THE RURAL CITY OF MURRAY BRIDGE

DRAFT ASSET MANAGEMENT PORTFOLIO PLAN 2024 - 2034

THE RURAL CITY OF MURRAY BRIDGE

We acknowledge the Ngarrindjeri people as the traditional owners of this land on which we meet and work. We respect and acknowledge their spiritual connection as the custodians of this land and that their cultural heritage beliefs are still important to the living people today.

We recognise the living culture and combined energies of the Ngarrindjeri people, our global pioneers and community members today for their unique contribution to the life of our region.

CONTENTS

About this Plan

The Asset Management Portfolio Plan (AMPP) is a strategic document that supports Council to effectively manage and care for its community assets like roads, open space, buildings and water systems. Having a plan ensures that these assets are managed sustainably to meet the community's current and future needs.

The AMPP includes an overview of our:

- Assets and how we intend to manage them over the next 10 years
- Operating context and internal/external drivers
- Asset Management Framework including policy, commitments and accountabilities
- Assessment of our asset management performance including an Improvement Plan
- Framework to manage our asset risks,including managing the vulnerability of our assets to the impacts of climate change

Individual Asset Management Plans (AMP) have been developed for the following asset categories: Buildings, Civil and Transport, Open Space, Stormwater, and Water Supply and Wastewater. The AMPs include data on asset maintenance, renewals, acquisitions and levels of service supported by 10 year projections in line with Council's Long Term Financial Plan.

More analysis is required to finalise an AMP for Plant and Fleet assets to ensure service delivery aligns with our needs as a growing Council. While an AMP is not included, the Plant and Fleet asset category is referred to throughout the front end of the plan at a high level in context of the overall asset portfolio.

The AMPP complies with the requirements of Section 122 of the *Local Government Act 1999*, which states that a council must develop and adopt plans for the management of its area, to be called collectively the strategic management plans.

The development of the plan is underpinned by the principles of best practice infrastructure asset management which includes:

- International Standard for Asset Management (ISO 55000 series)
- International Infrastructure Management Manual (IIMM), IPWEA

Message from the Mayor

The Rural City of Murray Bridge is a place where you can live well and thrive.

Set to become South Australia's second city, Council is actively preparing for growth to support our current and future residents to have access to the services and opportunities that a growing community brings.

A vital part of Council's strategy is ensuring our communities have well-planned and maintained infrastructure to support them day to day – from the roads we travel on, the sportsgrounds we play on to the community facilities we visit – they all contribute to the enjoyment of life across our rural city.

The Asset Management Portfolio Plan is our roadmap for effectively managing the important community assets we all rely on. Responsible for an asset portfolio with a replacement value of $565M, this plan positions Council to address the challenges and opportunities of growth, community expectations, environmental pressures and financial constraints in a sustainable and balanced way.

Central to this plan is ensuring we're meeting our community's needs and providing them fit for purpose, reliable and accessible infrastructure assets now and for generations to come.

We look forward to implementing this plan with the support and involvement of Council Members, staff and our community.

Wayne Thorley
Mayor

Our City

The Rural City of Murray Bridge – the regional heart of the Murraylands - is a thriving rural city located on the banks of the picturesque Murray River. A community on the cusp of significant growth, we are a place where people can live well and thrive in an environment where jobs, education, affordable housing and a relaxed river lifestyle are accessible to all. We are a diverse and welcoming community that is friendly, supportive and full of community spirit.

Located 80km south-east of Adelaide and less than an hour from the Adelaide CBD, Murray Bridge is well placed on the national road network with road and rail access to the eastern states and Adelaide and connection to the South Eastern Freeway. The 65km length of the Murray River travels through our rural city, with our well-loved river and natural landscapes supporting local, recreational and tourism experiences. Murray Bridge is the location of the first road bridge to cross the Murray River, built in 1879.

Murray Bridge currently has 1.1 jobs for every person in or wanting a job. As the centre for agriculture, agri-business and innovation, along with being a key logistics and transport hub; Murray Bridge is prime for further growth of these industries on surrounding employment lands.

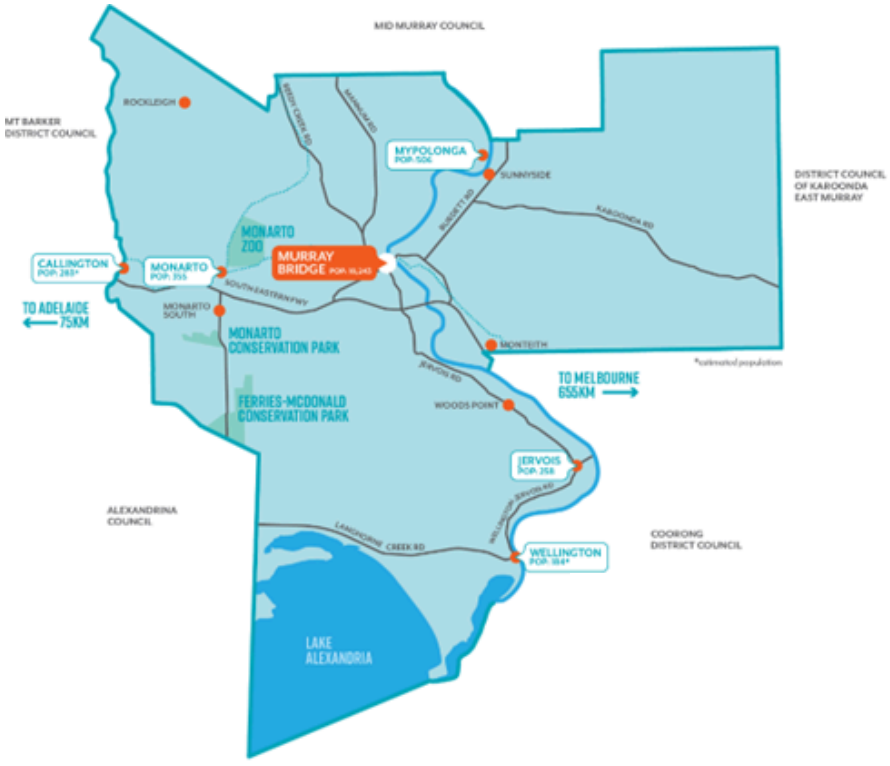
Murray Bridge is a vibrant regional centre, offering a wide range of facilities and services to the local and regional community including residents of the Murraylands, Adelaide Hills and Fleurieu Peninsula. There is a rich heritage in the Council area situated on the traditional lands of the Ngarrindjeri people. Our rural communities have a proud and unique rural character, while across our whole community people value our rural atmosphere and laid-back lifestyle.

Median Age
43 years old

Household type
Couples with children 22%
Couples without children 27%
One parent families 12%
Lone person households 30%

5.6% of our community are First Nations people

13% of our community were born overseas
Top 5 birth places (other than Australia) are the UK, Philippines, China, New Zealand and Vietnam.



Our Strategic Plans

Strategic Planning Framework

Council's Strategic Planning Framework sets out how our suite of Strategic Management Plans together provide direction, key moves, data and resources to deliver the vision of Thriving Communities.

Our Strategic Management Plans are supported by subject specific plans and strategies that help to identify and prioritise projects, actions or initiatives including those to be considered as part of the Annual Business Plan and Budget process. These plans and strategies are adjusted over time to reflect the direction of the Strategic Plan.

Council has endorsed a Structure Plan to help guide the future growth and development of our regional city. It identifies what land, services and Infrastructure are required to support this growth and helps to prioritise projects for funding and advocacy actions.

Under the *Local Government Act 1999*, Council is required to undertake public consultation on its Draft Strategic Management Plans. Council's Community Engagement Policy and Framework provides guidance for and principles of open and effective engagement.

Community Plan 2016 - 2032

The Community Plan 2016 – 2032 reflects our community's aspirations and sets out a shared vision of Thriving Communities

The Plan was developed through an extensive community engagement process in 2015 where over 3,500 comments and ideas were shared culminating in the vision. Council is committed to the delivery of this Plan over 16 years, through four strategic plans and 16 Annual Business Plans and Budgets.

The four Community Plan themes define what our Thriving Communities will see and experience. They are:

GREAT PEOPLE AND LIFESTYLE

Where people are friendly, living well and enjoying all the region has to offer.

People thrive when they experience great people and lifestyle.

VALUED ENVIRONMENT

Well cared for river, green spaces and built and natural environment that people value and love.

People thrive when they spend time in a valued environment.

DYNAMIC ECONOMY

Where people, business and industry are seizing opportunities to learn, earn and grow.

People thrive when they participate in a dynamic economy.

CONNECTED COMMUNITY

Where people get involved, contribute to, and are supported by the community around them.

People thrive when they belong to connected communities.

Our Strategic Plan 2024 - 2028

On 24 June 2024, Council adopted its new Strategic Plan 2024-28. This plan sets out how Council will actively prepare for the growth of our rural city, a critical phase toward our shared vision of Thriving Communities. It identifies the strategic focus for the next four years, providing direction for decision making and how we prioritise our resources and effort.

The following section details how asset management strategies align and contribute to Community Plan outcomes.

GREAT PEOPLE AND LIFESTYLE

Where people are friendly, living well and enjoying all the region has to offer.

- **Safety Enhancement:** Prioritise the safety of infrastructure assets, including roads, footpaths, and public spaces, through regular maintenance, adequate lighting, and the implementation of safety measures. This objective ensures a safe environment for community members to live, work, and play.

- **Health and Wellness Promotion:** Integrate infrastructure elements that support active living and well-being, such as walking and cycling paths, fitness facilities, and access to green spaces. This promotes a healthy and active lifestyle among our residents.

- **Community Engagement in Planning:** Involve our community in planning and design of public spaces, neighbourhoods, and infrastructure projects. Through diverse perspectives and incorporating local input, the community can create liveable spaces that reflect their needs, values, and aspirations.

- **Accessible and Inclusive Design:** Ensure that infrastructure assets are designed and maintained to be accessible to people of all ages, abilities, and backgrounds. This promotes inclusivity, allowing everyone to fully participate in community life and activities, irrespective of their physical or cognitive capabilities.

- **Preservation of Historic and Cultural Heritage:** Preserve and celebrate the community's history, diversity, and cultural heritage through the adaptive reuse of historic buildings, integration of public art, and promotion of cultural events and festivals.

- **Sustainable and Resilient Development:** Incorporate sustainability principles into infrastructure planning, construction, and operations by promoting energy efficiency, renewable energy, water conservation and climate-resilient designs that are environmentally responsible and adaptable to future challenges.

DYNAMIC ECONOMY

Where people, business and industry are seizing opportunities to learn, earn and grow.

- **Infrastructure for Connectivity**: Develop and maintain a robust transportation infrastructure, including roads, public transport to facilitate the movement of people, goods, and services within and beyond the community.

- **Entrepreneurship and Innovation Support:** Create programs, initiatives, and infrastructure assets that foster entrepreneurship, innovation, and knowledge-based industries. This may include business incubators, co-working spaces, technology hubs, and research and development centres to nurture a productive community.

- **Quality of Life Enhancement:** Invest in infrastructure assets that contribute to a high quality of life, such as parks, recreational facilities, cultural institutions, and healthcare centres. This attracts and retains talent, making the community an appealing place to live, work, invest, and visit, and fostering a positive economic environment.

- **Collaboration and Partnerships:** Foster collaborations between public and private sectors, academic institutions, and community to leverage expertise, resources, and funding for infrastructure development and economic growth, contributing to a dynamic and prosperous regional economy.

- **Tourism and Cultural Heritage Preservation:** Develop and promote tourism assets, attractions, and cultural heritage sites to attract visitors, generate revenue, and celebrate the community's unique identity. This recognises the economic value of tourism and the importance of preserving the community's cultural heritage.

- **Sustainable and Resilient Infrastructure:** Integrate sustainability and resilience principles into infrastructure asset management practices. This includes incorporating energy-efficient technologies, renewable energy sources, sustainable water management systems, and climate-resilient designs to support economic growth and productivity while minimising environmental impacts.

VALUED ENVIRONMENT

Well cared for river, green spaces and built and natural environment that people value and love.

- **Public Space Enhancement**: Improve and maintain the quality of public spaces along the riverfront, such as parks, promenades, and recreational areas, to create great places for people to gather, socialise and enjoy nature.

- **Energy Efficiency and Renewable Energy:** Implement energy-efficient technologies and practices, in lighting, building insulation, and renewable energy sources. By reducing energy consumption and transitioning to clean energy sources, the community contributes to a more sustainable environment.

- **Waste Management and Recycling:** Improve waste management systems, including recycling programs and waste reduction initiatives, to minimise the environmental impact of infrastructure operations. Promoting this objective supports the vision of clean and sustainable communities.

- **Climate Change Adaptation:** Incorporate climate change considerations such as implementing flood-resilient designs, adopting sustainable drainage systems, and promoting climate-conscious land-use planning. This objective ensures the long term resilience and adaptability in the face of climate change impacts.

- **Collaboration and Partnerships**: Deliver shared goals and positive impact through collaboration and partnerships with local organisations, environmental groups, and government agencies to leverage expertise, resources, and funding for sustainable infrastructure asset management.

- **Monitoring and Evaluation:** Improve monitoring systems to assess the environmental performance of infrastructure assets and track progress towards sustainability goals. Regular review allows for the identification of improvements and ensures that asset management strategies align with the community's vision of a valued environment.

CONNECTED COMMUNITY

Where people get involved, contribute to and are supported by the community around them.

- **Community Engagement and Participation:** Actively involve community members in infrastructure asset management processes by seeking their input, feedback, and ideas. This promotes transparency, builds trust, and empowers residents to contribute to the improvement of their communities.

- **Education and Awareness Programs:** Develop educational initiatives that enhance community members' understanding of infrastructure asset management, including its benefits, challenges, and potential impacts. This empowers residents with knowledge to participate actively.

- **Volunteer and Community Support Programs:** Develop programs that encourage community members to actively participate in the maintenance, monitoring, and improvement of infrastructure assets. This fosters a sense of ownership and responsibility and leverages local knowledge to enhance asset management.

- **Partnerships and Networks:** Forge partnerships with community organisations, businesses, educational institutions, and other stakeholders to leverage their expertise, resources, and networks in infrastructure asset management. This facilitates knowledge share, problem-solving and access to funding opportunities.

- **Continuous Feedback and Evaluation:** Gather feedback from the community about infrastructure projects and initiatives. Regularly evaluate the effectiveness of infrastructure asset management strategies and adapt them based on community input, changing needs, and emerging opportunities.

- **Long Term Sustainability and Legacy:** Plan and manage infrastructure assets with a long term perspective, considering their lifecycle, maintenance requirements, and future community needs. This ensures infrastructure investments support connected communities for generations to come.

Asset Management Snapshot

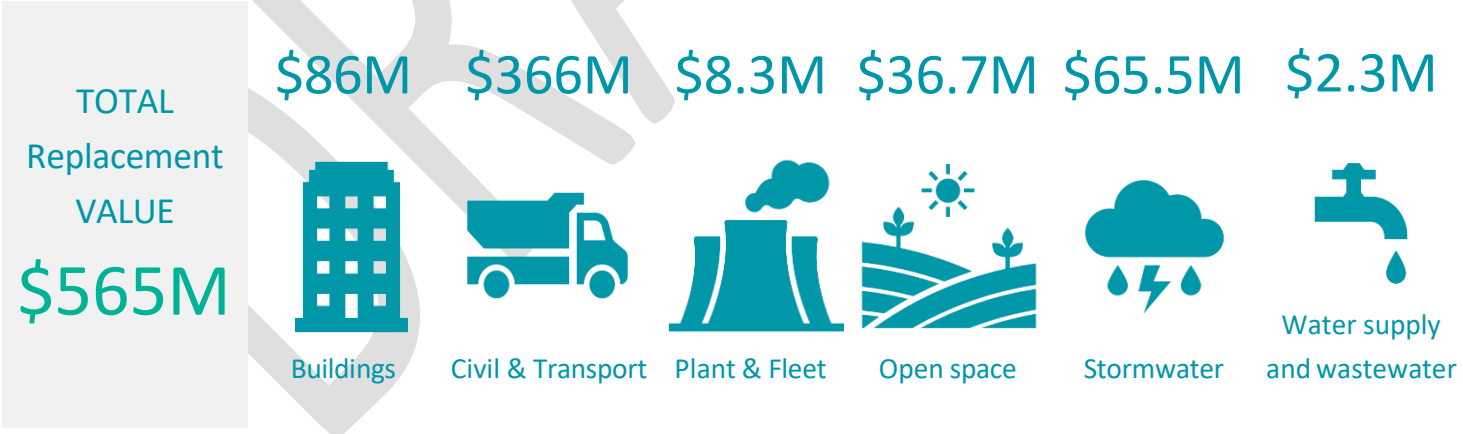
Assets Support Service Delivery

Council provides a wide range of services to support our community including libraries, sport and recreational facilities, parks and playgrounds, aged care, youth services, cultural activities and events. Our infrastructure assets play a critical role in supporting the way we deliver these services to our community. Facilities such as The Gallery, Performing Arts + Function Centre, Library, Swimming Centre and the Station are examples of assets that support the delivery of important services to the community. These assets must be planned, managed and maintained fit for the purpose of supporting quality service delivery.

Total Asset Portfolio

As of 30 June 2023, Council had a total asset portfolio with a replacement cost circa $565M. (Source: Assetic Nov 2023)

The AMPP focuses on our infrastructure assets, which are central to supporting our service delivery and the assets the community experiences day to day. They are divided below into asset classes, including an asset class replacement value.



The historic and forecast value of each asset class is shown below.

Data for 2019-20 is unavailable.

Item	2019–20 Actual ($'000)	2020–21 Actual ($'000)	2021–22 Actual ($'000)	2022–23 Actual ($'000)	2023–24 Forecast ($'000)
Buildings	N/A	52,128	27,971	29,571	28,860
Civil & Transport		166,811	172,157	239,750	237,375
Plant and Fleet		5,487	5,527	5,439	5,855
Open Space		20,730	21,245	23,117	23,650
Stormwater		45,774	45,976	46,025	45,871

Water supply and Wastewater	1,709	1,689	2,653	2,598
Totals	292,639	274,565	346,555	344,209

What is Infrastructure Asset Management?

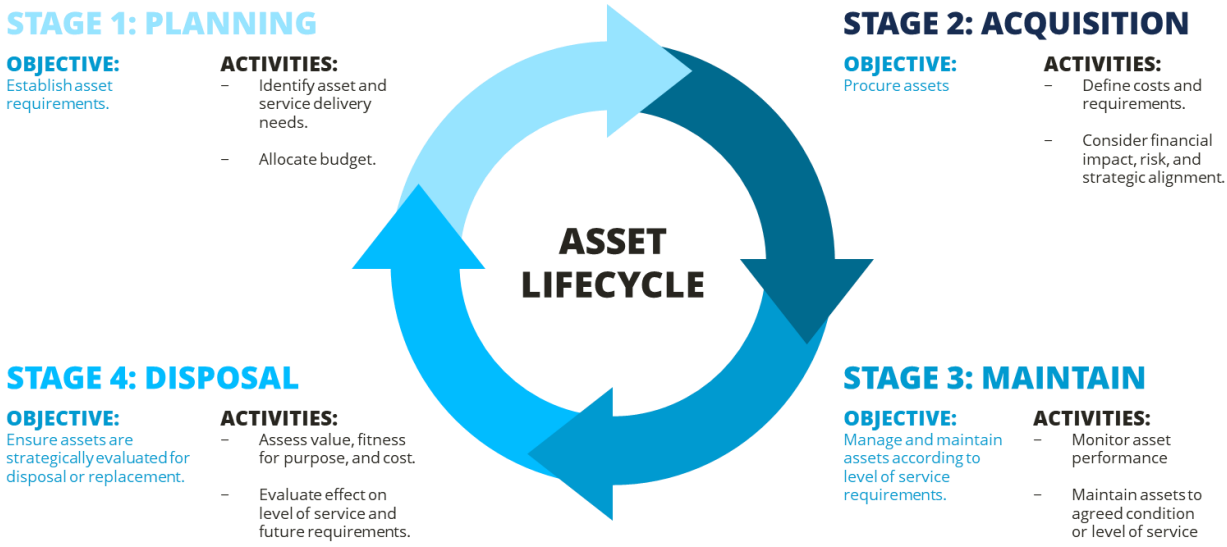
Assets are expensive investments that deliver value over generations of communities. We commit to building an asset understanding the lifecycle costs are significant.

Infrastructure asset management is the process of managing the lifecycle of infrastructure assets including planning, design, construction, operation, maintenance and disposal.

It includes:

- Providing a defined level of service and monitoring performance.
- Managing the impact of growth through demand management and infrastructure investment.
- Taking a lifecycle approach to developing cost-effective management strategies for the long term that meet the defined level of service.
- Identifying, assessing and appropriately controlling risks.
- Linking to a Long Term Financial Plan which identifies required, affordable forecast costs and how it will be allocated.
- Ensuring delivered services meets current and future demands, while satisfying all legislative and regulatory requirements such as the *Work, Health and Safety Act 2012.*

The following graphic illustrates the asset lifecycle from planning, acquisition, maintenance and potentially, disposal.



Annual Business Plan and Budget Process

Each year as part of our Annual Business Plan and Budget process, we consider the need for and performance of services and assets. This assessment may result in updates to our Asset Management Plans reflecting:

- Continued service delivery and ongoing asset maintenance.
- Further capital investment in their renewal or replacement to existing levels of service or their adaptation through upgrades or expansion.
- Additional capital acquisition of new assets to support new services.
- Asset disposal or decommissioning at the end of the asset's useful life or ceasing a service using circular economy principles.

Asset Management Framework

Asset Management Framework

The Asset Management Framework reflects the resources, systems, processes and information that supports whole of Council asset management activities.

The section below provides an overview of key components of our framework.

Asset Management Policy

As a Council actively preparing for significant growth, the effective management of community assets is critical in ensuring that current and future communities can live well and thrive.

Council has endorsed an Asset Management Policy that guides the management, renewal and replacement of its asset portfolio in a sustainable manner and at appropriate service levels.

To achieve this, the policy sets out the following key principles to define Council's approach to asset management:

- *Assets exist to support the delivery of services.*
- *Asset management plans and management guidelines will guide management, maintenance and renewal of assets.*
- *Asset management decisions are integrated with Strategic Planning and Council's Risk Management Framework.*
- *Asset planning decisions are based on an evaluation of alternatives which consider lifecycles, costs benefits and risk of ownership.*
- *Systems are developed to provide accountability for asset condition, usage and performance.*
- *An effective internal control structure is established.*
- *Council will maintain Asset Management Plans to identify future asset management requirements within the context of a long term financial framework.*
- *Asset renewal requirements will be separately identified from new assets and all undergo a separate annual approval process by Council.*
- *Council recognises the need to maintain its asset base and will target a long term asset sustainability ratio in the range of 90-100%.*

Assessment Management Framework Objectives

Council's Executive Team through the Asset Management Leadership Team is committed to the following Asset Management Framework objectives:

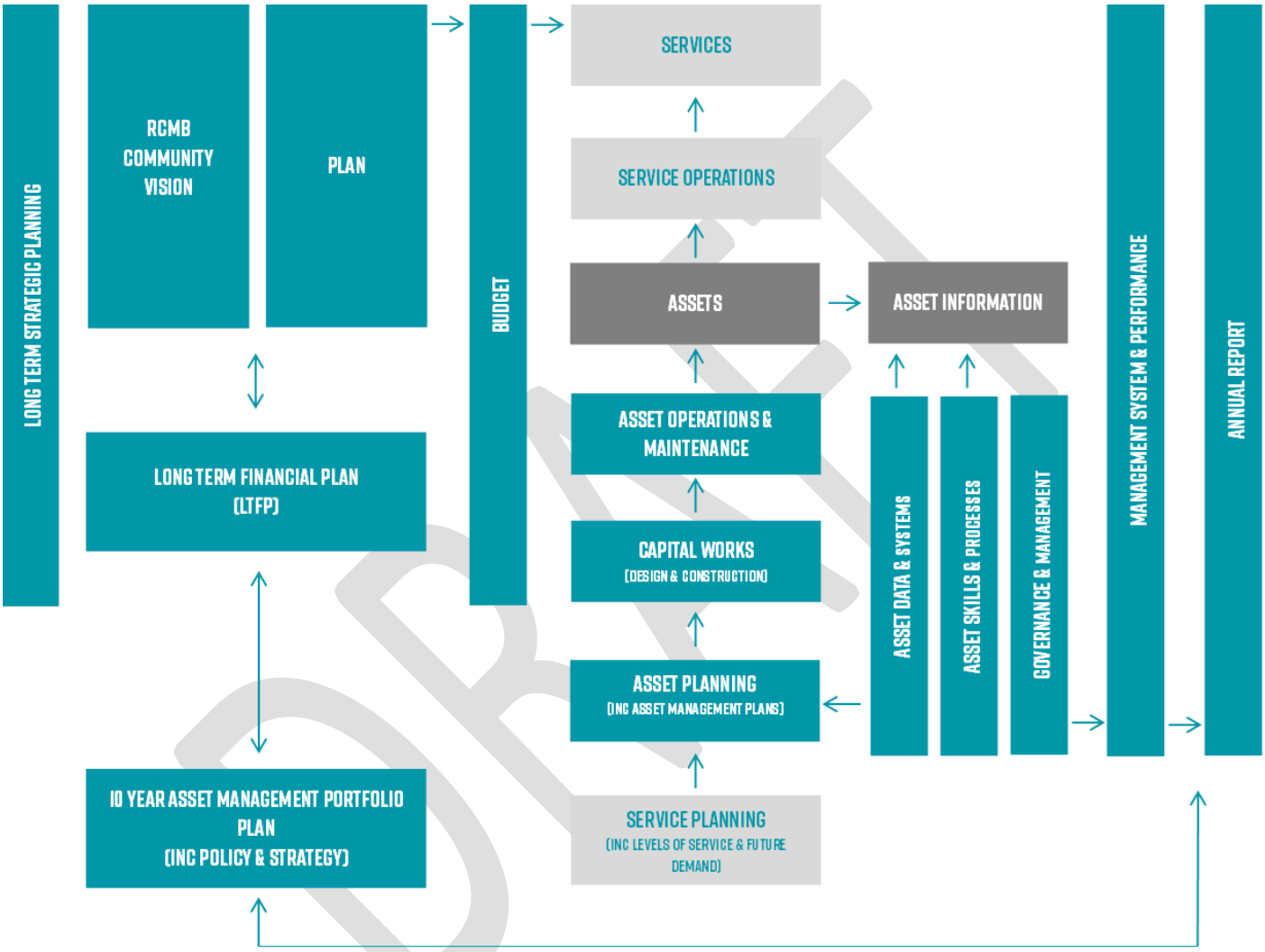
Asset Management Objectives	Details	Strategic Alignment
1. Asset Management	Act on the outcomes from the Asset Management Maturity Audit, forming Leadership Team and Working Group. Ensure actions in each asset plan are pursued.	South Australia's *Local Government Act 1999*

	System Improvement	Strategic Plan 2024 - 2028
2. Resourcing for asset management	Review capability and capacity against required asset management needs and levels of work.	
3. Integrated long term planning	Annual AMPs update, commitment to fixed frequency condition audits, ensuring data driven AMPs roll up to LTFP	
4. Lifecycle financial sustainability	Improve asset renewals decision making. Use Assetic data to drive planned replacements. Track key portfolio metrics. Enable community feedback and consultation. Ensure gifted assets and acquisitions are funded for the O&M phase.	Community Plan 2016-2032 ESCOSA advice
5. Risk and evidence-based decision making	Ensure proposed acquisition projects are well considered, fit for purpose and align with our Strategic Plan and other projects that have been endorsed and in delivery. Ensure risk is included in decision making.	International Standard for Asset Management (ISO 55000 series)
6. Community and place-based levels of service	Following on from zero based budgeting, improve accountable staff understanding of cost, risk and performance across all asset classes.	International Infrastructure Management Manual (IIMM), IPWEA
7. Constructive and accountable culture	Embed the ownership of asset management functions to roles identified in each AMP. Shift thinking and behaviour from reactive to proactive.	
8. Sustainability and Climate Resilience	Continued assessment of candidate projects relative to Council policies and commitments	

Asset Management Framework

Our Asset Management Framework outlines the systems and processes that form the critical asset management activities. Each element requires adequate resources with the appropriate skills and experience to deliver. We will continue to build internal asset management capacity through training and development opportunities.

The figure below illustrates the integration of Council's strategic plans with service planning and operations, and key asset management processes.



Roles and Responsibilities

Council adheres to the policy and framework through its people, business processes, information technology systems and data management under the leadership of the Executive Leadership Team.

To support the AMPP, Council will implement its Asset Management Accountability Framework which defines relevant responsibilities and accountabilities relating to the framework and over time will establish ownership, control, accountability and reporting requirements for each asset class.

The role of Council members and staff are outlined below:

Council will:

- Act as steward for community infrastructure assets and set corporate vision and policy for asset management.
- Approve resources to maintain community assets for delivering the agreed levels of service.
- Delegate responsibility to the CEO for ensuring that appropriate strategies, plans and systems are implemented for long term sustainability of assets and service delivery.

CEO and Executive Leadership Team will:

- Foster an asset management culture and implement consistent, compliant and best practice asset management across the organisation.
- Ensure that the asset management policy and strategic plans are integrated into the corporate integrated planning and governance frameworks.
- Ensure that sustainable long term financial plans are developed to reflect the state of the assets and agreed levels of service.
- Ensure that accurate and reliable information is presented to Council for optimal decision-making purposes.
- Report on the performance and state of the assets to Council

Asset Management Steering Committee will:

- Provide top-down leadership across Council by ensuring adequate strategic direction (for example, through the Asset Management Policy) and the clear communication of this to all stakeholders with an interest in asset management.
- Adopt an approach that covers the entire asset lifecycle and nominates appropriate asset planning and design, asset operations and maintenance strategies, levels of service and divestment planning.
- Ensure asset management systems and process development are aligned with the organisation, fit for purpose for the Council and supports the preservation of asset knowledge.
- Deliver robust, well timed and cost-effective asset investment decisions, ensuring decision making criteria addresses customer or custodian needs, and be underpinned by sound knowledge of specific asset condition, criticality and risk.
- Ensure the organisation complies with relevant regulations, policies, procedures, and standards.
- Ensure Asset Management resources have adequate capability and capacity and are sufficiently externally facing, remaining abreast of industry trends and current thought leadership initiatives.
- Regularly measure performance against objectives and continuously improve asset management.
- Provide leadership to staff who are tasked with implementing strategic, tactical and operational strategies and plans that support asset management objectives across the Council asset portfolio.
- Ensure the Asset Management Portfolio Plan is of sufficient quality to provide effective input into Council's LTFP and that these are regularly updated.

Asset and Service Managers will:

- In line with our Community Engagement Policy, consult with the community and stakeholders to deliver levels of service to agreed risk and cost standards.
- Develop asset management plans that deliver agreed levels of services.

- Develop policy operating statements for their respective areas in asset management and service delivery.
- Implement asset maintenance, renewal, upgrade, expansion and new acquisition works programs in line with asset management plans and service delivery needs.
- Use an integrated asset management information system to record, view and analyse asset lifecycles.
- Report on asset performance in delivering the required services

Finance and Procurement Team will:

- Ensure the long term sustainability of asset expenditure.
- Ensure compliance to relevant standards for financial reporting on assets

Employees and Contractors will:

- Apply agreed asset management practices in their area of work.
- Ensure all service contracts that impact on the acquisition, expansion, upgrade, renewal and maintenance of assets are structured to support this policy.

Management System and Performance

The Management System is made up of the technical elements of asset management practice that enables Council to effectively operate and improve asset and services outcomes and objectives. Effective asset management relies upon:

- Top-down leadership and commitment to asset management with clear goals and objectives.
- A management structure including well defined roles, responsibilities and accountabilities.
- Electronic information systems - Council uses Assetic for its buildings asset register. This contains a wealth of information, including year of construction, material type, dimensions, most recent valuation, most recent condition rating and asset hierarchy / classification.
- Business processes - there are several in place relating to asset acquisition and disposal including supporting the operation and maintenance of the portfolio.

The figure below demonstrates how people, processes, systems and data must all work together to ensure a robust framework.

Asset Management Drivers

Community Expectations

With the community at the heart of our actions and decisions every day, we are committed to understanding their needs and providing value and quality services.

We use community engagement activities, customer experience surveys, and our communication channels including face-to-face, phone, emails and digital platforms to help us understand community needs and expectations.

Council is committed to community engagement and is guided by our Community Engagement Policy and Framework. The *Local Government Act 1999* requires Council to consult the community on the Draft Annual Business Plan and Budget, Draft Strategic Plan and its Draft Asset Management Plans. Council recognises that engaging the community and understanding their views and experiences lead to better outcomes, including for infrastructure asset projects.

Understanding Community Expectations

Our community relies on our infrastructure assets every day. While other visitors may not use all our assets directly, they still have an interest especially in how they perceive our rural city. Understanding the expectations of our community and customers is essential in managing our infrastructure assets effectively. At critical points in the lifecycle of our assets, we work closely with our community to understand their values and use their feedback to help us shape our asset management.

Our community and infrastructure asset users are diverse and include, but are not limited to, the following groups: Residents, workers and trades people, business owners, students, shoppers, visitors including at events, venues and tourist attractions, cyclists and other commuters and people with a disability and other needs.

Our community expects that Council is financially responsible and prudent when we invest in assets and that the investment represents good value for money.

Our customer's expectations of infrastructure assets are summarised below:

Quality – well maintained and fit for purpose

Amenity – look clean and feel comfortable

Safety – structurally sound, compliant and free from hazards

Reliability – minimal downtime and free from defects

Responsiveness – addressing complaints and change

Sustainability – environmentally, socially and economically

Resilience – responding to the impacts of climate change

Timeliness – on time with minimal delays or waiting lists

Accessibility – ease of entry and caters to all needs.

During the *Let's Thrive* community engagement process in 2023 that informed the development of Council's Strategic Plan 2024-2028, the community provided specific feedback on council infrastructure. This is included below by asset class:

Asset Class	Categories
Buildings	Upgrades and renewal requests on specific buildings, more facilities in various areas, aged care, sports and recreation facilities
Civil & Transport	Road improvements, footpaths / verges, parking, road safety, road usage, transport planning improvements, main street activation
Open Space	Arts and Culture, landscaping, greening, signage, river access, river protection, riverfront activation, tracks and trails, playgrounds, youth centres
Plant & Fleet	Nil
Stormwater	Various issues raised in specific local communities
Water & Wastewater	Nil

Levels of Service

The levels of service provided by our assets evolve as the needs of our community change. We establish service standards through our strategic and operating planning processes and these principles flow through to design standards and contract specifications for works and maintenance.

Service levels are defined in three ways in our Asset Management Plans:

1. Customer values
2. Customer levels of service
3. Technical levels of service

Customer Values are defined by considering:

- What aspects of the service are important to the customer?
- Do they see value in what is currently provided?
- What is the likely trend over time based on the current budget provision?

Customer Levels of Service are defined by considering:

- **Condition** How good is the service, what is the condition or quality of the service?
- **Functionality** Is it suitable for its intended purpose, is it the right service?
- **Capacity/Use** Is the service over or under used, do we need more or less of these assets?

Technical Levels of Service

Technical levels of service consider operational or technical measures of performance that deliver the customer values and impact the desired customer levels of service. These technical measures relate to the activities and allocation of resources to best achieve the desired customer outcomes and demonstrate effective performance.

Technical service measures are linked to the activities and annual budgets covering:

- **Acquisition** – Activities that provide a higher level of service like widening a road, sealing an unsealed road or replacing a pipeline with a larger size; or deliver a new service like a new library.
- **Operation** – Regular activities undertaken to provide services like opening hours, cleansing, mowing grass, energy and inspections.
- **Maintenance** – Activities necessary to retain an asset as near as practicable to an appropriate service condition. Maintenance activities enable an asset to provide service for its planned life, for example, road patching, unsealed road grading and building and structure repairs.
- **Renewal** – Activities that return the service capability of an asset to the level it originally provided, for example, road resurfacing and pavement reconstruction and building component replacement.

External Drivers

Understanding the external environment, from changes to our community profile, the economy through to technology and climate change is essential in managing our infrastructure assets effectively and with a long term view. External demand drivers can significantly affect how we plan for and deliver services and assets over the next decade. These drivers present significant risks and opportunities concerning our asset management and we need to be agile and adaptable to manage and respond to them.

Population Growth

Under the State Government's Greater Adelaide Regional Plan, Murray Bridge will grow to become a satellite city providing local jobs, services and amenities along with affordable housing. The Murray Bridge Structure Plan 2024 forecasts that the population across the Rural City of Murray Bridge will grow to 39,416 people by 2041 from a current population of 23,037. This is over 70% population growth in less than 20 years which means we need to be planning now for the infrastructure assets that need to be acquired or upgraded to support this growing community. The Murray Bridge Structure Plan and Community Infrastructure Model are key components in Council's Future City Program, a strategic initiative that puts in place the framework to manage and sustain growth. The Residential Areas Growth Areas Code Amendment will release more land in Murray Bridge for affordable housing to support population growth.

Demographic change

In 2021, the dominant age structure in the Rural City of Murray Bridge was 55 to 59 years, accounting for 6.9% of the population. By 2026, the 0 to 4 years group is expected to account for 7% of the population while the largest age group is forecast to be 60 to 64 years with a total of 1,674 persons. This means that the largest increases are at either end of the age spectrum. By 2041, the largest age group by population will be the 25-55 years group.

All these age groups have very different service needs, from access to playgrounds and childcare to demand for services relating to the aged care sector. Understanding demographic changes helps us understand the specific infrastructure asset requirements that will be needed in the future.

Local Business Growth

Murray Bridge currently has 1.1 jobs for every person in or wanting a job. As the centre for agriculture, agri-business and innovation, along with being a key logistics and transport hub; Murray Bridge is prime for further growth of these industries on surround employment lands. Available land, power, water and gas along with proximity to national transport routes, positions Murray Bridge as an ideal location for new industries and the growth of existing businesses.

Council must continue to work proactively with business and industry to support economic growth, diversification and resilience and the creation of jobs. Planning for appropriate, supportive and enabling infrastructure assets is a key component of this.

Economy

In its December 2023 Economic Briefing, the South Australian Centre for Economic Studies noted the slowing of global growth due to policy makers efforts to control inflation through stricter monetary policies and reducing government spending and investment of public money. The global economic environment is also affected by high interest rates, sharp rises in living costs over recent years, infrastructure price pressures and the possibility of surges in global commodity prices.

Even with global influences driving persistent inflation, Australia's economy slowing down through 2023 and despite strong government expenditure and business investment, South Australia has still experienced very solid growth since the start of the pandemic, eclipsing Australian GDP growth trend buckling three years in a row.

Just like many households, Council continues to experience rising costs in delivering our core services. We have made significant efforts to fund these costs through internal efficiency savings. Council will continue to monitor and identify economic impacts on our financial performance and budgeting and account for these through our financial planning strategies while ensuring we continue to deliver core services to our communities. Infrastructure plays a vital role in generating projects that can directly stimulate employment and business, support growth and attract visitors and business back into the area.

Technology

Technological advance is rapid, with digital technologies reshaping the way the cities and communities operate. These changes affect the way we plan and deliver services and our assets and change the way the community engages with Council. While keeping pace with new technology is a challenge, it represents a phenomenal opportunity for our strategic asset management systems, especially seen in asset monitoring and maintenance. Advanced sensor technologies and Internet of Things (IoT) devices enable real-time monitoring of infrastructure assets, such as bridges, roads, and utilities. This data-driven approach allows for proactive maintenance, as potential issues and deterioration can be detected early on, preventing costly repairs and improving the overall lifespan of assets.

The implementation of data analytics and predictive modelling using big data and artificial intelligence, enables asset managers to analyse vast amounts of information to identify patterns, predict asset performance, and optimise maintenance schedules. This data-driven approach enhances operational efficiency, reduces downtime, and improves asset performance.

Another significant impact of technology is the integration of smart infrastructure solutions. Smart traffic management systems utilise real-time data and intelligent algorithms to optimise traffic flow, reduce congestion, and enhance road safety. Intelligent lighting systems adjust illumination levels based on traffic conditions and pedestrian activity, improving energy efficiency. Moreover, smart water and utility management systems use IoT devices and remote monitoring to optimise resource usage, detect leaks, and ensure efficient operation.

Climate change

Climate change is emerging as a vital issue for our community, with recent scientific research observations showing that communities and ecosystems are highly vulnerable to even modest levels of climate change.

South Australia's temperatures are increasing and rainfall is decreasing. For the Adelaide and Mt Lofty Ranges region this means a general warming and drying trend. Identified impacts of these changes include:

- Higher temperatures – including more extremely hot days (over 35C) and heat waves.
- More frequent very high and extreme fire danger days.
- Decreased flows in water supply catchments (including the Murray-Darling Basin).
- Increased flood risk placing pressure on storm water infrastructure.
- Shifts in conditions affecting viability of native plants and animals.
- Increased coastal erosion and storm surges.

Our AMPP must consider the economic, social and environmental sustainability of our Council area, including mitigation and planning for climate change risks.

SA Auditor General's observations of local government planning and operations

The SA Auditor General's observations (2020) that directly relate to asset management practices for SA councils include:

- Strategic management planning to include levels of service, performance measures and community consultation.
- AMPs to include all information required to manage the asset base including levels of service and KPIs that link to objectives, including risk management plans.
- Ensure up-to-date and regular review of risk management frameworks for individual asset classes.
- Clearly define performance measures for asset maintenance with regular reporting of outcomes.

Council's asset management improvement initiatives specifically address these requirements, noting that improvements are incremental and take time to implement effectively within the organisation.

Essential Services Commission of South Australia (ESCOSA)

ESCOSA provides a local government oversight scheme to all South Australian councils and provides advice on a four- yearly rotational basis. They advise on the appropriateness of long term financial, infrastructure and asset management plans, and the proposed financial contributions by the council's ratepayers under those plans. Council works in collaboration with ESCOSA to ensure a best practice approach to asset management. The following items were identified as improvements during the 2022-23 ESCOSA review of

the Rural City of Murray Bridge asset management planning:

- Ensure all AMPs cover a period of 10 years.
- Ensure asset condition assessments, valuations and useful life estimates are up to date and included in AMPs.
- Include more detail in updates to Long Term Financial Plan projections about the renewal and new or upgraded capital expenditure by infrastructure category (including for key projects), to provide better alignment and transparency between Asset Management Plans and Long Term Financial Plan projections.
- Continue to update existing AMPs and complete new AMPs as indicated in the forward program, with a focus on consideration of the community's desired service levels, the resultant capital expenditure requirements, and alignment with Long Term Financial Plan projections.

Legislative Requirements

There are various legislative requirements relating to the management of assets. The ones that impact the delivery of the building assets are outlined below:

Legislation	Requirement
Building Code of Australia	Defines the performance requirements of buildings.
Disability Discrimination Act 1992	A Commonwealth Act relating to discrimination on the grounds of disability.
Environmental Protection Act 1993	An Act to provide for the protection of the environment: to establish the Environmental Protection Authority and define functions and powers and for other purposes.
Planning, Development and Infrastructure Act 2016	An Act to provide for matters that are relevant to the use, development and management of land and buildings, including by providing a planning system to regulate development within the state, rules with respect to the design, construction and use of buildings, and other initiatives to facilitate the development of infrastructure, facilities and environments that will benefit the community.
SA Public Health Act 2011	This legislation helps the State respond to modern public health risks by allowing health officials to take immediate action on a health hazard that presents a serious and immediate threat to public health.
SA Safe Drinking Water Act 2011	This Act and Regulations aim to improve protection of drinking water quality by providing direction to drinking water providers on how to achieve safety and how it can be measured.
South Australian Local Government Act 1999	Sets out role, purpose, responsibilities, and powers of local governments including the preparation of a LTFP supported by asset management plans for sustainable service delivery.

South Australian State Records Act 1997	To ensure that Council's records maintain all relevant information as set out by the State Government of South Australia.
Work Health and Safety Act 2012	To take a constructive role in promoting improvements in work health and safety practices whilst assisting in the preservation of public health and safety in all undertakings of the organisation.
Water Industry Act 2012	Establishes the regulatory framework for the water and sewerage industry covering economic regulation, technical regulation, water planning and customer complaint handling. A full schedule of legislation, codes, standards, criteria and guidelines applicable to the supply and management of water and wastewater is provided in the Water Supply and Wastewater Asset Management Plan.

Internal Demand

Understanding the internal environment that drives Council operations is important; from strategies, plans and policies to strategic risk and workforce management, each can significantly influence how we deliver services and the assets that support them. These internal drivers present significant risks and opportunities for asset management, and we need to be agile and adaptable to manage and respond to them.

Environment Management Plan including Climate Emergency Action Plan

Council declared a Climate Emergency in October 2019 agreeing to deliver a Climate Emergency Action Plan to begin to mitigate its contribution to climate change. Our action involves working with the LGA and other councils to develop tools for translating the management of climate change impacts into Council's long term financial and asset management planning, while considering risks for inclusion in risk registers. A high-level summary of our strategies and potential asset impacts is provided below:

Strategy	Potential Asset Impacts
Reducing Greenhouse Gas Emissions (GHG)	LED Street Lighting. Power and lighting efficiency review – equipment and buildings. Plant and fleet – understanding the benefits of EVs. Consideration is given in project planning to Emissions Reduction Target and offset measures. Green Infrastructure initiatives.
Alternative Power Options	Solar panels on buildings. Support renewables and carbon credit programs, for example non-asset options.
Capacity & Knowledge	Encourage transport options through the implementation of Council's Walking and Cycling Masterplan and Council's Footpath Construction Program. Undertake whole of organisation, climate risk assessment that enables the identification of priority risks across all functions within Council. Establish a template to evaluate project whole-of life-costs including climate risks and responses. Incorporate climate change considerations in all Council functions including the planning and assessment process and asset management plans.
Cooling the Council Area	Achieve 20% increase in tree cover based on tree canopy study. New footpaths are planted as recommended.

Financial Policies

The primary purpose of these policies is to reduce Council's reliance on rates income by improving our investment portfolio and strategic revenue.

Our strategic financial principles include being:

- Financially sustainable.
- Aligned with strategic aspirations.

- Fair, stable and predictable revenue and financing mechanisms.
- Effective and efficient capital managers.
- Optimising our assets and investments.
- Prudent financial risk managers.

Our financial policies recognise that risk, volatility, and loss of purchasing power are present to some degree in all types of investment and strategic income. Council is reasonably risk-averse, and any investment we take should deliver a satisfying risk-adjusted return to the Council. Our policies aim to achieve a low-to-medium risk to ensure financial sustainability, including minimum performance targets.

Information Systems / Technology

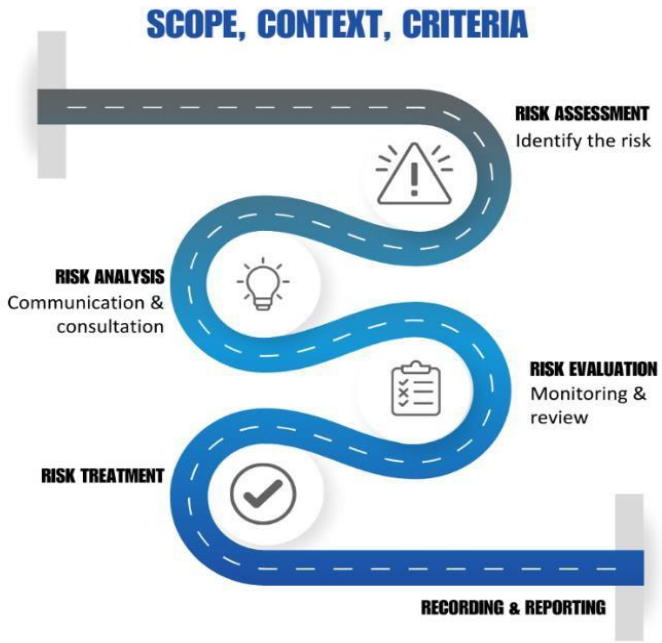
Council uses several corporate and specialist systems supporting asset management which are at various points in their product lifecycle. Assetic is the asset management prime and MyPredictor is used for some lifecycle cost analysis.

Data analysis informs many asset decisions at a strategic and operational level. Digital technologies such as smart meters, sensory networks and cloud-based services all present new opportunities to improve asset planning and management.

Risk Management

Risk is defined as something that can prevent you from achieving your objectives. Our responsibility is to manage risks and associated opportunities in all operations, including asset management. Managing the risks and opportunities associated with our assets is an integral part of our governance, good management practice and decision-making. Council will understand its exposure to identifiable risks and manage these to a tolerance of moderate risk. This is done by adhering to our Risk Management Policy and making use of a toolkit, procedures and guidelines across each asset class

Council has a Tolerance of Moderate risk. We base our approach on the international standard for risk management, ISO 31000; with the approach illustrated in the following diagram.



Risk Management Process – Abridged Source: ISO 31000:2018

Organisation Strategic Risks

The strategic risks facing the organisation significantly impact the ongoing provision of services to our community. To adapt to changing conditions we need to understand our capacity to 'withstand a given level of stress or demand', and to respond to possible disruptions to ensure continuity of service.

Council's strategic risks related to asset management are identified below and include the type of threats and hazards and the current measures that the organisation takes to manage this risk.

Threat/Hazard	Current Risk Control Approach	Residual Risk
Business continuity and community resilience	Assist as the ability to respond, recover, restore and resume business as usual activity. Robust plans are in place.	Moderate
Emergency events	Assessors all hazards including the response to multiple threats including flooding, earthquake, transport incidents.	Moderate
Infrastructure management	Assessment includes monitoring damage caused by deterioration or emergency events.	Moderate
Financial management, sustainability and cost increases	Assessment includes strategies to deal with changes in income and expenditure caused by other change in policy or emergency events.	Moderate

Asset Class Risks

Each asset class has its own appreciation of risk with respect to the assets themselves and any associated service delivery. Critical assets identify risks that may result in loss or reduction in service, personal injury, environmental impacts, a 'financial shock', reputational impacts, or other consequences. Each Asset Class Plan summarises the key critical assets which have a high consequence of failure.

Zero Based Budgeting

Council is reviewing its methodology in costing and planning its services. This means taking a blank sheet of paper approach to resource planning which is different from a traditional budgeting approach of making incremental changes to prior year budgets. Recently and over several years, Council received significant capital works grants from state and federal governments. While these projects have been delivered well, they have placed considerable pressure on operations and maintenance teams to service their requirements.

Workforce Management

Our highly engaged, diverse and deeply committed workforce enables us to deliver our vision of being a community where people can live well and thrive. Workforce planning is about ensuring you have the right people at the right time to deliver the organisation's goals. To deliver, manage and maintain our asset portfolio, skills in asset management, project management, contract management, design, engineering, planning, and stakeholder management are essential across the Council.

We take great pride in our work and culture at the Rural City of Murray Bridge and are committed to providing quality services to our community and value working with our community.

Strategic Property Review

The Strategic Property Review involves developing a Strategic Property Framework to assist Council with future property acquisition and disposal decisions; and includes the review of Community Land Management Plans. It provides a comprehensive, holistic and transparent approach looking at all of Council's land holdings (including road reserves) whilst also taking into consideration current and future needs of our growing community and city.

This work will require an audit and review of all Council property, current and potential future use and linkages to existing Council strategies and plans. The process includes considering each parcel of land and identifying reserves, dedications and trusts, encumbrances, easements, soil contaminants, and whether they are owned by Council freehold or leased.

The review will work to identify the following:

- Status of all properties.
- Registered interests including status of ownership, community land, options for use and whether surplus to Council needs.
- Status of all leases and licences including term, rights of renewal and other information.
- Status of any leases where Council is the lessee.
- Policies and procedures such as property management, leases and licences, encroachments, authorisations and permits, purchase, disposal, roads and other property related matters.
- Quality and suitability of standard form leases and licences.

Property is a significant investment for Council. It is vital we provide the right assets for our community now and into the future. This review will provide the strategic insights necessary to inform community aligned capital renewal and other asset decisions across the property portfolio.

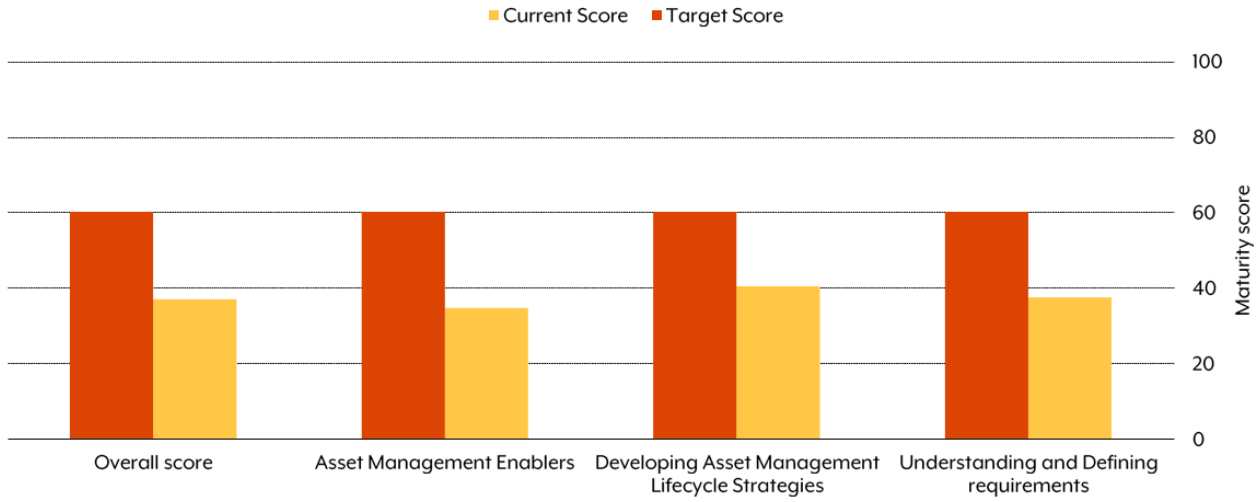
Asset Portfolio Performance

Asset Management Maturity Assessment

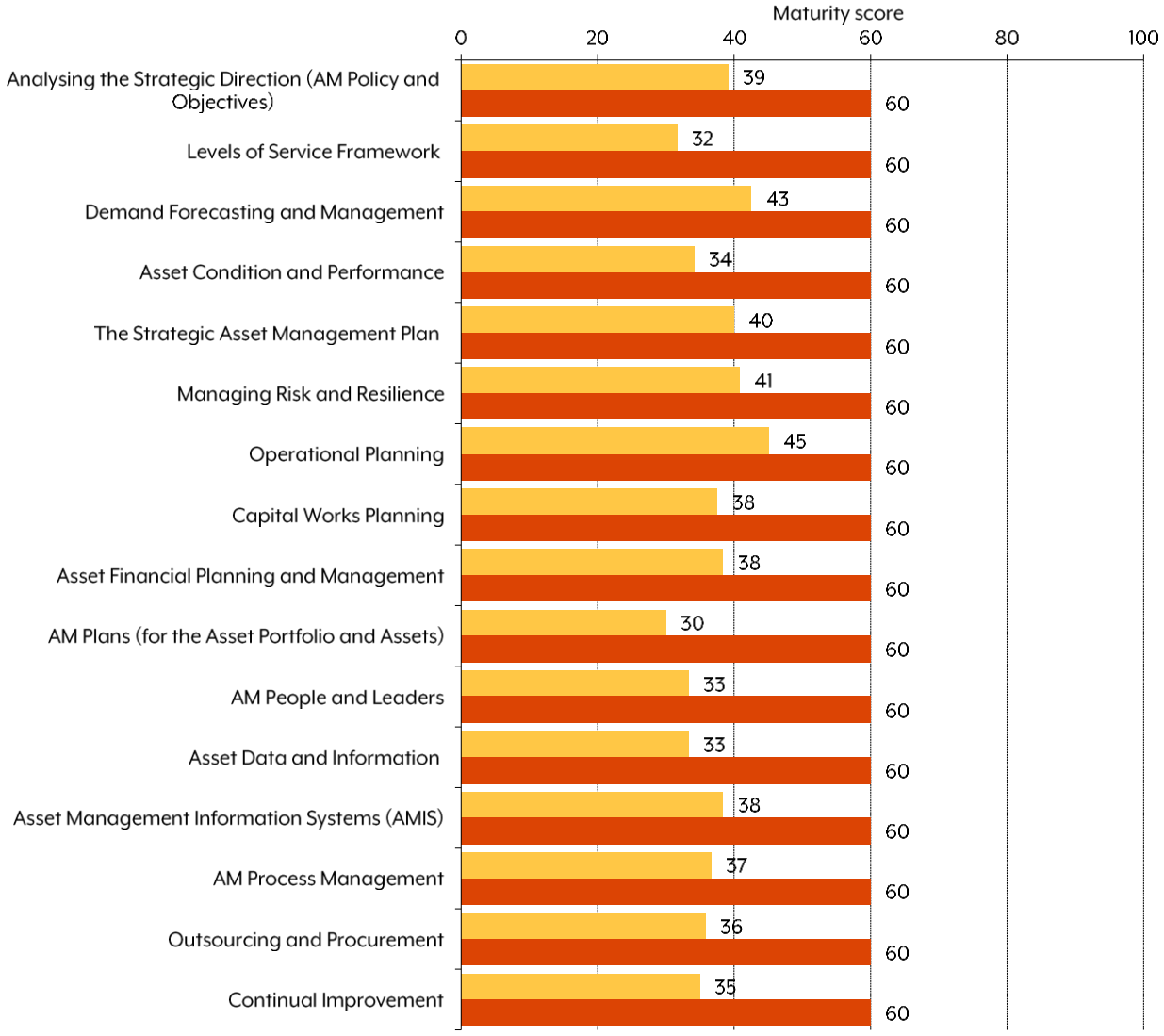
The Institute of Public Works institute of Australasia (IPWEA) provides an asset management assessment tool that has been well adopted by Australian and New Zealand local governments. It is used to assess the maturity of asset management practices and functions.

The Rural City of Murray Bridge has used the tool to complete an assessment of Council's maturity in asset management practice. The results below apply to the entire asset portfolio with a score of 60 defining 'core' level asset management practice. The gaps provide the opportunity for Council to target improvement in asset management across the organisation (by function) and also by asset class.

Overall Maturity ASSESSMENT results



Overall Maturity Assessment Results by Sub-element



Plan Improvement and Monitoring

Council's Maturity Assessment results have confirmed that across the infrastructure asset portfolio level, several areas require focus over the plan period. These are reflected in the Improvement Plan actions detailed below, noting they are standalone from the improvement actions generated from each Asset Management Plan.

Item	Description	Lifecycle	Impact Area	Responsibility
1	Plan and undertake a community survey to gain feedback on specific asset class levels of service	All	Levels of Service Framework	Manager City Assets
2	Review current resourcing capability and capacity for asset management across Council	All	AM People and Leaders	GM Infrastructure & Environment
3	Provide asset management training where there are identified shortfalls	All	AM People and Leaders	Manager City Assets

Item	Description	Lifecycle	Impact Area	Responsibility
4	Establish resourcing and confirm process to update all AMPs annually as part of the planning and budgeting cycle	All	AM People and Leaders	Manager City Assets
5	Implement the AM Steering Committee	All	AM People and Leaders	GM Infrastructure & Environment
6	Review Asset Management Information Systems Requirements including field workforce mobility	All	Information Systems	Manager City Assets
7	Review and update all supporting tools, templates and manuals	All	Data	Manager City Assets
8	Aggregate risk to portfolio level, presently this is at asset class level	All	Levels of service Framework	Manager City Assets
9	Review asset data governance framework	All	Data	Manager City Assets
10	Commit to a formal asset condition assessment every four years	All	Data	Manager City Assets
11	Improve asset renewals planning in all asset classes	Renewals	Capital Works Planning	Manager City Assets Manager City Infrastructure
12	Look to consolidate customer requests for maintenance from various sources	O&M	Asset condition and Performance	Manager City Assets

State of our Assets

Council has a total asset portfolio with a replacement value of circa $565M in Infrastructure, property, plant and equipment. We reviewed the implementation of our previous Asset Management Strategy, including both the performance of the assets and our financials. The sections below summarise our findings.

Levels of Service

By undertaking regular assessments, we determine which assets meet our levels of service and which require capital intervention – renewal, upgrade or expansion – to meet service level thresholds.

One way of measuring levels of service performance is to consider what proportion of assets are not in need of capital investment.

Council is currently assessing the portfolio performance for asset condition, asset functionality and asset capacity. While many of the existing measures are subjective, they are moving towards objective measures as our asset management maturity level increases.

Asset Condition

Condition across all asset classes is typically measured using a 1-6 grading system as detailed below. It is important that consistent condition grades be used in reporting various assets across an organisation which support portfolio level analysis and effective communication. Condition in most cases is assessed at 3–5-year intervals. Hazard and defects reporting occurs continuously through our customer portal or service personal feedback.

Unless otherwise stated, all asset condition graphs throughout this document are represented as percentage of replacement cost per asset condition grade as opposed to a percentage of the number of assets in each condition grade.

Condition Grading	Condition Description	% Value and Life Remaining (typical)
1	**Very Good:** Only minor planned maintenance required	100
2	**Good:** Minor maintenance required plus planned maintenance	80
3	**Fair:** Significant maintenance required	60
4	**Poor:** Significant renewal/rehabilitation required	40
5	**Very Poor:** Physically unsound and/or beyond rehabilitation	20
6	**Unserviceable:** Unsafe, needs immediate replacement or closure	0

Asset Functionality

Asset functionality is defined as the ability of the physical infrastructure to meet service needs including social, environmental and economic performance. Each class has different measures as identified in each AMP.

Asset Capacity

Asset Capacity is defined as the ability of the physical infrastructure to meet demand. Each class has different measures as identified in each AMP. The table below demonstrates the proportion of assets (by asset class) not in need of capital investment.

Condition	Buildings	94.85%
Assets where condition score is 1, 2 or 3	Civil and Transport	96.79%
	Plant and Fleet	89.34%
	Open Space	90.55%
	Stormwater	72.64%
	Water supply and Wastewater	98.84%
	Average	90.39%
Functionality	Buildings	
Assessment methodology under development	Civil and Transport	
	Plant and Fleet	
	Open Space	
	Stormwater	
	Water supply and Wastewater	
	Average	
Capacity	Buildings	
Assessment methodology under development	Civil and Transport	
	Plant and Fleet	
	Open Space	
	Stormwater	
	Water supply and Wastewater	
	Average	

Financial Management

Understanding how assets depreciate over their useful service life is critical to allocating costs and setting income streams to support financial sustainability.

Depreciation

Item	2019–20 Actual ($'000)	2020–21 Actual ($'000)	2021–2022 Actual ($'000)	2022–23 Actual ($'000)	2023–24 Budget ($'000)
Property					
Buildings		886	1,171	1,225	1,241
Civil and Transport		4,148	4,310	6,499	6,585
Plant and Fleet		496	597	599	607
Open Space		806	1,027	1,286	1,303
Stormwater		745	753	759	769
Water supply and Wastewater		59	68	81	82

Capital Works (by Asset Class)

Item	2019–20 Actual ($'000)	2020–21 Actual ($'000)	2021–2022 Actual ($'000)	2022–23 Actual ($'000)	2023–24 Budget ($'000)
Buildings		12,491	618	902	530
Civil and Transport		10,651	7,549	5,389	4,210
Plant and Fleet		1,508	691	766	1,023
Open Space		5,748	6,310	2,481	1,836
Stormwater		859	344	525	615
Water supply and Wastewater		118	0	14	27

Capital Works (by Capital Expense Type)

Item	2019–20 Actual ($'000)	2020–21 Actual ($'000)	2021–2022 Actual ($'000)	2022–23 Actual ($'000)	2023–24 Forecast ($'000)
New acquisition works		23,922	9,616	3,229	295
Renewal works		7,454	5,898	6,849	9,040

Totals	31,376	15,513	10,078	9,335
Five-year total depreciation ($'000):	7,140	7,926	10,449	10,587
Five-year annual average depreciation ($'000):				

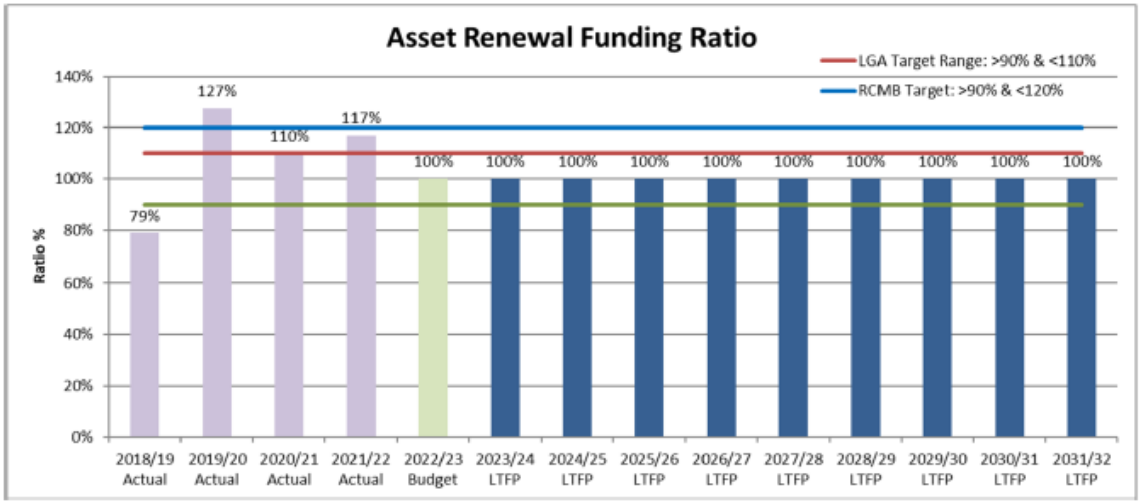
Financial Policy Ratios

Asset Renewal Funding Ratio – Council's target – Renewal/Replacement Capex > 90% but <%120

This indicator represents the extent to which assets are being replaced at the rate they are wearing out. Asset sustainability is measured by comparing renewal/replacement capital expenditure with the optimal identified renewal requirements as defined in Council's Asset Management Plans for the same period. This indicates whether Council is renewing or replacing existing non-financial assets at the optimal identified levels.

	RCMB's Actual Performance
LGA Target:	Renewal/Replacement Capex > 90% but <110%
RCMB Target:	Renewal/Replacement Capex > 90% but <120%
RCMB Result:	Renewal/Replacement Capex = 107.7% of Renewal Expenditure as per Asset Management Plans (5 yr ave of financial statements)

Below is the projected future performance as per the 2022-23 Budget and Long Term Financial Plan.

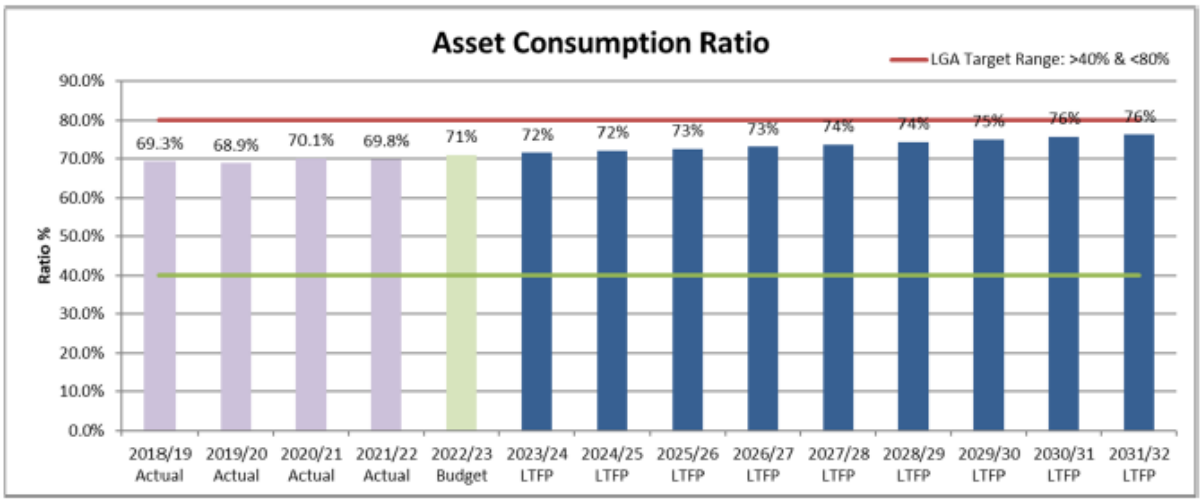


(3) Asset Consumption Ratio

This indicator represents the average proportion of “as new condition” left in assets. The ratio shows the written down current value of depreciable assets relative to their “as new” value in up-to-date prices. It highlights the aged condition of physical assets and hence the magnitude of potential future capital outlays to preserve their service potential. For Council to apply this parameter it is necessary to make memorandum adjustments for accumulated depreciation netted against gross replacement cost. This ratio is calculated for infrastructure assets based on the revaluation undertaken in 2014, adjusted for subsequent additions, disposals and depreciation charges.

	RCMB's Actual Performance
LGA Target:	Asset Consumption Ratio > 40% and < 80%
RCMB Result:	Asset Consumption Ratio = 69.8%

Below i s the projected future performance as per the 2022-23 Budget Long Term Financial Plan.



Please note that these graphs are as at the 2022-23 Budget Long Term Financial Plan and are intended to be updated in future to reflect refreshed values.

10 Year Infrastructure Asset Plan Overview

The decision to invest in existing or new assets can be complex. The up-front financial investment is significant and the decisions are multi-generational. When we commit to new assets, we must be prepared to fund future operations, maintenance and renewal costs. The following sections provide an overview of this.

We split capital expenditures into two categories – Acquisition and Renewal – each with their own considerations:

Acquisition (New Assets)

Acquisition means new assets that did not previously exist or works that will upgrade or improve an existing asset beyond its existing capacity. The decision to acquire a new asset may result from growth, demand, social and/or environmental needs. Assets may also be donated.

Council is actively preparing for the growth of our rural city, with our Future City Program providing a framework to manage and sustain growth. This includes evidence-based planning tools that identify the essential land, services and infrastructure required to support the expanding population. This is a key strategic tool to identify the need and support decision on asset acquisition.

Asset Renewal

Renewal is a major capital work which does not significantly alter the original service provided by the asset but restores, rehabilitates, replaces or renews and existing asset to its original service potential.

Assets requiring renewal are identified from one of two approaches in the Lifecycle Model.

- Uses Asset Register data to project the renewal costs (current replacement cost) and renewal timing (acquisition year plus updated useful life to determine the renewal year), or
- Use an alternative approach to estimate the timing and cost of forecast renewal work (for example, condition modelling system, staff judgement and average network renewals)

The typical useful lives of assets used to develop projected asset renewal forecasts are specific to each asset class.

Renewal Ranking Criteria

It is possible to prioritise renewals by identifying assets or asset groups that have:

- A high consequence of failure
- High use and subsequent impact on users would be significant
- Higher than expected operational or maintenance costs, and
- Potential to reduce lifecycle costs by replacement with a modern equivalent asset that would provide the equivalent service.

Our Renewal Program considers these factors across all asset classes. Each asset class has a proposed decision-making framework. *Once key renewal expenditure by asset class is confirmed, this information will be summarised in a table here.*

10-Year Outlook

As our Plans mature, specific projects will be called out by asset class in the format shown below:

Asset Class	Works overview	Cost estimate

Operations and maintenance planning / delivery (ongoing)

Operations include regular activities to provide services. Examples of typical operational activities include cleaning, street sweeping, asset inspection and asset maintenance.

Maintenance includes all actions necessary for retaining an asset as near as practicable to an appropriate service condition including regular ongoing day-to-day work necessary to keep assets operating. Maintenance can be categorised into preventive and corrective. Examples of typical maintenance activities are tabled below:

Asset Class	Preventive	Corrective
Buildings	Programmed asset inspections and maintenance to improve safety Equipment Inspections and maintenance as per Standards and industry practice– fire servicing, air conditioning filter cleaning	Failed lighting, electrical circuits Blocked toilets Lifts not working
Civil and Transport	Programmed asset inspections and maintenance	Pothole repairs
Plant and Fleet	Programmed asset inspections and maintenance Service as per manufacturer recommendations	Vehicle faults Plant faults
Open Space	Programmed asset inspections and maintenance For example, playgrounds	Failed equipment
Stormwater	Programmed asset inspections and maintenance Pumps - as per manufacturer recommendations	Pipe blockages / breakage Pit blockages / breakage
Water supply and Wastewater	Programmed asset inspections and maintenance Pumps - as per manufacturer recommendations	Blockages / breakage

Asset Disposal

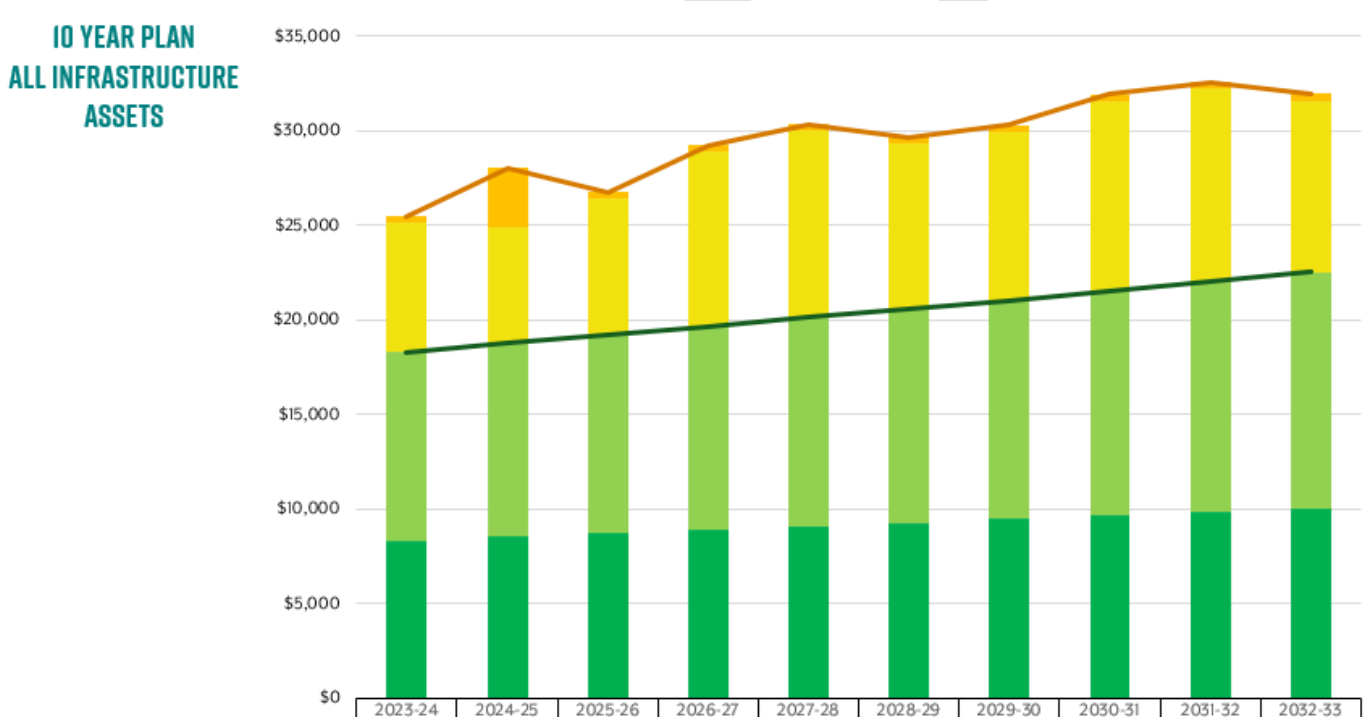
Disposal includes any activity associated with the disposal of a decommissioned asset including sale, demolition or relocation. A summary of the disposal costs and estimated reductions in annual operations and maintenance of disposing of the assets are also outlined. Any costs or revenue gained from asset disposals are included in the long-term financial plan. Assets identified for possible decommissioning and disposal are shown in the table below.

Asset	Reason for Disposal	Timing	Disposal Costs	$Saving (pa)

There are no assets currently flagged for disposal during the plan period.

10 year Funding Requirements

The following table presents the funding summary for all infrastructure asset classes over the 10-year planning period. Please refer to individual class plans for further information. (Plant and Fleet has been removed from this table)



	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33
Acquisition (New) works	295	3,154	312	317	324	331	337	344	351	357
Renewal works	6,923	6,066	7,226	9,243	9,920	8,759	8,904	10,067	10,217	9,086
Depreciation	9,980	10,230	10,485	10,746	11,017	11,291	11,574	11,862	12,160	12,463
Scheduled and reactive maintenance	8,281	8,571	8,742	8,917	9,096	9,277	9,462	9,652	9,845	10,042
CAPITAL EXPENDITURE	7,218	9,220	7,538	9,560	10,244	9,090	9,241	10,411	10,568	9,443
OPERATING EXPENDITURE	18,261	18,801	19,227	19,663	20,113	20,568	21,036	21,514	22,005	22,505

Key Assumptions made in Financial Forecasts

The following table presents the factors relating to the costs of supplying asset and asset services and changes in the need for assets or asset services. The assumptions are used in the Long Term Financial Plan (LTFP) 2022/23-2031/32. (Source: LTFP Update – August 2023)

Factor	Commentary and metrics
CPI	CPI Forecasts vary and the South Australian Centre for Economic Studies forecasts CPI of 4.5% over 2023/2024 and 3.5% over 2024/25. On the back of this forecast, the financial model assumes 7.9% CPI in 2023/24, 3.5% CPI in 24/25 and a normalisation of 2.0% thereafter as it is assumed that fiscal measures by the RBA (such as interest rate rises) will have a deflating effect on CPI.
Key Projects	Key Projects are assumed to decrease in 2023/24 to balance the budget. In 2024/25 they are assumed return to the original allocation and increase by a further 4.5% which reflects 1.0% growth plus CPI of 3.5%.
Depreciation/capex	Depreciation charge is forecast to increase 2.5% in 2023/24 reflecting increased investments in new infrastructure.

Forecast Reliability and Confidence

Expenditure projection in all plans are based on best available data. Currency and accuracy of data is critical to effective asset and financial management. Data is classified on a five-level scale in accordance with the following Data Confidence Grading System.

Confidence Grade	Description
A. Very High	Data based on sound records, procedures, investigations and analysis, documented properly and agreed as the best method of assessment. Dataset is complete and estimated to be accurate ± 2%
B. High	Data based on sound records, procedures, investigations and analysis, documented properly and agreed as the best method of assessment. Dataset is complete and estimated to be accurate ± 2%
C. Medium	Data based on sound records, procedures, investigations and analysis which is incomplete or unsupported, or extrapolated from a limited sample for which grade A or B data are available. Dataset is substantially complete but up to 50% is extrapolated data and accuracy estimated ± 25%
D. Low	Data is based on unconfirmed verbal reports and/or cursory inspections and analysis. Dataset may not be fully complete, and most data is estimated or extrapolated. Accuracy ± 40%
E. Very Low	Data is based on unconfirmed verbal reports and/or cursory inspections and analysis. Dataset may not be fully complete, and most data is estimated or extrapolated. Accuracy ± 40%

The following table summarises forecast reliability and confidence for each asset class:

Asset Class	Confidence Grade
Buildings	High
Civil & Transport	High
Plant and Fleet	High
Open Space	Medium
Stormwater	Medium
Water supply and Wastewater	Medium

Buildings Asset Management Plan 2024-2034

This Plan details critical information about our building assets, including a profile of their support services and their attributes. We also outline how this group of assets have performed over the past five years and what funds may be required to meet the projected demands of the services over the next 10-year planning period.

Actual funding will be guided by the capital investment plan of the Long Term Financial Plan and determined in the Annual Business Plan and Budget. However, the asset plan needs to outline a fuller picture of the future demand on our assets to make informed decisions around prioritisation within this asset class.

Staff Roles and Responsibilities

Clearly defining roles and responsibilities and allocating them to the right people is critical to the effective management of our infrastructure assets. The key roles and responsibilities for managing our building assets is summarised below:

Service Manager: Manager City Assets

Asset Manager: Manager City Assets

Role	Responsibility	Collaborators
Service Planning	City Assets – Buildings City Assets - Property	Community Development Community Services All Council Departments
Service Operations	City Assets – Buildings City Assets - Property	Community Development Community Services Key stakeholders - lease/licence holders, clubs Building Maintenance Officer
Asset Planning	City Assets – Buildings City Assets - Property	Community Development Community Services Senior Property Administrator Manager City Assets
Asset Design	City Assets – Buildings	Community Development Community Services Key stakeholders Manager Development & Regulation
Asset Construction	City Assets – Buildings	Building Maintenance Officer
Asset Maintenance	City Assets – Buildings	Building Maintenance Officer Key Stakeholders
Asset Disposal	Manager City Assets	Community Development Community Services Finance Officers
Asset Data	City Assets – Buildings City Assets - Property	Senior GIS Officer All staff
Asset Financials	Finance Team	Senior Property Administrator Senior GIS Officer

Asset Services and Benefits

Council's buildings provide a way to service the community. Thousands of people use Council buildings across our rural city, including workers, visitors and residents. Community use is predicted to grow to 20% by 2041. Council's buildings will need to facilitate the daily needs of people and provide functional places for them to undertake their business, social and recreational activities.

Categories

The table below summarises the categories of buildings owned and managed by Council and reflects the significant investment in this asset class. (Source: Assetic Nov 23)

TOTAL REPLACEMENT VALUE Buildings

$86M

$46M

Category one

Corporate operational buildings of strategic importance and have high public usage:

- Local Government Centre
- Library
- Performing Arts + Function Centre
- Swimming Centre
- Work Depot
- The Station
- Operational Council Buildings occupied most of the time.

$35M

Category two

Strategically important buildings which have high level public usage:

- Public toilets
- Council owned sporting clubrooms
- Sheds, park shelters, museums, Roundhouse.

Function, safety and cleanliness are important to the community and the clubs who use the facilities.

$5.6M

Category three

Less significant buildings or those which are maintained by someone else.

- Private buildings on Council land that are maintained by the owner
- Storage sheds

As these buildings are on Council land, Council is interested in public safety. Hirers of buildings will be made aware of any maintenance issues required.

TOTAL REPLACEMENT VALUE Buildings

$86M

Further detail on the assets can be found below.

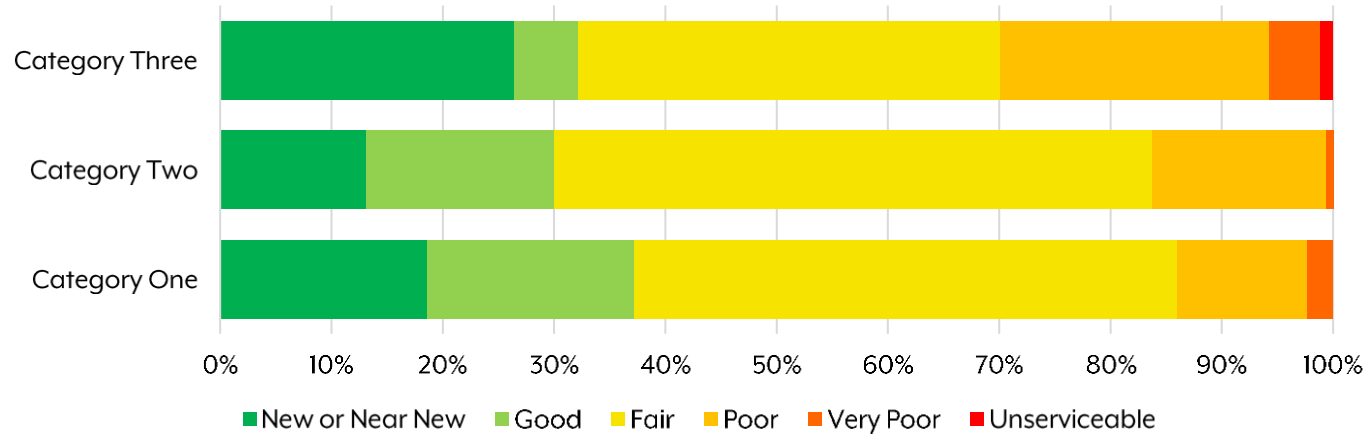
Asset Category	Description	Quantities	Useful Life (Years)	Written Down Value ($'000)	Replacement Value ($'000)
1	Corporate operational buildings of strategic importance with high public usage.	46	15 – 150	$33,062	$45,538
2	Strategically important buildings with high level public usage.	163	15 – 150	$14,920	$34,898
3	Less significant buildings of limited importance to Council or is maintained by someone else.	99	15 – 150	$2,138	$5,613
Totals:	N/A	308	15 – 150	$50,120	$86,050

Age Profile / Condition

Portfolio Level summary

70.03% of assets/components are in "fair" or better condition signaling the need for proactive maintenance renewals planning. Of these, 16.34% of assets/components are in "as new" condition.

The graph below shows the percentage of assets in each condition category.



Components, Attributes and Useful Lives

For ease of management, our buildings are broken up into a series of components. These components typically have different asset lives and require replacement as their condition or function deteriorates. The table below summarises the types, sub-types and useful life estimates.

Type	Sub-type	Useful Life (years)
Sub-Structure	Bitumen	100
	Concrete Post	80
	Concrete Slab	100
	Earth	80 or 100
	Rubble	80
	Timber	80 or 100
	Unknown	80 or 100
Super-Structure	Aluminium	60
	Brick	60 or 70
	Colorbond	60
	Concrete Block	75
	Fibro Board	65
	Galvanised Steel/Iron	60
	Pre-Fabricated Transportable	60
	Steel/Steel Frame	60
	Stone	70 or 75
	Timber	60
	Unknown	60
Roof		60
Fitouts & Fittings		20
Services	Electrical	60
	Fire	20
	Hydraulics	60
	Mechanical - Air Con (Ducted)	20
	Mechanical - Air Con (Wall Split Unit)	10
	Mechanical - Kitchen Rangehood Fan	10
	Mechanical - Gas Heater	10
	Mechanical - Lift	25
	Security	10

Levels of Service Performance

We assess the performance of the asset class relative to what customers value from the service. The sections below define the overall service proposition, the critical elements of customer service levels and how these are related through activities and funding against the key phases of the asset lifecycle. Asset criticality and service risk is also assessed.

Customer Values

Service levels are defined in three ways, customer values, customer levels of service and technical levels of service.

Customer Levels of Service

The Customer Levels of Service are considered in terms of:

- Condition – the actual physical and technical state of the asset, rated on a 1 (excellent) - 6 (very poor) basis. This refers to things like deterioration, damage, distress and unusual asset behaviour due to environmental impacts.
- Functionality – the ability of the physical infrastructure to meet service needs including social (quality, amenity, safety, accessibility), environmental (energy consumptions, waste generation, emissions) and economic performance (timeliness).
- Capacity – the ability of the physical infrastructure to meet demand, requiring an understanding of how future demands differ from current demands.

The table below summarises how these attributes are measured and expected future trends.

Measure	Level of Service	Performance Measurement	Current Performance	Expected Future Performance Trend
Condition	Provide building assets of suitable quality for its intended purpose	Validated customer requests / year, mostly roof leaks % of portfolio not in need of investment (condition 1,2 or 3)	40 94.60%	40 94.60%
	Confidence levels		Medium	Medium
Function	Provide building assets which are suitable for its intended purpose	Lighting, A/C % of portfolio not in need of investment	12 N/A	<12 N/A
	Confidence levels		Medium	Medium
Capacity	Provide building assets that are efficiently suited to current demand levels	Asset utilisation % of portfolio not in need of investment	Anecdotal only Unknown	Develop a method for the ongoing measurement and reporting of asset utilisation
	Confidence levels		Low	Low

Technical Levels of Service

By undertaking regular assessments, we determine which assets meet our levels of service and which require capital intervention – renewal, upgrade or expansion – to meet service level thresholds. Service and asset managers plan, implement and control technical service levels to influence the service outcomes. The table below shows the activities expected to be provided under the current planned budget allocation, and the forecast activity requirements being recommended in this AM Plan.

Lifecycle Activity	Purpose of Activity	Activity Measure	Current Performance	Recommended Performance
Acquisition	Upgrade activities are undertaken to provide buildings assets which are suitable for its intended purpose and asset utilisation	Degree to which new assets are funded.	No significant acquisition or upgrades scheduled	To be confirmed
		Forecast	$30,000	Is likely to increase
Operations and Maintenance	To ensure operation of buildings is suitable for purpose and cost effective	Yearly expenditure on operation of buildings.		
	Maintenance activities are undertaken to ensure building assets meet condition standards	Number of customer service requests for building maintenance.	TBC	TBC
		Forecast	$1,457,000	Is likely to increase
Renewal	Renewal activities are undertaken to ensure building assets meet condition standards	Conformance with renewal expenditure as detailed in this AMP.	TBC	
		Forecast	$500,000	Is likely to increase

Disposal	Underutilised buildings are disposed to reduce the total lifecycle costs of building assets	Value of assets disposed relative to building portfolio value.	No disposals identified
		Forecast	$0

Future Demand

We must respond proactively to the external and internal demands that relate to this asset class.

Demand for new services are managed through a combination of managing existing assets, upgrading of existing assets and providing new assets to meet demand and demand management. Demand management practices can include non-asset solutions, insuring against risks and managing failures.

Opportunities identified to date for demand management are shown in the table below:

Demand Driver	Current Position	Projection	Impact on services	Demand Management Plan
Population and Demographic Changes	Population 23,037 (2023) Dwellings 10, 143 (2021) Household size 2.33 (2021)	Population 39,416 (2041) Dwellings 12,310 (2041) Household size 2.39 Growth will be most significant in the Murray Bridge centre, Wellington – Rural East and Westside.	An increase in population will increase the utilisation and demand for community facilities including sporting and community clubs.	Methods to measure asset utilisation are to be further developed to assist with decision making surrounding the acquisition of new assets.
Leisure Trends	A growing technological society may inadvertently see a reduction in the time spent by the public undertaking leisure activities	Changes to the volume of use of open space and recreation assets and associated buildings.	Changes to the demand for community and sporting facilities which may see assets being under or over utilised	Methods to measure asset utilisation are to be further developed to assist with acquisition and disposal of new assets
Environmental	High level of public awareness of environmental issues - sustainability and	There will be greater community and legislative demand for implementing environmentally sustainable practices as part of the	Acquisition and renewal activities will need to assist with providing environmentally	Acquisition and renewal activities will need to incorporate environmental sustainability into

	climate change. Flooding.	lifecycle activities of Council's building assets.	sustainable buildings.	the building design process.
Technology	Technology trends are poised to revolutionise building assets in Australia across various domains.	From energy efficiency and security to smart building management and sustainability, the integration of advanced technologies will optimise resource usage, enhance security measures, improve operational efficiency, and promote environmentally friendly practices in building assets.	Embracing these technological advancements will not only benefit individual buildings but also contribute to the larger goal of creating a sustainable and intelligent built environment.	Develop a phased technology adoption plan, based on based on community needs.

Lifecycle Decision Making

Acquisition Plan

To meet demand new assets are acquired or created. There are no current key projects identified during the plan period.

Operations and Maintenance Plan

Maintenance includes all actions necessary for retaining an asset as near as practicable to an appropriate service condition including regular, ongoing day-to-day work necessary to keep assets operating. Building maintenance may be preventive or reactive in nature. The following table shows the typical activities undertaken in maintaining our buildings portfolio:

Category	Description
Structural Maintenance	Activities to maintain the structural integrity of buildings. This includes regular inspections, repairs of cracks or damage, reinforcement of foundations, and addressing structural issues to ensure the safety and stability of the building.
Plumbing and Electrical Maintenance	Maintenance of plumbing and electrical systems within buildings. This includes regular inspections, repair of leaks or blockages, maintenance of fixtures and fittings, and ensuring the proper functioning of electrical systems, wiring, and equipment.
HVAC System Maintenance	Maintenance of heating, ventilation, and air conditioning (HVAC) systems. This includes regular inspections, cleaning or replacement of filters, checking and repairing ductwork, and ensuring optimal functioning of HVAC equipment for occupant comfort and energy efficiency.
Fire Safety Systems Maintenance	Maintenance of fire safety systems, such as fire alarms, extinguishers, sprinkler systems, and emergency exits. This includes regular inspections, testing, and certification to ensure compliance with fire safety regulations and to protect occupants and property from fire risks.

Roof and Waterproofing Maintenance	Maintenance of building roofs and waterproofing systems. This includes inspections for leaks or damage, repair or replacement of roof materials, gutter cleaning, and ensuring proper drainage to prevent water ingress and protect the building from water-related issues.
Interior and Exterior Maintenance	Maintenance of interior and exterior building elements. This includes painting, cleaning, repair or replacement of flooring, walls, ceilings, windows, doors, and other components to ensure aesthetics, functionality, and occupant satisfaction.
Security System Maintenance	Maintenance of security systems, such as access control systems, CCTV cameras, and alarm systems. This includes regular inspections, testing, repair or replacement of equipment, and ensuring the proper functioning of security measures to protect the building and its occupants.
Landscape and Grounds Maintenance	Maintenance of building landscapes and outdoor areas by Open Space team. This includes regular lawn care, pruning of trees and shrubs, maintenance of pathways, cleaning of common areas and ensuring a well-maintained and aesthetically pleasing environment.
Energy Management and Efficiency	Activities to manage and improve energy efficiency in buildings. This includes implementation of energy-saving measures such as LED lighting, reporting on energy consumption, and optimising building management systems to reduce energy usage and environmental impact.

Maintenance contracts are in place for fire services, pest control, electrical safety, SA Water supply, air conditioning servicing, electronic door servicing, building insurance, security monitoring and minor maintenance. Building cleaning is regular planned services of nominated facilities typically provided by external contractors.

Renewal Plan

At the time of writing the future asset renewal plan is under development. The plan is being prepared based on asset condition and is done so at building and asset component level. Factors affecting renewal decisions relate to asset utilisation, the cost and benefit of investment, future growth projections and the available funds. It is important the asset base does not deteriorate relative to existing service level outcomes.

The merits of individual projects identified as candidates for upgrade can be assessed and ranked using the following matrix:

Criteria	Description
Building Condition and Age	Assessing the overall condition of the buildings and considering the age of each building.
Functional and Operational Efficiency	Considering the functionality and efficiency of the buildings in meeting the required purposes.
Maintenance and Repair Needs	Identifying maintenance and repair requirements, including structural, electrical, and plumbing needs.
Accessibility and Universal Design	Assessing the buildings' accessibility for people with disabilities and incorporating universal design.
Energy Efficiency and Sustainability	Evaluating energy efficiency measures and sustainable practices, such as renewable energy integration.

Criteria	Description
Strategic Alignment and Priorities	Ensuring alignment with Council's strategic goals and priorities.

Disposal Plan

There are presently no building or land assets considered for disposal.

Risk Management

Critical Assets

Critical assets are defined as those which have a high consequence of failure causing significant loss or reduction of service. Our category 1 and 2 buildings generally have a higher criticality rating and consequence of failure due to their type and use. Similarly, critical failure modes are those which have the highest consequence. Failure modes may include physical failure, collapse or essential service interruption. The table below shows our critical buildings assets/systems, how they may fail and the potential impact of their failure:

Critical Asset(s)	Failure Mode	Impact
Structural deterioration/failure	Safety hazards, potential building collapse, property damage	Loss of life, injuries, property damage, and economic losses. Major disruption to business operations or residential activities. Long Term impact on public confidence.
Electrical system failure	Inoperable equipment, compromised safety, potential fire hazards	Disruption of essential services, including lighting, HVAC systems, elevators, and communication networks. Potential loss of productivity, inconvenience to occupants, and increased safety risks. Possible damage to electrical equipment and sensitive electronic devices.
Fire protection system failures	Increased risk of fire, potential damage to cultural artefacts, safety hazards	Increased risk of fire-related injuries or fatalities. Greater damage to property due to a delayed or inadequate response to a fire incident. Potential violation of fire safety codes and regulations. Higher insurance premiums.
Building envelope failure	Water intrusion, damage to interior, potential structural damage	Building envelope failure can have significant impacts, including energy inefficiency, moisture intrusion, IAQ issues, damage to building components, occupant discomfort, increased maintenance costs, and decreased property value.
Safety system malfunctions	Increased risks to visitors and staff, potential legal liabilities	Failure can jeopardise occupant safety, hinder efficient operations, and potentially lead to accidents or injuries.

Risk Reduction Plans

A detailed assessment of risk associated with service delivery identifies risks that result in loss or reduction in service, personal injury, environmental impacts, a 'financial shock', reputational impacts, or other consequences. The risk assessment process identifies credible risks, the likelihood of the risk event occurring, and the consequences should the event occur. The table below consider all categories of buildings, describes what can happen and then demonstrates the impact that good risk treatment strategies have on reducing asset and service risk.

Service or Asset at Risk	What Can Happen	Risk Treatment Plan
Structural deterioration	Safety hazards, potential building collapse, property damage	Regular structural inspections, prompt repairs and maintenance, implementation of structural strengthening measures
Electrical system failure	Inoperable equipment, compromised safety, potential fire hazards	Regular electrical system inspections, RCD, thermals on switchboards, test and tag, prompt repairs and upgrades
Building envelope failure	Water intrusion, damage to interior, potential structural damage	Regular inspections of the building envelope, prompt repairs and maintenance, installation of proper waterproofing systems
Fire protection system failures	Increased risk of fire, potential damage to cultural artefacts, safety hazards	Regular inspections and maintenance of fire protection systems, prompt repairs and upgrades
Safety system malfunctions	Increased risks to visitors and staff, potential legal liabilities	Regular inspections and testing of safety systems, prompt repairs and replacements

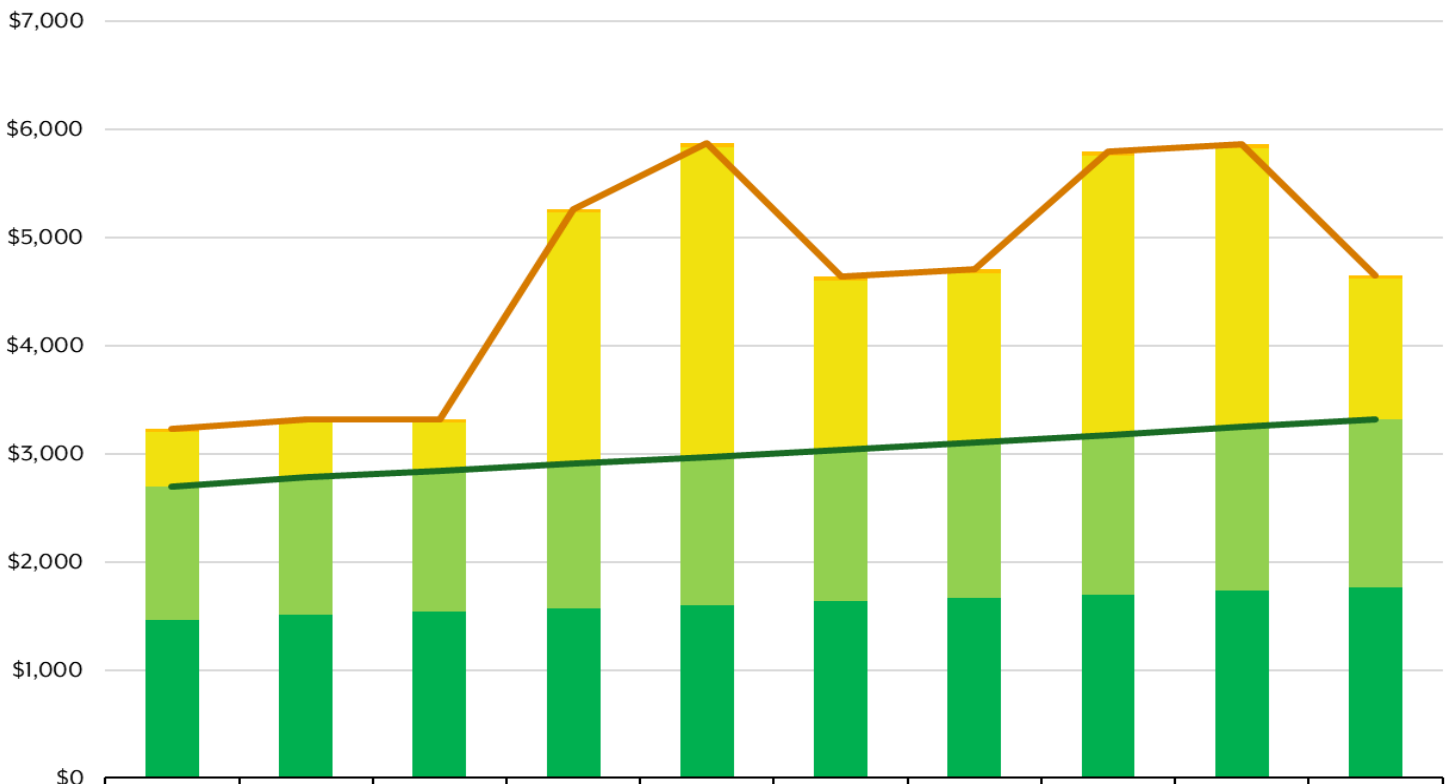
Financials – Past Performance

5-Year Summary

Item	2019–20 Actual ($'000)	2020–21 Actual ($'000)	2021–22 Actual ($'000)	2022–23 Actual ($'000)	2023-24 Forecast ($'000)
Scheduled and reactive maintenance		1,360	1,448	1,521	1,457
Depreciation		886	1,171	1,225	1,241
Operating expenditure		2,046	2,619	2,746	2,698
Renewal works		1,275	368	622	500
Acquisition		11,216	251	280	30
Capital expenditure		12,491	618	902	530
Totals:		14,537	3,237	3,648	3,228

Financials – Future Forecasts

10 YEAR PLAN BUILDINGS



	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33
Acquisition (New) works	30	0	32	32	33	34	34	35	36	36
Renewal works	500	538	445	2,327	2,865	1,563	1,564	2,581	2,581	1,297
Depreciation	1,241	1,272	1,304	1,336	1,370	1,404	1,439	1,475	1,512	1,550
Scheduled and reactive maintenance	1,457	1,508	1,538	1,569	1,600	1,632	1,665	1,698	1,732	1,767
CAPITAL EXPENDITURE	530	538	477	2,359	2,898	1,597	1,598	2,616	2,617	1,333
OPERATING EXPENDITURE	2,698	2,780	2,842	2,905	2,970	3,036	3,104	3,173	3,244	3,317

10-Year Outlook

Major investments through our Council Works program are in the process of being determined. Following on from the recent asset condition assessment process, a Building Renewals Plan is work in progress. Future plans will present information in the following manner:

Asset / sub-group	Works description	Works type	Cost estimate	Year

Financial Summary

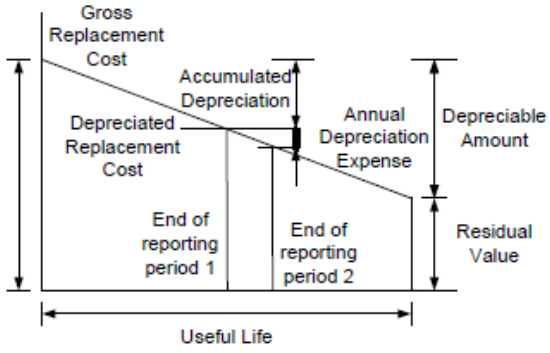
This section contains the financial requirements resulting from the information presented in the previous sections of this Asset Management Plan. The financial projections will be improved as the discussion on desired levels of service and asset performance matures.

Financial Statements and Projections

Asset Valuations

The best available estimate of the value of assets included in this AMP are shown below. The assets are valued at fair value at cost to replace service capacity:

Current (Gross) Replacement Cost	$86,050,000
Depreciable Amount	$36,000.000
Depreciated Replacement Cost (WDV)	$50,120,000
Depreciation	$1,241,000



In simple terms this means our buildings assets are 42% through their asset lifecycle.

Sustainability of Service Delivery

There are two key indicators of sustainable service delivery that are considered in this AMP for this asset class. The table below summarises what they mean and how well we are performing:

Ratio	Description	RCMB Target	RCMB Current	RCMB Forecast
Asset Renewal Funding Ratio	The extent to which assets are being replaced measured by comparing renewal/replacement capital expenditure with the optimal identified renewal requirements as defined in this AMP.	Renewal / Replacement Capex > 90% but %120	TBC	
Asset Consumption Ratio	The average proportion of "as new condition" left in assets. The ratio shows the written down current value of depreciable assets relative to their "as new" value in up-to-date prices.	>40% and <80%	58%	

Funding Strategies

The proposed funding for assets is outlined in Council's Annual Budget and Long Term Financial Plan. The financial strategy determines how funding will be provided, whereas this AMP communicates how and when this will be spent, along with the service and risk consequences of various service alternatives.

Valuation Forecasts

Asset values are forecast to increase as additional assets are acquired and existing assets upgraded.

Additional assets will generally add to the operations and maintenance needs in the longer term. Additional assets will also require additional costs due to future renewals. Any additional assets will also add to future depreciation forecasts.

Key Assumption made in Forecasts

Refer 10-Year Infrastructure Asset Plan Overview, Section 7.5.

Forecast Reliability and Confidence

Refer 10-Year Infrastructure Asset Plan Overview, Section 7.6.

Plan Improvement and Monitoring

It is important that an organisation recognise areas of their Asset Management Plan and planning process that require future improvements to ensure effective asset management and informed decision making. The Improvement Plan generated from this Asset Management Plan is shown below:

Item	Description	Lifecycle	Impact Area	Responsibility
1	Improve the Buildings team understanding of asset management through formalised training.	All	AM People & Leaders	Manager City Assets
2	Include 2020 buildings utilisation study and link to asset renewal program	All	Capital Works Planning	City Assets - Property
3	Develop current methods to measure and report regularly on key performance indicators including: • compliance with asset inspections • planned maintenance expenditure versus reactive maintenance expenditure • asset utilisation • customer satisfaction with the performance of building assets	All	Managing Risk & Resilience	City Assets - Property
4	Improve contractor pool for preventive and reactive maintenance, including fire and test and tag	All	Operational Planning	City Assets - Buildings
5	Improve procurement processes and turnaround times	O&M	Operational Planning	Procurement
6	Communicate levels of service framework (owned vs leased property responsibilities)	All	Levels of service framework	City Assets - Property
7	Prepare 10 Year Building Renewal Program	Renewal	Capital Works Planning	City Assets - Buildings
8	Further enhance preventive maintenance program	O&M	Managing Risk & Resilience	City Assets - Buildings

Civil and Transport Asset Management Plan 2024-2034

This plan details critical information about our civil and transport assets, including a profile of their support services and their attributes. We also outline how this group of assets have performed over the past five years and what funds may be required to meet the projected demands of the services over the next 10-year planning period.

Actual funding will be guided by the capital investment plan of the Long Term Financial Plan and determined in the Annual Business Plan and Budget. However, the asset plan needs to outline a fuller picture of the future demand on our assets to make informed decisions around prioritisation within this asset class.

Staff Roles and Responsibilities

Clearly defining roles and responsibilities and allocating them to the right people is critical to the effective management of our infrastructure assets. The key roles and responsibilities for managing our civil and transport assets is summarised below:

Service Manager: Manager City Infrastructure

Asset Manager: Manager City Infrastructure

Role	Responsibility	Collaborators
Service Planning	City Infrastructure – Planning & Design	Community Development Community Services Coordinator Infrastructure Planning & Design
Service Operations	City Infrastructure – Civil Operations	Community Development Community Services Team Leader Infrastructure Maintenance Coordinator Infrastructure Planning & Design
Asset Planning	City Infrastructure – Planning & Design	Community Development Community Services Group Leader Civil Operation Technical Officer Civil
Asset Design	City Infrastructure – Planning & Design	Manager Development & Regulation Infrastructure Engineer
Asset Construction	City Infrastructure – Civil Operations	Manager City Infrastructure Coordinator Infrastructure Project Delivery Infrastructure Engineer Project Manager
Asset Maintenance	City Infrastructure – Civil Operations	Team Leader Infrastructure Maintenance Technical Officer Civil
Asset Disposal	Manager City Infrastructure	Community Development Community Services Group Leader Civil Operation
Asset Data	City Infrastructure – Planning & Design City Infrastructure – Civil Operations	Senior GIS Officer All staff
Asset Financials	Finance Team	Senior GIS Officer Coordinator Infrastructure Planning & Design

Asset Services and Benefits

The primary function and service objective of roads are to facilitate movement of vehicles, pedestrians and bicycles into, around and out of the council area.

Our road infrastructure plays a critical role in maintaining the safety, amenity, livability and productivity while facilitating the movement of people, goods and services around our rural city. The plan covers all assets located within public road reserves.

Asset Class Profile

The table below summarises the categories of assets owned and management by Council and reflects the significant investment in this asset class (source: Assetic Nov 23).

TOTAL REPLACEMENT VALUE CIVIL AND TRANSPORT

$366M

$245M	$66M	$20M	$12.5M
			
SEALED ROADS	UNSEALED ROADS	KERBS	FOOTPATHS

$4.5M	$15M	$2.9M
		
CARPARKS	BRIDGES AND CAUSEWAYS	SIGNS AND TRAFFIC MANAGEMENT DEVICES

Asset Category	Description	Quantities	Useful Life (Years)	Written Down Value ($'000)	Replacement Value ($'000)
Sealed Roads	Urban and rural roads with a bitumen surface typically use spray seal, asphalt or recycled bitumen.	495,232.78 (495km)	15-160	177,697	244,590
Unsealed Roads	Roads formed and surfaced with imported granular material. Unsealed roads are mostly rural roads with a limited quantity of urban roads.	505,940.00 (506km)	20-160	25,731	66,096
Kerbs	Typically constructed from concrete on the edge of sealed roads to formalise the traffic corridor.	276,717.0 m (276.7km)	60-80	13,150	20,378
Footpaths	Constructed footpaths are typically concrete or brick paved. There is also an extensive network of scalp footpaths. Landscaped and untreated footpaths are excluded from this plan. Scalp and earth footpaths are considered a capital asset however attract no renewal activities. All works are considered maintenance.	349,667.24 (349.7km)	20-200	8,066	12,570
Car Parks	On street parking, off street parking, parking infrastructure.	42 Each	10-160	1,668	4,535
Bridges and Causeways	Vehicular bridges in the Local Government Area. Councils Vehicle bridges shared with District Council of Mt Barker. Pedestrian Bridges Causeways/Culvert Crossings (Floodways)	6 Each (3 at 50%) 18 Each 22 Each	50-100	1,174 1,154 5,931	2,996 2,077 10,054
Signs and Traffic Management Devices	Signs Guard rails Guideposts Roundabout/traffic island Other	5458 Each 30 Each 1,756 Each 77 Each 2 Each	25-80	1,305 343 93 312 1	1,849 419 119 336 2
Totals:	N/A		10-200	236,625	366,021

Road Management Data Hierarchy

Council aims to provide and manage its assets and infrastructure to meet design standards, guidelines and best practice principles and align to the expectations of the community. Civil and transport Infrastructure is measured using a Road Management Hierarchy that details, at a high level, what could be expected for each different type of road. Attributes used to measure asset capacity and performance include user profile (freight, commuter, and tourism), strategic linkages, surface type, pavement width and potential future demand.

Details of our road management hierarchy are shown in the table below.

Maintenance (LOS) Class	Road Hierarchy	Road Hierarchy Description	Km
B	Rural Link	Provides direct linkage between significant population centres or regions. Typically carry high percentages of heavy vehicles. Generally a sealed surface but may have unsealed sections.	106.5
C	Rural Collector	Predominately local users and provides linkage to State or Rural Link roads. Provides access to Rural Minor or Rural Access roads. Generally unsealed but may be sealed.	191.3
D	Rural Minor	Provides access to Rural Link and Rural Collector roads as well as access to adjoining properties. Little through traffic. Generally unsealed.	363.7
E	Rural Access	Provides access to properties only. Usually less than five properties and/or a no through road. Generally unsealed but may be formed gravel or natural surface.	142.1
A	Urban Business	CBD. Heavy traffic concentrations and some freight/delivery vehicles. Includes ancillary services to State roads. Typically sealed kerb to kerb, may be Hotmix.	5.0
A	Urban Link	State roads providing for through traffic. Not under Council care.	11.2
B	Urban Collector	Provides links to State roads and between suburbs or residential/business nodes. Heavy vehicle use. Sealed road.	29.1
C	Urban Minor	Primarily provides access to residential or commercial premises. Has some through traffic. Generally sealed but may be unsealed.	116.7
D	Urban Access	Local access only, no through traffic. Typically Cul-de-sac, Court etc. Generally sealed but may be unsealed.	32.6

Age Profile / Condition

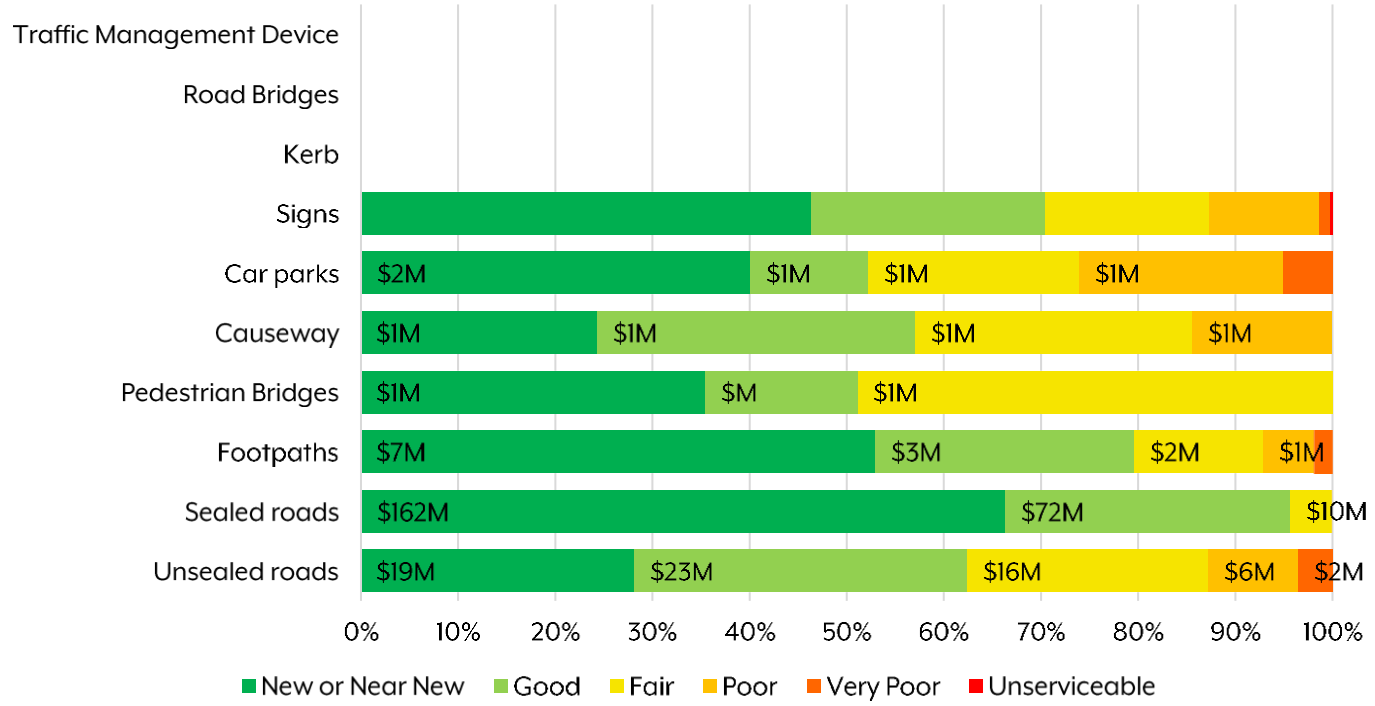
Portfolio Level Summary

96.79% of assets/components are in “fair” or better condition which is a positive result. Of these, 55.76% of assets/components are in “as new” condition.

Civil and transport infrastructure asset condition is generally very good, with over than 90% of assets categorised as new, near new, or in fair condition. However, there are some assets that currently necessitate renewal, particularly in unsealed roads and footpaths. Council recognises the significance of addressing the 10% of assets in the Very Poor condition range as a top priority in future capital works programs.

The charts below present the overall condition of our asset categories as measured by staff through defect and hazard inspections. Condition is rated on the below basis: (Source: Assetic Nov 2023)

Overall Condition Index	Description
1	New or Near New
2	Good
3	Fair
4	Poor
5	Very Poor
6	Unserviceable



Components, Attributes and Useful Lives

For ease of management, our civil and transport assets are broken up into a series of components. These components typically have different asset lives and require replacement as their condition or function deteriorates. The table below summarises the types, sub-types and useful life estimates:

Type	Sub-type	Useful Life (years)
Roads	*Sealed Roads - AC Surface*	
	Rural Light: Minor & Access	
	Sub Base	160
	Base	100
	Surface	30
	Rural Heavy: Link & Collector	
	Sub Base	160
	Base	80
	Surface	30
	Urban Light: Minor & Access	
	Sub Base	160
	Base	100
	Surface	30
	Urban Heavy: Business, Link & Collector	
	Sub Base	160
	Base	80
	Surface	30
	Sealed Roads - Spray Seal Surface	
	Rural Light: Minor & Access	
	Sub Base	160
	Base	100
	Surface	20
	Rural Heavy: Link & Collector	
	Sub Base	160
	Base	100
	Surface	15
	Urban Light: Minor & Access	
	Sub Base	160
	Base	100
	Surface	20
	Urban Heavy: Business, Link & Collector	
	Sub Base	160
	Base	100
	Surface	15
	Sealed Roads - Special Pavers (Sixth St)	
	Sub Base	160
	Base	80

	Surface	50
	Unsealed Roads (Sheeted)	
	Link & Collector	
	Sub Base	160
	Base	20
	Minor & Access	
	Sub Base	160
	Base	25
	Deep Lift Pavement	
Signs	Guide	30
	Regulatory	30
	Warning	30
	Hazard	30
	Information	30
	Special	30
	Miscellaneous	30
Kerb	150mm Upright and Semi Mountable	80
	200mm Upright	80
	Barrier Kerb	80
	Wheel Stops	
	Spoon Drain	60
Footpath	Brick	75
	Concrete	55
	AC	30
	Spray Seal	20
	Scalp	200
	Pram Ramp	55
	Pram Ramp Large	55
	Pram Ramp Special	55
Car Park	Pavement Sub-Base	160
	Pavement Base sealed	80
	Pavement Base unsealed	10
	Car Park Seal (Spray Seal)	20
	Car Park Seal (Hotmix)	40
Bridge	Road Bridge	
	Pedestrian Bridge - Timber, Recycled Plastic, Modwood	50
	Pedestrian Timber Boardwalk	50
	Pedestrian Bridge - Steel, Concrete	100
	Causeway	100

Levels of Service Performance

We assess the performance of an asset class relative to what customers value from the service. The sections below define the overall service proposition, the critical elements of customer service levels and how these relate through activities and funding against the key phases of the asset lifecycle. Asset criticality and service risk is also assessed.

Customer Values

In general terms, our community is seeking assets which are safe and functional for road users. More specifically, service levels are defined in three ways, customer values, customer levels of service and technical levels of service.

Customer Levels of Service

The Customer Levels of Service are considered in terms of:

- Condition – the actual physical and technical state of the asset, rated on a 1 (excellent) - 6 (very poor) basis. This refers to things like deterioration, damage, distress, unusual asset behaviour due to environmental impacts.
- Functionality – the ability of the physical infrastructure to meet service needs including social (quality, amenity, safety, accessibility), environmental (energy consumptions, waste generation, emissions) and economic performance (timeliness).
- Capacity – the ability of the physical infrastructure to meet demand, requiring an understanding of how future demands differ from current demands

The table below summarises how these attributes are measured and expected future trends.

Measure	Level of Service	Performance Measurement	Current Performance	Expected Future Performance Trend
Condition	Provide a road network with minimal potholes and areas of pavement failure	Number of customer requests for road maintenance	30 pa	30 pa
	Provide a road network with minimal water ponding issues	Number of customer requests for kerb and water table repairs	10 pa	<10 pa
	Confidence level		High	High
Function	Provide a road network that meets the needs of road users	Proactively look for opportunities to improve function	Review by Manager City Infrastructure	Review by Manager City Infrastructure

Measure	Level of Service	Performance Measurement	Current Performance	Expected Future Performance Trend
	Confidence level		Low	Low
Capacity	Provide a road network with minimal traffic congestion and speeding vehicles on local roads	Number of customer complaints regarding speeding vehicles and traffic congestion	To be measured through Customer Request Management System and responses to DIT Local Area Traffic Management surveys.	Steady decline in number of customer complaints due to the ongoing development of Local Area Traffic Management plans.
	Confidence level		High	Low

Technical Levels of Service

By undertaking regular assessments, we determine which assets meet our levels of service and which require capital intervention – renewal, upgrade or expansion – to meet service level thresholds. Service and asset managers plan, implement and control technical service levels to influence the service outcomes. The table below shows the activities expected to be provided under the current planned budget allocation, and the forecast activity requirements being recommended in this AMP.

Lifecycle	Purpose of Activity	Activity Measure	Current Performance	Recommended Performance
Acquisition	Develop and maintain a safe and sufficient road network.	Number of customer and internal requests for road upgrades	Acquisitions are driven by corporate strategies and masterplans and delivered as part of road reconstruction projects and include upgrades to improve streetscape amenity, cater for increased traffic volumes.	Road upgrade prioritisation criteria is to be further developed to assist with decision making for future road upgrades.
		Forecast	$1,322,000	
Operations and Maintenance	To ensure services provided are efficient and cost effective.	Number of proactive asset inspections undertaken.	Asset inspections are programmed and undertaken by Technical Officer Civil and specialist consultants on sealed roads, unsealed roads and bridges	Priority ratings and proactive inspection regimes are to be further developed for all road assets to assist with development of planned maintenance programs.

Lifecycle	Purpose of Activity	Activity Measure	Current Performance	Recommended Performance
	To maintain roads in a manner which is safe for use	The quantity of maintenance work undertaken including number of potholes repaired, area of pavement patched and length of curbing replaced. The average unit rate cost for road maintenance	Reactive maintenance is predominantly based on customer requests. Planned maintenance programs are developed from condition audits.	Further develop maintenance intervention criteria for road maintenance to ensure consistent practices are implemented to ensure asset useful lives are met.
		Forecast	$2,334,000	
Renewal	Provide a road network of suitable condition to meet the needs of road users.	The quantity of works undertaken each year through the road reconstruction, reseal and kerbing program.	The road renewal program of works is determined every five years from a detailed site condition inspection of the entire network to assess the network's condition.	Road renewal prioritisation criteria is to be further developed and allow the ongoing development of future road renewal programs.
		Forecast	$4,210,000	
Disposal	There are currently no plans for the disposal of any road assets			
		Forecast	$0	$0

Future Demand

We must respond proactively to the external and internal demands that relate to this asset class.

Demand for new services will be managed through a combination of managing existing assets, upgrading of existing assets and providing new assets to meet demand and demand management. Demand management practices can include non-asset solutions, insuring against risks and managing failures.

Opportunities identified to date for demand management are shown in the table below:

Demand Driver	Current Position	Projection	Impact on services	Demand Management Plan
Population and Demographic Changes	Population 23,037 (2023) Dwellings 10, 143 (2021) Household size 2.33 (2021)	Population 39,416 (2041) Dwellings 12,310 (2041) Household size 2.39 Growth will be most significant in the Murray Bridge centre, Wellington – Rural East and Westside	An increase in population will increase the utilisation and demand for community facilities including sporting and community clubs.	Methods to measure asset utilisation are to be further developed to assist with decision making surrounding the acquisition of new assets.
Environmental Water	Incorporating WSUD into capital projects e.g., permeable paving in place of asphalt pavement and the installation of raingardens and tree wells (emerging)	Explore opportunities and new techniques to incorporate WSUD into capital projects	Positive impacts on water management, water supply, water quality, community well-being, and long-term cost savings.	Gradual adoption well planned and costed.
Environmental Waste	Use of a range of asphalt materials derived from recycled products including reclaimed asphalt, plastic, glass, printer cartridges and crumb rubber to reduce the energy required to manufacture asphalt	Specifying of green plant and equipment by contractors to encourage cleaner energy sources. Continue to explore opportunities to utilise recycled asphalt products as part of road reseal and reconstruction program	Reducing the need for virgin resources, coast savings, improved performance, reduced waste and landfill space, energy conservation.	
Environment Energy	Expanding the use of LED lighting throughout road reserves will significantly reduce energy consumption associated with street lighting (emerging)	Further adoption will continue to occur	Energy efficiency, cost savings, enhanced visibility and safety, reduced light population, durability and reliability, less Mercury.	

Demand Driver	Current Position	Projection	Impact on services	Demand Management Plan
Technology	There is presently limited use of technology in managing our civil and transport assets. An exception is asset renewals planning where software analytics aids investment decision making.	One key area of impact is asset monitoring and maintenance. Advanced technologies such as remote sensing, Internet of Things (IoT) sensors, and data analytics enable real-time monitoring of infrastructure conditions, including roads, bridges, and buildings.	This data-driven approach allows Councils to proactively identify maintenance needs, detect structural issues, and prioritise repairs and upgrades. This helps Councils optimise asset performance, extend asset life and ensure safety and reliability.	Develop a phased technology adoption plan, based on based on community needs.

Lifecycle Decision Making

Acquisition Plan

To meet demand, new assets are acquired or created. Some of our key projects during the plan period are listed below:

- Maurice Rd sealing (externally funded)
- Various roads gifted from developments

Operations and Maintenance Plan

Routine operations and maintenance include all actions necessary for retaining an asset as near as practicable to an appropriate service condition including regular day-to-day work necessary to keep assets operating as intended. Typical activities carried out are summarised below.

Category	Description
Signage and Road Maintenance	Maintenance of road signs and markings to ensure clear and visible traffic guidance. This includes cleaning signs, repainting road markings, and replacing damaged or faded signs.

Category	Description
Pavement Maintenance	Activities to maintain road surfaces and prevent deterioration. This includes pothole patching, crack sealing, and resurfacing.
Drainage Maintenance	Maintenance of drainage systems to prevent water accumulation and ensure proper functioning. This includes clearing debris from roadside drains, cleaning and repairing culverts, and checking stormwater drainage systems.
Vegetation Management	Maintenance of roadside vegetation to ensure clear sightlines, prevent obstructions, and maintain safety. This includes tree pruning, removal of hazardous vegetation, and maintaining vegetation-free zones near road edges.
Roadside Asset Maintenance	Maintenance of various roadside assets such as guardrails, fences, and bus shelters. This includes inspection, repair, and replacement to ensure structural integrity, functionality, and safety.
Road Safety Audits and Upgrades	Conducting road safety audits to identify potential hazards and recommending improvements. This includes installing safety barriers, improving signage, and implementing traffic calming measures based on audit findings.

Renewal Plan

Council uses **Assetic MyPredictor** as a tool to assist in the modelling of funding requirements and renewal planning. This tool uses more realistic and mature degradation models and uses current asset condition for each asset within the asset class to produce potential projects that are likely required over the next 10-25 years.

Council's road network consists of 494 km of sealed and 507 km of unsealed roads and these assets represent 70% of this asset class based on replacement value. Their average Overall Condition Index (OCI) has improved slightly since 2019 and is 1.34 (was 1.79) for sealed and 2.68 (was 2.84) being better than good and better than fair condition respectively.

A realistic position for Council to aim, is to provide a level of service represented by an aspirational OCI of 1.5 for the sealed road networks and 1.75 for the unsealed road network. A variety of models have been trialed to optimise total spend, OCI and renewal workload over a 10-year period. The models range from funding being unrestrained to setting different spend limits per annum to investigate the resulting impact on OCI and renewal workload that can be readily performed by Council works staff.

The merits of individual projects identified as candidates for upgrade can be assessed and ranked using the following matrix:

Criteria	Description
Traffic Volume and Importance	Assessing the level of traffic and the significance of the road network in facilitating transportation.
Condition and Maintenance Needs	Evaluating the current state of roads and identifying necessary maintenance and repairs.

Criteria	Description
Safety Considerations	Considering factors that impact road safety, such as accident history and potential hazards.
Economic Importance	Assessing the economic impact of the road network, including connectivity and access to key areas.
Environmental Sustainability	Considering environmentally friendly practices, such as incorporating sustainable materials.
Strategic Alignment and Regional Planning	Ensuring alignment with regional development plans and strategic objectives.
Community Feedback and Priorities	Incorporating community input and addressing specific needs and concerns.

Disposal Plan

There are presently no assets considered for disposal.

Risk Management

Critical Assets

Critical assets are defined as those which have a high consequence of failure causing significant loss or reduction of service. Similarly, critical failure modes are those which have the highest consequence. Failure modes may include physical failure, collapse or essential service interruption. The table below shows our critical civil and transport assets, how they may fail and the potential impact of their failure.

Critical Asset(s)	Failure Mode	Impact
Road Pavement	Severe pavement failure restricting property access and/or provide risk to road users	Road closures which restrict properties and business premises. Increased risk of vehicle accident. Increased risk to public liability claims against council.
Kerb and water table	Kerbing lifts resulting from adjacent tree root growth	Water ponding within the road reserve with the potential to cause flood damage to properties. Increased risk to public liability claims against council.
Bridges / Culverts	Structural / deformation issues	Disruption of transportation routes, potential safety hazards, increased maintenance and repair costs.

Risk Reduction Plans

A detailed assessment of risk associated with service delivery identifies risks that result in loss or reduction in service, personal injury, environmental impacts, a 'financial shock', reputational impacts, or other consequences. The risk assessment process identifies credible risks, the likelihood of the risk event occurring, and the consequences should the event occur. The table below consider all categories of civil and transport, describes what can happen and then demonstrates how good risk treatment strategies reduce asset and service risk:

Service or Asset at Risk	What can Happen	Risk Treatment Plan	Treatment Costs
Road Pavement	Road pavement is unserviceable leading to increased risk of vehicle accidents or restricting property access.	Further develop the asset renewal criteria to assist with the decision making in developing the Capital Works Program. Further develop the risk rating criteria for all road assets to assist with the prioritisation of maintenance.	The cost of the process to further develop the asset renewal and risk rating criteria is estimated as the equivalent of 4 weeks full time work from Council's Infrastructure Engineer.
Kerb and Water table	Kerb and water table is lifted by adjacent tree root growth causing stormwater build up in the road reserve and stormwater inundating properties.	Further develop the risk rating criteria for all road assets to assist with the prioritisation of maintenance. Further develop the routine proactive inspections of road assets to assist with identifying defects and scheduling planned maintenance accordingly.	The cost of the process to further develop the risk rating criteria for all road assets is estimated as the equivalent of 4 weeks full time work from Council's Infrastructure Engineer. The cost of undertaking routine inspections is yet to be determined.
Bridges / Culverts	Structural / deformation issues	Regular bridge and culvert inspections, structural assessments, timely repairs and rehabilitation.	

Financials – Past Performance

5-Year Summary

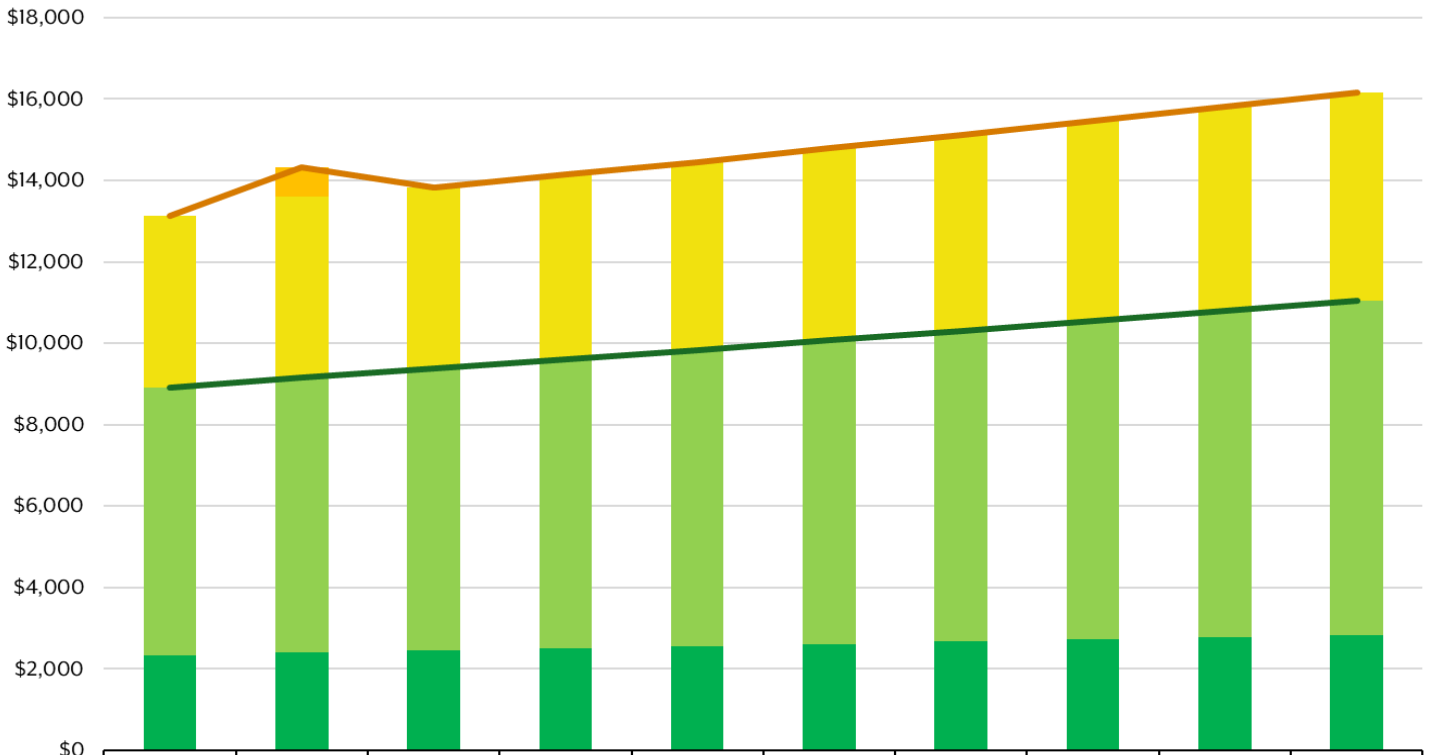
Data unavailable for 2019-20

Item	2019–20 Actual ($'000)	2020–21 Actual ($'000)	2021–22 Actual ($'000)	2022–23 Actual ($'000)	2023–24 Forecast ($'000)
Scheduled and reactive maintenance		5,287	2,141	1,959	2,334
Depreciation		4,148	4,310	6,499	6,585

Item	2019–20 Actual ($'000)	2020–21 Actual ($'000)	2021–22 Actual ($'000)	2022–23 Actual ($'000)	2023–24 Forecast ($'000)
Operating expenditure		9,435	6,451	8,458	8,919
Renewal works		3,073	4,295	4,067	4,210
Acquisition		7,578	3,254	1,322	
Capital expenditure		10,651	7,549	5,389	4,210
Totals:		20,086	14,000	13,847	13,129

Financials – Future Forecasts

10 YEAR PLAN CIVIL AND TRANSPORT



	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33
Acquisition (New) works		717	0	0	0	0	0	0	0	0
Renewal works	4,210	4,435	4,444	4,533	4,624	4,717	4,811	4,907	5,005	5,105
Depreciation	6,585	6,750	6,918	7,091	7,269	7,450	7,637	7,827	8,023	8,224
Scheduled and reactive maintenance	2,334	2,416	2,464	2,513	2,564	2,615	2,667	2,720	2,775	2,830
CAPITAL EXPENDITURE	4,210	5,152	4,444	4,533	4,624	4,717	4,811	4,907	5,005	5,105
OPERATING EXPENDITURE	8,919	9,165	9,382	9,605	9,832	10,065	10,304	10,548	10,798	11,054

10-Year Outlook

Major investments through our Council Works program are in the process of being determined. Future Plans will present information in the following manner:

Asset / sub-group	Works description	Works type	Cost estimate	Year

Financial Summary

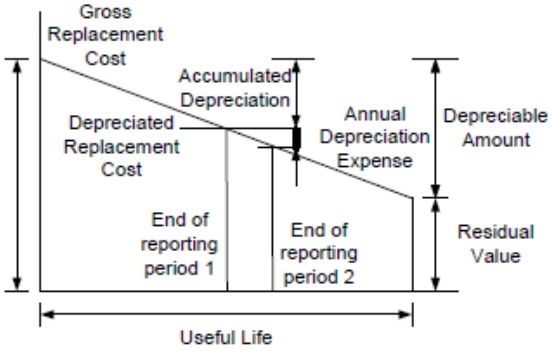
This section contains the financial requirements resulting from the information presented in the previous sections of this Asset Management Plan. The financial projections will be improved as the discussion on desired levels of service and asset performance matures.

Financial Statements and Projections

Asset Valuations

The best available estimate of the value of assets included in this AMP are shown below. The assets are valued at fair value at cost to replace service capacity:

Current (Gross) Replacement Cost	$366,021,000
Depreciable Amount	$129,396,000
Depreciated Replacement Cost (WDV)	$236,625,000
Depreciation	$6,585,000



In simple terms this means our civil and transport assets are 35% through their asset lifecycle.

Sustainability of Service Delivery

There are two key indicators of sustainable service delivery that are considered in this AMP for this asset class. The table below summarises what they mean and how well we are performing:

Ratio	Description	RCMB Target	RCMB Current	RCMB Forecast
Asset Renewal Funding Ratio	The extent to which assets are being replaced measured by comparing renewal/replacement capital expenditure with the optimal identified renewal requirements as defined in this AMP.	Renewal / Replacement Capex 100%	TBC	TBC

Ratio	Description	RCMB Target	RCMB Current	RCMB Forecast
Asset Consumption Ratio	The average proportion of “as new condition” left in assets. The ratio shows the written down current value of depreciable assets relative to their “as new” value in up-to-date prices.	>40% and <80%	67%	

Funding Strategies

The proposed funding for assets is outlined in Council's Annual Budget and Long Term Financial Plan. The financial strategy of the organisation determines how funding will be provided, whereas this AMP communicates how and when this will be spent, along with the service and risk consequences of various service alternatives.

Valuation Forecasts

Asset values are forecast to increase as additional assets are acquired and existing assets upgraded.

Additional assets add to operations and maintenance needs in the longer term. Additional assets will also require additional costs due to future renewals. Any additional assets add to future depreciation forecasts.

Key Assumption made in Forecasts

Refer 10-Year Infrastructure Asset Plan Overview, Section 7.5.

Forecast Reliability and Confidence

Refer 10-Year Infrastructure Asset Plan Overview, Section 7.6. More specially, for this asset class confidence level in condition data vary between the categories as per the table below. This is material because condition is a factor influencing the proposed renewal and maintenance budgets.

Roads	Very high - 2021 network condition assessment plus ongoing 2-monthly hazard/defect inspections
Kerbs	Very high – 2021 network condition assessment plus ongoing 2-monthly hazard/defect inspections
Footpaths	Very high – 2022 network condition assessment, plus continuous customer and staff feedback due to the nature and frequency of use)
Car Parks	Very high - 2022 condition assessment
Bridges	Very high – roads bridges, level 2 complete in 2022 and annually by Council. Other bridges – 2023.
Street Furniture	Low - data is only available for new assets

Plan Improvement and Monitoring

It is important that Council recognises areas of their Asset Management Plan and planning process that require future improvements to ensure effective asset management and informed decision making. The Improvement Plan generated from this Asset Management Plan is shown below:

Item	Description	Lifecycle	Impact Area	Responsibility
1	Verify/validate condition goals (OCI) for sealed and unsealed roads	All	Level of service framework	CI – Planning & Design
2	Ensure asset inspection manuals are in place and up to date	Operations and Maintenance	Asset Condition and Performance	CI – Planning & Design
3	Review unsealed to sealed roads Policy	Acquisition	Demand forecasting and management	CI – Planning & Design
4	Resolve time constraints in preparing 3-year renewal program	Renewals	Capital Works Planning	CI – Planning & Design
5	Investigate patrol grading to improve productive time and spend less on maintenance	Operations and Maintenance	Operational Planning	CI – Civil Operations
6	Improve project cost estimates (budget vs detailed costing)	Renewals	Asset Financial Planning and Management	CI – Planning & Design
7	Review of project completion and asset handover process, including contractors	Acquisition	Operational Planning	CI – Planning & Design

Open Space Asset Management Plan 2024-2034

This plan details critical information about our recreational and open space assets, including a profile of their support services and their attributes. We also outline how this group of assets have performed over the past five years and what funds may be required to meet the projected demands of the services over the next 10-year planning period.

Actual funding will be guided by the capital investment plan of the Long Term Financial Plan and determined in the Annual Business Plan and Budget. However, the asset plan needs to outline a fuller picture of the future demand on our assets to make informed decisions around prioritisation within this asset class.

Staff Roles and Responsibilities

Clearly defining roles and responsibilities and allocating them to the right people is critical to the effective management of our infrastructure assets. The key roles and responsibilities for managing our Open Space assets is summarised below:

Service Manager: Manager City Assets

Asset Manager: Manager City Assets

Role	Responsibility	Collaborators
Service Planning	City Assets - Open Space	Community Development Community Services Team Leader Youth, Sport & Recreation Coordinator Open Space
Service Operations	City Assets - Open Space	Community Services Team Leader Youth, Sport & Recreation Coordinator Open Space Team Leaders Open Space
Asset Planning	City Assets - Open Space	Community Development Community Services Team Leader Youth, Sport & Recreation Coordinator Open Space
Asset Design	City Assets - Open Space	Community Development Team Leader Youth, Sport & Recreation Key Stakeholders Manager Development & Regulation
Asset Construction	City Assets - Open Space	Manager City Infrastructure
Asset Maintenance	City Assets - Open Space	Team Leader Youth, Sport & Recreation Team Leaders Open Space
Asset Disposal	Manager City Assets	Community Development Community Services Team Leader Youth, Sport & Recreation
Asset Data	City Assets - Open Space	Senior GIS Officer All staff
Asset Financials	Finance Team	Senior GIS Officer Team Leader Youth, Sport & Recreation

Asset Services and Benefits

Our recreational facilities and open space assets provide valuable services and benefits to the community. They offer opportunities for physical activity and promote a healthy lifestyle, contributing to the overall well-being of individuals. They also foster social interactions and community engagement, creating a sense of belonging and unity among residents. Recreational facilities and open spaces enhance the aesthetic appeal of the area, attracting visitors, promoting tourism, and ultimately stimulating our regional economy.

Asset Class Profile

Categories

The table below summarises the categories of open space assets owned and managed by Council and reflects the significant investment in this asset class (source: Assetic: Nov 23).

TOTAL REPLACEMENT VALUE OPEN SPACE

$36.7M

$3.6M	$2M	$6M
		
FURNITURE	PLAY EQUIPMENT	PLAYING SURFACES

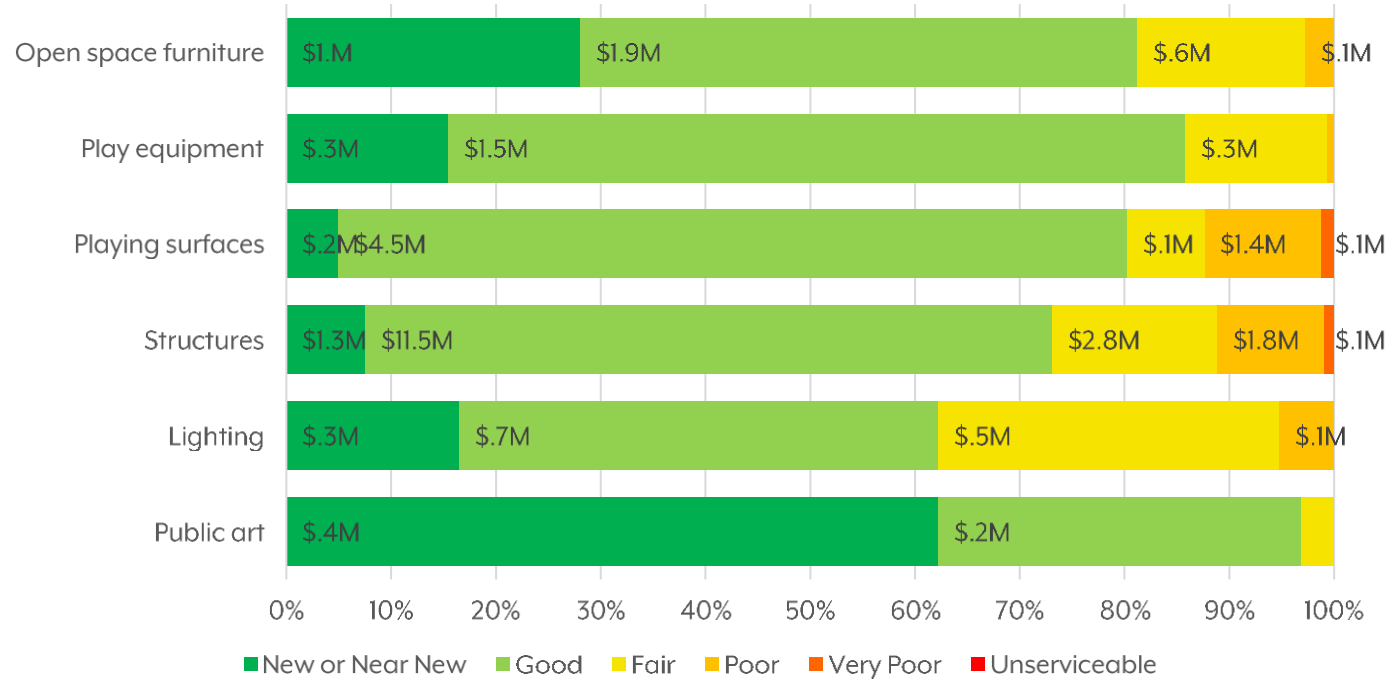
$17.5M	$1.6M	$638k
		
STRUCTURES	LIGHTING	PUBLIC ART

Asset Category	Quantities	Unit	Useful Life (Years)	Written Down Value ($'000)	Replacement Value ($'000)
Artworks	25.00	Each	100	571	638
Electrical	84.00	Each	25	548	837
Electrical Conduits	12,006.59	m	25	1,195	1,682
Electrical Conduit Pits	95.00	Each	25	90	94
Irrigation					
Network	80	Each	20	4,316	5,192
Stormwater Harvesting Treatment Facility	7.00	Each	Various	828	1,176
Pump/Pump Station	4.00	Each	Various	84	97
Other	38	Each		6	9
Lighting	294.00	Each	40	1,015	1,605
Mechanical	54.00	Each	Various	591	861
Open Space Furniture	1,047.00	Each	Various	2,636	3,642
Play Equipment					
Water Play Facility, Swimming Centre	1.00	Each	Various	459	625
Play Equipment	162.00	Each	Various	858	1,440
Sewer Mains	1,647.45	m	100	125	151
Sewer Nodes	2.00	Each	100	4	20
Sewer Plant and Equipment	4.00	Each	Various	8	28
Sewer Treatment Facility	2.00	Each	Various	2	5
Structures	1110.00	Each	Various	12,451	17,554
Water Mains	4334.17	m	100	1,020	1,027
Water Nodes	56.00	Each	100	32	55
Water Treatment Facility	18.00	Each	Various	10	12
Totals:			Various	26,849	36,750

Age Profile / Condition

Portfolio Level summary

90.55% of assets/components are in “fair” or better condition. Of these, 24.39% of assets/components are in “as new” condition.



Components, Attributes and Useful Lives

Our open space assets are broken up into a series of components. These components typically have different asset lives and require replacement as their condition or function deteriorates. The table below summarises the types, sub-types and useful life estimates. Note that this list presents only the key open space assets. Other asset category information is excluded from presentation in this plan for ease of reading.

Type	Sub-type	Useful Life (years)
Artwork	Paintings	100
	Sculpture	100
	Artwork - Other	100
Lighting	Floodlighting – old	40
	Floodlighting – new	40
	Public Lighting (includes Street Lighting)	40
Play Equipment	Play Equipment	15
	Rage Cage	25
	Skate Ramp	25

Type	Sub-type	Useful Life (years)
	Skate Park	60
	Scoreboard	35
	Basketball / Netball ring	15
	Outdoor Gym	15
	Bike Racks	30
	Bike Track	100
	Cycle Speedway	100
	Pool Cover	7
	Pool Equipment - small plant	5
	Pool Equipment - large plant	8
Playing Surfaces	Softfall	15
	Cricket Pitch	50
	Bitumen Court (e.g. tennis, basketball)	20
	Playing Surface Grass	100
	General Landscaping	5
Street and Park Furniture	Bins	10
	Seats/Benches and Picnic Settings	25
	BBQ	15
	Monument	100
	Dog Bag Dispenser	10
	Bollards	15
	Powered Bollards	15
	Water Feature	60
	Drinking Fountain	10
	Power Box and Cables	20
	White Posts	25
	Guard Rail	25
	Roundabout, Traffic Islands	80
	Street/Park Furniture - Other	20
Structures	Bollards	15
	Fence – permapine	30

Type	Sub-type	Useful Life (years)
	Fence – steel, colour bond, metal	20
	Swimming Pool	50
	Boat Ramp	80
	Wharf/Jetty - steel	75
	Wharf/Jetty - timber	75
	Shelter	20
	Flagpole	40
	Steps	50
	Gates – steel	20
	Gates – stone and iron	80
	Gates – wooden	10
	Shadecloth Sail Shelter	10
	Information Bay – old wooden style	30
	Information Bay – new style	20
	Wall	60

Levels of Service Performance

We assess the performance of the asset class relative to what customers value from the service. The sections below define the overall service proposition, the critical elements of customer service levels and how these are related through activities and funding against the key phases of the asset lifecycle. Asset criticality and service risk is also assessed.

Customer Values

Service levels are defined in three ways, customer values, customer levels of service and technical levels of service.

Customer Levels of Service

The Customer Levels of Service are considered in terms of:

- Condition – the actual physical and technical state of the asset, rated on a 1 (excellent) - 6 (unserviceable) basis. This refers to things like deterioration, damage, distress, unusual asset behaviour due to environmental impacts
- Functionality – the ability of the physical infrastructure to meet service needs including social (quality, amenity, safety, accessibility), environmental (energy consumptions, waste generation, emissions) and economic performance (timeliness)

- Capacity – the ability of the physical infrastructure to meet demand, requiring an understanding of how future demands differ from current demands

The table below summarises how these attributes are measured and expected future trends.

Type of Measure	Level of Service	Performance Measure	Current Performance	Expected Trend Based on Planned Budget
Condition	Provide a network of open space and recreation assets which are safe to use.	Number of customer requests for material maintenance in Magiq. Number of non-conforming formal inspections		Number of requests are expected to reduce.
	Confidence levels		Low	Low
Function	Provide a network of open space and recreation assets that are appealing and suitable for its intended purpose.	Targeted Customer Satisfaction Survey every four Years	Not presently measured	Customer satisfaction is expected to remain steady
	Confidence levels		Low	Low
Capacity	Provide a network of open space and recreation assets that efficiently meets demand levels.	Asset utilisation	Not currently measured and viewed as adequate.	Develop a method to measure asset utilisation
	Confidence levels		Low	Low

Technical Levels of Service

By undertaking regular assessments, we determine which assets meet our levels of service and which require capital intervention – renewal, upgrade or expansion – to meet service level thresholds. Service and asset managers plan, implement and control technical service levels to influence the service outcomes. The table below shows the activities expected to be provided under the current planned budget allocation, and the forecast activity requirements being recommended in this AMP.

Lifecycle Activity	Purpose of Activity	Activity Measure	Current Performance*	Recommended Performance
TECHNICAL LEVELS OF SERVICE				

Lifecycle Activity	Purpose of Activity	Activity Measure	Current Performance*	Recommended Performance
Acquisition	Provide a network of open space and recreation assets that efficiently meets current demand levels.	Projects are assessed and delivered as detailed in the Open Space, Sport and Recreation / other strategies and Council resolution.	Bakers Reserve Playground, Bremer Rd Cemetery upgrade, Showgrounds concept plan, Sturt Reserve Wharf Precinct.	Following the review of the Open Space Strategy, acquisition activities are to be reviewed and this AMP updated.
		Forecast	$265,000	
Operations and Maintenance	To ensure that assets are provided that are safe and available for use.	Percentage of asset inspections completed on time.	Asset inspections to be completed as follows: Playgrounds – monthly. Sporting Courts – reactive. Inspections only, Irrigation – quarterly.	Greater than 90% of asset inspections are completed on time.
		Maintenance response time to customer service Requests. Compliance with documented levels of service standards	Customer service requests are responded to within 7 days. Annual plan in progress.	100% response Annual Plan implemented.
		Forecast	$4,155	
Renewal	Replacement of the assets at optimum timing.	Asset age at renewal	Assets renewals are undertaken as per 10-year replacement plan.	Assets renewals are undertaken as per 10-year replacement plan
		Forecast	$1,571	
Disposal	There are currently no plans for the disposal of any open space and recreation assets.	-	-	-
		Budget		

Future Demand

We must respond proactively to the external and internal demands that relate to this asset class.

Demand for new services are managed through a combination of managing existing assets, upgrading of existing assets and providing new assets to meet demand and demand management. Demand management practices can include non-asset solutions, insuring against risks and managing failures.

Opportunities identified to date for demand management are shown in the table below.

Demand Driver	Current Position	Projection	Impact on services	Demand Management Plan
Population and Demographic Changes	Population 23,037 (2023) Dwellings 10, 143 (2021) Household size 2.33 (2021)	Population 39,416 (2041) Dwellings 12,310 (2041) Household size 2.39 Growth will be most significant in the Murray Bridge centre, Wellington – Rural East and Westside	An increase in population will increase the utilisation and demand for community facilities including sporting and community clubs.	Methods to measure asset utilisation are to be further developed to assist with decision making surrounding the acquisition of new assets.
Leisure Trends	A growing technological society may inadvertently see a reduction in the time spent by the public undertaking leisure activities.	Changes to the volume of use of open space and recreation assets and associated buildings.	Changes to the demand for community and sporting facilities which may see assets being under or over utilised.	Methods to measure asset utilisation are to be further developed to assist with acquisition and disposal of new assets.
Environmental Water	Reuse of stormwater for irrigation purposes (passive and active).	Continue to explore opportunities and new techniques and improve water efficiency and minimise water consumption for irrigation purposes.	Reduces strain on potable water supplies and promotes sustainable water management practices in urban areas.	Educating users, promoting water-saving technologies, and integrating smart irrigation systems.
Environmental Energy	Procure equipment derived from recycled materials which consumes	Continue to explore opportunities to utilise recycled materials as part of capital projects.	Enhances resource conservation, reduces environmental impact, and fosters a circular economy by extending	Raising awareness, offering incentives, and establishing regulations that prioritise sustainable

Demand Driver	Current Position	Projection	Impact on services	Demand Management Plan
	less energy to produce e.g. playground equipment, park furniture, sporting court surface.		the lifespan of products and reducing the demand for new raw materials.	procurement practices.
Environmental Waste	Minimising the waste generation from renewal activities by sourcing products derived from recycled materials	Explore techniques and materials that allow existing asset life to be extended or to be reused at end of life.	Helps reduce waste, conserve resources, minimise environmental impact, and support the development of a more sustainable and circular economy.	Educating consumers, implementing sustainable procurement policies, and fostering collaborations between businesses.
Environmental Greening	Opportunities for landscaping and tree planting is considered as part of open space and recreation capital projects.	Explore innovative ways to incorporate greening into open space and recreation capital projects.	Enhances appeal, improves air quality, mitigates heat island effects, promotes biodiversity, and contributes to well-being and livability.	Awareness campaigns and partnering with locals to promote the benefits ultimately fostering a collective responsibility.
Technology	There is currently limited application of technology in our Open Space.	A key area of impact is asset maintenance and monitoring, where advanced technologies such as IoT sensors and remote monitoring systems enable real-time tracking of infrastructure conditions, including sports fields, playgrounds, and Open Space.	Council can ensure the efficient and safe operation of recreation infrastructure assets, leading to enhanced user experiences and increased community satisfaction.	Develop a phased technology adoption plan, based on community needs.

Lifecycle Decision Making

Acquisition Plan

To meet demand new assets are acquired or created. Some of our key projects during the plan period are listed below:

- Bakers Reserve Playground
- Bremer Road Cemetery Upgrade
- Showgrounds Concept Plan
- Sturt Reserve Wharf Precinct
- Riverglades Wetlands

Operations and Maintenance Plan

Maintenance includes all actions necessary for retaining an asset as near as practicable to an appropriate service condition including regular ongoing day-to-day work necessary to keep assets operating. Maintenance may be preventive or reactive in nature. The following table represents type of activities undertaken by our maintenance resources:

Category	**Description**
Landscape Maintenance	Maintenance activities to preserve and enhance the aesthetics and functionality of open spaces. This includes mowing lawns, trimming hedges and shrubs, planting and pruning trees, managing flower beds, and weed control to ensure a well-maintained and visually appealing environment
Irrigation System Maintenance	Maintenance of irrigation systems to ensure proper watering of open spaces and recreational areas. This includes regular inspections, pump maintenance, cleaning or repairing sprinklers, adjusting watering schedules, and monitoring water usage to optimise irrigation efficiency and conserve water resources.
Pathway and Trail Maintenance	Maintenance of pathways, trails, and footpaths within open spaces. This includes repairs of cracks or damage, resurfacing, cleaning, and clearing obstructions to provide safe and accessible routes for pedestrians, cyclists, and other recreational users.
Playground Equipment Maintenance	Maintenance of playground equipment to ensure safety and functionality. This includes regular inspections, repairs or replacements of damaged components, cleaning and sanitising equipment, and ensuring compliance with safety standards to provide a safe play environment for children.
Sports Field Maintenance	Maintenance of sports fields and playing surfaces in recreational areas. This includes mowing, levelling, aeration, fertilisation, pest control, and line marking to provide optimal conditions for sports activities, minimise injuries, and ensure consistent playing surfaces.
Facility Maintenance	Maintenance of recreational facilities such as sports courts, pavilions, picnic areas, and restrooms. This includes repairs of structural elements, cleaning and sanitation, ensuring proper functioning of utilities, addressing vandalism or graffiti, and maintaining a clean and welcoming environment for visitors.
Waste Management and Litter	Maintenance of waste management systems and litter control in open spaces. This includes emptying bins, litter collection, proper disposal of waste, implementing recycling programs, and promoting responsible waste management practices to keep open spaces clean and environmentally friendly.

Control	
Pest and Weed Control	Control and management of pests and weeds within open spaces. This includes monitoring and applying appropriate measures to control pests, such as insects or rodents, and implementing strategies to prevent or manage the spread of weeds, ensuring a healthy and well-maintained environment.
Environmental Conservation	Maintenance activities focused on environmental conservation and preservation of natural habitats within open spaces. This includes implementing strategies to protect flora and fauna, managing biodiversity, promoting sustainable practices, and preserving ecologically sensitive areas.

Renewal Plan

The merits of individual projects identified as candidates for upgrade can be assessed and ranked using the following matrix.

Criteria	Description
Asset Condition and Age	Assessing the overall condition and age of open space and recreational assets.
Community Demand and Usage	Considering the level of community demand and usage of different open space and recreational assets.
Functionality and Amenities	Assessing the functionality and availability of amenities, such as seating, lighting, and facilities.
Environmental Sustainability	Evaluating environmental considerations, such as ecological impact and sustainable management.
Strategic Alignment and Community Planning	Ensuring alignment with strategic plans and community priorities for open space and recreation.
Maintenance and Repair Needs	Identifying maintenance and repair requirements, including landscaping, infrastructure, and equipment.

There are several master plans, strategies and concept designs relating to wetlands, sporting facilities and other assets. Funding for these projects is presently under review.

Disposal Plan

There are presently no assets considered for disposal.

Risk Management

Critical Assets

Critical assets are defined as those with a high consequence of failure causing significant loss or reduction of service. Similarly, critical failure modes are those with the highest consequence. Failure modes may include physical failure, collapse or essential service interruption. The table below shows our critical open space assets, how they may fail and the potential impact of their failure:

Critical Asset(s)	Failure Mode	Impact
Parks and Gardens	Lack of regular maintenance	Deterioration of park infrastructure, overgrown vegetation, decreased aesthetic appeal
	Irrigation system failure	Compromised surface condition, dead vegetation
	Vandalism or theft	Damage to park infrastructure, loss of amenities and facilities, decreased safety
	Tree or limb failure	Potential property damage, safety hazards, injuries
Sports Fields and Courts	Poor drainage or irrigation	Reduced playability, increased risk of injuries, damage to turf
	Surface damage or wear	Decreased playability, potential injuries, increased maintenance costs
	Inadequate facility maintenance	Deterioration of sports facilities, decreased usability and safety
Playgrounds	Equipment damage or wear	Safety hazards, increased risk of injuries
	Lack of safety surfacing or fall zone protection	Increased risk of injuries from falls, potential legal liabilities
	Vandalism or theft	Damage or loss of playground equipment, decreased usability
Trails and Walkways	Erosion or structural deterioration	Unsafe conditions, decreased accessibility, potential injuries
	Lack of signage or wayfinding	Difficulties in navigation, decreased user experience
	Vegetation encroachment or overgrowth	Restricted access, safety hazards

Risk Reduction Plans

A detailed assessment of risk associated with service delivery identifies risks that result in loss or reduction in service, personal injury, environmental impacts, a 'financial shock', reputational impacts, or other consequences. The risk assessment process identifies credible risks, the likelihood of the risk event occurring, and the consequences should the event occur. The table below consider all categories of open space, describes what can happen and then demonstrates the impact that good risk treatment strategies have on reducing asset and service risk.

Service or Asset at Risk	What can Happen	Risk Treatment Plan
Parks and Gardens	Lack of regular maintenance	Implementing a regular maintenance schedule for parks and gardens, including mowing, pruning, and landscape upkeep
	Irrigation system failure	Compliance with asset maintenance plans
	Vandalism or theft	Installing security measures such as CCTV cameras, adequate lighting, and secure locks
	Tree or limb failure	Conducting regular tree inspections, pruning, and removal of hazardous trees
Sports Fields and Courts	Poor drainage or irrigation	Implementing effective drainage systems, regular inspections and maintenance of irrigation systems
	Surface damage or wear	Propose to regularly inspect and maintenance of playing surfaces, implementing usage restrictions when necessary
	Inadequate facility maintenance	Implementing a regular maintenance schedule for sports facilities, including repairs, painting, and equipment maintenance
Playgrounds	Equipment damage or wear	Regular inspections of playground equipment, prompt repairs or replacement when necessary
	Lack of safety surfacing or fall zone protection	Ensuring proper installation and maintenance of safety surfacing, maintaining adequate fall zones around playground equipment
	Vandalism or theft	Installing security measures such as CCTV cameras, secure fencing, and regular inspections
Trails and Walkways	Erosion or structural deterioration	Regular inspections and maintenance of trails and walkways, erosion control measures
	Lack of signage or wayfinding	Installing clear signage, maps, and directional markers, periodic assessment and updating of signage

Financials – Past Performance

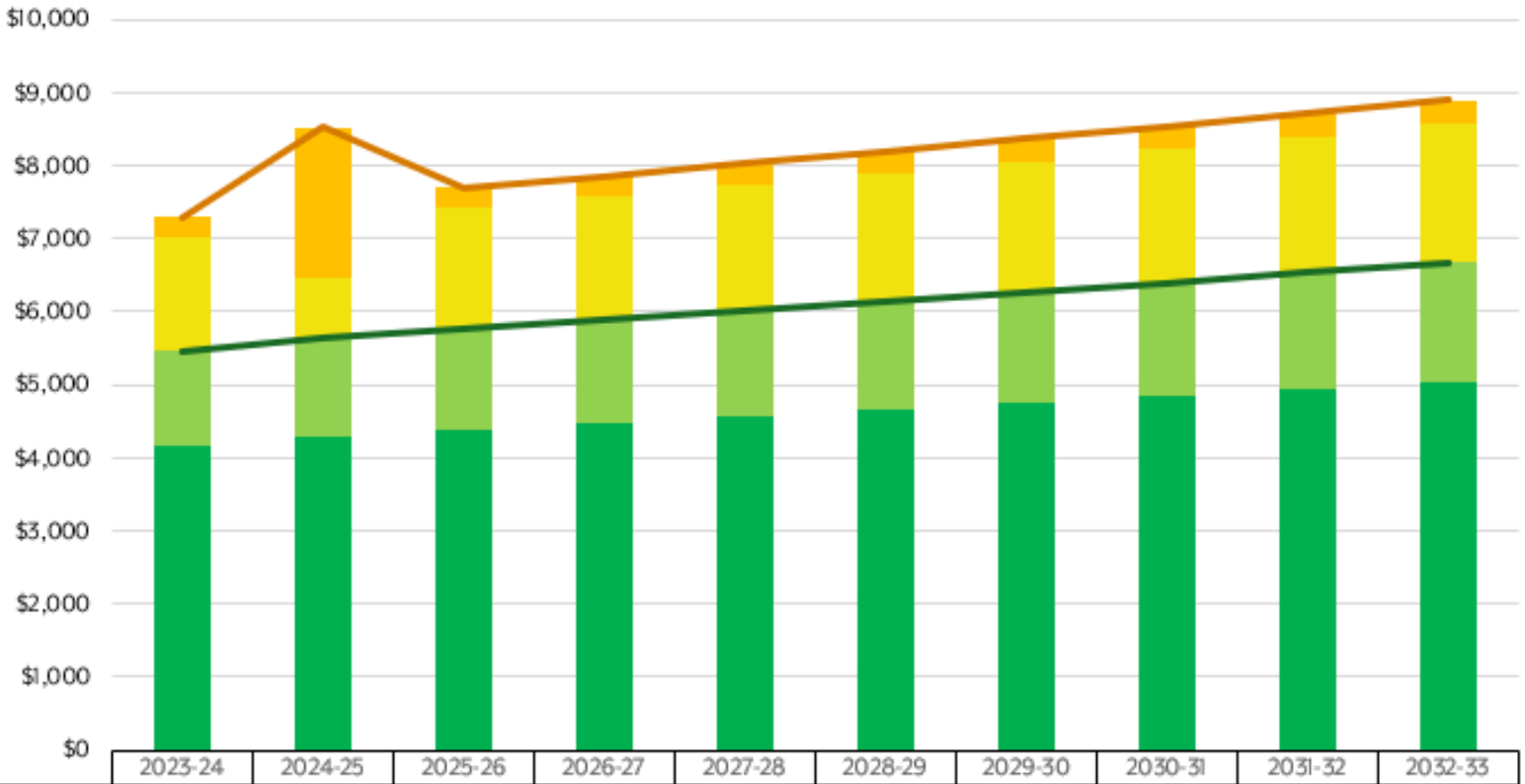
5-Year Summary

Data unavailable for 2019-20

Item	2019–20 Actual ($'000)	2020–21 Actual ($'000)	2021–22 Actual ($'000)	2022–23 Actual ($'000)	2023–24 Forecast ($'000)
Scheduled and reactive maintenance		2,913	3,472	4,646	4,155
Depreciation		805	1,027	1,286	1,303
Operating expenditure		3,718	4,499	5,932	5,458
Renewal works		2,192	630	915	1,571
Acquisition		3,556	5,680	1,565	265
Capital expenditure		5,748	6,310	2,480	1,836
Totals:		9,466	10,809	8,412	7,294

Financials – Future Forecasts

10 YEAR PLAN
OPEN SPACE



	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33
Acquisition (New) works	265	2,060	280	285	291	297	303	309	315	321
Renewal works	1,571	827	1,659	1,692	1,726	1,760	1,795	1,831	1,868	1,905
Depreciation	1,303	1,336	1,369	1,403	1,438	1,474	1,511	1,549	1,588	1,627
Scheduled and reactive maintenance	4,155	4,300	4,386	4,474	4,564	4,655	4,748	4,843	4,940	5,039
CAPITAL EXPENDITURE	1,836	2,887	1,938	1,977	2,017	2,057	2,098	2,140	2,183	2,226
OPERATING EXPENDITURE	5,458	5,636	5,755	5,877	6,002	6,129	6,259	6,392	6,527	6,666

10-Year Outlook

There are several master plans, strategies and concept designs relating to wetlands, sporting facilities and other assets. Funding for these projects is presently under review. Future plans will present information in the following manner:

Asset / sub-group	Works description	Works type	Cost estimate	Year

Financial Summary

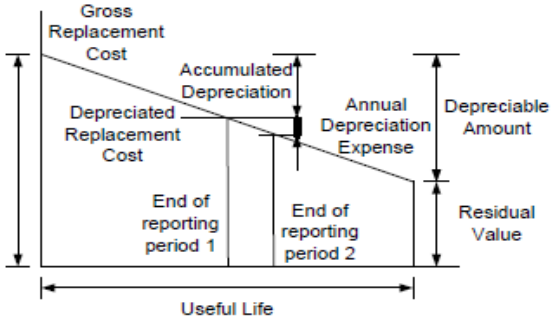
This section contains the financial requirements resulting from the information presented in the previous sections of this Asset Management Plan. The financial projections will be improved as the discussion on desired levels of service and asset performance matures.

Financial Statements and Projections

Asset Valuations

The best available estimate of the value of assets included in this AMP are shown below. The assets are valued at fair value at cost to replace service capacity:

Current (Gross) Replacement Cost	$36,750,000
Depreciable Amount	$9,901,000
Depreciated Replacement Cost (WDV)	$26,849,000
Depreciation	$1,303,000



In simple terms this mean our asset are 27% through their asset lives.

Sustainability of Service Delivery

There are two key indicators of sustainable service delivery that are considered in this AMP for this asset class. The table below summarises what they mean and how well we are performing.

Ratio	Description	RCMB Target	RCMB Current	RCMB Forecast
Asset Renewal Funding Ratio	The extent to which assets are being replaced measured by comparing renewal/replacement capital expenditure	Renewal / Replacement		

Ratio	Description	RCMB Target	RCMB Current	RCMB Forecast
	with the optimal identified renewal requirements as defined in this AMP.	Capex > 90% but %120		
Asset Consumption Ratio	The average proportion of "as new condition" left in assets. The ratio shows the written down current value of depreciable assets relative to their "as new" value in up-to-date prices.	>40% and <80%	70%	

Funding Strategies

The proposed funding for assets is outlined in Council's Annual Budget and Long Term Financial Plan. The financial strategy determines how funding will be provided, whereas this AMP communicates how and when this will be spent, along with the service and risk consequences of various service alternatives.

Valuation Forecasts

Asset values are forecast to increase as additional assets are acquired and existing assets upgraded.

Additional assets generally add to the operations and maintenance needs in the longer term. Additional assets require additional costs due to future renewals. Any additional assets add to future depreciation forecasts.

Key Assumption made in Forecasts

Refer 10-Year Infrastructure Asset Plan Overview, Section 7.5.

Forecast Reliability and Confidence

Refer 10-Year Infrastructure Asset Plan Overview, Section 7.6.

Plan Improvement and Monitoring

It is important that we recognise areas of our Asset Management Plan and planning process that require future improvements to ensure effective asset management and informed decision making. The Improvement Plan generated from this Asset Management Plan is shown below:

Item	Description	Lifecycle	Impact Area	Responsibility
1	Update the Sports and Recreation Strategy utilisation patterns and include function and age	Acquisition Renewal	Levels of Service Framework	CI – Civil Delivery
2	Develop a method of measuring utilisation and function for major asset types	Acquisition Renewal	Levels of Service Framework	CI – Civil Delivery
3	Identify critical spare requirements (if required)	Operations and Maintenance	Managing Risk and Resilience	City Assets – Open Space
4	Improve process to capture new assets (handover)	Acquisition Renewals	Asset Data and Information	Manager City Assets
5	Improve service level definitions and understanding of cost implications	Operations and Maintenance	Levels of Service Framework	CI – Civil Delivery
6	Develop a 10 Year Work Program	Renewal	Levels of Service Framework	CI – Civil Delivery
7	Review annual maintenance plan for all open space areas	Operations and Maintenance	Asset condition and Performance	City Assets – Open Space

Stormwater Asset Management Plan 2024-2034

This plan details critical information about our stormwater assets, including a profile of their support services and their attributes. We also outline how this group of assets have performed over the past five years and what funds may be required to meet the projected demands of the services over the next 10-year planning period.

Actual funding will be guided by the capital investment plan of the Long Term Financial Plan and determined in the Annual Business Plan and Budget. However, the asset plan needs to outline a fuller picture of the future demand on our assets to make informed decisions around prioritisation within this asset class.

Staff Roles and Responsibilities

Clearly defining roles and responsibilities and allocating them to the right people is critical to the effective management of our infrastructure assets. The key roles and responsibilities for managing our stormwater assets is summarised below:

Service Manager: Manager City Infrastructure

Asset Manager: Manager City Infrastructure

Role	Responsibility	Collaborators
Service Planning	Group Leader Civil Operation	Community Development Community Services Coordinator Infrastructure Planning & Design
Service Operations	Group Leader Civil Operation	Community Development Community Services Team Leader Infrastructure Maintenance Coordinator Infrastructure Planning & Design Group Leader Open Space
Asset Planning	Coordinator Infrastructure Planning & Design Group Leader Open Space	Community Development Community Services Group Leader Civil Operation Technical Officer Civil
Asset Design	Coordinator Infrastructure Planning & Design	Manager Development & Regulation Infrastructure Engineer
Asset Construction	Coordinator Infrastructure Planning & Design	Manager City Infrastructure Coordinator Infrastructure Project Delivery Infrastructure Engineer Project Manager
Asset Maintenance	Group Leader Civil Operation Group Leader Open Space	Team Leader Infrastructure Maintenance Technical Officer Civil
Asset Disposal	Coordinator Infrastructure Planning & Design Group Leader Open Space	Community Development Community Services Group Leader Civil Operation
Asset Data	Coordinator Infrastructure Planning & Design Group Leader Civil Operations	Senior GIS Officer All staff
Asset Financials	Finance Officers	Senior GIS Officer Coordinator Infrastructure Planning & Design

Asset Services and Benefits

Our stormwater assets provide essential services and benefits to the community. These assets effectively manage and control stormwater runoff, reducing the risk of flooding and water damage to properties and infrastructure. They help improve water quality by capturing and treating pollutants, safeguarding the health of local waterways and ecosystems. Stormwater assets can be designed to incorporate green infrastructure elements, such as rain gardens and wetlands, which enhance urban aesthetics, promote biodiversity, and contribute to a more sustainable and resilient community.

The table below summarises the categories of stormwater assets owned and managed by Council and reflect the significant investment in this asset class (source: Assetic Nov 23).

TOTAL REPLACEMENT VALUE Stormwater

$65.5M

$41.3M	$3.1M	$7.9M	$2.4M
Stormwater pipes drainage	Stormwater pipes harvesting	Stormwater pits	Stormwater equipment
$728k	$4.3M	$3.3M	$2.4M
Open drains	Basins and bores drainage	Basins and bores harvesting	Rural culverts

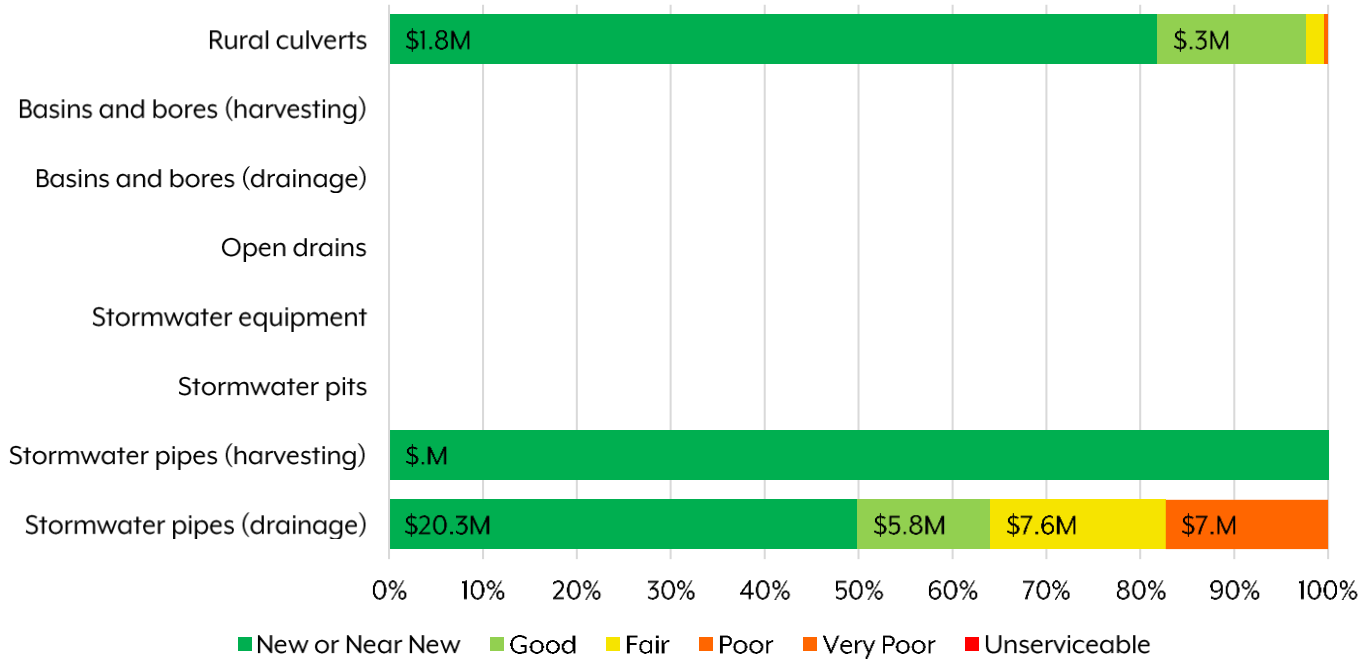
Asset Category	Asset Type	Quantities	Unit	Useful Life (Years)	Written Down Value ($'000)	Replacement Value ($'000)
Pipes	Drainage					
	Pipes	73,933.82	m	100	25,345	33,988
	Rising Mains	3,851.52	m	50	357	1,382
	Culverts	2,189.60	m	100	2,138	5,424
	Headwall/Outfall	133.00	each	100	357	522
Pipes	Harvesting					
	Pipes	689.89	m	100	174	188
	Rising Mains	9,564.89	m	50	2,453	2,878
	Culverts	16.41	m	100	11	12
	Headwall/Outfall	11.00	each	100	29	32
Pipes	WSUD					
	Pipes	73.40	m		13	13
Pits	Drainage	2282.00	each	100	6,238	7,903
	Harvesting	7.00	each	100	35	38
	WSUD	31.00	each	100	12	13
Equipment	Drainage					
	Pump/Pump Station	9.00	each	12	240	344
	Switchboard	2.00	each	25	44	63
Equipment	Harvesting					
	Other	121.00	each		359	499
	Pump/Pump Station	8.00	each	12	731	1,130
	Switchboard	6.00	each	25	282	400
Open Drains	Drainage	10,828.91	m	100	520	728
Basins and Bores	Drainage					
	Basin	44.00	each	100	3,351	4,228
	Bore	12.00	each	100	55	89
	Other	3.00	each		28	37
Basins and Bores	Harvesting					
	Basin	1.00	each	100	2,987	3,226

Asset Category	Asset Type	Quantities	Unit	Useful Life (Years)	Written Down Value ($'000)	Replacement Value ($'000)
	Other	4.00	each		26	29
WSUD	Other	1.00	Each	100	5	5
Rural Culverts	Culverts	2,770,95	m	100	1,360	1,802
	Headwalls	150.00	each	100	428	525
	Other	15.00	each		40	53
Totals:	N/A				47,618	65,551

Age Profile / Condition

Portfolio Level summary

72.64% of assets/components are in "fair" or better condition signaling the need for proactive maintenance and renewals planning. Of these, 47.24% of assets/components are in "as new" condition. 50% of the network is less than 20 years old.



Components, Attributes and Useful Lives

For ease of management, our stormwater assets are broken up into a series of sub-types. These types typically have different assets lives and require replacement as their condition or function deteriorates. The table below summarises the types, sub-types and useful life estimates.

Type	Sub-type	Useful Life (years)
Stormwater	*PVC Pipe*	
	90mm – 375mm	100
	RCP Pipe	
	300mm – 2100mm	100
	Rising Main	
	80mm – 525mm	50
	ACO Drain	
	Ag pipe	
	Headwall - to fit	
	300mm – 750mm	100
	Box Culverts	
	375x225mm to 400x3115mm	100
	Valves	
	15mm – 50mm	25
	Side Entry Pits	
	Single 900x600	100
	Double 1800x600	100
	Triple 2700x600	100
	Quadruple 3600x600	100
	Junction Box	
	450x450 to 1200x600	100
Stormwater	1200x900	100
	1200x1200	100
	Grated Inlet Pit	
	600x600	100
	1200x1200	100
	Connection Point	100
	GPT	
	HG12 to HG40A	100
	HG45A	100
	Slab	100

Type	Sub-type	Useful Life (years)
	Open Drain	100
	Basin	100
Stormwater, Water Supply and Wastewater Equipment	Meter	35
	Pump	12
	Stormwater Pump	30
	Filter	15

Levels of Service Performance

We assess the performance of the asset class relative to what customer's value from the service. The sections below define the overall service proposition, the critical elements of customer service levels and how they are related through activities and funding against the key phases of the asset lifecycle. Asset criticality and service risk are also assessed.

Customer Values

Service levels are defined in three ways, customer values, customer levels of service and technical levels of service.

Customer Levels of Service

The Customer Levels of Service are considered in terms of:

- Condition – the actual physical and technical state of the asset, rated on a 1 (excellent) - 6 (unserviceable) basis. This refers to things like deterioration, damage, distress, unusual asset behaviour due to environmental impacts.
- Functionality – the ability of the physical infrastructure to meet service needs including social (quality, amenity, safety, accessibility), environmental (energy consumptions, waste generation, emissions) and economic performance (timeliness).
- Capacity – the ability of the physical infrastructure to meet demand, requiring an understanding of how future demands differ from current demands.

The table below summarises how these attributes are measured and expected future trends.

Type of Measure	Level of Service	Performance Measure	Current Performance	Expected Trend Based on Planned Budget
Condition	Provide a stormwater network that efficiently captures and treats stormwater run- off and and provides irrigation i some circumstances	Value of stormwater renewal and upgrade projects Incorporation of water sensitive	Council incorporates raingardens, soakage tree wells.	Renewal expenditure is expected to increase as a fair portion of the asset class is now in fair to poor condition

Type of Measure	Level of Service	Performance Measure	Current Performance	Expected Trend Based on Planned Budget
	Confidence levels		Medium	Low
Function	Provide a stormwater network that controls drainage and protects the public from major flooding.	Number of customer requests relating to property flooding.	Less than 5 per annum	Less than 5 per annum
	Confidence levels		Medium	Low
Capacity	Provide and maintain a fit for purpose stormwater network	Number of customer requests for blocked drains/ pits	<10 pa	<10 pa
	Confidence levels		High	Low

Technical Levels of Service

By undertaking regular assessments, we determine which assets meet our levels of service and which require capital intervention – renewal, upgrade or expansion – to meet service level thresholds. Service and asset managers plan, implement and control technical service levels to influence the service outcomes. The table below shows the activities expected to be provided under the current planned budget allocation, and the forecast activity requirements being recommended in this AMP.

Lifecycle Activity	Purpose of Activity	Activity Measure	Current Performance*	Recommended Performance
TECHNICAL LEVELS OF SERVICE				

Lifecycle Activity	Purpose of Activity	Activity Measure	Current Performance*	Recommended Performance
Acquisition	Develop a stormwater network which successfully controls flooding.	Delivery of upgrade program in accordance with Stormwater Management Plans.	Stormwater Management Plans are to be updated. Determination of stormwater upgrades and new assets are based on localised investigations.	Acquisition activities are delivered in accordance with Stormwater Management Plans. Population growth is contributing to capacity issues within existing networks.
		Budget	$0	
Operation	Undertake CCTV inspection of pipes, pits, culverts and swales to assist with the development of planned maintenance programs and to obtain condition data.	Length of stormwater pipework inspected per annum.	Approximately 3,400 lineal metres per annum	4% of the stormwater network per annum or approximately 3,400 lineal metres per annum
Maintenance	Maintain the serviceability of the stormwater network.	Compliance with a planned pit and pipe cleaning program.	Pit and pipe cleaning is undertaken at varying frequencies across the network.	The pit and pipe cleaning program is to be further developed based on prioritisation of assets.
	Maintain the serviceability of rural culverts.	Compliance with a planned inspection regime.	Rural culvert inspections are undertaken at varying frequencies across the network.	Establish set frequencies for inspections.
	Maintain the serviceability of stormwater pump stations	The frequency of planned maintenance	Pump stations are subject to the following: yearly major services cleaning as required (generally yearly).	The current level of service is expected to be maintained.

Lifecycle Activity	Purpose of Activity	Activity Measure	Current Performance*	Recommended Performance
	Maintain the serviceability of gross pollutant traps and water sensitive urban design devices.	The frequency of planned maintenance.	Planned maintenance is undertaken six monthly or annually.	The current level of service is expected to be maintained.
		Budget	$101,000	
Renewal	Provide a stormwater network that is fit for purpose.	Stormwater asset condition scores.	Renewals are currently undertaken as identified in the findings of CCTV condition inspections.	Renewal of all stormwater assets of condition 4 or poorer over the 10-year period.
		Budget	$615,000	
Disposal	There are currently no plans for the disposal of stormwater assets.	-	-	-
		Budget	-	-

Future Demand

We must respond proactively to the external and internal demands that relate to this asset class.

Demand for new services are managed through a combination of managing existing assets, upgrading of existing assets and providing new assets to meet demand and demand management. Demand management practices can include non-asset solutions, insuring against risks and managing failures.

Opportunities identified to date for demand management are shown in the table below:

Demand Driver	Current Position	Projection	Impact on services	Demand Management Plan
Population and Demographic Changes	Population 23,037 (2023) Dwellings 10, 143 (2021) Household size 2.33 (2021)	Population 39,416 (2041) Dwellings 12,310 (2041) Household size 2.39	An increase in population will increase the utilisation and demand for stormwater assets.	Methods to measure asset utilisation are to be further developed to assist with decision making surrounding

Demand Driver	Current Position	Projection	Impact on services	Demand Management Plan
		Growth will be most significant in the Murray Bridge centre, Wellington – Rural East and Westside		the acquisition of new assets.
Environmental Water and Climate Change	Incorporating water sensitive urban design into capital projects to improve water quality and encourage stormwater reuse (passive and active)	Continue to explore opportunities and new techniques to promote water quality and efficiently capture and reuse stormwater for irrigation purposes as part of capital projects.	Increased maintenance	To be determined
Environmental Energy and Waste	Exploration of techniques to prolong asset life to reduce energy consumption in comparison to complete asset renewals e.g. relining of existing pipes.	Specifying of green plant and equipment by contractors to encourage cleaner energy sources	Reduces carbon footprint.	Not applicable
Environmental Greening	Catchment and reuse of stormwater for irrigation purposes is employed (passive and active systems).	Continue to explore opportunities and new techniques to efficiently capture and reuse stormwater for irrigation purposes as part of capital projects.	Increased open space maintenance	Not Applicable
Technology	There is currently limited application of technology in our stormwater network.	Advanced technologies such as real-time monitoring systems and sensor networks enables Council to collect and analyse data on stormwater flows, water quality, and infrastructure performance. This data-	Council can then identify areas of concern, implement targeted maintenance strategies, and prevent potential flooding and water quality problems.	Develop a phased technology development plan, based on community needs.

driven approach allows for proactive maintenance, early detection of issues, and efficient allocation of resources.

Lifecycle Decision Making

Acquisition Plan

To meet demand new assets are acquired or created. Some of our key projects during the plan period are listed below:

- Hindmarsh Estate – installation of rising from Hindmarsh Estate Basin to allow discharge to existing Howard St Basin.
- Ellendale Development – additional development funds to cater for existing Council stormwater catchment.
- Moore St upgrade – installation of pipes to counter flooding.
- Humphrey St upgrade - installation of pipes to counter flooding.
- Ashbrook Ave upgrade – installation of pipes to prevent footpath scouring.

Operations and Maintenance Plan

Maintenance includes all actions necessary for retaining an asset as near as practicable to an appropriate service condition including regular ongoing day-to-day work necessary to keep assets operating. The table represents the type of activities undertaken in this asset class.

Category	Description
Drainage System Inspections	Regular inspections of stormwater drainage systems to identify blockages, obstructions, or structural issues. This includes visual inspections, CCTV surveys, and flow monitoring to ensure proper functioning and prevent flooding or water backup during heavy rainfall events.
Debris and Sediment Removal	Removal of debris, leaves, trash, and sediment from stormwater assets such as drains, catch basins, and culverts. This includes manual or mechanical cleaning methods to maintain clear pathways for water flow, prevent blockages, and reduce the risk of localised flooding.
Erosion Control	Implementation of erosion control measures to prevent soil erosion and sedimentation in stormwater assets. This includes stabilising embankments, installing erosion control blankets or mats, and promoting vegetation growth to reduce erosion and protect water quality.

Category	Description
Stormwater Infrastructure Repairs	Repairs and maintenance of stormwater infrastructure, such as pipes, culverts, and channels. This includes addressing structural issues, cracks, leaks, or pipe failures to ensure efficient conveyance of stormwater and prevent infrastructure deterioration.
Stormwater Pond and Wetland Maintenance	Maintenance activities for stormwater ponds and wetlands. This includes regular inspections, vegetation management, sediment removal, and monitoring water quality parameters to maintain the functionality of these assets for stormwater treatment and flood mitigation.
Water Quality Monitoring	Monitoring and testing of stormwater quality to assess pollutant levels and compliance with water quality standards. This includes sampling, laboratory analysis, and implementation of measures to reduce pollutant loads and improve water quality within stormwater systems.
Stormwater Asset Mapping and Data Management	Updating and maintaining accurate maps and records of stormwater assets. This includes mapping stormwater infrastructure, documenting asset conditions, and utilising asset management systems to track maintenance activities, prioritise repairs, and optimise asset management strategies.
Community Engagement and Education	Engaging with the community to promote awareness of stormwater management practices and encourage responsible behaviours. This includes educational programs, public outreach, and collaboration with stakeholders to foster a sense of shared responsibility in maintaining stormwater assets and reducing pollution.
Emergency Response and Disaster Management	Preparedness and response activities for stormwater-related emergencies. This includes establishing emergency response plans, coordinating flood response operations, implementing flood mitigation measures, and helping during extreme weather events.

Renewal Plan

The merits of individual projects identified as candidates for upgrade can be assessed and ranked using the following matrix.

Criteria	Description
Asset Condition and Age	Assessing the overall condition and age of stormwater infrastructure assets
Functionality and Performance	Evaluating the effectiveness and performance of the stormwater network in managing water flow and drainage.
Flooding and Erosion Risk	Assessing the risk of flooding and erosion within the stormwater network.
Environmental Impact and Water	Considering the environmental impact of stormwater runoff and the quality of discharged water.

Criteria	Description
Maintenance and Repair Needs	Identifying maintenance and repair requirements, including pipe repairs, debris removal and inspections.
Climate Resilience	Evaluating the network's ability to withstand and adapt to changing climate conditions.
Strategic Alignment and Community Impact	Ensuring alignment with strategic plans and addressing community concerns related to stormwater management.

Disposal Plan

There are presently no assets considered for disposal.

Risk Management

Critical Assets

Critical assets are defined as those which have a high consequence of failure causing significant loss or reduction of service. Similarly, critical failure modes are those which have the highest consequence. Failure modes may include physical failure, collapse or essential service interruption. The table below shows our critical stormwater assets, how they may fail and the potential impact of their failure:

Critical Asset(s)	Failure Mode	Impact
Stormwater Drains	Blockages or obstructions	Flooding of roads, properties, and infrastructure, potential property damage, safety hazards
	Structural deterioration or collapse	Loss of structural integrity, sinkholes, damage to surrounding areas, potential safety hazards
	Pipe leaks or cracks	Water loss, erosion of surrounding areas, potential infrastructure damage
Stormwater Channels	Sediment builds up or siltation	Reduced capacity, increased risk of flooding, potential damage to surrounding properties and structures
	Vegetation overgrowth or encroachment	Reduced flow capacity, increased risk of flooding, potential damage to surrounding properties
Stormwater Retention Ponds	Sediment accumulation	Reduced storage capacity, decreased efficiency in managing stormwater runoff
	Damaged or malfunctioning outlet structures	Inability to control water levels, increased risk of overflow, potential flooding

Stormwater Culverts	Blockages or obstructions	Impeded flow, increased risk of flooding, potential damage to roadways and infrastructure
	Structural failure or collapse	Structural damage to culverts, road collapse, potential safety hazards
	Corrosion or deterioration of culvert materials	Reduced structural integrity, potential culvert failure, damage to surrounding areas
Stormwater Pump Stations	Pump or motor failure	Inability to manage stormwater levels, increased risk of flooding, potential property damage
	Power failure or electrical issues	Disruption in stormwater management, increased risk of flooding, potential property damage
	Sensor or control system malfunction	Inaccurate monitoring, reduced operational efficiency, potential system failure

Risk Reduction Plans

A detailed assessment of risk associated with service delivery identifies risks that result in loss or reduction in service, personal injury, environmental impacts, a 'financial shock', reputational impacts, or other consequences. The risk assessment process identifies credible risks, the likelihood of the risk event occurring, and the consequences should the event occur. The table below consider all categories of stormwater, describes what can happen and then demonstrates the impact that good risk treatment strategies have on reducing asset and service risk

Service or Asset at Risk	What can Happen	Risk Treatment Plan
Stormwater Drains	Blockages or obstructions	Regular inspections and maintenance of stormwater drains and channels to identify and clear blockages or obstructions
	Structural deterioration or collapse	Conducting regular inspections and structural assessments of stormwater drains, culverts, and channels
	Pipe leaks or cracks	Implementing regular inspections and condition assessments of stormwater drains, culverts, and pipes to identify and repair leaks
Stormwater Channels	Sediment build up or siltation	Implementing sediment and debris management programs to prevent sediment build up in stormwater channels
	Vegetation overgrowth or encroachment	Conducting regular vegetation management to prevent overgrowth and encroachment in stormwater channels
Stormwater Retention Ponds	Sediment accumulation	Regular maintenance programs for stormwater retention ponds, including sediment removal and dredging activities

Service or Asset at Risk	What can Happen	Risk Treatment Plan
	Damaged or malfunctioning outlet	Regular inspections and maintenance of outlet structures in stormwater retention ponds
Stormwater Culverts	Blockages or obstructions	Regular inspections and maintenance of stormwater culverts to identify and clear blockages or obstructions
	Structural failure or collapse	Regular inspections and structural assessments of stormwater culverts to identify and address structural issues
	Corrosion or deterioration of culvert	Protective coatings or liners on culvert materials to prevent corrosion and deterioration
Stormwater Pump Stations	Pump or motor failure	Implementing a preventive maintenance program for stormwater pump stations, including regular inspections and servicing
	Power failure or electrical issues	Consider power systems or alternative power sources to mitigate the impact of power failures

Financials – Past Performance

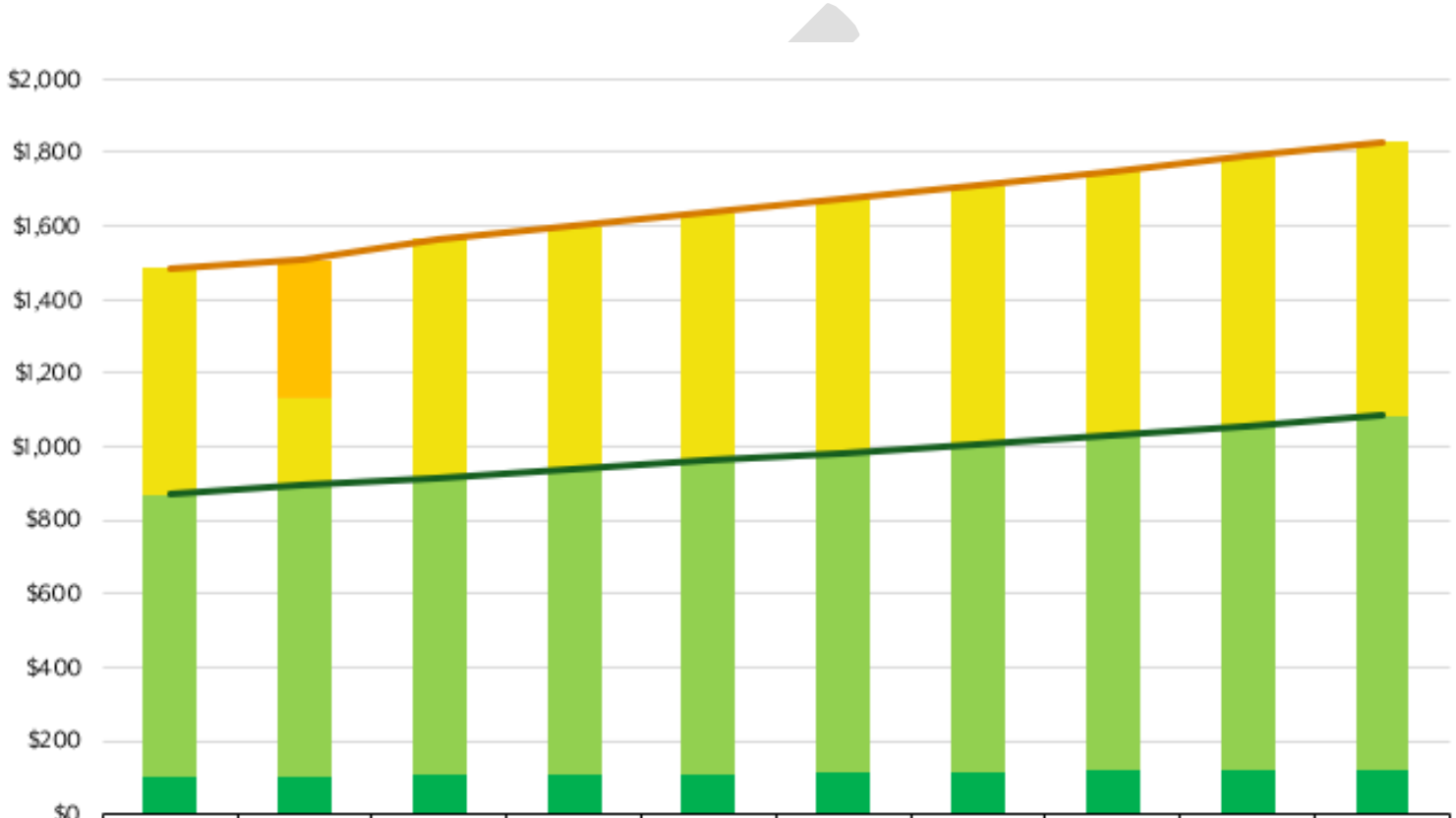
5-Year Summary

Data unavailable for 2019-20

Item	2019–20 Actual ($'000)	2020–21 Actual ($'000)	2021–22 Actual ($'000)	2022–23 Actual ($'000)	2023–24 Forecast ($'000)
Scheduled and reactive maintenance		0	46	181	101
Depreciation		745	753	759	769
Operating expenditure		745	799	940	870
Renewal works		24	145	464	615
Acquisition		836	200	61	
Capital expenditure		860	345	525	615
Totals		1,605	1,144	1,465	1,485

Financials – Future Forecasts

10 YEAR PLAN
STORMWATER



	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33
Acquisition (New) works		377	0	0	0	0	0	0	0	0
Renewal works	615	238	649	662	675	689	703	717	731	746
Depreciation	769	788	808	828	849	870	892	914	937	960
Scheduled and reactive maintenance	101	105	107	109	111	113	115	118	120	122
CAPITAL EXPENDITURE	615	615	649	662	675	689	703	717	731	746
OPERATING EXPENDITURE	870	893	915	937	960	983	1,007	1,032	1,057	1,083

10-Year Outlook

Major investments through our Council Works program are in the process of being determined. Future plans will present information in the following manner:

Asset / sub-group	Works description	Works type	Cost estimate	Year

Financial Summary

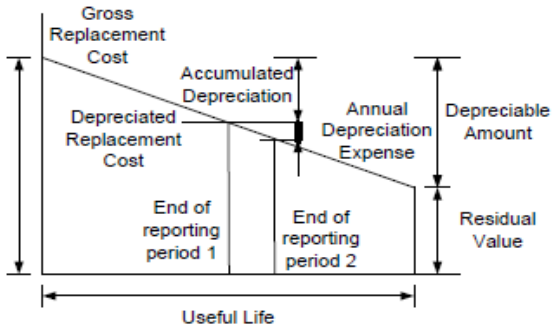
This section contains the financial requirements resulting from the information presented in the previous sections of this Asset Management Plan. The financial projections are improved as the discussion on desired levels of service and asset performance matures.

Financial Statements and Projections

Asset Valuations

The best available estimate of the value of assets included in this AMP is shown below. The assets are valued at fair value at cost to replace service capacity:

Current (Gross) Replacement Cost	$65,551,000
Depreciable Amount	$17,933,000
Depreciated Replacement Cost (WDV)	$47,618,000
Depreciation	$769,000



In simple terms, our stormwater assets are just 27% through their asset lives.

Sustainability of Service Delivery

There are two key indicators of sustainable service delivery that are considered in this AMP for this asset class. The table below summarises what they mean and how well we are performing:

Ratio	Description	RCMB Target	RCMB Current	RCMB Forecast
Asset Renewal Funding Ratio	The extent to which assets are being replaced measured by comparing renewal/replacement capital expenditure	Renewal / Replacement Capex > 90% but 120%		

Ratio	Description	RCMB Target	RCMB Current	RCMB Forecast
	with the optimal identified renewal requirements as defined in this AMP.			
Asset Consumption Ratio	The average proportion of "as new condition" left in assets. The ratio shows the written down current value of depreciable assets relative to their "as new" value in up-to-date prices.	>40% and <80%	73%	

Funding Strategies

The proposed funding for assets is outlined in Council's Annual Budget and Long Term Financial Plan. The financial strategy determines how funding will be provided, whereas this AMP communicates how and when this will be spent, along with the service and risk consequences of various service alternatives.

Valuation Forecasts

Asset values are forecast to increase as additional assets are acquired and existing assets upgraded.

Additional assets will generally add to the operations and maintenance needs in the longer term. Additional assets will also require additional costs due to future renewals. Any additional assets will also add to future depreciation forecasts.

Key Assumption made in Forecasts

Refer 10-Year Infrastructure Asset Plan Overview, Section 7.5.

Forecast reliability and Confidence

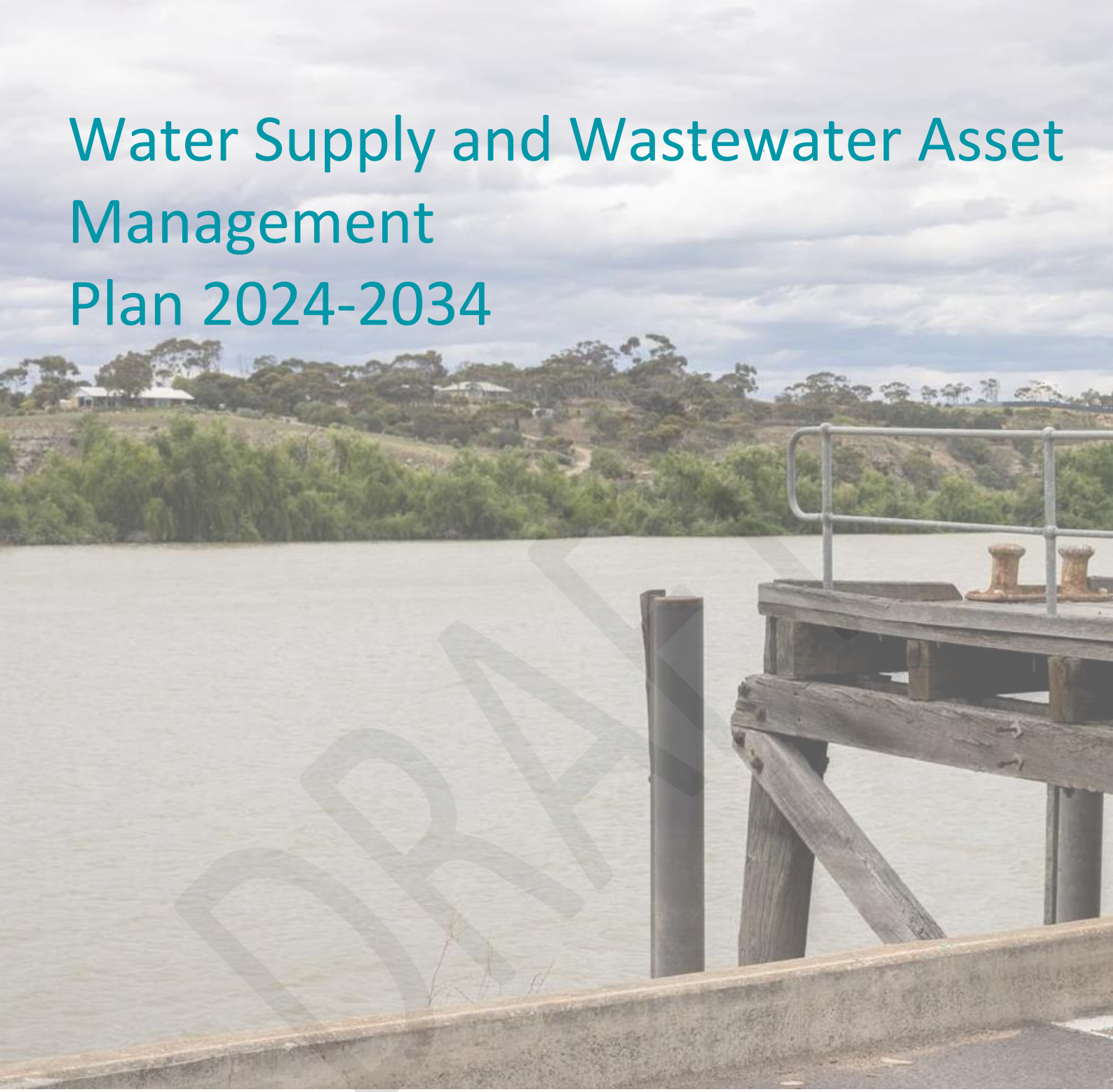
Refer 10-Year Infrastructure Asset Plan Overview, Section 7.6.

Plan Improvement and Monitoring

It is important that Council recognises areas of their Asset Management Plan and planning process that require future improvements to ensure effective asset management and informed decision making. The Improvement Plan generated from this Asset Management Plan is shown below:

Item	Description	Lifecycle	Impact Area	Responsibility
1	Update Stormwater Management Plan	All	Operational Planning	CI – Planning & Design
2	Improve working knowledge of the re-use system	All	Operational Planning	CI – Planning & Design
3	Improve systems and processes supporting maintenance planning integrity, scheduling, resourcing; management of systems documentation; and risk/contingency planning	Planning Operations & Maintenance	Operational Planning	CI – Planning & Design CI – Civil Operations
4	Validate pump sets and other assets at end of life	Renewal	Renewals	Group Leader Open Space
5	Review loadings on high pressure piping system (over-capacity)	O&M	Asset condition and Performance	Infrastructure Engineer
6	Review O&M manual, maintenance plan and list of critical spare parts	O&M	Asset condition and Performance	CI – Civil Operations
7	Develop a 10 Year Work Program (relies on 1)	Renewal	Capital Works Planning	CI – Planning & Design
8	Collect field data on 100 approx. rural culverts	O&M	Operational Planning	CI – Planning & Design

Water Supply and Wastewater Asset Management Plan 2024-2034



This plan details critical information about our water supply and wastewater assets, including a profile of their support services and their attributes. This plan covers the assets associated with Council's two Community Water Supply and Community Wastewater Management Systems (CWMS) located at Riverglen (1991) and Woodlane (1997). We outline how this group of assets have performed over the past five years and what funds may be required to meet the projected demands of the services over the next 10-year planning period.

Actual funding will be guided by the capital investment plan of the Long Term Financial Plan and determined in the Annual Business Plan and Budget. However, the asset plan needs to outline a fuller picture of the future demand on our assets to make informed decisions around prioritisation within this asset class.

Staff Roles and Responsibilities

Clearly defining roles and responsibilities and allocating them to the right people is critical to the effective management of our infrastructure assets. The key roles and responsibilities for managing our water supply and wastewater assets is summarised below:

Service Manager: Manager City Assets

Asset Manager: Manager City Assets

Role	Responsibility	Collaborators
Service Planning	City Infrastructure – Civil Operations	Community Development Community Services Coordinator Infrastructure Planning & Design Water & Wastewater Coordination
Service Operations	City Infrastructure – Civil Operations	Community Development Community Services Water & Wastewater Coordinator Coordinator Infrastructure Planning & Design
Asset Planning	City Infrastructure – Planning & Design	Community Development Community Services Water & Wastewater Coordinator
Asset Design	City Infrastructure – Planning & Design	Manager Development & Regulation Infrastructure Engineer
Asset Construction	City Infrastructure – Civil Operations	Manager City Infrastructure Coordinator Infrastructure Project Delivery Infrastructure Engineer Project Manager
Asset Maintenance	City Infrastructure – Civil Operations	Water & Wastewater Coordinator Technical Officer Civil
Asset Disposal	Manager City Infrastructure	Community Development Community Services Water & Wastewater Coordinator
Asset Data	City Infrastructure – Civil Operations City Infrastructure – Planning & Design	Senior GIS Officer All staff
Asset Financials	Finance Team	Senior GIS Officer Coordinator Infrastructure Planning & Design

Asset Services and Benefits

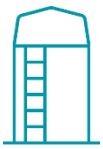
Our water supply and wastewater assets play a crucial role in providing essential services and benefits to the community. They ensure access to clean and safe drinking water, promoting public health and well-being. Wastewater treatment facilities effectively manage and treat sewage, preventing water pollution and protecting the environment. These assets contribute to the overall sustainability of the community by supporting water conservation efforts and promoting responsible water resource management.

The table below summarises the categories of water and wastewater assets owned and managed by Council and reflects the significant investment in this asset class (source: Assetic Nov 23).

TOTAL REPLACEMENT VALUE Water Supply & Wastewater

$2.3M

$482k	$258k	$260k	$202k
			
Water Mains	Water Nodes	Water Plant and Equipment	Water Treatment Facility

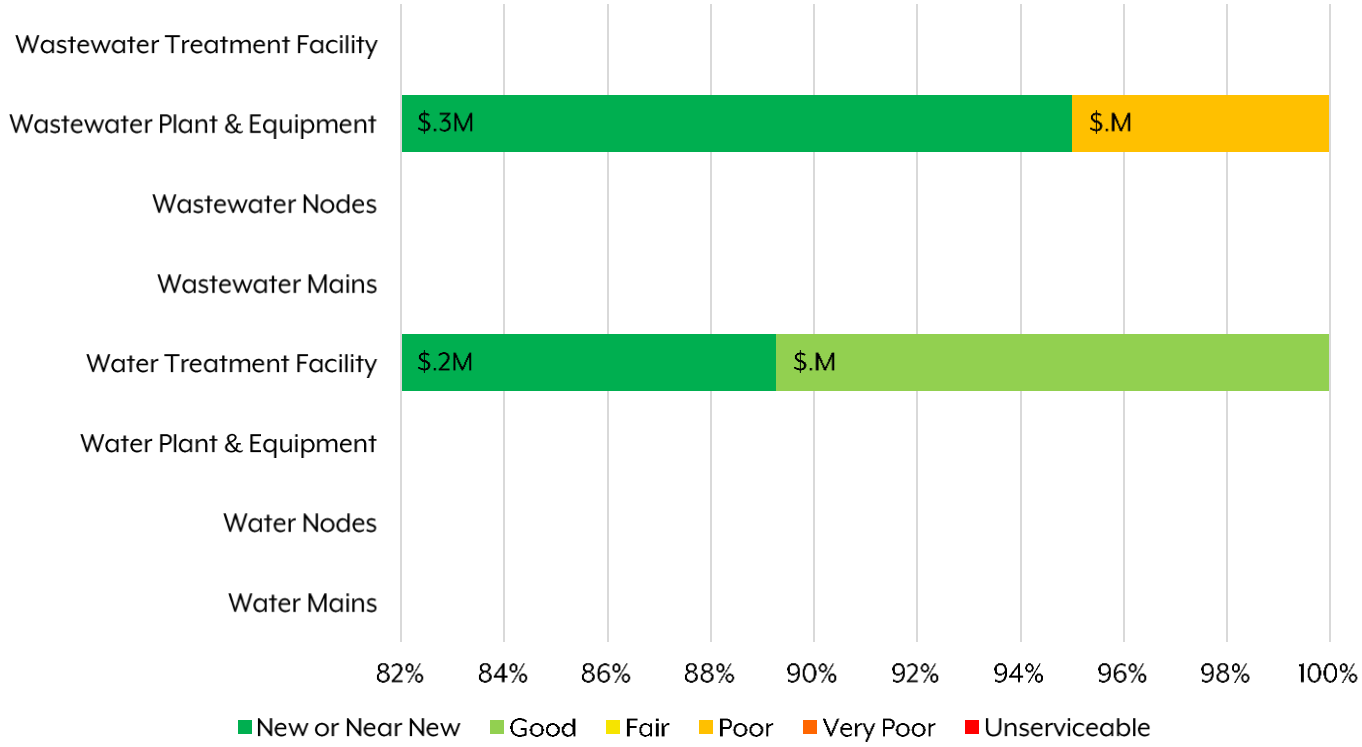
$595k	$83k	$351k	$20k
			
Wastewater Mains	Wastewater Nodes	Wastewater Plant and Equipment	Wastewater Treatment Facility

Asset Category	Description	Quantities	Unit	Useful Life (Years)	Written Down Value ($'000)	Replacement Value ($'000)
Water Mains	Pipe	3875.048	m		169	351
	Rising Main	1218.831	m		0	131
Water Nodes	Tanks and valve	10	Each		176	258
Water Plant and Equipment	Pump	6	Each		72	105
	Sub Water Meter	91	Each		20	39
	Switchboard	1	Each		29	81
	Valve	131	Each		0	2
	Water Filtration Plant	1	Each		5	21
	Water Meter	6	Each		4	5
	Other	3	Each		6	7
Water Treatment Facility	Treatment Plant	1.00	Each		128	165
	Soakage Trench	1.00	Each		16	17
	Other	1.00	Each		16	20
Wastewater Mains	Pipe	5354.849	m		389	532
	Rising Main	737.775	m		42	63
Wastewater Nodes	Tank	4.00	Each		2	29
	Other	11.00	Each		28	54
Wastewater Plant and Equipment	Pump	12.00	Each		68	137
	Pump Control System	10.00	Each		12	214
Wastewater Treatment Facility	Soakage Trench	14.00	Each		8	20
Totals:	N/A			15 – 150	1,190	2,251

Age Profile / Condition

Portfolio Level summary

98.84% of assets/components are in “fair” or better condition signaling the need for proactive maintenance and renewals planning. Of these, 43.31% of assets/components are in “as new” condition.



Components, Attributes and Useful Lives

For ease of management, our water and wastewater assets are broken up into a series of components. These components typically have different assets lives and require replacement as their condition or function deteriorates. The table below summarises the types, sub-types and useful life estimates:

Type	Sub-type	Useful Life (years)
Water and Wastewater	Water	
	80mm PVC Pipe	100
	100mm or 150mm PVC Pipe	100
	25mm Poly Pipe	100
	50mm Poly Pipe	100
	65mm Poly Pipe	100
	320mm Polyethylene Pipe	100
	Retention Basin, Backwash Pit	100
	Sewer	
	50mm PVC Pipe	100
	80mm PVC Pipe	100
	100mm PVC Pipe	100
	150mm PVC Pipe	100
	Inspection Opening / Pit Cover	100
	Valve	25
	Wastewater Treatment Misc.	30
	Soakage Pit - Sewer	30
	Common to Both	
	Tank – concrete - size unknown	30
	Tank – concrete - 200,000L	30
Water and Wastewater	Tank – concrete - 100,000L	30
	Tank – concrete - 22,000L	30
	Tank – poly - size unknown	80
	Tank - Galvanised	25
	Tap, Sprinkler, Bore - Not Capitalised	NA
	Irrigation System	20

Levels of Service Performance

We assess the performance of the asset class relative to what customer's value from the service. The sections below define the overall service proposition, the critical elements of customer service levels and how these relate through activities and funding against the key phases of the asset lifecycle. Asset criticality and service risk are also assessed.

Customer Values

Service levels are defined in three ways, customer values, customer levels of service and technical levels of service.

Customer Levels of Service

The Customer Levels of Service are considered in terms of:

- Condition – the actual physical and technical state of the asset, rated on a 1 (excellent) - 6 (unserviceable) basis. This refers to things like deterioration, damage, distress, unusual asset behaviour due to environmental impacts.
- Functionality – the ability of the physical infrastructure to meet service needs including social (quality, amenity, safety, accessibility), environmental (energy consumptions, waste generation, emissions) and economic performance (timeliness).
- Capacity – the ability of the physical infrastructure to meet demand, requiring an understanding of how future demands differ from current demands

The table below summarises how these attributes are measured and expected future trends.

Measure	Level of Service	Performance Measurement	Current Performance	Expected Future Performance Trend
Condition	Provide assets of suitable quality for its intended purpose	Customer requests / year % of portfolio not in need of investment	<5	<5
	Confidence levels		High	High
Function	Provide assets which are suitable for its intended purpose	Customer satisfaction Water Quality	Medium High	High High
	Confidence levels		High	High
Capacity	Provide assets that are efficiently suited to current demand levels	Asset utilisation and Outputs	Council required to monitor and report on annual usage of all W&W	As per existing
	Confidence levels		High	High

Technical Levels of Service

By undertaking regular assessments, we determine which assets meet our levels of service and which require capital intervention – renewal, upgrade or expansion – to meet service level thresholds. Service and asset managers plan, implement and control technical service levels to influence the service outcomes. The table below shows the activities expected to be provided under the current planned budget allocation, and the forecast activity requirements being recommended in this AMP.

Lifecycle Activity	Purpose of Activity	Activity Measure	Current Performance	Recommended Performance
Acquisition	Upgrade activities are undertaken to provide water and wastewater assets which are suitable for its intended purpose and asset utilisation	Usually reactive and related to Development Approvals	Upgrades scheduled for: Newbridge	
		Forecast	$0	$
Operations and Maintenance	To ensure operation of water and wastewater is suitable for purpose and cost effective	Yearly expenditure on operation of water and wastewater. Cost recovery process in place for ESCOSA (Riverglen).		
	Maintenance activities are undertaken to ensure continuity and reliability of supplied services	Weekly monitoring of water quality. Annual major pumpset and systems servicing	Compliant Compliant	Compliant Compliant
		Forecast	$234,000	$
Renewal	Renewal activities are undertaken to ensure assets meet condition standards described	Conformance with renewal expenditure as detailed in this AMP.	Cemetery Stormwater Harvesting Pumps replacement	
		Forecast	$27,000	$
Disposal	Underutilised water and wastewater assets are disposed to			

Lifecycle Activity	Purpose of Activity	Activity Measure	Current Performance	Recommended Performance
	reduce the total lifecycle costs			
		Forecast	$0	$

Additional Legislation, Codes, Standards, Criteria and Guidelines

Council must adhere to the following legislation, codes, standards, criteria and guidelines specific to the supply and management of water and wastewater schemes.

- AS/NZS 2031: Water quality - Sampling for microbiologic al analysis (ISO 19458:2006, MOD)
- AS/NZS 3500: Plumbing and drainage
- AS/NZS 4020: Testing of products for use in contact with drinking water
- AS/NZS 5667: Water quality - Sampling - Guidance on the design of sampling programs, sampling techniques and the preservation and handling of samples
- AS/NZS ISO 3100: Risk management - Principles and Guidelines
- Australian Guidelines for Water Recycling: Managing Health and Environmental Risks (Phase I) (NRMMC, EPHC)
- Community Wastewater Management System Codes 20 13 (DHA)
- Dangerous Substances Act 1979 and associated Regulations 2008
- Dual Water Supply Systems First Edition Version 1.2. A Supplement (WSA 03- 2002)
- Environment Protection (Water Quality) Policy 2003
- Guidelines. Design Criteria and Standards for Community Wastewater Management Schemes (LGA)
- Livestock Act 1997 (specifically Section 3.6)
- Natural Resources Management Act 2004 and associated Regulations
- Pressure Sewerage Code of Australia (WSA 07)
- Septic Tank Effluent Drainage Scheme Design Criteria (DH, LGA)

- Sewage Pumping Station Code of Australia (WSA 04)
- Sewerage Code of Australia (WSA 02) and any SA Water supplementary documentation
- South Australian Biosolids Guidelines for the Safe Handling, Reuse or Disposal of Biosolids (EPA)
- South Australian Public Health Act 2011 and Regulations (Wastewater) 2013
- South Australian Recycled Water Guidelines (DHA)
- Standard Form: Technical Specification-Construction of Septic Tank Effluent Drainage Schemes (DH, LGA)
- The National Construction Code (NCC) Volume 3 Plumbing Code of Australia (PCA)
- Vacuum Sewerage Code of Australia (WSA 06)
- Water Industry Act 2012 and Regulations 2012
- Water Resources Act 1997
- Water Supply Code of Australia (WSA 03)

Future Demand

We must respond proactively to the external and internal demands that relate to this asset class.

Demand for new services will be managed through a combination of managing existing assets, upgrading of existing assets and providing new assets to meet demand and demand management. Demand management practices can include non-asset solutions, insuring against risks and managing failures.

Opportunities identified to date for demand management are shown in the table below.

Demand Driver	Current Position	Projection	Impact on services	Demand Management Plan
Population and Demographic Changes	Population 23,037 (2023) Dwellings 10, 143 (2021) Household size 2.33 (2021)	Population 39,416 (2041) Dwellings 12,310 (2041) Household size 2.39 Growth will be most significant in the Murray	An increase in population will increase the utilisation and demand for community facilities including sporting and community clubs.	Methods to measure asset utilisation are to be further developed to assist with decision making surrounding the acquisition of new assets.

Demand Driver	Current Position	Projection	Impact on services	Demand Management Plan
		Bridge centre, Wellington – Rural East and Westside.		
Environmental	High level of public awareness of environmental issues - sustainability and climate change. Flooding.	Will follow population Trends.	Impacts on stormwater basin and potable water supply.	
Technology	There is currently limited application of technology in our W&W network.	The monitoring and management of water supply networks. Advanced technologies such as Supervisory Control and Data Acquisition (SCADA) systems and remote sensors enable real-time monitoring of water quality, pressure, and flow rates throughout the network.	This data-driven approach allows Council to identify leaks, detect abnormalities, and optimise water distribution, leading to improved efficiency and reduced water losses.	Develop a phased technology adoption plan based on community needs.
Technology	Solar Power	Switch to renewables.	Improved environmental Sustainability.	

Lifecycle Decision Making

Acquisition Plan

To meet demand, new assets are acquired or created, no acquisitions are planned during the plan period. Noting Newbridge development is likely to fall into FY25.

Operations and Maintenance Plan

Maintenance includes all actions necessary for retaining an asset as near as practicable to an appropriate service condition including regular ongoing day-to-day work necessary to keep assets operating. The supply of water and management of wastewater is a critical and potential high-risk activity. Careful controls and measures must be in place to ensure continued supply and service safety. The following table of typical maintenance activities undertaken supports service objectives:

Category	Description
Infrastructure Inspections	Regular inspections of water supply and wastewater infrastructure to identify leaks, breaks, corrosion, or other issues. This includes visual inspections, pressure testing, and using technologies like acoustic sensors or drones to assess the condition of pipelines, storage tanks, and treatment facilities.
Leak Detection and Repair	Detection and repair of leaks in water supply and wastewater systems. This includes employing leak detection techniques such as acoustic surveys, correlation analysis, or data analytics to locate leaks, followed by repairs or replacements of damaged pipes, valves, or fittings to reduce water loss and optimise system efficiency.
Pump Station Maintenance	Maintenance activities for water supply and wastewater pump stations. This includes inspecting and cleaning pumps, checking motor performance, monitoring pump controls and alarms, lubricating moving parts, and conducting preventive maintenance to ensure reliable and efficient pump operation.
Water Treatment Plant Maintenance	Maintenance of water treatment plants and facilities. This includes inspections of treatment processes, equipment calibration, cleaning and maintenance of filters, chemical dosing systems, and disinfection systems to ensure water quality and compliance with regulations.
Sewer Line Cleaning and Clearing	Cleaning and clearing of sewer lines to prevent blockages and maintain system flow. This includes the use of hydro jetting equipment, mechanical rodding, or vacuum systems to remove obstructions, roots, grease, or debris that can cause sewer backups or overflows.
Septic System Maintenance	Maintenance activities for septic systems, including inspections, pump-outs, and maintenance of septic tanks, drain fields, or alternative wastewater treatment systems. This helps ensure proper function, prevent system failures, and protect public health and the environment.
Water Quality Monitoring	Monitoring and testing of water quality in the supply and distribution networks. This includes sampling, laboratory analysis, and assessing parameters such as disinfection levels, pH, turbidity, and bacterial contamination to ensure compliance with health and safety standards.
Emergency Response and Contingency Planning	Preparedness and response activities for water supply and wastewater emergencies. This includes developing emergency response plans, coordinating water supply during disruptions, managing water storage, and implementing contingency measures to address natural disasters, infrastructure failures, or water contamination events.

Renewal Plan

Replacement of Bremer Road Cemetery stormwater pumps (harvesting) planned during FY24.

The merits of individual projects identified as candidates for upgrade can be assessed and ranked using the following matrix:

Category	Description
Asset Condition and Age	Assessing the overall condition and age of water supply and wastewater infrastructure assets.
Reliability and Service Continuity	Evaluating the reliability and continuity of water supply and wastewater management services.
Water Quality and Compliance	Ensuring compliance with water quality standards and regulations to safeguard public health.
Capacity and Demand	Assessing the capacity of the network to meet current and future water supply and wastewater needs.
Maintenance and Repair Needs	Identifying maintenance and repair requirements, including pipe repairs, equipment maintenance.
Energy Efficiency and Sustainability	Evaluating energy efficiency measures and sustainable practices in water supply and wastewater management.
Strategic Alignment and Community Impact	Ensuring alignment with strategic plans and addressing community concerns related to water services.

Disposal Plan

There are presently no assets considered for disposal.

Risk Management

Critical Assets

Critical assets are defined as those which have a high consequence of failure causing significant loss or reduction of service. Similarly, critical failure modes are those with the highest consequence. Failure modes may include physical failure, collapse or essential service interruption. The table below shows our critical water supply and wastewater assets, how they may fail and the potential impact of their failure.

Critical Asset (s)	Failure Mode	Impact
Water Treatment Plants	Equipment breakdown	Insufficient supply of clean drinking water, compromised water quality, potential health risks to the community
	Power outage	Disruption in water treatment processes, potential water scarcity during outage periods
	Chemical supply interruption	Inability to treat water properly, compromised water quality, potential health risks to the community
Distribution Pipelines	Pipe leaks or bursts	Water loss, reduced water pressure, potential contamination of water supply, disruption of water supply to customers
	Corrosion or deterioration of pipes	Water quality issues, increased risk of pipe failures, potential water contamination
	Blockages or obstructions	Reduced water flow, potential water scarcity, disruption of water supply to customers, potential sewer backups or overflows
Pump Stations and Lift Stations	Pump or motor failure	Disruption of water supply or wastewater management, reduced pumping capacity, potential sewer backups or overflows
	Power failure or electrical issues	Inability to pump water or manage wastewater, potential sewer backups or overflows
	Sensor or control system malfunction	Inaccurate monitoring, reduced operational efficiency, potential sewer backups or overflows
Wastewater Treatment Plants	Equipment failure or breakdown	Inadequate treatment of wastewater, potential environmental pollution, health risks
	Power outage	Disruption in wastewater treatment processes, potential environmental pollution

	Chemical supply interruption	Inability to treat wastewater properly, compromised treatment efficiency, potential environmental pollution
Sewer Network and Manholes	Pipe leaks or cracks	Sewage leaks, contamination of soil or water bodies, potential health risks
	Blockages or tree root intrusion	Sewer backups or overflows, potential environmental pollution, health risks
	Structural deterioration or collapse of manholes	Safety hazards, potential injury to workers or the public
Storage Tanks and Reservoirs	Structural integrity issues	Water leakage, contamination of stored water, potential collapse or catastrophic failure
	Contamination	Compromised water quality, potential health risks to the community
	Overflow or discharge issues	Wasted water resources, potential environmental pollution

Risk Reduction Plans

A detailed assessment of risk associated with service delivery identifies risks that result in loss or reduction in service, personal injury, environmental impacts, a 'financial shock', reputational impacts, or other consequences. The risk assessment process identifies credible risks, the likelihood of the risk event occurring, and the consequences should the event occur. The table below consider all categories of water and wastewater assets, describes what can happen and then demonstrates the impact that good risk treatment strategies have on reducing asset and service risk:

Service and Asset at Risk	What can Happen	Risk Treatment Plan
Water Treatment Plants	Equipment breakdown	Preventive maintenance program where we regularly inspect and maintain equipment, ensuring timely repairs or replacements.
	Power outage	Some backup power generators or alternative power sources to mitigate the impact of power outages in place.
	Chemical supply interruption	Contingency plan is to keep chemical supply well in stock.
Distribution Pipelines	Pipe leaks or bursts	No current activities. Future - regular inspections and implement condition assessment programs to identify and address pipe leaks or bursts.
	Corrosion or deterioration of pipes	No current activities. Future - implement corrosion protection measures, such as cathodic protection or protective coatings, to prevent pipe deterioration.
	Blockages or	Implement regular cleaning and flushing programs to prevent blockages

	obstructions	and obstructions in the pipelines.
Pump Stations and Lift Stations	Pump or motor failure	Implement a preventive maintenance program to regularly inspect and maintain pumps, motors, and control systems.
	Power failure or electrical issues	Battery backup power systems in place at Riverglen. Alternative is to truck water in to provide portable water. Backup generators can be sourced in the event of emergencies.
	Sensor or control system malfunction	Future - implement additional real-time monitoring systems to detect pump failures or abnormalities and enable prompt maintenance or repairs.
Wastewater Treatment Plants	Equipment failure or breakdown	Future - establish preventive maintenance procedures and conduct regular inspections to identify and address equipment failures.
	Power outage	Install backup power systems or alternative power sources to ensure continuous operation during power outages.
	Chemical supply interruption	Maintain adequate stock of critical chemicals and establish alternative supply arrangements to mitigate chemical supply interruptions.
Sewer Network and Manholes	Pipe leaks or cracks	Conduct regular inspections and implement proactive maintenance programs to identify and repair pipe leaks or cracks.
	Blockages or tree root intrusion	Implement root control measures, such as regular tree root removal or lining of pipes, to prevent blockages and intrusions.

Service and Asset at Risk	What can Happen	Risk Treatment Plan
	Structural deterioration or collapse of manholes	Implement rehabilitation programs to address structural deterioration and collapse risks in manholes.
Storage Tanks and Reservoirs	Structural integrity issues	Conduct regular inspections and structural integrity assessments to identify and address any issues.
	Contamination	Implement monitoring systems to detect water leakage or contamination in storage tanks and reservoirs.

Financials – Past Performance

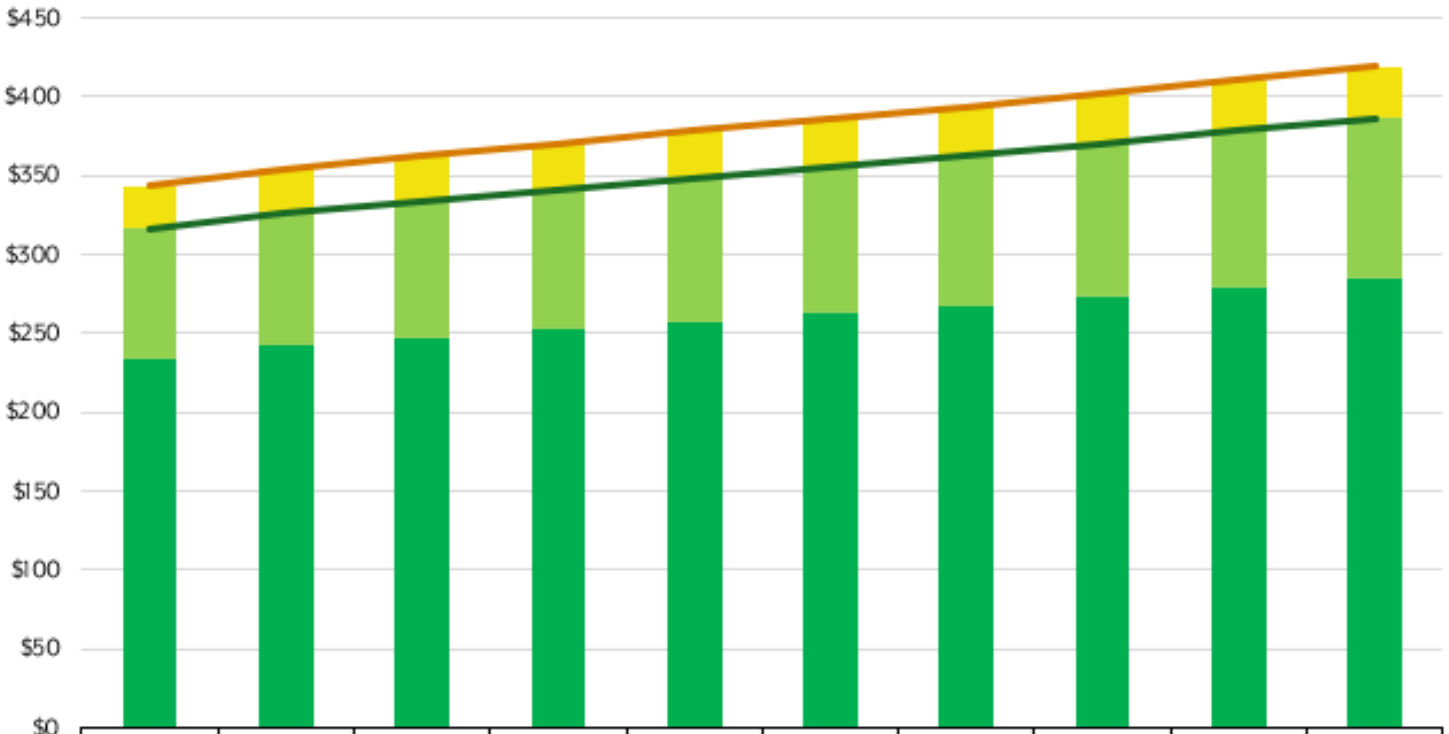
5-Year Summary

Data unavailable for 2019-20

Item	2019–20 Actual ($'000)	2020–21 Actual ($'000)	2021–22 Actual ($'000)	2022–23 Actual ($'000)	2023–24 Forecast ($'000)
Scheduled and reactive maintenance		284	235	210	234
Depreciation		50	68	81	82
Operating expenditure		334	303	291	316
Renewal works		98	0	14	27
Acquisition		19			
Capital expenditure		118	0	14	27
Totals		452	303	95	109

Financials – Future Forecasts

10 YEAR PLAN WATER SUPPLY AND WASTEWATER



	2023-24 Forecast	2024-25 Plan	2025-26 Plan	2026-27 Plan	2027-28 Plan	2028-29 Plan	2029-30 Plan	2030-31 Plan	2031-32 Plan	2032-33 Plan
Acquisition (New) works		0	0	0	0	0	0	0	0	0
Renewal works	27	28	29	29	30	30	31	31	32	33
Depreciation	82	84	86	88	91	93	95	97	100	102
Scheduled and reactive maintenance	234	242	247	252	257	262	267	273	278	284
CAPITAL EXPENDITURE	27	28	29	29	30	30	31	31	32	33
OPERATING EXPENDITURE	316	326	333	340	348	355	362	370	378	386

10-Year Outlook

Major investments through our Council Works program are in the process of being determined. Future Plans will present information in the following manner:

Asset / asset sub-group	Works description	Works type	Cost estimate	Year

Financial Summary

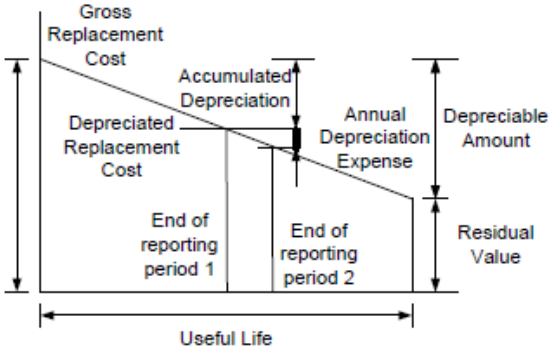
This section contains the financial requirements resulting from the information presented in the previous sections of this Asset Management Plan. The financial projections will be improved as the discussion on desired levels of service and asset performance matures.

Financial Statements and Projections

Asset Valuations

The best available estimate of the value of assets included in this AMP is shown below. The assets are valued at fair value at cost to replace service capacity:

Current (Gross) Replacement Cost	$2,251,000
Depreciable Amount	$1,061,000
Depreciated Replacement Cost (WDV)	$1,190,000
Depreciation	$82,000



In simple terms this means our water supply and wastewater assets are 47% through their asset lives, signaling the need for review of maintenance and investment.

Sustainability of Service Delivery

There are two key indicators of sustainable service delivery that are considered in this AMP for this asset class. The table below summarises what they mean and how well we are performing.

Ratio	Description	RCMB Target	RCMB Current	RCMB Forecast
Asset Renewal Funding Ratio	The extent to which assets are being replaced measured by comparing renewal/replacement capital expenditure with the optimal identified renewal requirements as defined in this AMP.	Renewal / Replacement Capex > 90% but 120%		
Asset Consumption Ratio	The average proportion of "as new condition" left in assets. The ratio shows the written down current value of depreciable assets relative to their "as new" value in up-to-date prices.	>40% and <80%	70%	xx

Funding Strategies

The proposed funding for assets is outlined in Council's Annual Budget and Long Term Financial Plan. The financial strategy determines how funding will be provided, whereas this AMP communicates how and when this will be spent, along with the service and risk consequences of various service alternatives.

Valuation Forecasts

Asset values are forecast to increase as additional assets are acquired and existing assets upgraded.

Additional assets will generally add to the operations and maintenance needs in the longer term. Additional assets will also require additional costs due to future renewals. Any additional assets will also add to future depreciation forecasts.

Key Assumption made in forecasts

Refer 10-Year Infrastructure Asset Plan Overview, Section 7.5.

Forecast Reliability and Confidence

Refer 10-Year Infrastructure Asset Plan Overview, Section 7.6.

Plan Improvement and Monitoring

It is important that Council recognises areas of their AMP and planning process that require future improvements to ensure effective asset management and informed decision making. The improvement plan generated from this AMP is shown below:

Item	Description	Lifecycle	Impact Area	Responsibility
1	Review staffing levels to ensure adequate coverage	Operations and Maintenance	Operational Planning	CI – Civil Operations
2	Improve systems and process to uplift management of system documentation and risk /contingency planning	All	Asset data and Information	CI – Planning & Design
3	Review O&M manual, maintenance plan and list of critical spare parts	Operations and Maintenance	Operational Planning	CI – Civil Operations
4	Review level of planned preventive maintenance	Operations and Maintenance	Asset Financial Planning and Management	CI – Planning & Design
5	Develop a 10 Year Work Program	Renewal	Capital Works Planning	CI – Planning & Design
6	Improve risk reduction activities as identified previously in this plan	All	Managing Risk and Resilience	CI – Planning & Design

Appendices

Appendix A – Glossary

Term	Definition
Asset	A resource controlled by a municipality because of past events and from which future economic benefits or service potential is expected to flow to the municipality.
Asset capacity	The ability of the physical infrastructure to meet demand. Each class has different measures as identified in each AMP.
Asset condition	The physical condition of an asset on a 1 (very good) to 6 (unserviceable) grading system.
Asset Functionality	The ability of the physical infrastructure to meet service needs including social, environmental and economic performance. Each class has different measures as identified in each AMP.
Asset Management Framework	Describes how strategic plans relate to service planning and operations; and key asset management processes.
Asset Renewal Funding	Council is renewing or indicates whether the Council is renewing or replacing existing non-financial assets at the optimal level identified within the Asset Management Plans.
Capital Works	Physical infrastructure projects or programs of work that meet certain financial and other criteria.
Customer Levels of Service.	Provide definitions for measures of quality, function and capacity/use
Customer Values	Define what aspects of the service is important to the customer, typically related to value and likely trends over time
Depreciation	The systematic allocation of the depreciable amount of an asset over its useful life
Funding	The approved budget for the period in question and may include the source of funds.
International Association for Public Participation (IAP2)	The Standard for stakeholder engagement structure and principles.
International Infrastructure Management Manual (IIMM)	IPWEA is a key Australian local government industry reference manual/group
International Standard for Asset Management (ISO 55000)	

International Standard for Risk Management (ISO 31000	
Lifecycle Decision Making	Defines the decision-making criteria used in making decision as to whether invest in acquisition, operations and maintenance, renewal and disposals for each asset class.
Lifecycle Management of Assets	Describes how our various activities relate to our services, our assets and whether those activities are considered capital or operational.
New	New assets will commit Council to ongoing operations, maintenance and renewal costs for the period that the service provided from the assets is required. These future costs are required to be identified and considered in developing forecasts of future operations, maintenance and renewal costs for inclusion in the Long Term Financial Plan.
Renewal Projects	Provides for the maintenance of Council's existing assets and is determined by Council's Asset Management Plans and current condition of assets.
Strategic Enhancement	The Program of new and enhanced facilities in accordance with the Strategic Plan objectives and Council responsibilities.
Technical Levels of Service	Operational or technical measures of performance that deliver the customer values and impact the desired Customer Levels of Service
Upgrade	Works to improve an asset to a capacity or capability greater than its previous state. For example; road upgrade - replace a previously unsealed road surface with an asphalt or paved surface.
Valuation	The process of valuing assets in accordance with the Australian Accounting Standards Board (AASB). Specific Standards may include: AASB 13: Fair Value Measurement, AASB 116 Property Plant and Equipment, AASB 5 Asset Held for Sale, AASB 140 Investment Properties, and AASB Impairment.

Appendix B – Council Strategy and Plans

- Strategic Plans - strategy documents that align to the *Local Government Act 1999*
- Community Plan 2016 – 2032
- Strategic Plan 2024 -2028
- Annual Business Plan 2024-25
- Long Term Financial Plan and Asset Management Portfolio Plan
- Subsidiary Plans – developed and adopted where a focus on a particular location, service or program is required.

There are at least thirty Council strategies and plans located on Council's website and can be found **here.** They are categorised relative to their prime asset classes below:

Asset Class	Subsidiary Plans
All Asset Classes	Climate Change Adaption Plan 2016-2021 Community Land Management Plans Community Safety Plan 2018-2024 Community Satisfaction Survey 2017 Disability Access and Inclusion Plan Economic Development Strategy 2020-2032 Environmental Management Plan 2020-24 inclusive of Climate Emergency Action Plan Public Realm Style Guide RCMB Tourism Development Plan 2016-2020 Waste Management Strategy 2015-2020
Buildings	Public Toilet Strategy 2017-2022
Civil and Transport	Footpath Strategy 2017 Biodiversity Strategy 2015-2020 Roadside Vegetation Management Plan 2014- 2019 Swanport Road Master Plan 2018 Town Centre Traffic Plan 2013
Plant and Fleet	Nil
Open Space	Sturt Reserve Masterplan Design Development 2021 Sturt Reserve Master Plan 2017 Riverfront – Wayfinding and Network Strategy Parts 1-2 2018 Biodiversity Strategy 2015-2020 Murraylands River Trail Feasibility Study- March 2015 Youth Action Plan 2022-27

Asset Class	Subsidiary Plans
	Ngarrindjeri Murrundi Management Plan No 1 2009 Oval Master Plan - Christian Reserve 2019 Oval Master Plan - Homburg/Jaensch Oval 2019 Play Space Strategy 2017-2027 Public Art Strategy 2019-2024 RCMB Sport, Recreation and Open Space Strategy 2013 Walking and Cycling Master Plan and Concept Design Trial 2018 Trail Strategy - Parts One and Two 2017 Water Based Recreation Management Plan 2021 Riverfront Strategy - May 2016
Stormwater	Nil
Water Supply and Wastewater	Nil

Appendix C – Tools, Templates and Manuals

The following table provides an overview of the manuals and tools supporting asset management across Council. While this list is not exhaustive, it has been assembled based on relevance to overarching asset management requirements. More comprehensive references are available through Asset and Service Managers.

Asset Class	Name	Version	Date
All	Asset Management Business Process Manual	1.0	
	Valuation Manual		
Buildings	Buildings Asset Management Business Process Manual		
	Buildings Condition Assessment Manual		
	Buildings Defect & Hazard Inspection Manual		
Civil and Transport	Road Asset Management Business Process Manual	Draft	Oct 2014
	Road Condition Assessment Manual	Draft	Oct 2014
	Road Defect & Hazard Inspection Manual	Draft	Nov 2014
	Kerbs Asset Management Business Process Manual	Draft	Nov 2014
	Kerbs Condition Assessment Manual	Draft	Nov 2014
	Kerbs Defect & Hazard Inspection Manual	Draft	Nov 2014
	Footpaths Asset Management Business Process Manual		
	Footpaths Condition Assessment Manual		
	Footpaths Defect & Hazard Inspection Manual		
	Bridges Asset Management Business Process Manual		
	Bridges Condition Assessment Manual		
	Bridges Defect & Hazard Inspection Manual		
	Street Furniture Asset Management Business Process Manual		
	Street Furniture Condition Assessment Manual		
	Street Furniture Defect & Hazard Inspection Manual		
Plant and Fleet	Fleet and Minor Plant Asset Management Business Process Manual		
	Fleet and Minor Plant Condition Assessment Manual		
	Fleet and Minor Plant Defect & Hazard Inspection Manual		
Open Space	Maintenance Levels of Service		

Asset Class	Name	Version	Date
	Play Equipment Asset Management Business Process Manual		
	Play Equipment Condition Assessment Manual		
	Play Equipment Defect & Hazard Inspection Manual		
	Land/Parks Asset Management Business Process Manual		
	Land/Parks Condition Assessment Manual		
	Land/Parks Defect & Hazard Inspection Manual		
	Open Space Furniture Asset Management Business Process Manual		
	Open Space Furniture Condition Assessment Manual		
	Open Space Furniture Defect & Hazard Inspection Manual		
	Irrigation Asset Management Business Process Manual		
	Irrigation Condition Assessment Manual		
	Irrigation Defect & Hazard Inspection Manual		
	Electrical Equipment Asset Management Business Process Manual		
	Electrical Equipment Condition Assessment Manual		
	Electrical Equipment Defect & Hazard Inspection Manual		
	Lighting Asset Management Business Process Manual		
	Lighting Condition Assessment Manual		
	Lighting Defect & Hazard Inspection Manual		
	Structures Asset Management Business Process Manual		
	Structures Condition Assessment Manual		
	Structures Defect & Hazard Inspection Manual		
Stormwater	Harvesting Scheme Plans		
	Culverts Asset Management Business Process Manual		
	Culverts Condition Assessment Manual		
	Culverts Defect & Hazard Inspection Manual		
Water supply and Wastewater	Riverglen Water Supply Risk Management and Contingency plan		2022
	Safety, Reliability, Maintenance and Technical Management Plan (Water Supply, Wastewater Treatment and Recycled Stormwater Schemes)		2021
	Wastewater Systems – Riverglen Marina and Woodlane		2014

Asset Class	Name	Version	Date
	WW Disposal & Water Supply Preliminary Report – Woodlane		2008
	Woodlane Wastewater Treatment Plant - Annual Report		2007-08
	Operation & Maintenance Manual		2008
	Sewer Systems Asset Management Business Process Manual		
	Sewer Systems Condition Assessment Manual		
	Sewer Systems Defect & Hazard Inspection Manual		
	Water Supply Asset Management Business Process Manual		
	Water Supply Condition Assessment Manual		
	Water Supply Defect & Hazard Inspection Manual		

THE RURAL CITY OF
MURRAY BRIDGE

2 Seventh Street
PO Box 421
Murray Bridge SA 5253

T 08 8539 1100
W murraybridge.sa.gov.au
E council@murraybridge.sa.gov.au