council has a well-planned and achievable approach to city development, through responsible asset planning and delivery.

The Asset Management System Model illustrates the key components of Council's Asset Management System (AMS) and how they relate. The Asset Management Framework provides the essential information that enables business practices and schematically presents the Asset Investment Planning and Works Delivery with a continuous improvement focus. 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. The AMS and Asset Management Capability combine to enable effective asset management practices that deliver on the Council's commitment to ensuring the city's future.

## Plan on a Page




**STRATEGIC ASSET MANAGEMENT OBJECTIVES**

- Integrated long-term planning to provide effective control and governance to infrastructure assets to realise value through managing risk and opportunity to achieve the desired balance of cost, risk, and performance in community service delivery.
- Life cycle financial sustainability to build a stronger and resilient city economy.
- Risk and evidence-based decision-making to promote asset management principles in our long-term planning.
- Community- and place-based levels of service to identify the future demands of infrastructure, ensuring that infrastructure assets continue to support service delivery in a sustainable and resilient manner.
- Continuous systems improvement to consolidate core maturity in asset management practices.
- Constructive and accountable culture in all asset management activities.
- Sustainability and Climate Resilience to implement best practice whole of life cycle asset management.

# List of Abbreviations

| | |
|---|---|
| AM | Asset Management |
| AMP | Asset Management Plan |
| AMS | Asset Management System |
| CAPEX | Capital Expenditure |
| CEO | Chief Executive Officer |
| CES | Core Enterprise Suite |
| ELT | Executive Leadership Team |
| FMECA | Failure Mode, Effects and Criticality Analysis |
| FMEA | Failure Mode Effect Analysis |
| GIS | Geographical Information System |
| ICT | Information and Communications Technology |
| ISO 55001 | ISO 55001: Asset Management - Management System – Requirements |
| LoS | Level of Service |
| LGIP | Local Government Infrastructure Plan |
| LTFF | Long Term Financial Forecast |
| OPEX | Operational Expenditure |
| PPE | Personal Protective Equipment |
| RCA | Root Cause Analysis |
| RCM | Reliability Centred Maintenance |
| SAMP | Strategic Asset Management Plan |
| SWMS | Safe Method Work Statement |

# 2 Introduction

Council is committed to working towards the vision of 'A globally connected community driven by lifestyle and nature' to deliver the required functionality, specified performance and compliance requirements to create a sustainable future for the community. Everything Council does is underpinned by five core values:


Figure 2-1: Council's SERVE values

Council has direct responsibility for funding, day-to-day management and service delivery of infrastructure assets that must be maintained and operated in a strategic manner to provide continuous, safe, efficient service to the community. This SAMP ensures Council can deliver services, maintain assets, and achieve its strategic objectives in a financially sustainable manner in the short, medium, and long term.

Day-to-day AM includes the routine inspection and maintenance repair of infrastructure assets to ensure capability and safety. Medium to longer-term activities include the monitoring, planning, renewal, creation, and disposal of assets. Ageing assets can require significant ongoing maintenance, and this must be balanced against the need to provide new assets and services for our rapidly growing community.

## 2.1 Scope

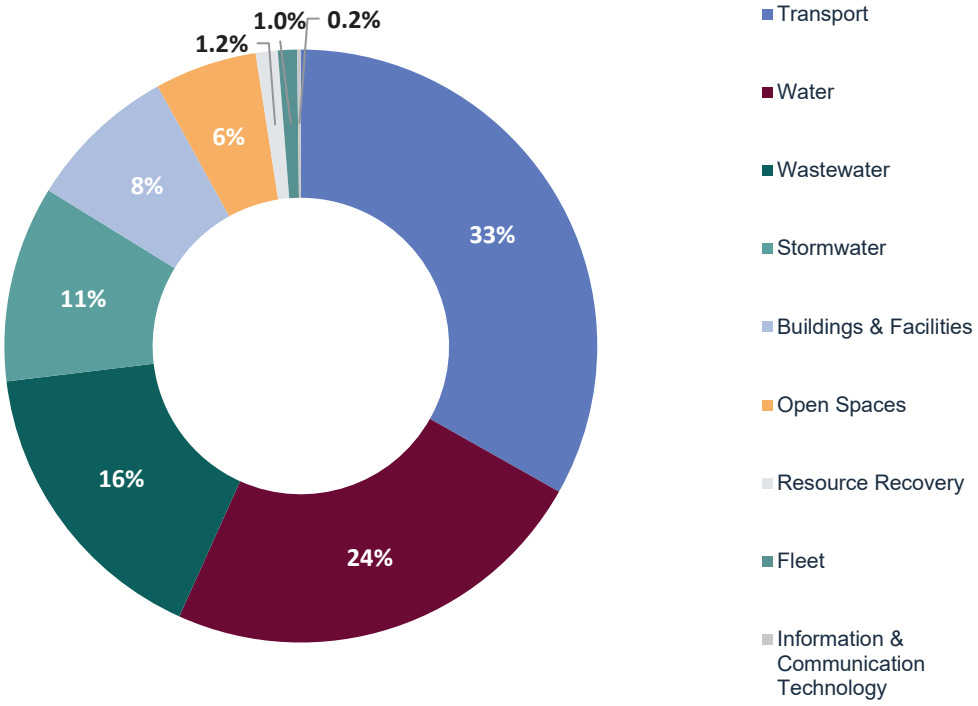



Figure 2-2: Asset replacement values as a % of total asset value (key Asset Classes)

This SAMP provides guidance on all Council assets, which are grouped into nine key asset classes[1].

Figure 2-2 shows the asset classes and the replacement value for each asset class as a percentage of total council asset value. The transport asset class represents the highest replacement cost (33% of total council assets), followed by the water assets at 24% of total council assets.

Ultimately the SAMP provides a framework for the effective management and control of our infrastructure assets to achieve a balance of cost, risk, and performance in community service delivery. It ensures we continue to provide safe spaces and places for our community to enjoy, as well as contributing to the appearance of our city and meeting the objectives of our Strategic Plan.

The SAMP also describes the asset-based activities that Council proposes to undertake over the medium to long term in delivering its strategic objectives and providing services to the community through its assets. This SAMP specifies 10 years of asset renewal projections in line with Council's Long Term Financial Forecast (LTFF). The SAMP also presents the current state of Council's AM Framework, data and systems, highlighting identified gaps and continuous improvement activities.

## 2.2 Purpose and Objective of SAMP

This document forms the AM Strategy for Council. It is intended to define the strategic objectives and approach to the management of the infrastructure assets, in a manner which:

- is optimised and sustainable in terms of whole-life
- assists in the delivery of the Council's overall Vision, Organisational Strategic Plan and Objectives
- appropriately considers how the organisation will establish and achieve current and future demand via the management of the condition and performance of the asset base
- builds strong stakeholder engagement and leadership for informed and robust AM decision-making processes to support the functionality and sustainability of the AMS
- develops 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
- appropriately considers the necessary current and future AM capabilities of Council, in terms of people, processes, systems, equipment and data to achieve the identified outputs and objectives.

The purpose of this SAMP is to:

- describe the role of the AMS in supporting achievement of the AM objectives, delivering appropriate level of service (LoS), and meeting legislative requirements
- document information that specifies how organisational objectives have been realised as AM objectives
- inform the approach for developing AMP through the AM Capability Delivery Model.

## 2.3 SAMP and Executive Responsibility

Strategic AM planning is a key corporate activity that must be driven by senior management to reflect a department's asset policy framework and associated budgetary objectives. For strategic AM to generate maximum impact, executive management should ensure that:

- ownership, control, accountability, responsibility, and reporting requirements for assets are established, relevant, clearly communicated and implemented
- AM Information Systems (TechOne) are maintained at a level that meets departmental and government information, decision-making and reporting requirements
- an effective asset performance evaluation/reporting and continuous improvement program is in place
- ongoing development and review of the SAMP to promote the viability and long-term use of assets in line with Council's organisational objectives.

[1] Coastal, Community and Cultural asset classes are not included due to the relatively low replacement cost compared to other Asset Classes

# 3 Organisational Context and Stakeholders

Council operates in accordance with the Strategic Planning Framework, external legislation and industry practice, and multiple internal policies, procedures, and organisational management frameworks. These influence the Council AM operational activities and decision-making. In addition, stakeholders (both internal and external) play an important role in this process.

## 3.1 Organisational Objectives

Organisational objectives are short-term and medium-term goals that Council seeks to accomplish. These objectives play a large part in developing policies and determining the allocation of resources.

### 3.1.1 Corporate Plan

Council's Corporate Plan sets out high-level strategic information for Townsville and the surrounding region, much of which is common with functional AMPs, including information about population, growth expectations, social composition, and community engagement.

Council has adopted five key goals:

- **A city that connects you to what you need at the time you choose**
- **A circular economy that advances business and moves towards zero waste**
- **The hub for modern industry**
- **A sustainable destination that embraces and participates in the arts, sports, events, and recreational activities**
- **A leading centre of education, training, and research commercialisation**

### 3.1.2 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 Planning 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 Understanding Community Perspective

Many people directly use and rely on the infrastructure assets in their daily activities. In addition, Council's stakeholders include a wide range of people and groups who, although not using the assets directly, have shared or competing interests in how Council manages these assets. Therefore, understanding community and stakeholder perspective is crucial so that infrastructure assets can be managed effectively.

Council's Community Engagement Strategy recognises the importance of community input in developing and delivering better services. The strategy enhances the involvement of community, community-based agencies, and local business in Council's decision-making processes so that decisions will be more likely to reflect community issues and interest and ensure well-thought-through solutions. Community consultation contributes significantly to the development of Council's AM Policy and the establishment of AM programs and budgets.

Council's initiatives to continuously monitor customer satisfaction and align asset provision with service delivery are:

- Continue to consult with the community through surveys and workshops.
- Monitor responsiveness KPIs and improve work practices as required.
- Monitor reliability KPIs and improve work practices as required.

The need to closely monitor and benchmark the impact of AM improvements on community satisfaction has been identified as an important future initiative.

## 3.3 Asset Management System (AMS)

### 3.3.1 AMS Model

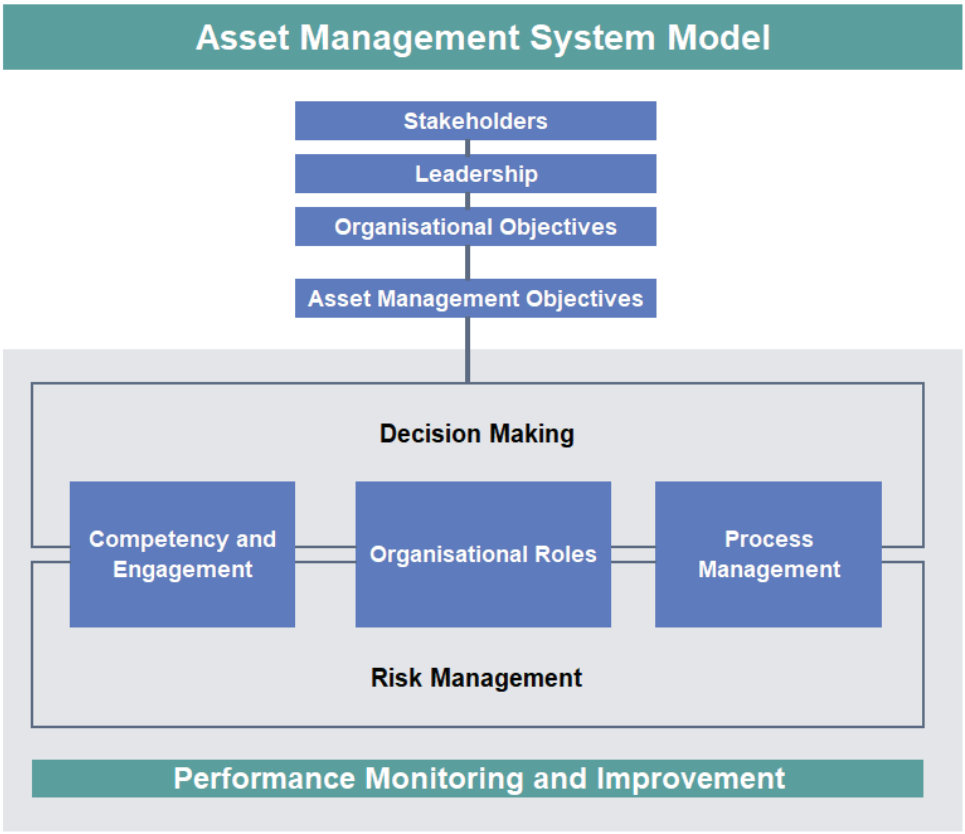



Figure 3-1: Council Asset Management System Model

The purpose of the AMS Model is to articulate the key components of an AMS and how they interrelate. Council's AMS Model aligns with the Asset Management Body of Knowledge (AMBoK) from the Asset Management Council. Council's AMS Model is shown in Figure 3-1.

### 3.3.2 Council Asset Management Policy

Council's AM Policy was developed in accordance with the Administrative Directive for the Development of Council Policies, Associated Procedures and Administrative Directives. This policy is owned and maintained by the Engineering and Asset Infrastructure Planning Section. The CEO, directors, general managers, team managers, and AM staff are responsible for ensuring this policy and associated documents are understood and adhered to by all staff.

The policy states:

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

The management of assets and service will be achieved by:

- developing and maintaining a long-term SAMP and AMPs
- preparing business cases, planning reports and evidence-based prioritisation supporting the introduction of a new service, procurement of a new asset or rehabilitation or renewal of an existing asset
- integrating customer experience, strategy planning, financial affordability, and capital works planning
- maintaining a long-term financial forecast which demonstrates that the full costs of an asset are borne equitably by all users (including future users) of the asset, by using the utility delivered to customers through the method of depreciation and obsolescence

- ensuring that the lowest lifecycle cost of an asset is achieved while maintaining agreed LoS, performances, and an acceptable risk level
- annually prioritising the capital investment plan and reviewing AM strategies and plans
- measuring, monitoring, and reviewing, asset and service management values and performance.

### 3.3.3 Asset Management Framework

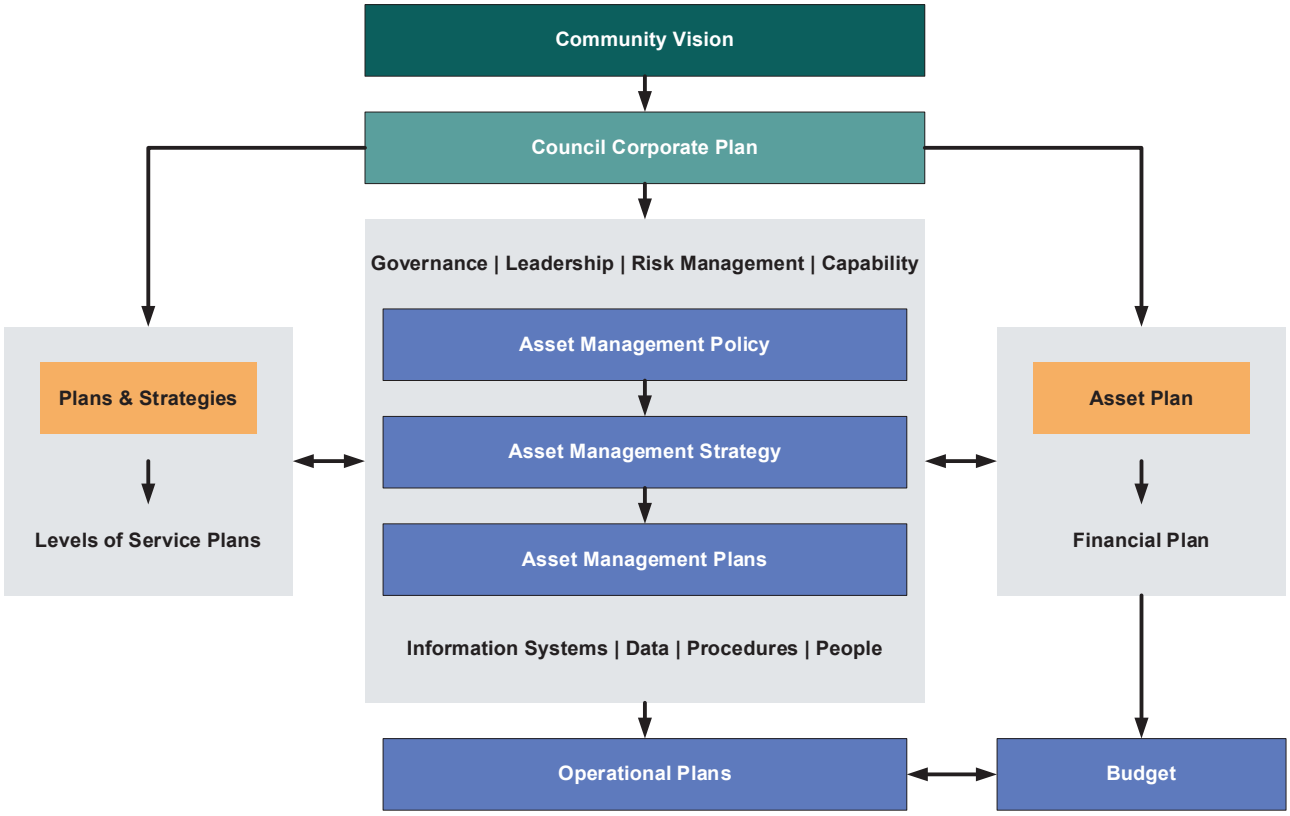



Figure 3-2: Council Asset Management Framework

Council's AM Framework:

- links organisational strategic objectives with the AM Policy and objective
- links organisational strategic objectives with the LoS that the assets should deliver
- guides the AM priorities, the work required on the assets to achieve those objectives and the finances needed to support that work.

In summary, this framework (Figure 3-2) aims to ensure that a systematic approach to AM delivers prudent and efficient outcomes that meet both our corporate and AM objectives.

### 3.3.4 SAMP Alignment

Council's Strategic Planning Framework (Figure 3-3) is the overarching framework used to assist Council and the community to plan for the future. It is a continuous systematic process, which includes how Council engages with the community to identify intended future outcomes and monitor and report on the progress of outcomes.

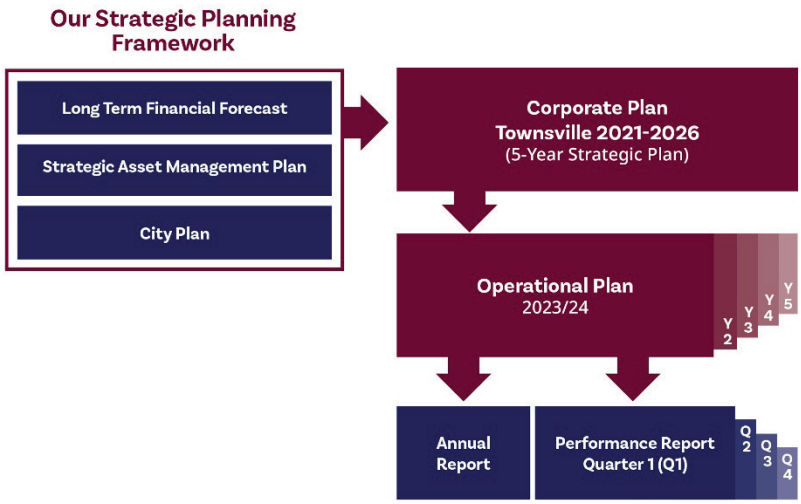



Figure 3-3: Strategic Planning Framework

The SAMP has a pivotal role in the AM document hierarchy. It links organisational objectives to AM objectives, and outlines the high-level, strategic actions that are required to ensure that the AM objectives are achieved. In turn, this ensures that the Council's AM activities are contributing effectively to the achievement of overall organisational objectives. The SAMP also provides guidance for the development of lower-level objectives, and the more detailed AMPs for achieving those lower-level objectives (Figure 3-4).

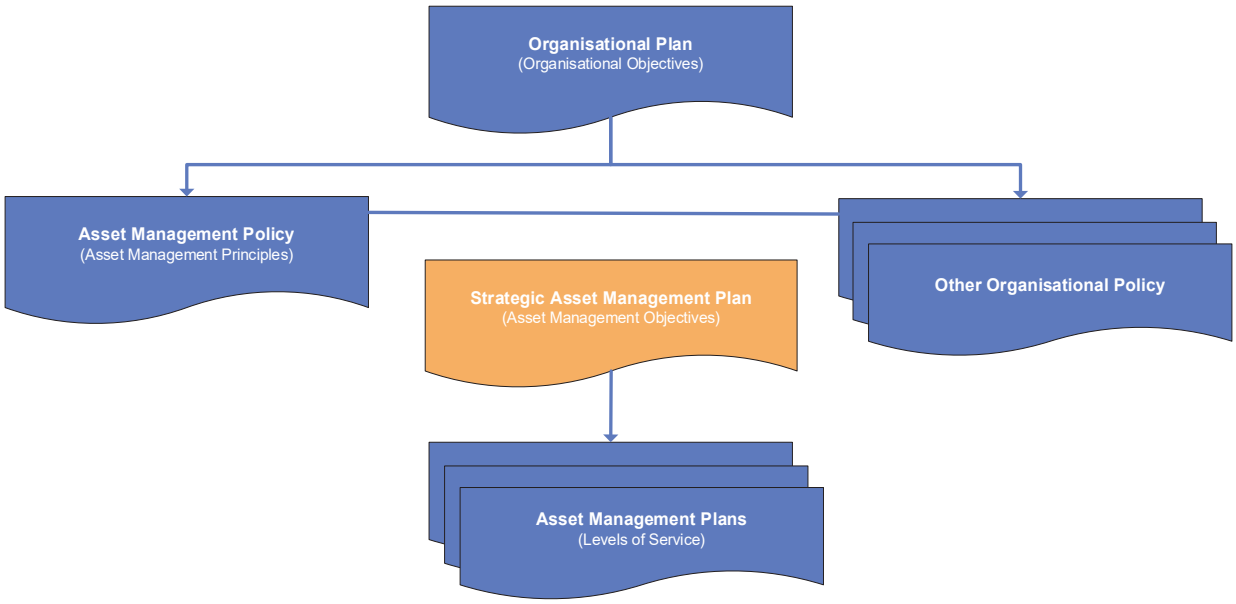



Figure 3-4: SAMP hierarchy in the organisational objective

SAMP aligns to the Council's Strategic Planning Framework and ensures that effective AM practices are in place to optimise service delivery. Various inputs such as the Corporate Plan, legislation and the AM Policy play an important role in forming the SAMP (Figure 3-5). This then becomes one of the key inputs to form the AMPs for various asset classes which are prepared in accordance with the relevant industry standards. Each AMP includes provision for capital, renewal, operational and maintenance works to provide infrastructure meeting community expectations for agreed service standards. The AMPs outline processes and principles used to plan capital, renewal and maintenance works for key assets and to prioritise capital works in the asset class. This information impacts the Council's LTFF and annual budget business plans.

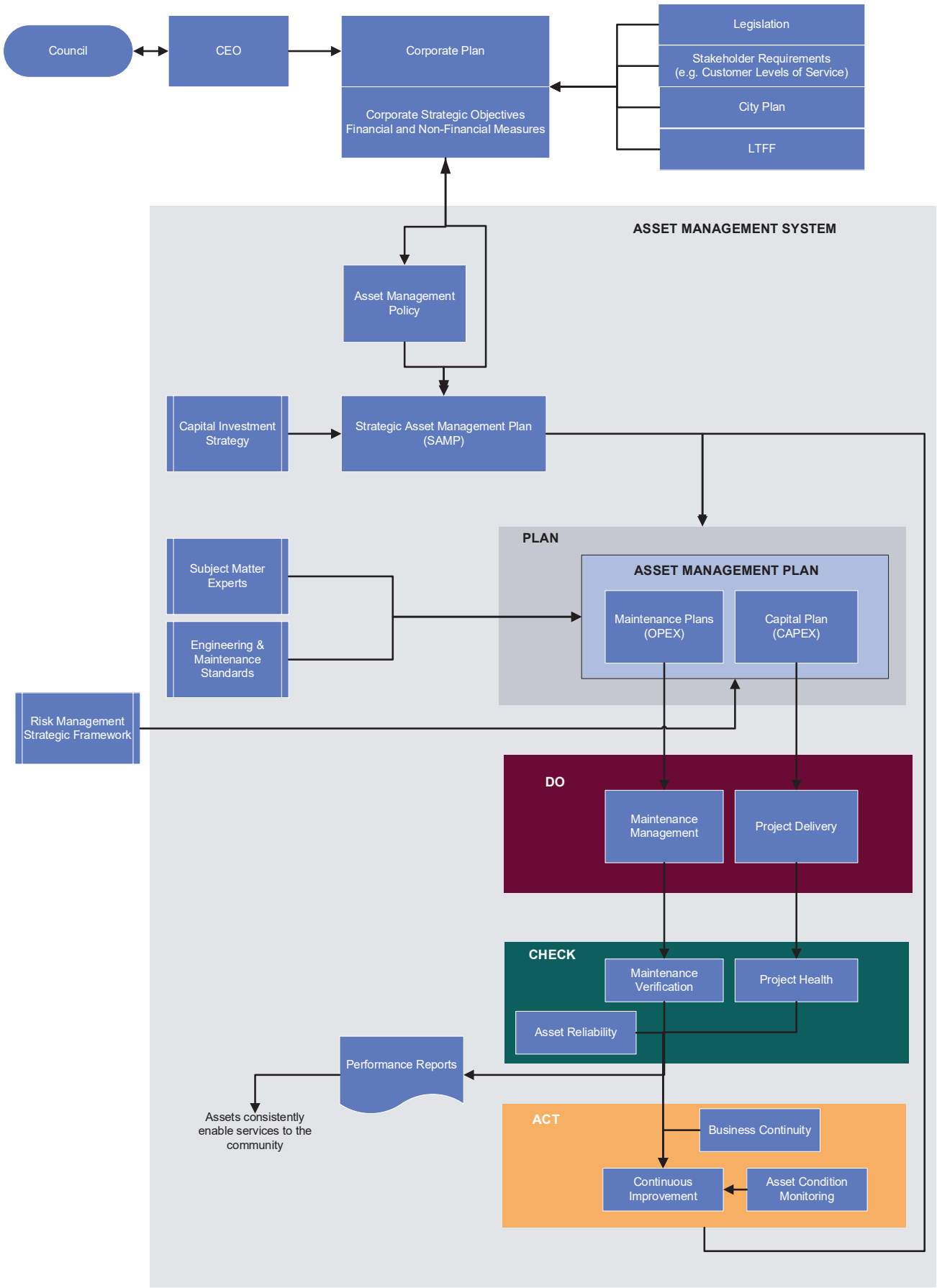



Figure 3-5: SAMP alignment

### 3.3.5 Asset Management System Integration

The AMS is part of a suite of management systems and processes used by Council. Figure 3-6 shows the AMS and its interdependencies on other Council systems.


Figure 3-6: AMS and interdependencies to other Systems

## 3.4 Leadership and Accountability

Council leadership is provided by four main divisions and various committees associated with assets and infrastructure including Planning and Development and Internal Audit. Figure 3-7 shows the organisational structure of the leadership teams of Council.

AM leadership is provided by the AM teams who are responsible for development and implementation of AMS, Policy and Strategy.

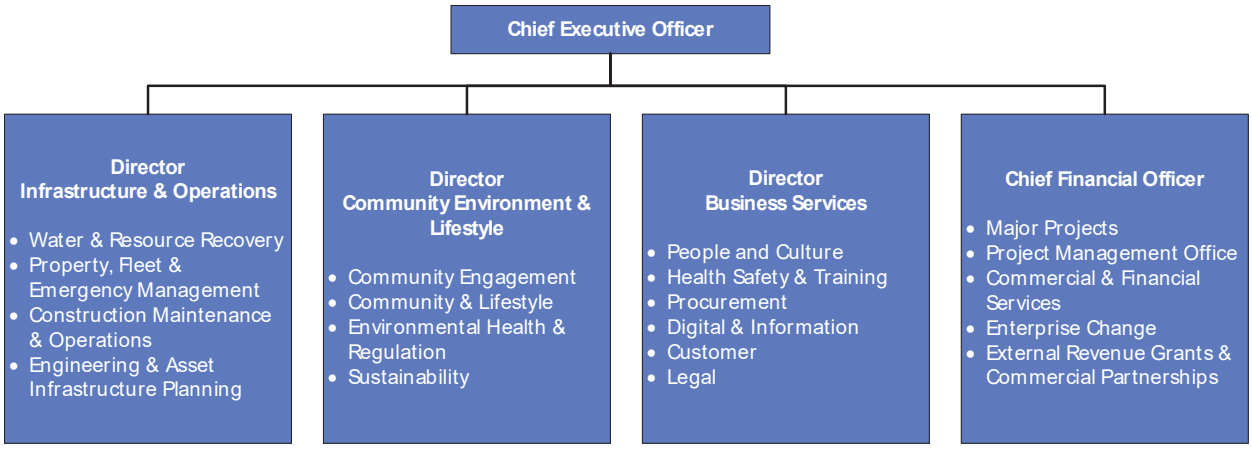



Figure 3-7: Council Organisation

## 3.5 Asset Management Roles and Responsibilities

Council's AM teams sit within the Engineering and Asset Infrastructure Planning section, who are responsible for the custodianship of Council's infrastructure assets. These teams are responsible for the AM Policy, AM Framework, SAMP, asset data and renewal planning in consultation with other teams.

This relationship and the responsibilities of Council staff and Councillors as they relate to AM activities and decision-making is shown in Figure 3-8.

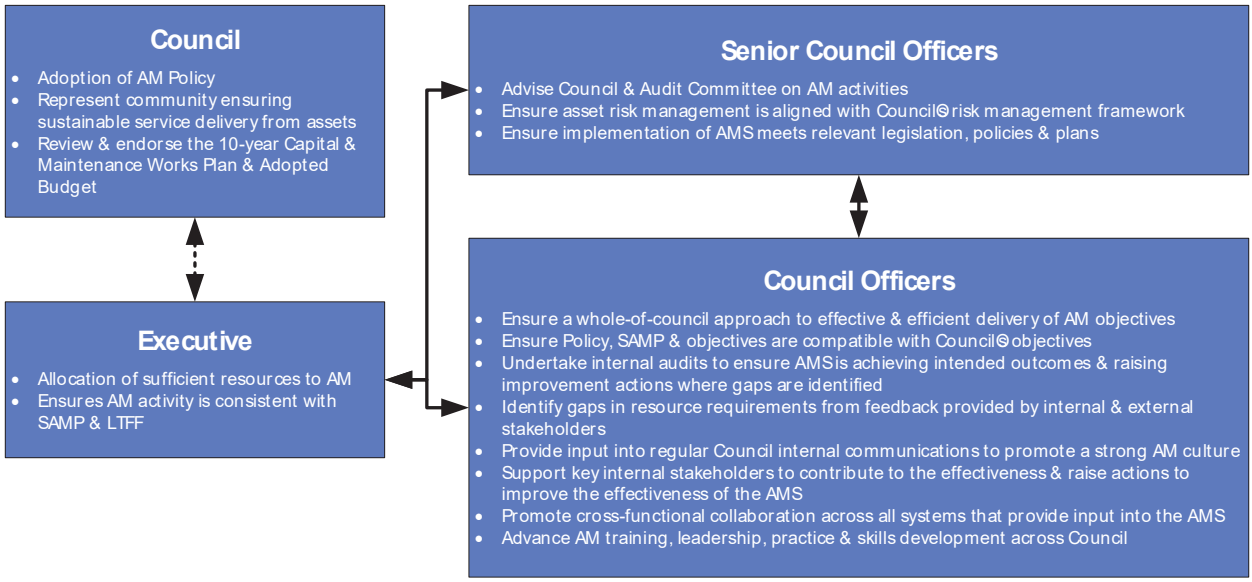



Figure 3-8: AM Roles and Responsibilities

## 3.6 Stakeholders

### 3.6.1 Internal Stakeholders

Specific internal stakeholders of the AMS and their respective roles and responsibilities were outlined in Section 3.5. 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 AM Policy and objectives
- **Senior Council Officers:** Responsible for the development and implementation of the AM and operational plans to deliver the asset outcomes
- **Council Officers:** Responsible for the implementation of the operational plans

Internal stakeholder groups engagement is achieved through a variety of formal and informal communication channels including email, meetings, performance appraisals, workshops, and formal AM training.

### 3.6.2 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 federal government
- the Queensland Government
- financial institutions, insurers, regulatory authorities
- developers
- visitors.

The Department of State Development, 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 Queensland Audit Office and the Queensland Treasury sets out the accountability and reporting requirements.

Regulations governing Council activities are also administered by The Department of Energy and Public Works (through the Planning Act), the Department of Resources and the Department of Environment and Science (through the *Water Act 2000*).

Developers rely on Council to provide guidance and planning approvals that ensure the desired LoS 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.

# 4 Current State

Council owns and manages a diverse asset portfolio, worth in excess of $7 billion. Assets are divided into groups that comprise Transport, Water, Wastewater, Resource Recovery, Buildings and Facilities, Fleet, Stormwater, Open Space, ICT, Coastal, Community and Cultural.

## 4.1 Asset Portfolio Summary

In 2021–22, Council collected 6.4 million bins, diverted 79,370 thousand tonnes from landfill, processed 18,696 megalitres of wastewater, treated 43,545 megalitres of water, serviced 1,830 kilometres of roads and 582 kilometres of footpaths, maintained and enhanced 351 parks. Figure 4-1 summarises the Council asset portfolio as of May 2023.


Figure 4-1: Council asset portfolio summary

The replacement values of commissioned assets covered by this SAMP as of 1 July 2022 are shown below. These figures have been sourced from the CES Asset Book values from asset registers. (Note this value is subject to change and dependent on factors including asset revaluation, renewal, upgrades, disposals and donated assets.).

Table 4-1: Council asset portfolio replacement value

| Asset Portfolio | Replacement Value ($000) |
|---|---|
| Transport | 2,638,204 |
| Water | 1,872,186 |
| Wastewater | 1,301,900 |
| Stormwater | 851,254 |
| Buildings & Facilities | 650,621 |
| Open Spaces | 443,674 |
| Resource Recovery | 95,470 |
| Fleet | 82,755 |
| Information & Communication Technology | 15,908 |
| **Total** | **7,951,972** |

A further breakdown of the assets within each asset class and their renewal value is provided in the individual AMP for that asset class.

### 4.1.1 Performance Monitoring

Asset performance is measured against Key Performance Indicators (KPIs) and relevant targets. Areas of continuous improvement, alignment with stakeholder requirements, and defined responsibility and processes for measurement, recording and reporting are also included where relevant. KPIs for each asset class are identified in the AMPs.

## 4.2 Asset Data

Council collects, maintains, and analyses a large amount of information across its asset portfolios. Council's asset data is stored, managed, and maintained in an Asset Register within TechnologyOne's Enterprise AM Information System.

The Asset Register records available information for the asset class, condition, value, size, and age of individual assets.

Council's enterprise GIS is also utilised in conjunction with the Asset Register. GIS enables mapping, visualisation, spatial analysis and querying of asset data. An example of GIS-based asset visualisation is shown in Figure 4-2: Council's GIS layout.

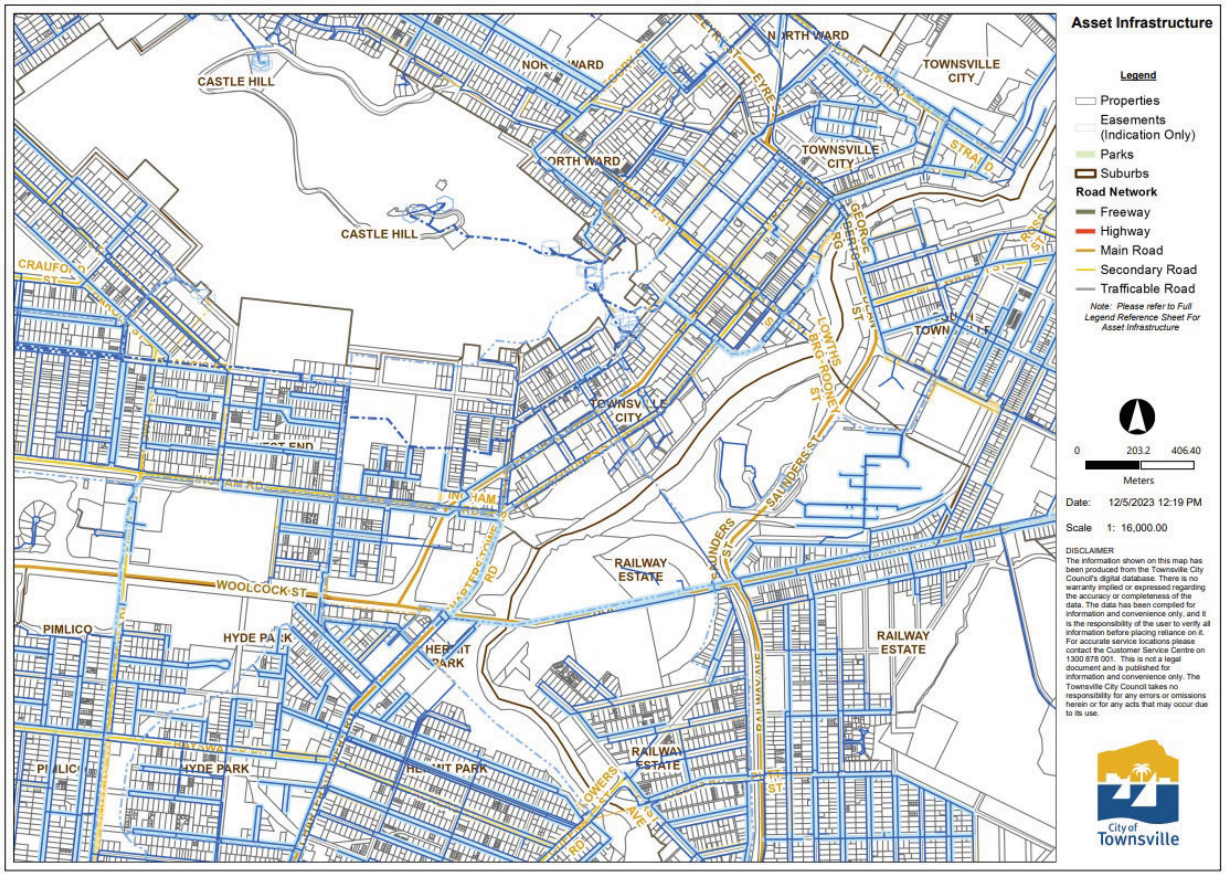



Figure 4-2: Council's GIS layout

The information from the Asset Register and GIS sources are used in multiple AM decision-making and reporting areas including the development of capital programs, long-term forecasting, asset valuation and depreciation, and local government-wide legislated reporting. Council AM decision-making is a combination of "top down" inputs from the policies, strategies, and its AM Policy, and a "bottom up" approach that largely consists of the analysis of available asset and condition data, forecasting and predictive modelling.

## 4.3 Levels of Service (LoS)

The purpose of AM is to realise value from assets and achieve the desired balance of cost, risk, and performance in community service delivery. This manifests in agreed LoS which are described from both a high-level community outcome perspective and a technical perspective.

To understand community stakeholder expectations that are reflected in the AM objectives, Community Sentiment Surveys are undertaken periodically. The surveys are based on a Council-developed methodology to ensure consistency of results and to reflect changes in community expectations that are tracked over time. In addition to the community survey, the community can interact with Council through various channels such as our Customer Experience Teams, The Office of the Mayor and Divisional Councillors, Council's public website, the Have Your Say Townsville Platform and various social media platforms.

Council is reviewing the Service Standards to establish the LoS that will provide consistent and quality service to the community.

### 4.3.1 LoS Framework

Council's Service Management Plan provides a framework for defining LoS as shown in Figure 4-3.

<table>
<tr><td rowspan="2">CORPORATE PLAN</td><td rowspan="2">SERVICE STRATEGY</td><td colspan="7">SERVICE MANAGEMENT - ASSET DEMAND STATEMENT</td><td colspan="4" rowspan="2">OPERATIONAL PLAN</td><td rowspan="2">ANNUAL REPORT</td></tr>
<tr></tr>
<tr><td rowspan="6">Vision / Mission</td><td rowspan="6">Service Description</td><td colspan="2">Service Standards</td><td colspan="5">Service Targets</td><td rowspan="6">Resource Plan</td><td rowspan="6">Procedure Manuals</td><td rowspan="6">Service Costs</td><td rowspan="6">Productivity Reviews</td><td rowspan="6">Performance Reports</td></tr>
<tr><td>Customer</td><td>Technical</td><td>Customer</td><td>Technical</td><td>Normal Program</td><td>Required Intervention Criteria</td><td>Response Time</td></tr>
<tr><td>Design</td><td>Design</td><td colspan="5" rowspan="3">Targets dependent on asset type.</td></tr>
<tr><td>Presentation / Amenity</td><td>Presentation / Amenity</td></tr>
<tr><td>Utilisation / Performance</td><td>Utilisation / Performance</td></tr>
<tr><td colspan="7">LONG TERM FINANCIAL FORECAST</td></tr>
<tr><td colspan="2">Capital Budget</td><td colspan="5">Operational Budget</td></tr>
</table>

Figure 4-3: LoS Framework

# 5 Strategic AM objectives

The strategic AM objectives, at an organisational level, are created to deliver the community services and the needs of the community Figure 5-1. These objectives were established to reflect the Corporate Plan where Council commits to delivering quality services to facilitate sustainable growth through inspired leadership, community engagement and sound financial management. Council is governed by the principles of sustainable development and management of assets and infrastructure and delivery of effective services, as embodied in the Local Government Act. These requirements are addressed in each of the individual AMPs, as these plans deliver the AM objectives within the budgets and with the resources available, and ensure that appropriate LoS are achieved.

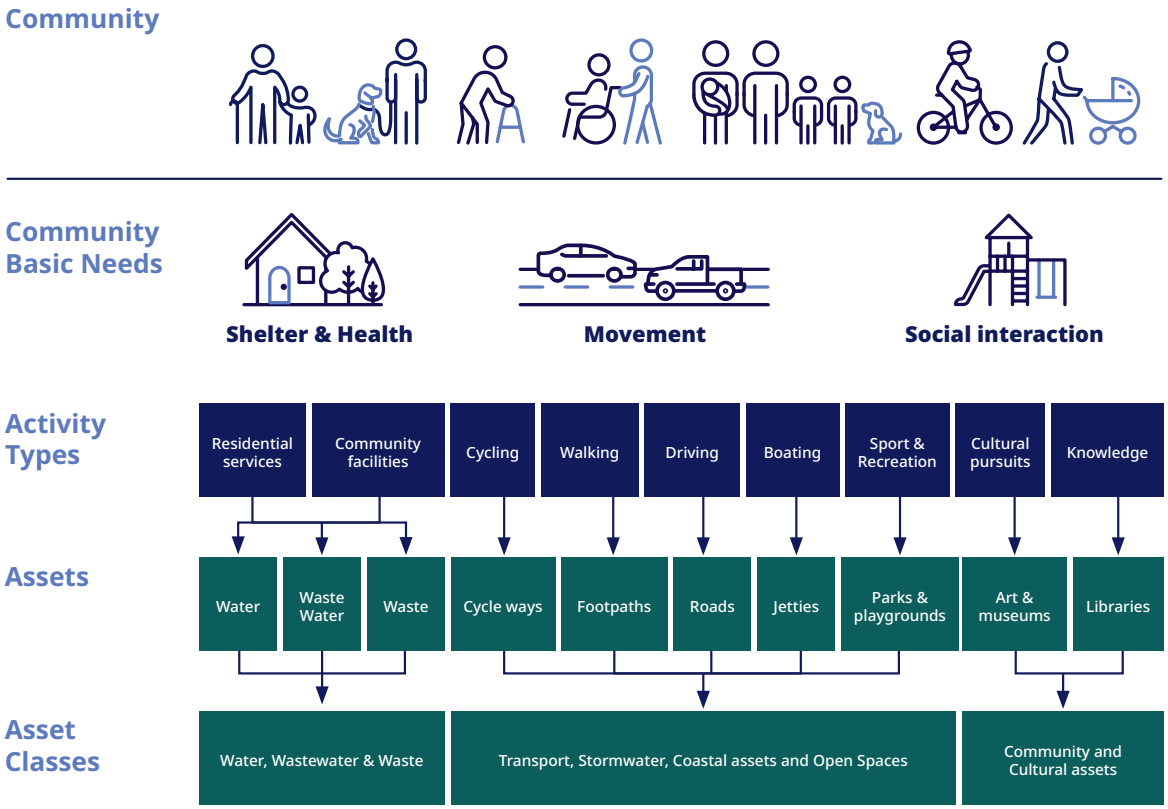



Figure 5-1: Services provided to the Community

AM objectives define the purpose of an AMS. Council has strategic AM objectives as follows:

- Integrated long-term planning 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
- Life cycle financial sustainability to build a stronger and resilient city economy
- Risk and evidence-based decision-making to promote AM principles in our long-term planning
- Community and place-based LoS to identify the future demands of infrastructure, ensuring that infrastructure assets continue to support service delivery in a sustainable and resilient manner
- Continuous systems improvement to consolidate core maturity in AM practices
- Constructive and accountable culture in all AM activities
- Sustainability and Climate Resilience to implement best practice whole of life-cycle AM.

These objectives are further broken down into performance measures that provide a means for determining achievement:

- individual AMPs
- Strategic Service Management Plan 2015-2020.

These performance measures would evolve as Council's thinking about strategic performance management matures. These measures will be amended in future iterations of the SAMP.

## 5.1 Reviewing the Strategic 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 sustainable development and management of assets, infrastructure planning and delivery of effective services, as embodied in the Local Government Act.

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 LoS are achieved.

## 5.2 Impact of External and Internal Factors

Council takes into consideration the following external and internal factors which influence the strategic AM planning and objectives.

### 5.2.1 External

- **Legislative and Regulatory Environment:** Legislation may explicitly require AM plans, practices or systems to be best met by adopting AM principles. This in turn may inform minimum requirements for AM service levels and customer requirements and thus the LoS.
- **Commercial Environment:** Council arrangements and funding mechanisms may affect the scope of AM and its focus within Council. Customer pricing and charges and Council's affordability limits are also other key components.
- **Economic Environment:** The economy, internal economic efficiency, and resource availability.
- **Social Environment:** Societal benefits and balancing benefits and impacts for the community.
- **Natural Environment:** Limiting adverse impacts on the environment such as climate change.

### 5.2.2 Internal

- **Corporate Direction:** As defined in the Corporate goals and plan.
- **Business Frameworks:** These include Risk Management Framework, commitment to AM and change management culture.
- **Financial and Funding Strategies:** These include application of financial management principles, funding constraints and consideration of asset lifecycle costs.

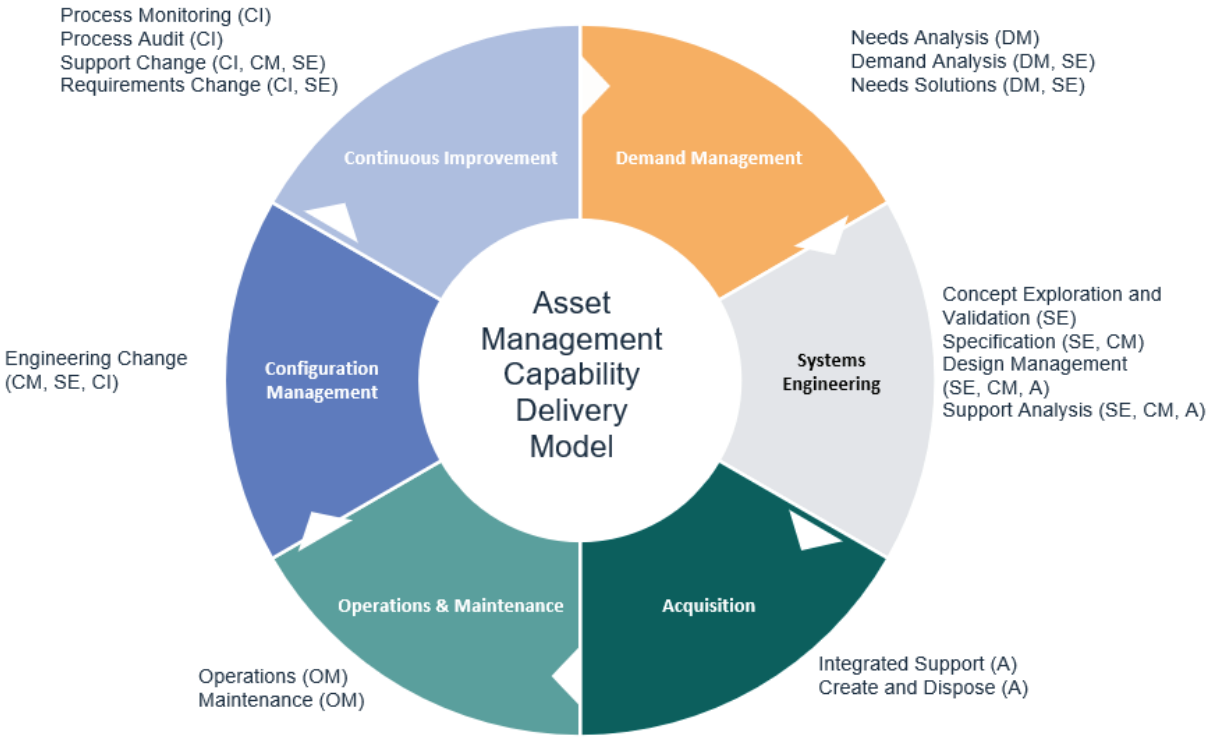
The above factors influence how AM is conducted to meet the demands of rapidly changing societal, political, legislative, and business environments.

## 5.3 Asset Management Capability Delivery Model

The Capability Delivery Model is used to drive the AM objectives. The key outcomes of Council's AM Capability Delivery Model are:

- taking a life cycle approach to managing assets
- developing a cost-effective management strategy for the long-term
- providing a defined LoS 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 AM processes and practices.

This focus has been mapped in Figure 5-2.




**DM** - Demand Management **SE** - Systems Engineering **A** - Acquisition **OM** - Operations and Maintenance **CM** - Configuration Management **CI** - Continuous Improvement

Figure 5-2: Asset management capability delivery model

## 5.4 Asset Management Plans

AMPs for each asset class have been prepared in accordance with the above capability delivery model and 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 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 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**
  - **LoS** – defining the quality of the service to be delivered by the asset
  - **Future demand** – how the desired quality of service will impact 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.
- **Operational and maintenance works** – operations and maintenance investment.
- **Configuration Management** – how risk is managed.
- **Continuous Improvement** – improvements required to provide the agreed service levels.

The information linkages to the AMPs include:

- 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 forecast, strategic business plan, annual budget and departmental business plans and budgets.

## 5.5 Demand Management

AMPs describe the drivers affecting the future demand of each asset class. The analysis of external drivers that impact the demand shows the types of assets needed to provide the required service and the increase of capacity or performance of the existing assets. New or amended legislative requirements are integrated periodically to maintain the service levels of the existing assets or upgrade/renew the assets to meet the new demand. The key drivers affecting the future demand are:

- regulation
- population growth
- economic factors
- community preferences and expectations
- technological changes
- climate change.

### 5.5.1 Demand Management Planning

Council meets the demand for new services through a combination of managing existing assets, upgrading existing assets and acquiring new assets. This also includes non-asset solutions, insuring against risks and managing failures.

Public consultation and measurement of current service levels are crucial for Council's demand management planning. Through the continuous monitoring of service levels, Council addresses any service deficiencies that arise as a result of the activities of its operational and rationalisation program of works.

# 6 Asset Management Planning Approach

Proactive and well-considered planning is essential to the delivery of safe, reliable, and cost-effective services to the community. Best practice standards recommend that asset planning occurs within the framework of an AMS (Figure 3-1).

## 6.1 Planning Approach

Sustainable management of Council infrastructure assets requires managing the assets' whole of lifecycle. The tools used to manage this include demand and growth forecasts, LoS, risk and condition management, and environmental, social and governance management. Key drivers in this approach are outlined in Figure 6-1. Council's approach to AM planning also ensures that correct operational and financial decisions are made for the delivery of sustainable services, reducing the asset risk exposure to an acceptable level, and achieving financial sustainability. Council's AM Policy also advocates this approach.

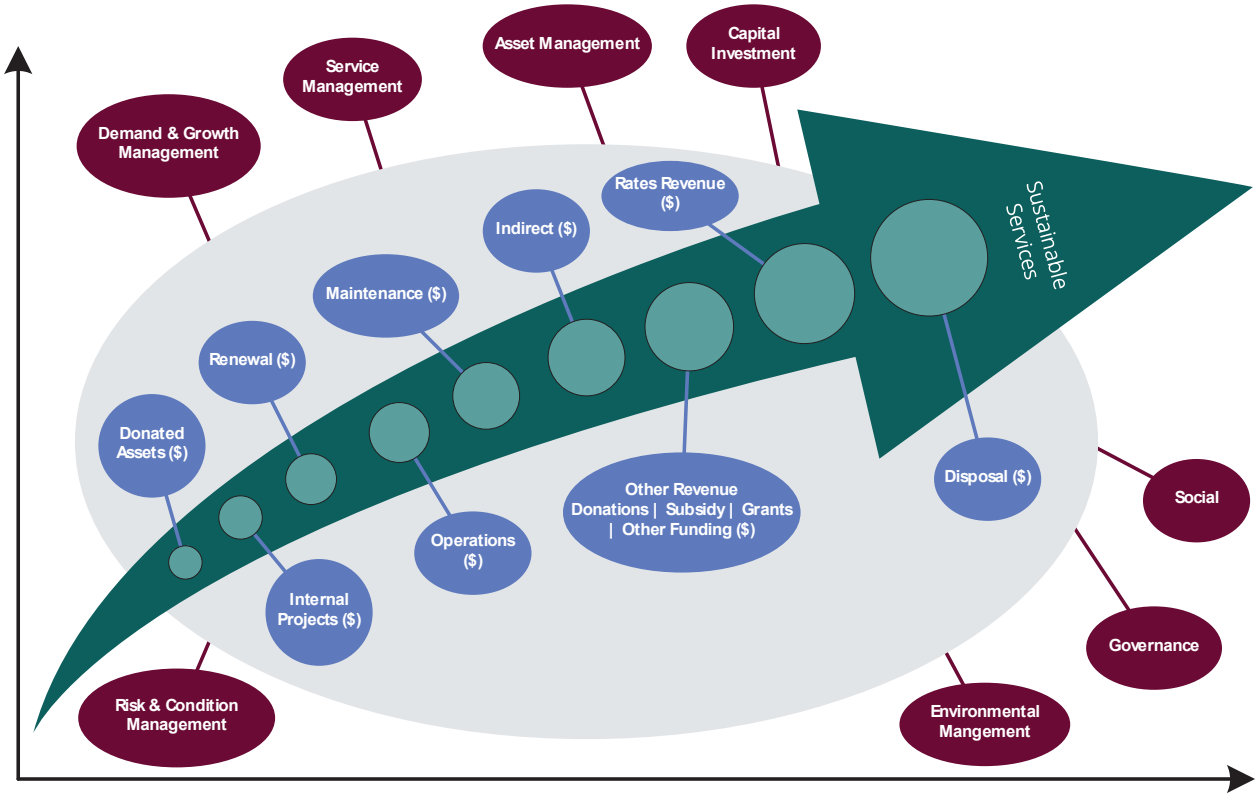



Figure 6-1: Asset Management Driver

## 6.2 Capital Investment Strategy

Council assets are largely selected for renewal based on their condition rating and reports from maintenance staff or community feedback. An internal three-year forward work plan is created for capital investment to enable future works to be aligned with identified strategic priorities. This enables works to be brought forward or pushed back over a three-year planning horizon to achieve alignment and synergy with other planned capital projects, thus maximising efficiency and minimising disruption to the community.

Asset investment strategies are specific to each asset class and are described in each AMP. The capital works within all asset classes are prioritised in accordance with the Corporate Risk Matrix. The renewals and rehabilitations of existing assets or the creation of new assets in the capital works program depends on optimising the relationship between performance, cost, and risk.

The new operational requirements and process impact AM objectives, regulatory reporting, asset inspections and new training requirements in terms of capital works delivery projects. When the impacts on operational requirements and resource levels are understood, operational requirements are translated into budget impacts to be allowed for within the annual operational plan. Further, delivery of capital works projects impacts the

maintenance programs, including development and implementation of new maintenance regimes. The impact of these issues in terms of labour and materials costs are assessed and translated into budget impacts to be allowed for within the annual operational plan.

## 6.3 Decision-Making Criteria

Asset investment decision-making needs to balance competing demands for limited funds. Council considers the following factors to decide investment priorities:

- meeting legislated requirements
- managing safety and risk
- financial sustainability and alignment with the LTFF
- alignment with the Strategic Plan
- maintaining agreed LoS for existing and contributed assets
- delivering increased LoS / new assets.

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 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.

## 6.4 Maintenance Strategy

The maintenance strategy for each asset class is outlined in its own AMP and the objectives of each strategy are developed based on the following:

- Assets are maintained to perform at optimum levels during their life cycle, reducing service disruptions, and breach and/or loss of licences due to failure.
- Critical areas and risks are identified and managed.
- The cost of maintaining assets over their life cycle is quantified.
- Information is gathered to assist future decision-making and budgeting.

The strategy recognises that all assets do not need to be maintained to the same standards. The appropriate standard, condition auditing and frequency of servicing/maintenance are determined through assessing criticality (in conjunction with the risk assessment framework) and utilisation.

Maintenance programs and plans are continuously being developed for maintainable assets and aligned with the business planning and service delivery requirements of each asset class. Maintenance must be managed to ensure the most efficient and effective expenditure of limited resources to optimise life-cycle costs of assets.

Maintenance strategies are broken down into the following classifications:

- **Preventative Maintenance** - This type of approach provides the most basic maintenance service available by undertaking regular servicing of maintainable assets that allows all assets to function as per the manufacturer's recommendations. Preventative maintenance schedules are developed by following guidelines given by the manufacturer or standards. These guidelines cover the type of inspection or condition monitoring that is required so that the assets do not run to failure.
- **Corrective Maintenance** - This approach provides the maximisation of the effectiveness of all critical maintainable assets through the elimination of breakdowns, and the reduction of the deviations from optimum operating conditions.
- **Reactive Maintenance** - This describes the strategy for repairing equipment malfunctions or breakdowns after the failure occurs, to restore equipment or machinery to normal working conditions.

Maintenance management information is captured within the Asset Register. This is the key tool in strategically planning maintenance, backlog identification, budgeting, and day-to-day maintenance activities. Reliability Centred Maintenance (RCM) is practised and the actual asset condition is compared against the desired

maintenance standard on a regular basis, or in the case of legislation, the required maintenance frequency. Tools such as Failure Mode, Effects and Criticality Analysis (FMECA), Failure Mode Effect Analysis (FMEA), Root Cause Analysis (RCA) and Life Cycle Approach are used where appropriate as part of a maintenance verification strategy.

## 6.5 Asset Condition Assessment

Assets need to be managed in a way that ensures they do not deteriorate to a point where they are prone to failure or are no longer able to provide the minimum required LoS.

Council undertakes asset condition rating of its key assets to determine their remaining useful life and to prioritise future operational and capital works (Table 6-1). By undertaking regular inspections, Council is also able to understand at what rate assets are deteriorating and is then able to monitor the effectiveness of maintenance and renewal activities in reaching the expected useful life of assets.

Table 6-1 Asset condition gradings

| Asset Condition Rating | Summary Definitions |
|---|---|
| 1 – "Excellent" | Asset has no defects; condition and appearance are as new. Only planned maintenance required. |
| 2 – "Good" | The asset exhibits superficial wear and tear, minor defects, minor signs of deterioration, but does not require major maintenance; no major defects exist. Minor maintenance required plus planned maintenance. |
| 3 – "Fair" | The asset is in average condition; deteriorated elements require attention; services are functional but require attention. Significant maintenance required. |
| 4 – "Poor" | The asset has deteriorated badly; serious structural problems; general appearance is poor; elements are defective; services are frequently failing; and a significant number of major defects exist. Significant renewal / rehabilitation required. |
| 5 – "Very poor" | The asset has failed, or it is expected to fail in the immediate future; may not be operational / is unfit for normal use, physically unsound and/or beyond rehabilitation. |

The asset condition assessments are unique and different for each asset class and categorised in their respective AMPs.

## 6.6 Risk Management

Council has adopted an Enterprise-Wide Risk Management Policy to manage business, project and operational activities and decisions. The Strategic Enterprise-Wide Risk Management Framework is the means through which these are coordinated. Risk is proactively managed in accordance with ISO 31000:2018 Risk Management Guidelines and related standards such as Compliance Programs (AS 3806:2006) and Compliance Management Systems – Guideline.

Council's Strategic Enterprise-Wide Risk Management Framework includes commentary on its risk appetite, acknowledging that risk-based decision-making to support the achievement of strategic objectives should be tailored to each major risk type. Council has set specific risk parameters against major functions/risk categories to operate within tolerable ranges. The Councillors and Council senior management established Council's acceptable risk levels. These were determined with the guidance of the Risk Appetite Statement (RAS) and the cost of treating the risk weighed against the opportunity for creating or protecting value. General managers, with the help of risk champions, are responsible for providing updates monthly or as required and monitoring the tolerance level in PerformancePLUS. A progress update report is provided to the Audit & Risk Committee quarterly.

Council-wide strategic and operational risk assessments are managed by the Legal Services section through a risk register with responsible risk owners across the organisation. The AM teams continue to assess risk for any decision proposals relating to Council's assets and any new and emerging risks are monitored.

To enable Council's strategic asset risk to be identified, documented, recorded, and compared on a consistent basis, Council identifies potential risks associated with providing services from different asset classes based on

"what can happen, where and when" for each potential event, followed up with identifying possible "why and how can it happen" for each risk event. Council considers all risks identified as requiring further treatment in the context of the treatment options available, weighing the cost of implementing each option against the potential benefits. In some cases, a cost-benefit analysis is performed to assist in the selection process.

The risk treatment plans for each asset class are clearly identified and ranked in priority in the particular AMP. The implementation of risk treatment plans provide a measure of the extent to which the risk treatments have been incorporated into all asset classes in terms of their overall performance management, measurement and reporting activities.

## 6.7 Asset Disposal Strategy

Council is committed to ensuring that disposal of assets is carried out in accordance with the relevant probity and accountability obligations prescribed in legislation and to meet all its statutory obligations. All Council disposals comply with the five Sound Contracting Principles detailed in Chapter 4, section 104(3) of the Local Government Act. These principles are:

- Value for money
- Open and effective competition
- Development of competitive local business and industry
- Environmental protection
- Ethical behaviour and fair dealing.

Asset Disposal Manuals for all the asset classes are currently being developed.

# 7 Asset Investment

Council follows the financial sustainability terms stated in section 104(2) of the Local Government Act which states that "A Local Government is financially sustainable if the Local Government is able to maintain its financial capital and infrastructure capital over the long term". The importance of AM to the financial sustainability of the Council is reinforced by the Local Government Act.

Each year, Council spends a significant proportion of its budget renewing the existing assets and acquiring new assets. The purpose of AM is to provide effective management and control of infrastructure assets to achieve the desired balance of cost, risk, and performance in community service delivery.

## 7.1 Funding Strategies

The funding strategy to provide the services covered by this SAMP and supporting AMPs is contained within the organisation's 10-year LTFF. Current funding strategies include:

- allocating budgets on a year-by-year basis as required by assets needing renewal in that year, including the deferral of renewal when there are insufficient funds available
- allocating an additional flat amount each year in anticipation of future renewal obligations.

## 7.2 Financial Approval Process

The annual funding approval process is implemented in a number of steps as outlined in Figure 7-1.

- The 10-year capital plan is developed with input from the assets, finance and service provider groups while taking the LTFF into account.
- The draft optimised program is forwarded to the Council Executive Leadership Team (ELT) for further refinement and approval.
- Following Council ELT approval, the program is workshopped with the Councillors and any changes are incorporated and adopted by Council.
- The adopted budgets are established as projects within the financial management system.
- The LTFF is updated to account for the adopted annual works program.

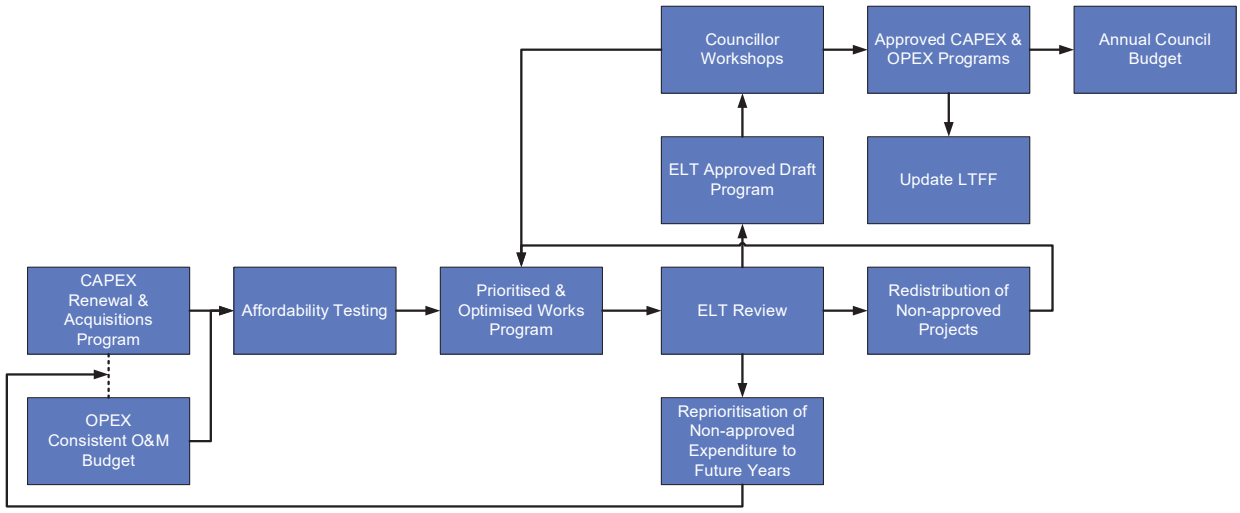



Figure 7-1: Funding Approval Process

## 7.3 Valuation Forecasts

In accordance with AASB116 Property Plant and Equipment, all non-current physical assets measured at fair value must be comprehensively revalued by a suitably qualified person at least once every five years. Where indicators exist that the asset class has experienced a significant and volatile change in value since the last reporting period, all assets in that class should be considered for specific appraisal, if practicable.

It is the responsibility of the General Manager Commercial and Financial Services and General Manager Engineering and Asset Infrastructure Planning to coordinate asset revaluations in line with the Queensland Audit

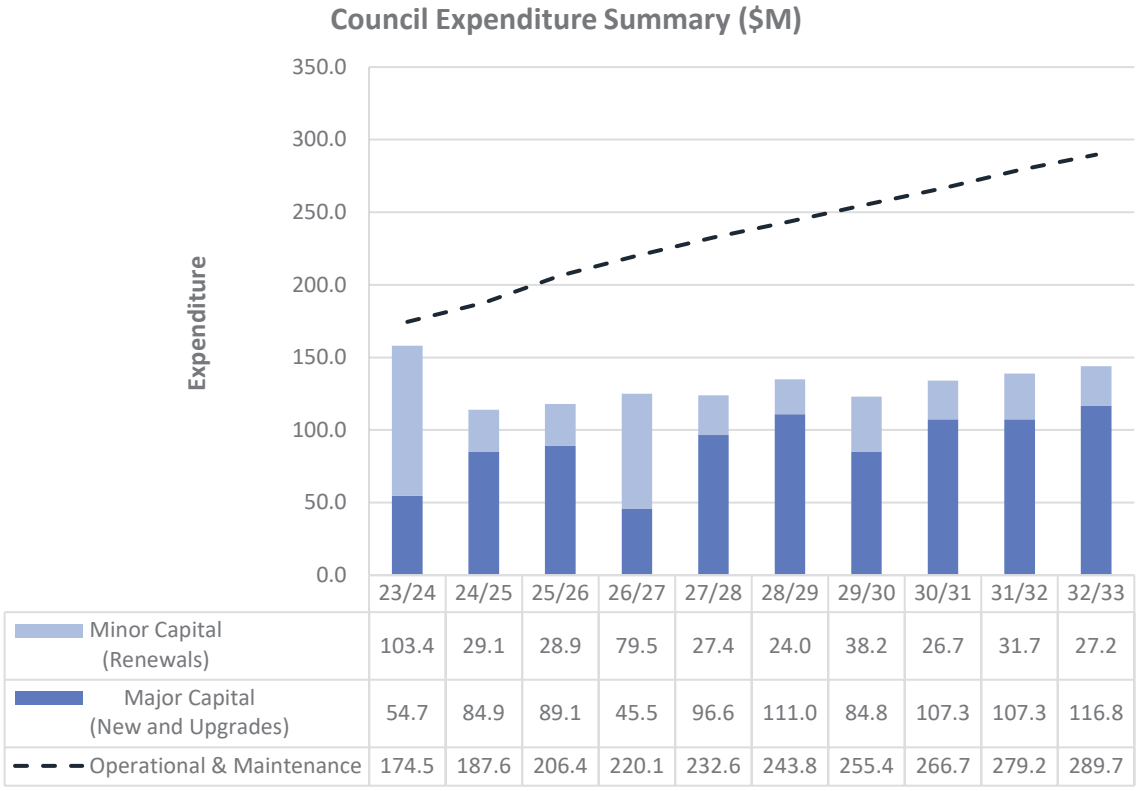
Office requirements. Council carries out the revaluation of the infrastructure assets at different intervals for different asset classes.

It is the responsibility of the General Manager Commercial and Financial Services and General Manager Engineering and Asset Infrastructure Planning to determine, in line with Queensland Audit Office requirements, that the carrying values for large asset classes do not materially differ from the fair value as at that financial year's reporting date. This includes material change in an asset's condition and useful life.

Council acknowledges fully depreciated assets can still be in use. This provides an indication that Council's applied depreciation does not reflect the pattern in which the asset's future economic benefits are being consumed. In accordance with Queensland Government guidelines, Council does not re-life assets and credit depreciation but holds the asset at nil written down value.

## 7.4 Annual Expenditure

Over the next 10 years, estimated annual expenditure on Council's asset portfolio ranges between $408 million and $429 million. The graph in Figure 7-2 shows the estimated capital, operational and maintenance costs for next 10 years for all the Council asset portfolios.




| | 23/24 | 24/25 | 25/26 | 26/27 | 27/28 | 28/29 | 29/30 | 30/31 | 31/32 | 32/33 |
|---|---|---|---|---|---|---|---|---|---|---|
| Minor Capital (Renewals) | 103.4 | 29.1 | 28.9 | 79.5 | 27.4 | 24.0 | 38.2 | 26.7 | 31.7 | 27.2 |
| Major Capital (New and Upgrades) | 54.7 | 84.9 | 89.1 | 45.5 | 96.6 | 111.0 | 84.8 | 107.3 | 107.3 | 116.8 |
| Operational & Maintenance | 174.5 | 187.6 | 206.4 | 220.1 | 232.6 | 243.8 | 255.4 | 266.7 | 279.2 | 289.7 |

Figure 7-2: Council Annual Asset Expenditure Forecast (10 years)

# 8 Evaluation

Performance and efficiency of the AMS must be monitored, measured, analysed, evaluated and auditable. This evaluation identifies:

- external and internal issues that are relevant to the AMS
- AM performance nonconformities
- opportunities for continual improvement
- changes in the risk profile.

## 8.1 Performance Monitoring

Performance management is carried out for each asset class on an ongoing basis. The objectives of performance management include:

- undertaking systematic gap analysis
- continuously improving AM activities and practices towards an advanced level where applicable
- achieving financial sustainability
- maintaining legislative compliance against the Local Government Act, specifically sections 104(5) and 105.

## 8.2 Continuous Improvement

Council has adopted a continuous improvement approach that establishes and nurtures a 'whole-of-organisation' culture focused on best practice in AM.

**Asset Management Maturity**

An AM maturity assessment is currently underway. This is intended to determine the current state of Council AMS for all asset portfolios with respect to the requirements of ISO55001:2014. It is also intended to fully realise the potential of the organisation in managing its assets for all asset portfolios and to develop a roadmap, including prioritised actions to maximise the effectiveness of the current AMS.

**Lifecycle Management Plan**

Council is currently developing an asset lifecycle framework to maximise the usable life of assets through planning, purchasing, utilising, maintaining, and disposing of assets. The main aim of asset life cycle management is to reduce costs and increase productivity.

**AM Plan**

The current AMPs for various asset classes are classed as "core" plans and are based on the estimated life cycle of assets. Condition monitoring of the assets can move the AMPs towards the "advanced" state that can be effectively utilised for capital planning. During the development of these AMPs, various gaps in information and planning would be identified and detailed in these plans. During future revision of these plans, these gaps will be addressed to ensure the improvement of these plans.

**Capital Works Planning**

Formal decision-making and corporate risk-based prioritisation techniques are applied to all operational and capital asset programs within each main budget category.

**Data management/ improvement**

To prepare detailed AMPs for the asset classes, Council will continually improve the quality of data that informs AM decision-making. Council is currently exploring alternatives to its current Enterprise AM Information System. The intention is that all current business functions and processes are integrated, communicated, and available to streamline work process and decision-making.

**Other**

The other areas of continuous improvement are summarised below:

| | |
|---|---|
| Alignment of individual AMPs to this SAMP using the AM Capability Delivery Model | Review, development, and implementation of maintenance strategies for all asset classes |
| Review, development, and implementation of LoS for all asset classes | Develop and implement lifecycle cost AM modelling |

## 8.3 SAMP review

Although the SAMP is a medium to long-term document, it will be reviewed yearly to ensure that it contains current asset portfolio and condition data, risks and mitigations are current, and continuous improvement initiatives are up to date. To provide a rolling 10-year financial forecast of infrastructure and AM investment requirements, this review is performed along with the LTFF and Budget. The review period for AMPs is set to a maximum of five years with annual minor review as detailed in Figure 8-1.

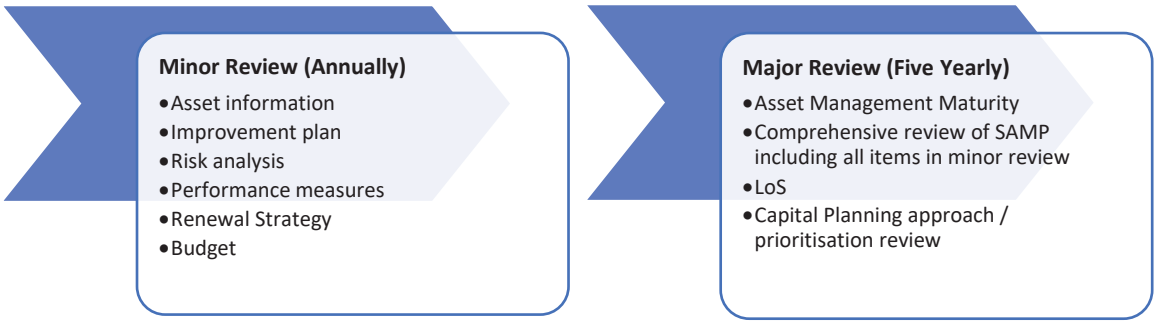



Figure 8-1: Planning Horizon of SAMP

# 9 Document Control

| | |
|---|---|
| **Document Status** | Final |
| **Prepared by** | Asset Strategy and Compliance |
| **Document Custodian** | General Manager – Engineering and Asset Infrastructure Planning |
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| **Issue Date** | 07/06/2023 |
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| **Endorsed by** | Full Council |


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