COMMITTEE AGENDA

Audit Committee

Notice is hereby given pursuant to the provisions of the Local Government Act, 1999, that the next Meeting of the Audit Committee will be held in the Council Chambers, 181 Unley Road Unley on

Tuesday 13 October 2020 6.30pm

for the purpose of considering the items included on the Agenda.

Chief Executive Officer

MEMBERS

Presiding Member D Powell (Presiding Member)
Councillor K. Anastassiadis
Councillor M. Broniecki
Independent Member N Handley
Independent Member A Martin

ACKNOWLEDGEMENT

We would like to acknowledge this land that we meet on today is the traditional lands for the Kaurna people and that we respect their spiritual relationship with their country.

We also acknowledge the Kaurna people as the custodians of the Adelaide region and that their cultural and heritage beliefs are still as important to the living Kaurna people today.

ORDER OF BUSINESS

ITEM **PAGE NO**

1. ADMINISTRATIVE MATTERS

1.1 APOLOGIES

Nil

1.2 LEAVE OF ABSENCE

Nil

1.3 CONFLICT OF INTEREST

Members to advise if they have any material, actual or perceived conflict of interest in any Items in this Agenda and a Conflict of Interest Disclosure Form (attached) is to be submitted.

1.4 MINUTES

1.4.1 Minutes of the Ordinary Audit Committee Meeting held Tuesday, 18 August 2020

1.5 DEFERRED / ADJOURNED ITEMS

Nil

2. REPORTS

3. OTHER BUSINESS

NEXT MEETING

Tuesday 3 November 2020 - 6.30pm

Council Chambers, 181 Unley Road Unley

DECISION REPORT

REPORT TITLE:	ASSET MANAGEMENT PLANS
ITEM NUMBER:	2.1
DATE OF MEETING:	13 OCTOBER 2020
AUTHOR:	JAMES MITCHELL
JOB TITLE:	SENIOR ASSETS AND ENGINEERING LEAD
ATTACHMENTS:	1. ASSET MANAGEMENT PLAN DRAFT - BUILDING 2. ASSET MANAGEMENT PLAN DRAFT - OPEN SPACE 3. ASSET MANAGEMENT PLAN DRAFT - STORMWATER 4. ASSET MANAGEMENT PLAN DRAFT - TRANSPORT

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1. EXECUTIVE SUMMARY

The *Local Government Act 1999* requires Council to develop and adopt Asset Management Plans by February 2021. Four Draft Asset Management Plans (Draft Plans) have been developed which set out the framework for managing Council's key infrastructure assets:

- **Buildings** – civic buildings, community buildings, leased buildings, libraries and swimming centre.
- **Open Space** – artwork, drinking fountains, fences, irrigation, smart technology, sporting assets, playgrounds, furniture, lighting (other than street lighting), structures, etc.
- **Stormwater** – underground drainage network, creeks, stormwater management devices and recycled water infrastructure.
- **Transport** – kerbing, pathways, roads, bridges, bus stops, car parks, street lighting and traffic control devices.

The Draft Plans have been developed in consultation with the Finance Team to demonstrate proactive management of assets, compliance with regulatory requirements and to communicate the funding required to provide the determined levels of service over a ten-year period.

The Draft Plans demonstrate significant improvements since Council's adoption of the previous Plans, providing a strong foundation of asset management knowledge, framework and direction moving forward.

It is acknowledged that there is still work required to improve Council's Plans and provide even more rigour around Council's asset management decisions and framework. The Draft Plans provide direction through long term planning, improvement programs, monitoring and performance measures for continuous improvement.

The purpose of this report is to seek a recommendation from the Audit Committee to Council to endorse the Draft Plans for community consultation.

2. RECOMMENDATION

That:

1. The report be received.

2. Council endorse the Draft Asset Management Plans, as contained in Attachment 1 to this report (Item 2.1, Audit Committee Meeting 13/10/2020), for the purpose of undertaking community consultation.

3. A further report be presented to Council outlining a summary of the feedback received during the community consultation process and the Final Asset Management Plans for endorsement.

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3. RELEVANT CORE STRATEGIES/POLICIES

4. Civic Leadership
4.1 We have strong leadership and governance.
3.1 Maintain financial and asset sustainability through regular reviews of Council's Strategic Plans and Frameworks. This is achieved through the development of the Plans and endorsement as per legislative requirements by February 2021 (Annual Business Plans and Strategic Planning Notice (No 4) – Local Government Act emergency variations made).

4. BACKGROUND

The *Local Government Act 1999* requires Council to develop and adopt Asset Management Plans in order to enable the development of its Long Term Financial Plan (LTFP) for a minimum period of ten years. The Plans are required to be reviewed within two years of a Council election and are therefore due to be reviewed before November 2020. The due date has been extended to February 2021 as per *Annual Business Plans and Strategic Planning Notice (No 4) – Local Government Act emergency variations made.*

It is acknowledged that Council's current Plans are in need of review and further development, hence the development of the Draft Plans.

Since the commencement of the review of the Plans, many areas have been identified requiring improvement, and progressively measures have been put in place to ensure the successful delivery of the new Plans. This is to ensure the LTFP is informed with reliable data to achieve financial sustainability while maintaining the assets level of service adopted by Council and the community.

Four Draft Plans have been developed to set out the framework for managing Council's key infrastructure assets. The Plans include:

- **Buildings** – civic buildings, community buildings, leased buildings, libraries and swimming centre.

- **Open Space** – artwork, drinking fountains, fences, irrigation, smart technology, sporting assets, playgrounds, furniture, lighting (other than street lighting), structures, etc.

- **Stormwater** – underground drainage network, creeks, stormwater management devices and recycled water infrastructure.

- **Transport** – kerbing, pathways, roads, bridges, bus stops, car parks, street lighting and traffic control devices.

Progress to date

The Administration has engaged an external consultant to assist with the development of the Draft Plans.

Asset data was analysed in terms of integrity for use within the Draft Plans and improvements were developed to increase data maturity and confidence. The following improvements were undertaken:

- Assets across all Draft Plans were divided into three levels (Asset Class, Asset Category and Asset Group) to improve quality of data auditing and reporting.

- Levels of service were reviewed to standardise performance measures across the asset classes in terms of quality, function, condition, renewal, capacity and utilisation, accessibility and safety.

- Condition and performance data were compiled from historic condition audits over the last five years to inform renewal and maintenance programs.

- The financial data from the fixed asset register (Technology One) was reviewed with the Finance Team through the 2019/20 revaluation process and assets were aligned to the class/category/group structure for the Plans reporting. Future improvements within the fixed asset register were identified and will be actioned following the relevant asset class revaluation.

- Maintenance and operations, renewal capital and new capital planning was undertaken for a ten-year period based on the reviewed condition and financial data.

- A risk assessment for each asset class was undertaken with the assistance of the Council's Principal Risk Management Officer and the Council's Risk Management Framework.

- Improvement programs were developed for each asset class and performance measures have been identified to track the performance of the Plan.

The Draft Plans have been developed with significant input from various teams from across Council's operations to ensure all relevant information is included accordingly.

5. DISCUSSION

The Draft Plans are developed to demonstrate proactive management of assets, compliance with regulatory requirements and to communicate the funding required to provide the agreed levels of service over a ten-year planning period. The Draft Plans aim to align with industry standards, align the delivery of asset management with the organisational goals and objectives and create transparency and accountability through all aspects of asset management.

The key areas of the Plans include:

- Levels of Service with performance measures and key performance indicators (KPIs).

- Future demand forecast and impact on assets.

- Lifecycle management for how Council will manage assets. Includes performance monitoring and ten-year forecasting for maintenance, renewal capital and new capital.

- Risk management including a risk assessment with controls and treatments.

- Financial summary for a ten-year period.

- Improvement program and performance measures.

Condition Summary

Overall, Council's assets are in good physical condition and this is reflective of the renewal projections all being below the annual depreciation. As Council's assets age, there will be an increase in renewal costs in years 10 to 20. This will be identified in each iteration of the Draft Plans as the average renewal will increase.

Buildings

The average building asset condition rating is 2.8, meeting the KPI (under condition rating 3) with 91% of assets at a level 3 (fair) or better. All assets rated in poorer condition than fair have been renewed since the condition audit (2018) or are scheduled for renewal (these assets include the Unley Oval Grandstands, Goodwood Oval Grandstands and Millswood Lawns).

Open Space

The open space asset condition is the highest across the asset classes. However, these assets have the shortest useful life requiring more frequent replacement. The open space asset category includes Smart City Technology installed within reserves, car parks and streetscapes. These currently have not been condition assessed as they were installed after the last assessment (2017).

Stormwater

Stormwater asset condition is significantly lower than the other assets. The underground assets are typically difficult and costly to inspect and have long useful lives (up to 100 years).

Confidence in the data collated from the 2017 condition inspection is not high with respect to condition and useful life. To address this, the Administration is developing a condition inspection program in 2020/21 to be undertaken over multiple years, increasing CCTV inspection of the underground stormwater network to inform future programs. The improvement program has outlined actions through condition assessments, review of useful lives and renewal programs, which will improve data maturity and confidence for the Plan's next review.

Transport

Transport assets are varied, and the condition assessments are completed over multiple years. The road and kerb categories are the highest values and will be reviewed in 2021/22, increasing the asset maturity to informing future programs.

Bridge condition assessments will be undertaken in 2020/21 to inform the future bridge renewal program, which will be updated within the Plan.

Asset Class	Condition average	Condition percentage	Last assessment	Next assessment
Buildings	2.8	91%	2018	2022/23
Open Space	2.3	95%	2017	2021/22
Stormwater	3.1	59%	2017	2020/21
Transport	2.1	93%	2017 and 2020	2021/22 and 2023/24
TOTAL	**2.6**	**85%**		

Financial Summary

Maintenance and operational budgets are in-line with current LTFP projections, increasing by CPI each year. A Depot Operations service review has commenced and is to be completed in the 2020/21 financial year. The results of this review will inform future changes to operational budgets, which will be reflected in future updates of the Plans.

The current asset renewal ratio (ARR) across all asset categories is 92% for the next ten years based on the LTFP, indicating Council is spending 8% below what is required to maintain sustainability at the agreed levels of service. An additional $512,825 per year on average for the next ten years is required to bring the ARR back to 100% (Council target). The total projected budget is still below the annual depreciation due to the good condition of Council's asset portfolio. This indicates further renewal increases will be required as the assets age to maintain the current levels of service.

The stormwater Draft Plan identifies a large one-year renewal for 2020/21 based on condition and age data. Immediate renewal for these assets has been identified as premature and a condition assessment in 2020/21 will prioritise the renewal program based on condition, criticality and risk. The one-year cost will be distributed over the ten-year program, which currently has sufficient budget within the LTFP (stormwater ARR 104%).

The LTFP's footpath renewal budgets within the transport asset class is exceeding renewal requirements (ARR 222%) due to the high condition of the footpath network. The footpath program will be reduced from 2021/22 and focus on functionality, safety and compliance rather than replacement due to condition. However, the overall transport renewal budget will increase as additional funding is required for road and kerb renewal to meet the condition requirements of the respective networks.

New capital is currently in-line with LTFP limitations. New capital averages are only projections as they are subject to each years' project budget bids and Annual Business Plan. It is typical for the asset classes to fluctuate year to year across categories.

Maintenance and Operations - Average annual budget

Asset Class	Projection	
Buildings	$	1,990,300
Open Space	$	3,023,600
Stormwater	$	305,300
Transport	$	3,444,600
TOTAL	**$**	**8,763,800**

Renewal Capital - Average annual budget

Asset Class	AMP renewal	Current LTFP	ARR	Difference	
Buildings	$ 1,072,074	$ 908,500	85%	$ 163,574	Increase to LTFP
Open Space	$ 634,200	$ 573,700	90%	$ 60,500	Increase to LTFP
Stormwater	$ 940,876	$ 976,600	104%	-$ 35,724	Decrease to LTFP
Transport	$ 3,520,875	$ 3,196,400	91%	$ 324,475	Increase to LTFP
TOTAL	**$ 6,168,025**	**$ 5,655,200**	**92%**	**$ 512,825**	**Increase to LTFP**

New Capital - Average annual budget

Asset Class	Projection
Buildings	$ 504,800
Open Space	$ 285,900
Stormwater	$ 1,311,100
Transport	$ 691,700
TOTAL	**$ 2,793,500**

Improvement Program

Continuous improvement is required across all asset categories to improve Council's asset maturity and continue to manage the asset portfolio more efficiently and effectively.

Improvements across all assets include:

- Integration between the Financial Register, Asset Condition Data and GIS data, which will be progressed by asset class following each revaluation.

- Community level of service benchmarking and tracking through community surveys.

- Depot operations service review 2020/21 to inform operational levels of service and improve maturity of cost capture for operational activities against assets.

The buildings asset class will continue to have improved integration between the facility service delivery and the physical asset management. This will be undertaken through service delivery reviews (adopted by Council). These reviews will inform asset requirements and levels of service and the Plans will be updated accordingly. An example of this will be the Unley Swimming Centre masterplan and the public toilet service review. These are driven from the service delivery teams with the Asset Management Team as a stakeholder.

Open spaces are currently within 500m of 99% of the Council area. However, the function, standards and requirements within these open spaces is constantly evolving. These changes will be reflected in future Plans with regard to new assets and modern standard equivalent replacements.

There are several flood mitigation projects currently being undertaken within the stormwater asset class. These consist of multi-council catchment-based projects which form part of the Brown Hill Keswick Creek Catchment and Sturt River Urban Catchments Stormwater Management Plans, as well as local flooding issues investigation and design which are being delivered and require funding over the next ten years.

Council's recycled water Managed Aquifer Recharge (MAR) systems for irrigation of reserves are currently under review to meet the new performance criteria set by the Department of Environment and Water. The continuous efficient performance of these systems will be critical in terms of financial benefit (water usage) and environmental benefit with regard to Council's impact on the River Murray. Operational and capital costs will be reviewed and updated in future Plans.

Climate change has been addressed across the Draft Plans with respect to Council's impact (footprint) on the climate and the impact of the

changing environment on Council's physical assets. The Draft Plans will align with Council's strategic climate change direction developed through the Climate and Energy Plan which is to be developed in 2020/21.

Summary

The Draft Plans demonstrate significant improvements since Council's adoption of the previous Plans, providing a strong foundation of asset management knowledge, framework and direction moving forward.

It is acknowledged that there is still significant work required to improve the Plans and provide even more rigour around Council's asset management decisions and framework. The Draft Plans have provided direction through long-term planning, improvement programs, monitoring and performance measures for continuous improvement.

Next Steps

This report seeks a recommendation from the Audit Committee to Council to endorse the Draft Plans for the purpose of undertaking community consultation. At its meeting to be held on 26 October 2020, Council is expected to endorse the recommendation from the Audit Committee and enable the commencement of community consultation.

Community consultation will be undertaken by the Administration throughout November 2020. A further report is expected to be presented to Council at its December 2020 meeting summarising the feedback to be received during the community consultation process and seeking Council's approval to adopt the final Plans.

6. ANALYSIS OF OPTIONS

Option 1 –

1. The report be received.

2. Council endorse the Draft Asset Management Plans, as contained in Attachment 1 to this report (Item 2.1, Audit Committee Meeting 13/10/2020), for the purpose of undertaking community consultation.

3. A further report be presented to Council outlining a summary of the feedback received during the community consultation process and the Final Asset Management Plans for endorsement.

Under this option, the Audit Committee would recommend to Council to endorse the Draft Plans for the purpose of undertaking community consultation. Following the undertaking of the community consultation process, a further report would be considered by Council summarising the feedback to be received and the Final Plans for adoption.

Option 2 –

1. The report be received.

2. Council endorse the Draft Asset Management Plans, as contained in Attachment 1 to this report (Item 2.1, Audit Committee Meeting 13/10/2020), for the purpose of undertaking community consultation, subject to the following changes:

   2.1 *insert changes required*

Under this option, the Audit Committee would recommend to Council to endorse the Draft Plans for the purpose of undertaking community consultation, but subject to making changes to the documents as attached to this report and articulation of those changes.

Following the undertaking of the community consultation process, a further report would be considered by Council summarising the feedback to be received and the Final Plans for adoption.

7. RECOMMENDED OPTION

Option 1 is the recommended option.

8. POLICY IMPLICATIONS

8.1 Financial/Budget

- The Administration engaged an external consultant to assist in the development of the Draft Plans at a cost of $42,741.50.

8.2 Legislative/Risk Management

- The Draft Plans must be developed and adopted by Council by February 2021 inclusive of community consultation. There are no known risks at this time in not meeting this timeframe.
- The *Local Government Act 1999* requires Council to develop and adopt asset management plans setting out its proposed management of its key built assets for a minimum period of 10-years.
- The *Local Government Act 1999* also requires Council to review its asset management plans within two-years after each general election of Council (which has been extended by the State Government to February 2021).

8.3 Staffing/Work Plans

- Council staff will be responsible for the management of the community consultation process regarding the Draft Plans.

8.4 Environmental/Social/Economic

Nil

8.5 Stakeholder Engagement

- Feedback and comments will be invited via Council's Your Say.

9. REPORT CONSULTATION

The development of the Draft Plans has been in consultation with various Council Departments including the Executive Management Team, Finance and Procurement, City Design, Strategic Assets, Risk Management and Communications.

10. REPORT AUTHORISERS

Name	Title
Aaron Wood	Manager Assets and Operations
Claude Malak	General Manager, City Development

THE CITY OF UNLEY

BUILDING

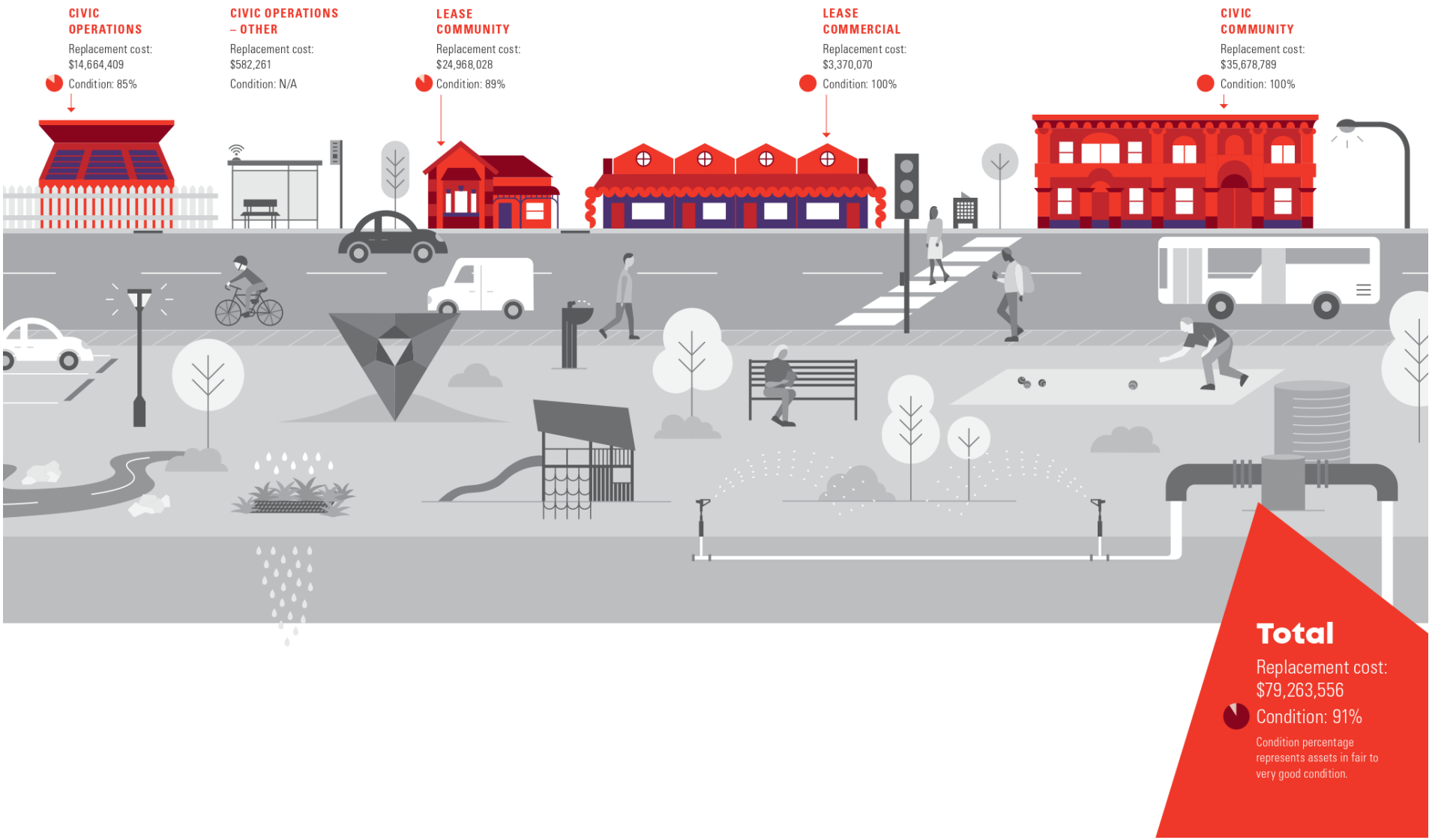
ASSET MANAGEMENT PLAN

2020

Contents

Issue	Date	Issue Details	Author	Checked	Approved
V.1	July 2020	Framework – Sproutt Consulting	SW	TY	JM
V.2	August 2020	Draft for Audit Committee	JM	AW	CM
V.3	October 2020	Draft for Community engagement			
V.4	November 2020	Final			

Building Assets Summary



The City of Unley (Council) has adopted four asset management plans which set out its goals and objectives for managing key infrastructure and assets, namely building, open space, stormwater and transport.

1 Executive Summary

Council's building assets provide community services such as sporting and recreational activities, libraries, community centres, public toilets and depot as well as accommodation for Council's civic, administrative and operational functions. This plan focuses on the management of Council's building assets.

The objective of asset management is to provide the desired level of service in the most cost-effective manner for present and future generations. A strategic approach to asset management aligning with industry standards and best-practice has been undertaken to ensure the sustainability of Council.

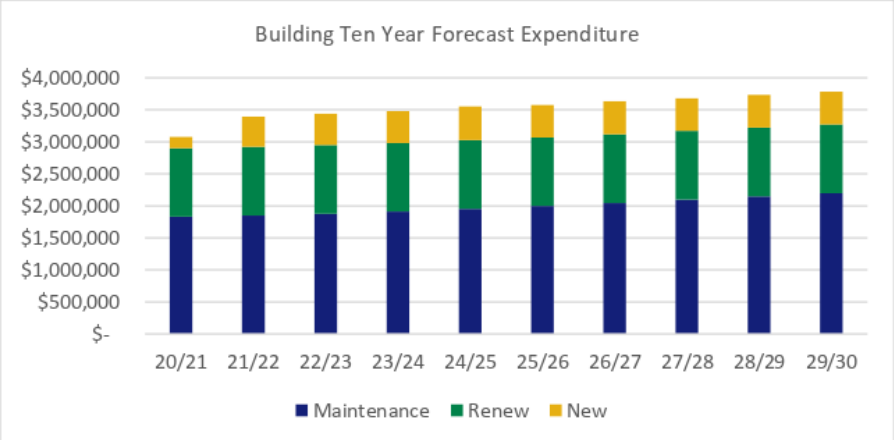
Effective asset management for building assets demonstrated in this plan is essential to achieve Council's vision: "Our City is recognised for its enviable lifestyle, environment, business strength and civic leadership."

Building Levels of Service:	
Quality	Buildings are well maintained
Function	Assets meet the service needs
Capacity and Utilisation	Buildings have the capacity to meet the community need
Condition	Physical state of buildings in serviceable condition
Renewal	Sustainably managing the renewal of assets
Accessibility	Buildings are accessible to all
Safety	Safety compliance standards are achieved

Future Demands:	
Population and demographics	Population is forecast to increase 13% by 2040 Over the last five years 30% of residents are new to Council
Climate Change	Awareness of Council's role in climate sustainability Increasing temperatures
Technology	Global trends towards smart cities

Condition:	91% building asset condition satisfaction

Financial Summary:



The forecast contained within the Plan will be reviewed annually with an update completed every four years.

Council is committed to continuously improving the quality and maturity of its asset management practices. The improvement program specifies its commitment to increase its asset management maturity and data confidence. Key performance measures have been established to track Council's performance of its assets and asset management practices.

2 Introduction

2.1 Background

Council's building assets provide accommodation for its civic, administrative and operational functions as well as providing community services such as sporting and recreational activities, libraries, community centres, public toilets and depot. The building portfolio also includes several commercial (income generating) properties. The Plan covers the Council's building assets, which include:

- Civic Community – Used for administrative and community services provided by Council to the community.
- Civic Operations – Operational in nature and/or complimentary to other Council functions.
- Lease Commercial – Leased from Council for tenants to run commercial businesses in the community.
- Lease Community – Leased from Council for tenants to run services to the community.
- Civic Operations: Other – Used in support of physical works services provided by Council.

The Plan is developed to demonstrate proactive management of assets (and services provided from assets), compliance with regulatory requirements, and to communicate funding required to provide the required levels of service over a ten year planning period.

This plan aims to:

- Align with ISO 55000:2014 (international standard for asset management) without seeking accreditation as an ISO document or process.
- Align the delivery of asset management activities with the organisation's goals and objectives; this is known as the "line of sight" with asset management.
- Create transparency and accountability through all aspects of asset management, ensuring all stakeholders understand their roles and responsibilities for achieving the Plan's aims.

The Plan is developed and implemented in conjunction with the following Council plans, strategies and policies (Table 2-1):

Plans, Strategies and Policies	
Community Plan 2033	Active Ageing Strategy
4 Year Delivery Plan 2017-2021	Environmental Sustainability
Long Term Financial Plan 2020-21 to 2029-30	Digital Unley
Asset Management Plans	Asset Management Policy

Table 2-1: Plans, strategies and policies

Council's building asset key stakeholders for service delivery of the Plan are contained in Table 2-2:

Key Stakeholders	**Roles in Asset Management Plan**
Residents/ Community	Opportunity to provide input into the development and review of the Council's strategic management plans.
Elected Members	Represent needs and views of community. Ensure Council's objectives and policies are appropriate and effective. Ensure Council's resource allocation, expenditure and activities, and the efficiency and effectiveness of its service delivery is appropriate. Ensure Council is financially sustainable.

Key Stakeholders	Roles in Asset Management Plan
Audit Committee	Audit Committee will review, make recommendations and observations to Council on the financial outcomes of the Plans.
Chief Executive Officer	Ensures administration deliver strategic planning and direction of the Council. Ensures administration implement the strategic plan goals and objectives by providing services within the allocated resourcing while managing risks. Ensures Council is financially sustainable.
General Manager – City Development	Ensures asset management plans are completed and reported to CEO and Council. Ensures the capital works programs are delivered in line with strategic planning. Ensures the maintenance programs are achieving service standards.
Assets and Operations Manager	Ensures the review of asset management and the delivery of improvement strategies. Manages maintenance programs to ensure they are active and achieving service standards. Ensures the capital works programs are achieved.
Senior Assets and Engineering Lead	Manages development and review of asset management plans. Responsible for advancing asset management within the organisation. Review infrastructure data integrity within the asset management system and GIS applications. Review and manage condition audits of infrastructure. Review asset valuation data. Coordinates the annual capital works program.
Coordinator Property & Facilities	Coordinate Council resources to deliver the capital works and maintenance program. Manage leasing and licencing of Council property assets.
Facility and community service providers	Determine and develop services appropriate for the facility.
Response and Signage Team	Deliver operations and maintenance.
External Lessees	Undertake facility responsibilities in line with the lease agreement.

Table 2-2: Key stakeholders for the Plan

2.2 Goals and Objectives of Asset Ownership

The goal of asset management is to provide the desired level of service through the provision and management of physical assets in the most cost-effective manner, for present and future generations.

The Plan demonstrates alignment with the Council's Community Plan 2033 through its vision and themes:

Our City is recognised for its enviable lifestyle, environment, business strength and civic leadership.

Community Living

Goal: People value our City with its enviable lifestyle, activities, facilities and services.

Objectives:

- Our Community is active, healthy and feels safe.
- Our Community participates in community activities, learning opportunities and volunteering.
- Our City meets the needs of all generations.
- Our Community is proud to be part of our City.
- Our City is connected and accessible.

Environment Stewardship

Goal: We will maintain and enhance our urban environment and strengthen our City's resilience to climate change by providing leadership to our Community.

Objectives:

- Unley's urban forest is maintained and improved.
- Excellence in waste management is achieved through avoidance, re-use and diversion.
- The energy efficiency of the City if increased and our carbon footprint reduced.
- Efficient, effective & sustainable water management is ensured.
- The City's resilience to climate change is increased.

Economic Prosperity

Goal: Our businesses are valued because of the range of goods, services and facilities they provide, and new businesses are supported, not burdened with bureaucracy.

Objectives:

- Unley is recognised as an easy place to do business.
- Thriving main streets and other business activities operate across our City.

Civic Leadership

Goal: Council will listen to the community and make transparent decisions for the long-term benefit of the City.

Objectives:

- We have strong leadership and governance.
- Council provides best value services to the community.
- Our business systems are effective and transparent.

These objectives should be considered in all decision-making aspects regarding the building assets to ensure Council consistently strives to achieve these strategic objectives. Several initiatives feed into the above objectives outside of the asset management process that ultimately support the stated objectives.

The strategic asset management objective for building assets is to ensure the building assets are maintained to a standard that meets the community's expectation and functionality is fit for purpose.

2.3 Plan Framework

Key elements of the Plan include:

- Levels of service – specifies the levels of service objectives and how they are measured.
- Future demand – how this will impact on future service delivery and how the demand will be met.
- Lifecycle management – how Council manages existing and future assets to provide the levels of service.
- Risk management – how Council manages asset risks.
- Financial summary – funds required to provide the levels of service.
- Improvement plan and monitoring – how Council will improve asset management maturity and how the Plan will be measured to ensure it's meeting Council's objectives.

The asset management framework is shown in Figure 2-1 and the roadmap for preparing an asset management plan is in Figure 2-2.

The Community Plan is a comprehensive community vision for Council. The vision is broken down into themes, goals and objectives outlining how we plan to achieve our vision.

The 4 Year Delivery Plan outlines how we will deliver the Community Plan's vision, strategies and framework.
Corporate Strategies identify the challenges and opportunities across key areas of our Council, and outline the plans and actions required to achieve the long-term goals as set out in the Community Plan.

The Plan demonstrates long-term (ten years) asset management planning and outcomes and outlines asset activities and resources to provide a defined level of service in the most cost-effective way while managing risks.

The Long Term Financial Plan (LTFP) demonstrates financial sustainability in the medium to long term, while achieving the objectives in the Community Plan.

The Annual Business Plan outlines Council's activities to progress towards meeting our Community Plan objectives, outlines how Council plans to allocate its budget and what services and projects will be developed in the forthcoming financial year.

Figure 2-1: Asset management framework

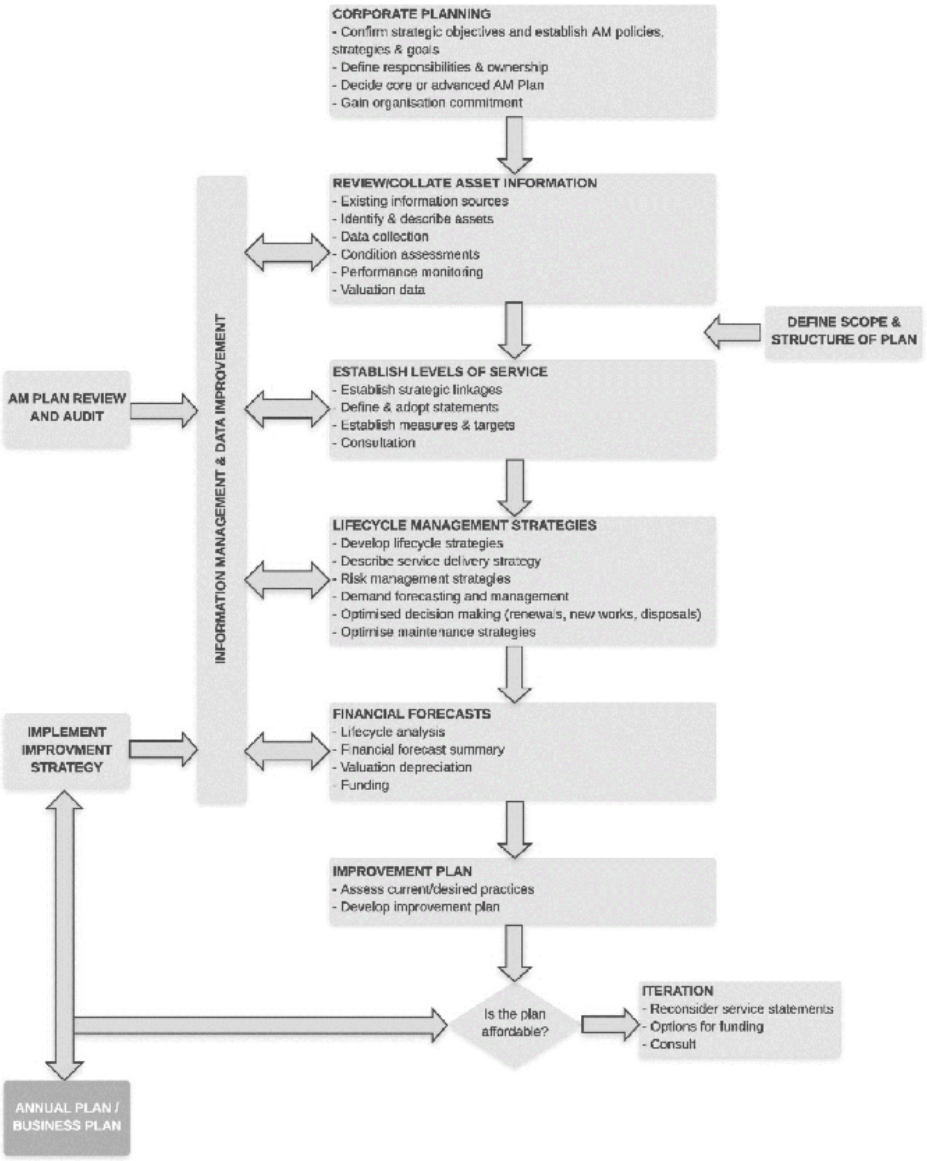


Figure 2-2: Road map for preparing an Asset Management Plan
Source: IPWEA, 2006, International Infrastructure Management Manual (IIMM) Fig 1.5.1, p 1.11

2.4 Core and Advanced Asset Management

The Plan is prepared as a core level maturity over the ten year planning period in line with the International Infrastructure Management Manual (IIMM). Core asset management is a top down approach with analysis applied at a network level. The Plan is prepared to meet legislative and organisational requirements for sustainable service delivery and long-term financial planning and reporting. The improvement program (Section 8) outlines and prioritises the steps required to an advanced asset management maturity.

3 Levels of Service

3.1 Customer Research and Expectation

Council receives continuous community feedback from a variety of sources including, but not limited to:

- Community enquiries and requests
- Community Plan consultation process
- Council Strategies
- Annual Business Plan and LTFP consultation process
- Project feedback
- Development of the Asset Management Plan
- Customer satisfaction surveys
- Service satisfaction surveys

This feedback is built into the development of the Plan and the levels of service it aims to deliver.

Through the development of the community levels of service (LoS) outlined in the Plan, Council will actively survey the community on its assets and associated services to ensure it is delivering on its levels of service. In 2020/21 Council will develop a benchmark for community levels of service to measure performance against.

3.2 Legislative Requirements

Council must meet many legislative requirements including Federal and State Government legislation and regulations as well as non-legislative requirements including Australian Standards and Council policies as contained in (Table 3-1).

Legislation	Requirement
Aboriginal Heritage Act 1988	An Act to provide for the protection and preservation of the Aboriginal heritage; to repeal the Aboriginal and Historic Relics Preservation Act 1965 and the Aboriginal Heritage Act 1979; and for other purposes.
Australian Accounting Standards	Standards applied in preparing financial statements, relating to the valuation, revaluation and depreciation of stormwater assets.
Building Code of Australia	Meet requirements for occupation under the approved Building Class.
Development Act 1993	Regulates the use and managements of buildings including their design and construction, ongoing maintenance, and conservation.
Disability Discrimination Act 1992	To ensure persons with disabilities have access to the building and facilities.
Environment Protection Act 1993	An Act to provide the protection of the environment; to establish the Environment Protection Authority and define its functions and powers; and for other purposes. Consideration of this act should be undertaken for the provision, development or management of assets.
Food Act 2001	Sets out standards for food handling.
Heritage Act 1993 and Heritage Places Act 1993	The portfolio includes buildings that are State and Locally Heritage listed buildings. These Acts set out the responsibilities of the land owner to maintain and preserve the heritage value of the buildings.
Liquor Licensing Act 1997	Sets out responsibilities for holders of liquor license.

Legislation	Requirement
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.
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.
Retail & Commercial Leases Act 1995	An Act regulating the leasing of certain properties.
Retail and Commercial Leases Amendment Act 2019	An Act regulating the leasing of certain properties.
SA Public Health Act 2011	An Act to promote and to provide for the protection of the health of the public of South Australia and to reduce the incidence of preventable illness, injury and disability; and for other purposes.
Work Health & Safety Act 2012	Provide a safe work environment for workers on the site.

Table 3-1: Legislative requirements

3.3 Current Level of Service

Levels of service are a key business driver and influence all asset management decisions. It describes:

- The outputs Council intends to deliver to customers.
- The service attributes such as quality, functionality and capacity.
- The performance measures.

Performance measures are used to indicate how Council is doing in relation to delivering levels of service.

Council has defined two levels of service categories:

- Community Levels of Service – measures the service the community expects.
- Technical Levels of Service – measures the service the organisation provides.

Community levels of service measure the community's perception of Council's service performance, while the technical levels of service measure against technical indicators of performance.

Council's desired level of service is the technical level of service as a minimum. The level of service will be constantly monitored and reviewed with the introduction of the community survey to develop community level of service key performance indicators (KPIs). It's anticipated the next review will be in four years. Council's levels of service are captured in Table 3-3.

Community Levels of Service

Performance Measure	Level of Service Objective	Performance Measure	KPI	2020
Quality	Buildings are well maintained	Community survey on the physical quality of buildings	KPI based on 2020/21 survey (to be developed)	2020/21 survey to set baseline
Function	Asset to meet service needs – 'fit for purpose'	Community survey on the functionality of buildings	KPI based on 2020/21 survey (to be developed)	2020/21 survey to set baseline

Technical Levels of Service

Performance Measure	Level of Service Objective	Performance Measure	KPI	2020
Condition	Physical state of buildings in serviceable condition	Average condition of building assets.	Equal or less than condition rating 3	2.8
Renewal	Sustainably managing the renewal of assets	Asset Renewal Ratio	90%-110%	85%
Capacity and Utilisation	Assets have the capacity to meet the community need	Utilisation of buildings	Utilisation rates 80% or higher*	100%
Accessibility	Buildings are accessible to all	Public facing buildings/facilities meet all relevant legislation and standards for access.	100% compliance	100%
Safety	Safety compliance standards are achieved	Legislative compliance testing for Test & Tag, Asbestos, Fire and Life safety, Swimming Facility.	100% Compliance	100%

Table 3-2: Levels of service

*Utilisation rates represent the ability for the asset (building) to meet the requirement for the facility service provider. Occupation rates are captured within the respective service delivery reviews for the facility.

4 Future Demand

The community's demand for services changes overtime. The reason for change can be varied, some of the common drivers are population, demographics, environment and technology. As service demand changes, Council's assets may also need to change to meet the changing demand. A summary of Council's forecast demands and how these are proposed to be managed is contained in Table 4.1.

Population and Demographics

Current position	Demand forecast	Demand impact	Demand management plan	Impact on assets
Population increase: - Total estimated population 39,208 (ABS 2019).	Planned to accommodate an additional 5000 people by 2040. Higher than average provision of medium density housing (38%), which is anticipated to further increase in the next 30 years.	Increased demand for social infrastructure assets such as libraries, recreational, and community facilities.	Tracking levels of service KIP for utilisation and capacity.	If the participation rates increase and the utilisation rates are at capacity it will indicate more services and potentially facilities with greater capacity will be required. Tracking these trends will inform long term new capital investment.
Changing demographics: - 11,257 new residents have moved into Council within the last five years – 30% are new to Council. - Average age is 39 years old. - A quarter of the population are families (couples with children).	Growth in aging population. Growth in children aged between 0-9 years. Increase in families moving to Council. Increasing multiculturalism.	Increased demand for all age appeal facilities.	Tracking community levels of service KIP for functionality. Deliver on Council's Community Plan Objective 1.3 and the Active Ageing Strategy Focus Area 1, Strategy 3: Building and Development: - The Unley Central precinct serves as the Age Friendly demonstration imitative. - Public toilets are sufficiently available, safe, clean and accessible.	If the functionality KPI decreases, it will indicate a change in function may be required and future viability of the assets will need to be assessed. Tracking these trends will inform long term new capital investment. Increased DDA and aged care options through renewals and new capital.

Climate change

Current position	Demand forecast	Demand impact	Demand management plan	Impact on assets
Council and the community are increasingly aware of our impact on the environment and Council's role in environmental sustainability.	Council is committed to pursuing, supporting and creating an environment that will sustain current and future generations. This goal is shared by our community and is a primary objective of most governments across the world.	Council is committed to using fewer precious resources, reducing it carbon footprint and looking for smarter ways to achieve this objective.	Upgrade sites to LED lighting. Introduction of solar to civic buildings. Introduction of grants to facilitate the installation of solar panels to council's community leased facilities. Council is developing a Climate and Energy Plan to be endorsed in 2020/21.	Renewal programs for facility lighting before end of useful life through an organisational LED upgrade program. Introduction of solar assets in the new capital program.
While South Australia's climate has always been variable, a strong warming have been observed since the 1970's, and according to the Bureau of Meteorology, average temperatures across the state has warmed by almost 1°C during the past century, with overall rainfall declining.	Hot and dry consecutive summer days on the rise. The number of days over 40°C in eastern Adelaide is projected to double by 2050, and the frequency and duration of heatwaves is projected to increase.	Increased operating (electricity) costs to the Council buildings.	Choosing more energy efficient products within the buildings to offset the increase in energy usage. These programs include: Upgrade all sites to LED lighting. Introduction of solar to civic buildings. Introduction of grants to facilitate the installation of solar panels to council's community leased facilities.	Renewal programs for facility lighting before end of useful life through an organisational LED upgrade program. Introduction of solar assets in the new capital program.

Technology

Current position	Demand forecast	Demand impact	Demand management plan	Impact on assets
Global trend towards smart cities creating simplified services through smart technology.	Growing expectation to implement digital service improvements. Demand for increased technology provision/access.	Council must adapt to the changing way the community operates, thinks and plans.	Changes to Government Policy Reforms to the planning system currently underway. Digital Unley outlines Council's Digital Vision through the strategic use of digital technologies to enhance the lifestyle of residents, better manage the environment, support the local economy and continuously improve the delivery of Council services.	Futureproofing new buildings to accommodate and adapt to new technologies enabling an appropriate level of service.

Table 4-1: Future demands

5 Lifecycle Management

5.1 Background

Lifecycle management details how Council plans to manage and operate (from planning to disposing) building assets at the agreed level of service while optimising total cost of ownership at an appropriate level of risk.

This section outlines the building asset data (condition, valuation, revaluation, useful life) and processes needed to effectively manage, renew and upgrade the infrastructure assets.

Significant time is spent on the decision to create or acquire a new asset, likewise financial costs of maintaining an asset from creation to disposal or replacement will need to be planned. New assets require initial expenditure; however, the required financial commitment for the asset's lifecycle costs can be up to five times the initial expenditure.

The cost of an asset lifecycle can be divided into four major stages:

- Creation/Acquisition (Design/Procurement, Construction Commissioning)
- Maintenance and Operations (Operate, Maintain, Monitor)
- Capital Renewal/Replacement (Requirements/Specifications, Upgrade/Modify, Replace)
- Decommission (Trigger, Decommission, Disposal)

These major stages are further detailed in this Lifecycle Management section.

Variability of these stages also exists within different building categories, as function may influence the renewal versus replacement strategies.

The major stages can be further divided into specific processes as listed in Figure 5-1.

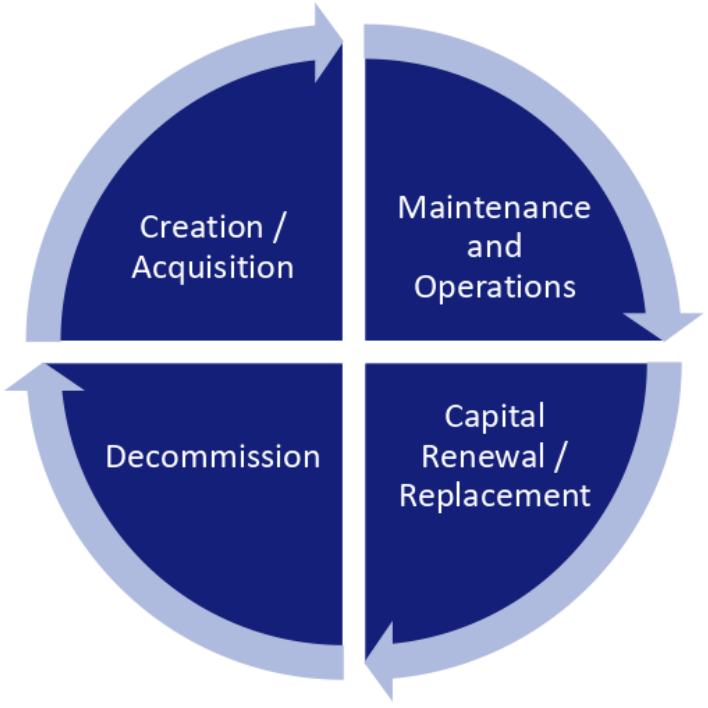
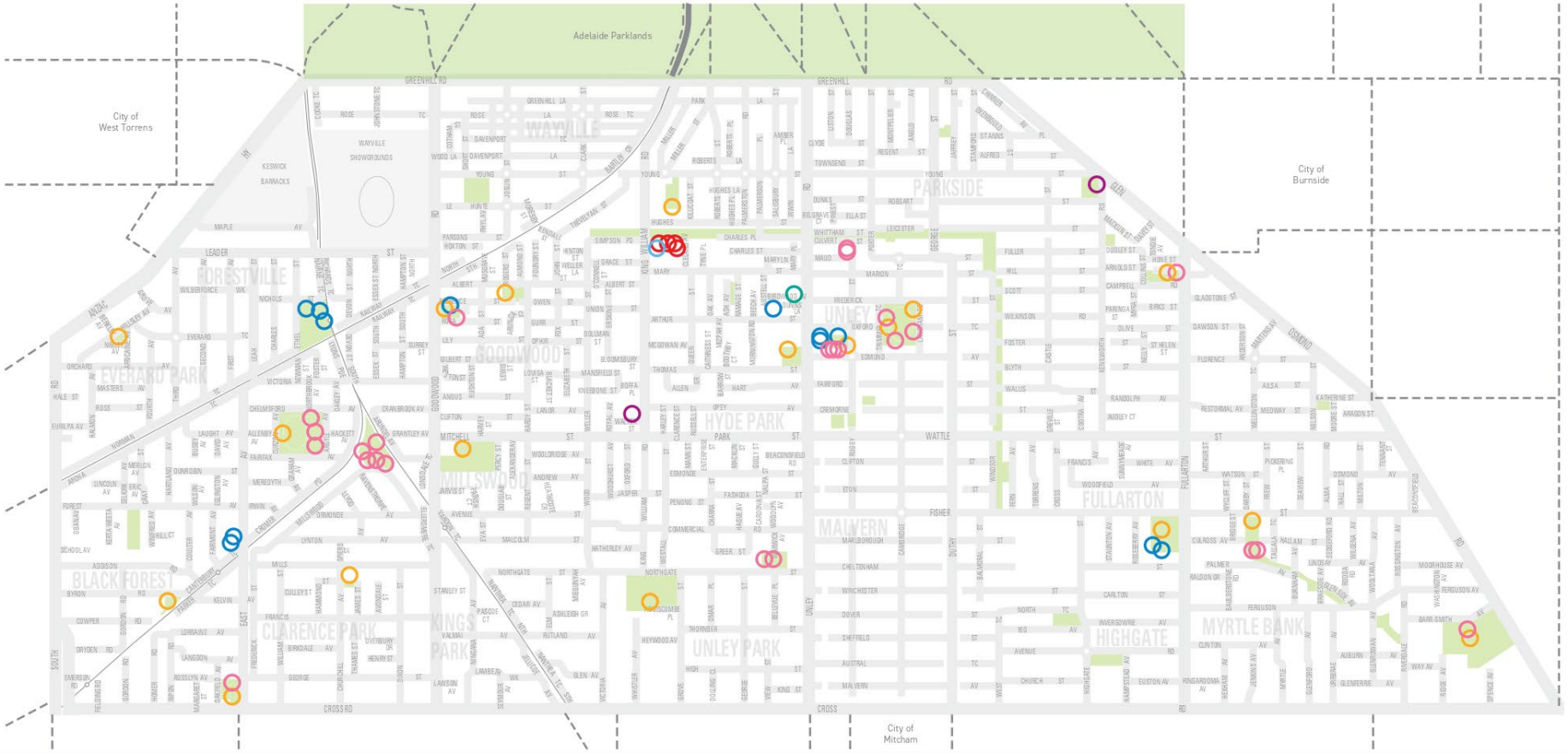


Figure 5-1: Asset lifecycle flowchart



COUNCIL BUILDING ASSET LOCATIONS

NORTH

LEGEND

- Civic Community
- Civic Operations
- Public Toilets
- Public Toilets (Leased)
- Commercial (Leased)
- Community (Leased)

Figure 5-3: Building locations

5.1.1 Physical Parameters

A building asset is defined as any construction or structure with fixed and permanent foundations or footings, enclosed or part enclosed with walls, roofing of rigid and long-lasting materials, with the purpose of occupation and/or storage.

The physical boundary of each building asset shall be divided practically, with functionality and the dependency on other assets for building connectivity as key determining factors. Building assets rely on footpath and ramps for easy access to maintain a connected network of assets for public use. Therefore, a building asset shall include the following site improvements and amenities in the direct vicinity:

- External lighting.
- Walkways (excluding walkway / sidewalk assets forming part of the existing footpath network).
- Landscaping and furniture (where assets in reserves and streetscapes have not been recorded as open space assets).

In the case where separate building assets share an adjoining wall and/or are located under a singular roof structure, the asset boundary shall be determined by a hierarchy of tenancy, physical access and function of the space.

Figure 5-2 defines Council's building locations which are split into the following categories:

Civic Community

These facilities are used for the administrative and community services provided by Council to the community. Table 5-1 contains Council's Civic Community buildings:

Category	Street	Suburb	Specific
Civic Community	411 Fullarton Road	Fullarton	Community Centre (Heritage)
Civic Community	411 Fullarton Road	Fullarton	Old Barn
Civic Community	411 Fullarton Road	Fullarton	Caretakers Cottage
Civic Community	101 - 103 Goodwood Road	Goodwood	Community Centre / Library
Civic Community	72 East Avenue	Black Forest	Institute / Community Centre (Heritage)
Civic Community	74 East Avenue	Black Forest	Community Centre House
Civic Community	72 East Avenue	Black Forest	Shed 1 (TOYS)
Civic Community	72 East Avenue	Black Forest	Shed 2
Civic Community	72 East Avenue	Black Forest	Shed 3
Civic Community	72 East Avenue	Black Forest	Shed 4
Civic Community	72 East Avenue	Black Forest	Child Care Shed
Civic Community	181 Unley Road	Unley	Council Offices
Civic Community	181 Unley Road	Unley	Town Hall & Library (Heritage)
Civic Community	80 - 82 Edmund Avenue	Unley	Museum (Heritage)
Civic Community	101 - 103 Goodwood Road	Goodwood	Library
Civic Community	18 Arthur Street	Unley	Senior Citizens Centre
Civic Community	Ethel Street	Forestville	Unley Swimming Centre

Table 5-1 Civic Community

These are Council's community facing buildings and the level of service will reflect a prompt and effective maintenance and capital replacement. Response will be fully accessible, will meet or exceed work health and safety (WHS) and public safety criteria and will be available for public activity.

The Unley Town Hall and Library is a heritage building constructed in stages in the late 1800's and early 1900's. The town hall portion is brick with freestone facade and timber flooring whilst the library portion is freestone, render and bluestone with concrete flooring. As this structure is heritage listed the maintenance and renewal programs focus on preservation with a continuous lifecycle without an end of life. This requires more frequent activity to maintain longevity within the structure and avoid any significant replacement or alteration due to condition.

The Unley Museum is a heritage building in the former Unley Fire Station building, forming part of the Edmund Avenue Cottages, a row of six Council-owned buildings which define the southern edge of the Village Green. The Edmund Avenue Cottages form part of the Unley Civic Precinct (area bounded by Unley Road, Oxford Terrace, Rugby Street and Edmund Avenue), for which Council is developing a long term vision.

The Unley Swimming Centre is a Civic Community building asset and the capital and maintenance costs for the assets in the facility are covered within the Plan. The facility is comprised of the following assets:

- Kiosk and Staff Rooms
- Change Rooms and Toilets
- Swimming Pool 50m
- Children's Pool 14m
- Wading Pool 10m
- Plant Room
- Plant and Equipment
- Shade Shelters
- Various site improvements (fencing, paving, lighting)

Council is developing a masterplan for the future of the Unley Swimming Centre which will inform the direction of all new and upgraded facilities.

Civic Operations

These facilities are operational in nature and/or complimentary to other Council functions. Table 5-2 contains Council's Civic Operations buildings:

Category	Street	Suburb	Specific
Civic Operations	75 King William Road	Unley	Storerooms
Civic Operations	75 King William Road	Unley	Garage
Civic Operations	75 King William Road	Unley	Shelter
Civic Operations	75 King William Road	Unley	Administration Building
Civic Operations	237 Young Street	Unley	Toilet Block
Civic Operations	Trimmer Terrace	Unley	Toilet Block & Ticket Office
Civic Operations	226 Unley Road	Unley	Toilet Block & Store Shed
Civic Operations	Northgate Street	Unley Park	Toilet Block
Civic Operations	411 Fullarton Road	Fullarton	Toilet Block
Civic Operations	53a Fisher Street	Myrtle Bank	Toilet Block
Civic Operations	Glen Osmond Road	Myrtle Bank	Toilet Block
Civic Operations	Churchill Avenue	Clarence Park	Toilet Block
Civic Operations	Africaine Avenue	Everard Park	Toilet Block
Civic Operations	55 Albert Street	Goodwood	Toilet Block
Civic Operations	181 Goodwood Road	Millswood	Change Rooms / Toilet Block

Civic Operations	Byron Road	Black Forest	Toilet Block
Civic Operations	360a Cross Road	Clarence Park	Toilet Block
Civic Operations	Fullarton Rd	Fullarton	Toilet Block
Civic Operations / Lease Community	1 Chelmsford Avenue	Millswood	Goodwood Saints Football Club & Goodwood Cricket Club Grandstand
Civic Operations / Lease Community	Trimmer Terrace	Unley	Jack Oatey Stand
Civic Operations / Lease Community	Trimmer Terrace	Unley	Harry J McKay Stand (Heritage)

Table 5-2 Civic Operations

These buildings provide operational functions and are complimentary to other purposes. Level of service reflect the operational status and prioritise WHS and public safety issues. Maintenance and capital replacement issues will be considered and programmed as appropriate.

In addition to Council owned public toilet, two leased toilet facilities, located at the Walter St CIBO and 82 Glen Osmond Road, are leased and fully maintained by Council in support of the local traders and shopping precincts.

The grandstands located at Unley Oval and Goodwood Oval function as both Civic Operations and Lease Community assets. The internal club facilities are subject to exclusive leases, while the external grandstand is open and accessible to the general public at all times. Significant upgrades to both these facilities are being progressed by Council due to standards outlined in the AFL Preferred Facilities Guidelines for State League competitions, which includes facility requirements for female and junior participants:

- The Unley Oval Jack Oatey Stand upgrade is currently being staged with new change room facilities and warm up area completed as stage one and administrative, spectator viewing, and hospitality areas within stage two.
- The Goodwood Oval Grandstand upgrade includes a two-storey facility with improved facilities to meet the needs of the football club, cricket club and the broader community.

Lease Commercial

These facilities are leased from Council for tenants to run commercial businesses in the community. Table 5-3 contains Council's Leased Commercial buildings:

Category	Street	Suburb	Specific
Lease Commercial	71 - 73 King William Road	Unley	Shop 1
Lease Commercial	72 - 73 King William Road	Unley	Shop 2
Lease Commercial	73 - 73 King William Road	Unley	Shop 3
Lease Commercial	166 Unley Rd	Unley	BarZaar
Lease Commercial	18 Trimmer Terrace	Unley	Montessori School
Lease Commercial	1 Bloomsbury Street	Goodwood	Residential property
Lease Commercial	1A Bloomsbury Street	Goodwood	Residential property

Table 5-3 Lease Commercial

Maintenance issues are generally the responsibility of the tenant with the level of service based on external and structural matters that support structural integrity and asset protection whilst ensuring Council's WHS and public liability is appropriate.

Lease Community

These facilities are leased from Council for tenants to run services to the community. Table 5-4 contains Council's Leased Community buildings:

Category	Street	Suburb	Specific
Lease Community	72 Edmund Avenue	Unley	St John
Lease Community	74 Edmund Avenue	Unley	Vacant
Lease Community	76 Edmund Avenue	Unley	Cancer Care Centre Inc
Lease Community	78 Edmund Avenue	Unley	Cottage
Lease Community	84 Edmund Avenue	Unley	Adelaide Potters Club
Lease Community	84 Edmund Avenue	Unley	Shed - 'The Mary Cummins Morphett Room'
Lease Community	84 Edmund Avenue	Unley	Shed
Lease Community	47 Oxford Terrace	Unley	Kindergarten
Lease Community	47 Oxford Terrace	Unley	Shed 1
Lease Community	47 Oxford Terrace	Unley	Shed 2
Lease Community	39 Oxford Terrace	Unley	Sturt Football Club
Lease Community	31 Rosa Street	Goodwood	Child Care Centre
Lease Community	Fern Avenue	Fullarton	Straw Hut
Lease Community	Fern Avenue	Fullarton	Garden Shed
Lease Community	Fern Avenue	Fullarton	Storage Shed
Lease Community	49 Oxford Terrace	Unley	Cottage
Lease Community	53a Fisher Street	Myrtle Bank	Highgate Girl Guides
Lease Community	53a Fisher Street	Myrtle Bank	Fullarton Scout Hall
Lease Community	53a Fisher Street	Myrtle Bank	Fullarton Scout Hall Shed
Lease Community	269 Fullarton Road	Parkside	Broughton Arts Society
Lease Community	Trimmer Terrace	Unley	Sturt Bowling Club
Lease Community	Trimmer Terrace	Unley	Sturt Lawn Tennis Club
Lease Community	8 Northgate Street	Unley Park	Bowling Club
Lease Community	8 Northgate Street	Unley Park	Tennis / Croquet Club
Lease Community	Glen Osmond Road	Myrtle Bank	Glen Osmond Scout Hall
Lease Community	1 Chelmsford Avenue	Millswood	Forestville Hockey Club
Lease Community	Millswood Crescent	Millswood	Bowling Club Shed
Lease Community	1 Chelmsford Avenue	Millswood	Hardcourt Tennis Club
Lease Community	1 Chelmsford Avenue	Millswood	Tennis SA
Lease Community	Millswood Crescent	Millswood	Bowling Club
Lease Community	Millswood Crescent	Millswood	Tennis Club
Lease Community	18b Millswood Crescent	Millswood	Workshop
Lease Community	Millswood Crescent	Millswood	Croquet Club
Lease Community	360a Cross Road	Clarence Park	Fairmont Tennis Club

Table 5-4 Lease Community

Maintenance issues are generally the responsibility of the tenant with Council. Levels of service are based on external and structural matters that support structural integrity and asset protection whilst ensuring Council's WHS and public liability is appropriate. Capital renewal works continue to be programmed to ensure the generally ageing facilities continue to be fit for purpose and meet all regulatory requirements.

Civic Operations – other

Facilities used in support of the physical works services provided by the Council to the community.

These buildings include:

- Mt Osmond landfill site located Princess Highway, Mount Osmond
- Private buildings on Council land include:
  - South Australia Society of Model and Experimental Engineers
  - Fullarton Scout Hall
  - Glen Osmond Scout Hall
  - Highgate Girl Guides

Centennial Park Cemetery Authority is a body corporate established as a Regional Subsidiary in accordance with the relevant provision of the Local Government Act 1999. The property of the Authority is held on behalf of the constituent owner Councils, the Cities of Unley and Mitcham. Centennial Park operations and asset management is delivered independent to the Plan.

5.1.2 Asset Utilisation

The utilisation of buildings varies across the asset categories. Different functionality of the building equates to specific requirements in operating times and the level of utilisation:

- Many civic community services run at designated business hours, allowing appropriate access to the public and community programs to be scheduled.
- Council Operations buildings are utilised during business hours and above depending on works requirements.
- Many sporting and recreational clubs operate on weekends and after hours. These buildings may have very little use throughout business hours except for administration, cleaning and preparation.

The overall daily or weekly routine of the building's utilisation allows for the planned cleaning and reactive maintenance response of the facilities during non-peak times.

Utilisation of buildings can be used as a metric for the optimisation of existing facilities and the allocation of funding. Assets with higher utilisation demand a higher level of service to be maintained. Utilisation is measured as a level of service KPI in terms of providing adequate buildings/facilities to meet the service needs by the facility operator, which are informed by the community usage rates.

5.1.3 Asset Condition

Buildings undergo three levels of inspections; the complexity and detail of these inspections increases as the level in increased:

- Level 1 – Operational inspection (monthly – internal maintenance team).
- Level 2 – Asset inspection (annually – internal assets team).
- Level 3 – Detailed condition assessment (three to five years – external consultant). The building asset database and condition inspections are based on the hierarchy of asset components shown in Figure 5-5.

The objective of a condition assessment is to provide sufficient information on asset condition to inform strategic asset planning and management decision-making.

The condition rating is based on the collected building asset condition assessment in 2018. The next condition assessment is due in 2022/23.

Buildings incorporate a 1-5 condition rating score (Table 5-5) to standardise assets for comparison across the portfolio. Each building component (Figure 5-4) is given a condition score which forms an overall average condition score per building asset.

Rating	Condition	Condition Description	Action
1	Very Good	A new or near new asset with no visible signs of deterioration.	No action required
2	Good	Early stages of minor deterioration causing no serviceability problems.	Minor defect only, no action required
3	Fair	Some obvious deterioration evident. Serviceability may be impaired slightly.	Maintenance required to return to accepted Level of Service
4	Poor	Severe deterioration evident, starting to limit the serviceability of the asset.	Consider renewal
5	Very Poor	Serviceability problems needing immediate rehabilitation. Possible risk to remain in service.	Replace/dispose

Table 5-5 Asset condition rating

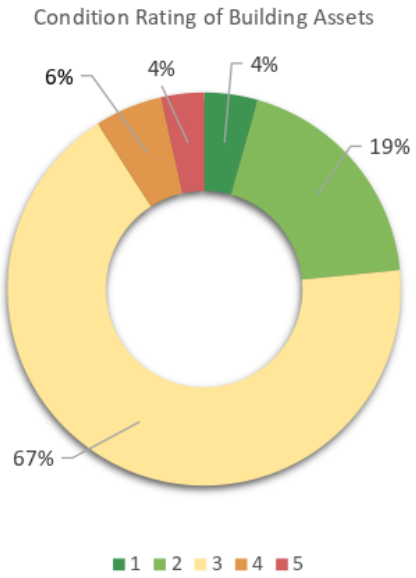


Figure 5-3: Building asset condition

The overall rating (based on 2018 condition assessment) of Council buildings is contained in Figure 5-3, which identifies:

- 23% of buildings do not require intervention.
- 67% of buildings are assessed for maintenance requirements.
- 10% of buildings are assessed for renewal/replacement requirements.

Asset condition rating are shown in Table 5-6 by asset category. The average rating can be used as a benchmark for measuring against the building category desired level of service.

Buildings have a level of service based on maintaining a condition rating of 3. When a building falls below this condition rating to a poor or very poor condition (a rating of 4 or 5), maintenance or renewal is undertaken to ensure the building condition is lifted to an excellent or good condition (a rating of 1 or 2).

This cyclic process is repeated across the portfolio as building assets deteriorate, to ensure an overall portfolio condition rating of 3 is sustained.

Building Categories	Number of Buildings	Average Condition Rating (2018)	Target Portfolio LoS Condition Rating
Civic Community	17	2.8	≤ 3.0
Civic Operations	21	2.7	≤ 3.0
Lease Commercial	7	2.8	≤ 3.0
Lease Community	34	3.0	≤ 3.0
Other	Not available	Not available	≤ 3.0
TOTAL	**79**	**2.8**	**≤ 3.0**

Table 5-6 Building asset condition categories

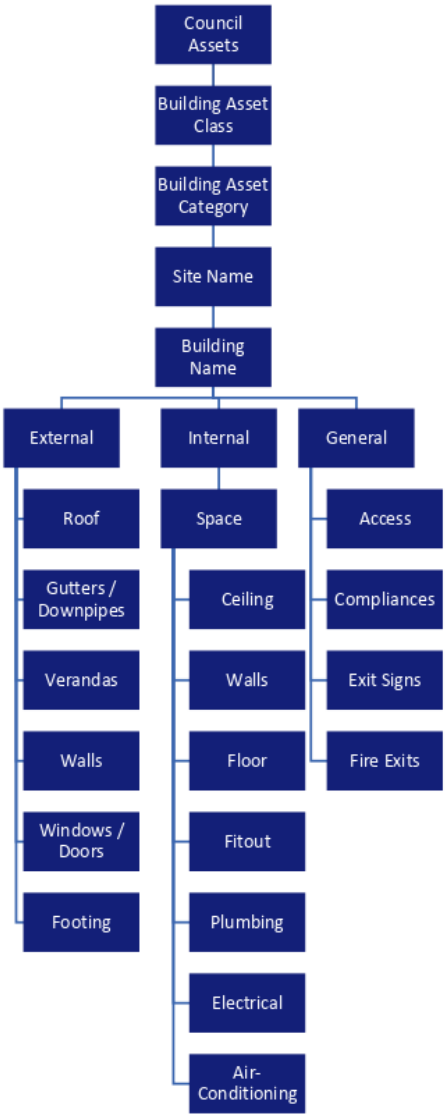


Figure 5-4: Building asset hierarchy

5.1.4 Useful Life

Buildings are provided with an expected useful life value for lifecycle cost planning, asset valuation and depreciation.

The expected life can be greater than a standard design life. This is achieved through capital renewal and maintenance as the building is maintained to satisfy the required levels of service. This ongoing renewal results in a slowed or plateaued remaining life.

As a result of this strategy, the asset construction date does not govern the assets residual life. Instead, the asset condition is used to form a condition based remaining useful life. Residual life revalued following the cycle of building asset condition inspections stipulated by Council.

Table 5-7 outlines general ranges for expected life of assets divided into building types. As many buildings have been acquired throughout the years and not built for purpose, these guides should be reviewed on a case by case basis, which is reflected by the range of useful life values within a single building type.

Building Type	Expected Life (Years)	Typical Use (Current Portfolio)
Purpose Built Civic/Admin Centre	100 - 150	Civic Community
Library	50 - 75	Civic Community
Community Centre	100 - 150	Civic Community
Refurbished Heritage Style Cottage	75 - 100	Civic Community / Leased Community
Shed	25 - 30	Civic Community / Leased Community
Purpose Built Swim Centre	50 - 75	Civic Community
Purpose Built Works Depot	50 - 75	Civic Operations
Public Toilet – Large Stand-Alone Block	50	Civic Operations
Public Toilet – Small Stand-Alone Block	30	Civic Operations
Public Toilet – External to Existing Facility	50	Civic Operations
Grandstands	75 - 100	Civic Operations
Clubrooms / Change rooms	30 - 50	Leased Community
Club Hall	50 - 75	Leased Community
Sports Club - Large	75 – 100	Leased Community
Sports Club - Small	50 – 75	Leased Community
Purpose Built Bazaar / Tavern	50 - 75	Leased Commercial
Shop	30 - 50	Leased Commercial

Table 5-7: Expected life of building assets

The impact of climate change to infrastructure assets useful life is not yet quantified and may continue to change as increased temperature, heatwaves, higher storm and rainfall intensities will increasingly affect the useful life of infrastructure at a material level. These impacts have been identified in risk management and future demands.

5.1.5 Asset Valuation

Valuations are undertaken in alignment with Australian Accounting Standard 'AASB13 Fair Value', and 'AASB116 Property Plant and Equipment'. These valuations are required every three to five years, with an independent audit required every five years. Valuations are undertaken to satisfy the financial reporting requirements and to understand the cost to replace assets. The next valuation will be completed 30 June 2023.

The valuation of Council's building assets is summarised in the Table 5-9 below.

Asset Category	Replacement Value	Accumulated Depreciation	Written Down Value
Civic Community	$35,678,789	$20,812,851	$14,865,938
Civic Operations	$14,664,409	$10,675,291	$3,989,118
Lease Commercial	$3,370,070	$2,358,998	$1,011,071
Lease Community	$24,968,028	$15,317,952	$9,650,076
Civic Operations – other	$582,261	$175,821	$406,440
TOTAL	**$79,263,556**	**$49,340,913**	**$29,922,643**

Table 5-8: Building assets valuation

5.1.6 Historical Expenditure

The maintenance budget has increased annually due to CPI and the asset portfolio growing in size, complexity and age. The new capital budget in 2019/20 was significantly increased due to the delivery of the Goodwood Oval Grandstand replacement and the staged upgrade of the Unley Oval Grandstand. Figure 5-5 outlines the historical expenditure for the past five years.

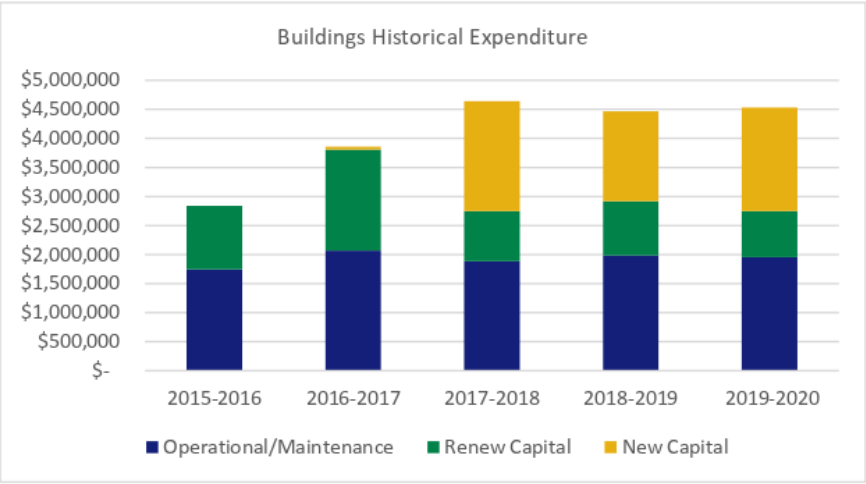


Figure 5-5: Historical expenditure

5.2 Operations and Maintenance Plan

5.2.1 Operations and Maintenance Strategies

Maintenance is recurrent expenditure, periodically or regularly required through a schedule of works to ensure the asset maintains its condition, achieves its useful life and provides the required level of service. The expenditure is anticipated in determining the asset's useful life. Figure 5-6 outlines the asset maintenance process.

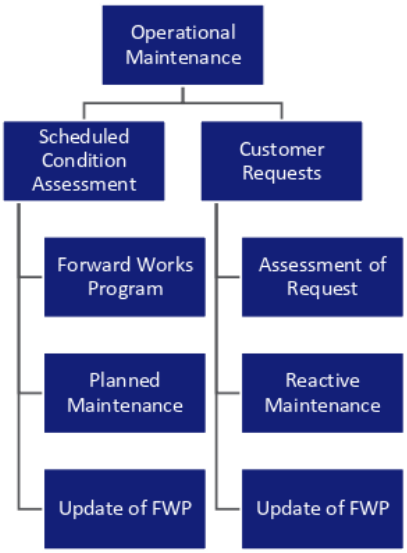


Figure 5-6: Asset maintenance process flowchart

As the years progress, the maintenance budget is projected to increase due to CPI and an asset portfolio growing in size, complexity and age.

Council's core maintenance activities include repair and upkeep of open space assets to ensure safety, functionality and operational capacity. Maintenance includes planned and reactive work activities:

- Planned maintenance is work carried out to a pre-determined schedule (e.g. routine mowing of grass in parks, gardens and sportsground).
- Reactive maintenance is unplanned work carried out in response to customer service requests and management decisions (e.g. vandalism and any ad hoc requests from the community).

In 2020/21 Council will conduct a review of all Depot operations in terms of levels of service to identify operational and financial efficiencies.

This review will be inclusive of all levels of service and processes to identify opportunities for efficiencies across all key depot operations including:

- Civil works
- Response and signage
- Open Space, Parks and Recreation
- Arboriculture

The outcomes of this service review may impact the operational and maintenance forecast with any changes made to be reflected in the LTFP following the conclusion of the review.

Council has the following service levels with respect to building assets. The response times are contained in Table 5-9.

Reactive Maintenance

Respond 1 (within 1 hour)

- Attend 95% of Priority 1 tasks within the target attend time.
- Complete 85% of Priority 1 tasks within the target completion time (subject to access, parts and materials. being available, otherwise 'make-safe' or undertake 'temporary repairs).

Respond 2 (within 48 hours)

- Attend 95% of Priority 2 tasks within the target attend time.
- Complete 85% of Priority 2 tasks within the target completion.

Respond 3 and 4 (within 10 or 20 days)

- Attend 95% of these tasks within the target attend time.
- Complete 90% of these tasks within the target completion time.

Respond 5 (within 30 days)

- Attend 95% of these tasks within the target completion time.
- Complete 95% of these tasks within the target completion time.

Long Term Maintenance

Respond 6 (include in Programmed Works schedule)

- Specific key performance indicators and/or milestones to be agreed on a project-by-project basis.
- Assess within 1 hour (does not necessarily mean inspect).

Respond category is assessed and allocated based on:

- Fire, Life Safety, Indoor Air Quality, Regulatory - Maintenance of building systems involving life safety and mandated regulatory compliance.
- Building Preservation – Maintenance required to avoid the deterioration of building systems such as roof leaks, plumbing leaks, heating.
- Occupied Necessities – Mechanical services, lighting, electrical service, lock repair, plumbing, sewers.
- Unique Program Support – Specialty systems and areas supporting IT space and equipment, function areas and meeting space, commercial type kitchens.
- Ad Hoc Departmental / Lessee Requests - Requests from departments outside of the above categories such as maintenance of departmentally owned equipment, moveable furniture and specialised systems not inclusive in the building infrastructure.
- Aesthetic – Interior surface finishes such as ceiling tile, drywall, and painting and floor coverings.

Respond	Examples
Respond 1 (Emergency response) ***During normal working hours – attendance within 1 hour.*** ***Outside normal working hours – attendance within 2 hours.***	• Risk of life or substantial damage to property. • Smell of gas. • Major water leak resulting in flood and immediate danger to the structure, services or fixtures/fittings. • Major loss of power. • Smell of burning (electrical). • Major structural damage, such as ceiling collapse. • Main drain blockage. • Total loss of heating in building - excludes student houses. • Lighting fault on staircases, landings and areas likely to be a Health and Safety Issue.
Respond 2 (Response within 48 hours) ***During normal hours where feasible***	• Lighting tube/bulb failures. • Partial loss of heating. • Loss of hot water. • Loss of drinking water. • Partial loss of power to room or area. • Overflow pipe discharging. • Blocked drains (excluding main drainage). • Fault on external doors and windows that may compromise security. • Faults on internal doors that may compromise security. • Water penetration into electrical fittings. • Major loss of water from faulty taps or shower heads.

Respond 3 (Respond and fix within 10 working days)	• Minor heating system leak. • Minor internal plumbing leak. • Minor loss of water from faulty taps or shower heads. • Flickering lights. • Loss of power to individual lights. • Major cooker, washing machine or fridge faults. • Internal lock faults. • Roof leaks. • Emergency light faults.
Respond 4 (Respond and fix within 20 working days)	• Broken WC seat. • Bathroom extractor fan faults. • Replace shower hose or head. • Minor joinery repairs. • Window faults not compromising security. • Minor fridge faults.
Respond 5 (Respond and fix within 30 working days)	• Replace sanitary fittings. • Making good holes in walls and ceilings or plaster repairs. • Minor joinery repairs nonurgent. • Repairs to room furniture.
Respond 6 (Programmed works – fixed by agreed date)	• Any work not fully in the above categories where completion date is pre-arranged with client. • Fixing of shelving, notice boards, white boards etc. • Manufacture of items for departments not regarded as maintenance related (subject to appropriate funding being available).

Table 5-9: Response

5.2.2 Summary of Future Costs

Figure 5-7 shows the forecast of planned and unplanned operations and maintenance works over the next ten years. It has been projected with CPI increase over the ten years. As Australia is facing a potential recession in the coming years, the CPI assumptions will change on an annual basis through the LTFP.

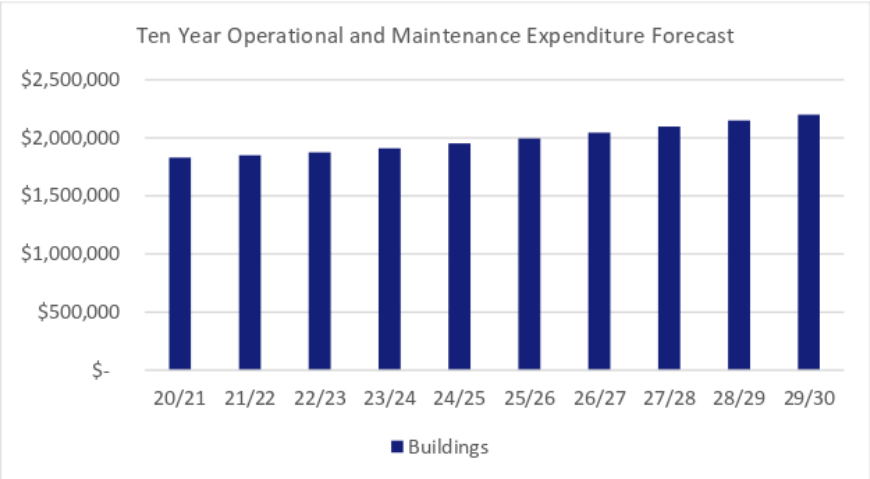


Figure 5-7: Buildings ten year operational and maintenance expenditure forecast

5.3 Renewal Plan (Capital)

Asset renewal is the replacement or refurbishment of an existing asset to return it to the modern standard equivalent performance and level of service. Renewal planning is necessary to ensure adequate funding is available, and assets are replaced at an optimum time to maintain the level of service.

5.3.1 Renewal Identification

Projected future renewal expenditures are forecast to increase over time as the asset portfolio grows in size, complexity and age.

Renewals are programmed across asset classes using the following methods:

1. Forward projection based on historic expenditure.
2. Broad estimates based on replacing assets at the end of their useful lives.
3. Predictive modelling of varying degrees of complexity.
4. Bottom-up approach with a high confidence in asset data. Projects are identified via asset monitoring, prioritised and allocated.

These methods increase in sophistication, which is reflected by the data confidence level.

Condition based data is the preferred method to form basis of the renewal program. Other factors such as functionality, risk, safety and changes in standards are also to be considered. When the data confidence is not at a mature stage, annual depreciation can be used as a guide for the annual budget.

It is recognised matching condition-based renewal fluctuations from year to year is not generally possible from both a budget and resourcing perspective. Distributing the renewal costs over the ten year timeframe is preferable from a budget and resourcing perspective. The process for renewals is outlined in Figure 5-8.

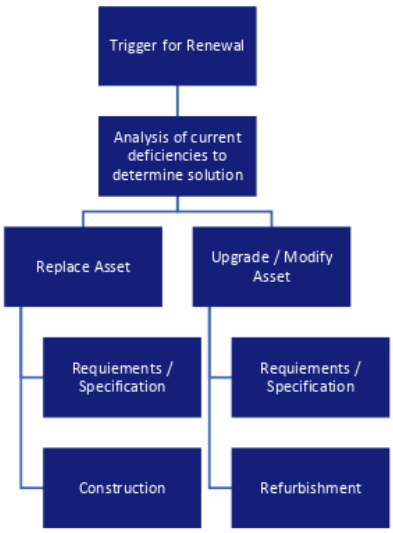


Figure 5-8: Asset capital renewal process flowchart

5.3.2 Renewal Strategies

Early implementation of renewal may be undertaken for upgrades and replacements due to changes in standards, safety issues, changes in levels of service, funding opportunities or alignment with external strategies and plans.

Renewal works identified in terms of renewal strategies may be deferred if the cost is beyond the current financial ability to fund it. This can occur when there are higher priority works on other asset groups. When renewal works are deferred, the impact of the deferral on the assets ability to still provide the required level

of service will be assessed. Although the deferral of some renewal works may not impact significantly on the short-term operation of the assets, repeated deferral will create a liability in the longer term.

5.3.3 Summary of Future Costs

The projected future renewal expenditure is summarised in Figure 5-9. The three sets of data in Figure 5-9 include:

- The renewal bar graph displays the replacement value of assets reaching the end of their useful life based on the 2018 condition assessment.
- The renewal average line displays the annual budget per year to meet the ten year renewal targets without the extreme variance indicated from the renewal bar graph.
- The LTFP line displays the current LTFP projection based on past asset management plans and asset data.

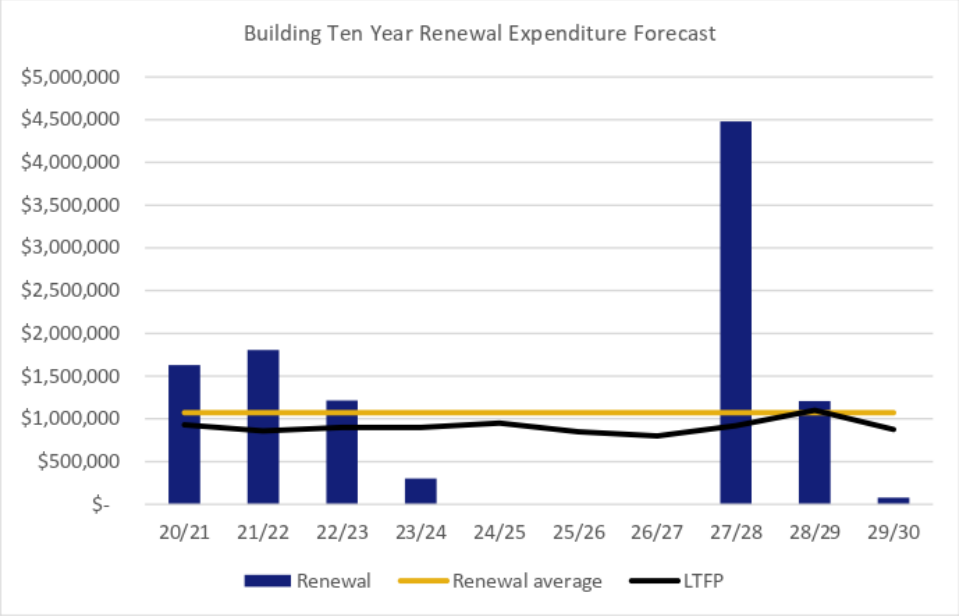


Figure 5-9: Building ten year renewal expenditure forecast

The average annual expenditure for the next ten years:

Renewal projection	$1,072,000
LTFP	$908,500
Annual depreciation	$1,280,000

The Plan identifies an annual spend of $1,072,000 for building asset renewal based on asset condition over the next ten years. The annual depreciation in 2020/21 for buildings is $1,280,000, which indicates an increase will be required in the LTFP spending for buildings as the asset portfolio ages.

The significant budget required to replace assets in 2027/28 is due to multiple asserts reaching the end of their useful life. A majority of these are fitout replacements for a range of facilities including sporting clubs, community centres, swimming centre, depot and toilet blocks. Council will budget annual renewal in line with the renewal average and distribute these renewals across the ten years.

Council's asset renewal ratio (planned renewal / the Plan's identified renewal) is at 85% over the next ten years. The ratio represents the level of capital expenditure on the renewal of assets (LTFP) relative to the expenditure projected in the Plan.

The current LTFP expenditure is under the budget projection and an increase of $1,636,000 to the budget over ten years will be required to maintain a ratio of 100%. Council's target is a 100% average over the next ten years.

5.4 Creation/Acquisition Plan (New Capital)

New works create new assets or works which upgrade an existing asset beyond its existing capacity. This can include existing property assets through acquisition. They may result from various needs derived from demands such as population growth, environmental and technology change (as mentioned in Section 4).

5.4.1 Capital Investment Strategies

Creation and acquisition begin with identifying current and projected needs not sufficiently fulfilled by the building asset portfolio. Triggers for asset creation include, but are not limited to:

- Legislative requirements including Occupational Health and Safety.
- The end of useful life of existing assets.
- Increased service demand (such as through an increase in population or levels of service).
- Changes in the required services (such as is outlined in the Active Ageing Strategy).

Investigation and recommendations on strategic opportunities for property acquisition or divestment are the responsibility of Council's Strategic Property Committee. Figure 5-10 outlines Councils asset creation process.

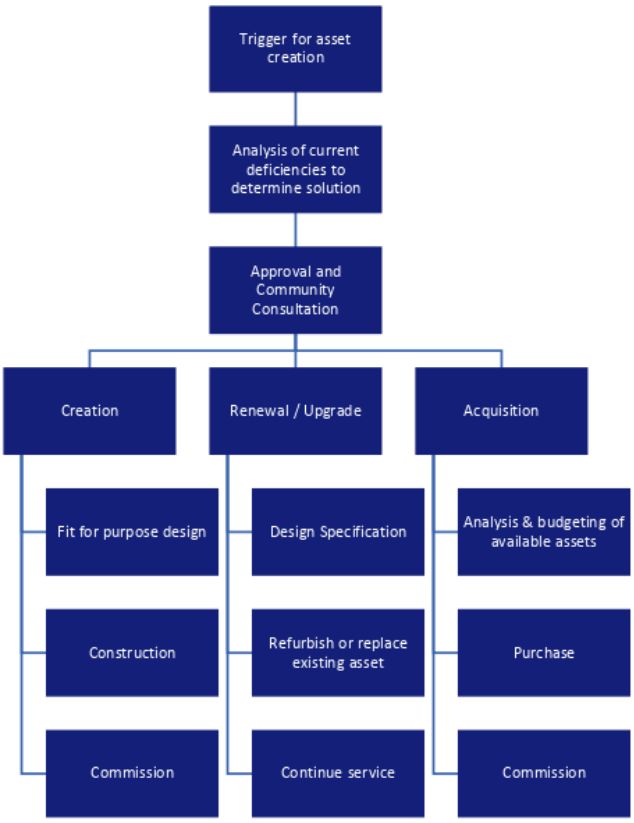


Figure 5-10: Asset creation process flowchart.

5.4.2 Summary of Future Costs

The projected upgrade/new asset expenditure are summarised in Figure 5-11.

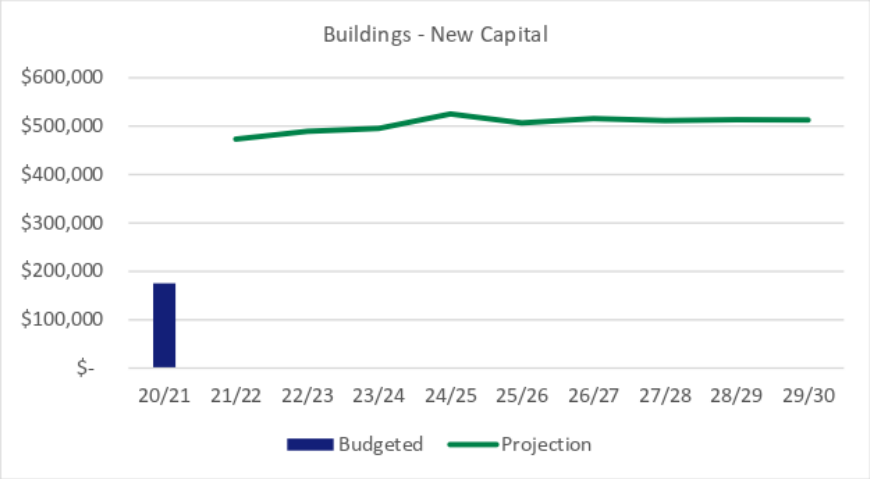


Figure 5-11: Projected new capital expenditure

Figure 5-11 outlines the projected new capital works budget for buildings. Council reviews new capital projects on an annual basis as part of the adoption of the Annual Business Plan, with one year (2020/21) of works been approved through the Annual Business Plan. The projection for the remainder of the ten year new capital is based on Council's annual priorities for new capital expenditure across Council and the need for new capital across all asset classes based on upcoming projects.

The 2020/21 financial year has a reduced budget as significant funds are being carried forward for the staged continuation of the Unley Oval Grandstand upgrade. The remaining funding is allocated to progressing design works. It's typical for the building new capital budget to fluctuate year to year to deliver the design and construction stages for large projects, with the majority of the capital funding being budgeted within the construction stage.

As timing and costs for these future projects are still to be confirmed due to strategic planning, design development and consultation, the projection for building assets is shown to be distributed with an average budget of $536,000 per year across nine years. These budgets are subject to individual annual bids, Council strategies and funding opportunities and are expected to fluctuate year to year.

The upcoming new capital projects for buildings in the next ten years include:

- Unley Oval Jack Oatey Grandstand (Stage Two)
- Edmund Avenue Cottages
- Unley Swimming Centre
- Millswood Croquet Club

5.5 Decommission Plan

Disposal includes activities associated with disposal of a decommissioned asset including sale, demolition or relocation.

Decommission of assets can be triggered in the following situations:

- The end of useful life of existing assets.
- Safety factors inherent to the asset.
- Non-compliance of the asset prompting a modern equivalent replacement.

Decommission of assets can involve the following courses of action (Figure 5-12):

- Design and replacement of the asset with a modern fit for purpose equivalent.
- Removal of the asset with the aim of repurposing the land in line with the long-term strategy of Council.
- The sale of the asset (in part or in whole), in situations where Council is looking to consolidate the asset portfolio.

The residual life of assets should be considered when decommissioning and disposing of asset components, which may have significant remaining life and value, e.g. information technology equipment within buildings.

Investigation and recommendations on strategic opportunities for property acquisition or divestment are the responsibility of Council's Strategic Property Committee.

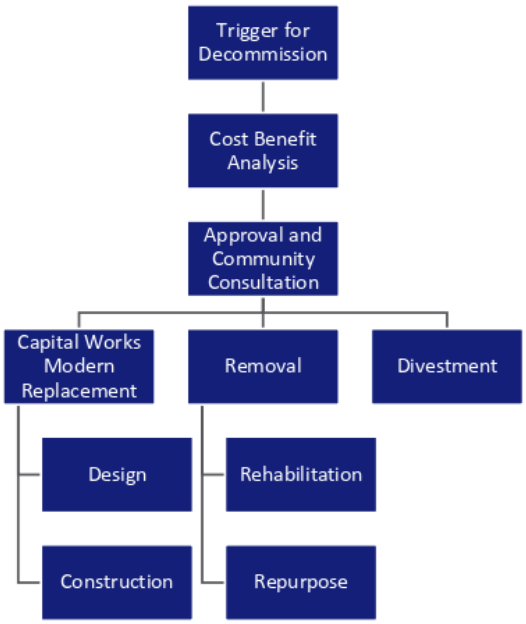


Figure 5-12: Asset decommission process flowchart

6 Risk Management

6.1 Critical Assets

Critical assets are those assets which have a high consequence of failure but not necessarily a high likelihood of failure. The identification of critical assets and failure modes means investigative activities, condition inspection programs, maintenance and capital expenditure plans can be effectively targeted.

Factors influencing criticality include safety, production/effort, cost and reputation.

Assets within the Civic Community category which are the public face of Council and provide integral administrative services are critical to the core community services supplied by Council. Severe deficiencies relating to the functionality and public appearance of these assets are to be avoided with high priority to maintain a stable provision and therefore public image of Council services.

Assets within the Civic Operations category which house the physical works departments of Council and provide integral physical works services are critical to the day to day operation of Council. Severe deficiencies relating to the operational status of these assets are to be avoided with high priority to maintain a stable provision and therefore public image of Council services.

6.2 Risk Assessment

The process for managing Council's risks is consistent with the International Risk Management Standard ISO 31000:2018. It involves five key steps, additional steps to ensure feedback through a monitoring and review process and appropriate communication and consultation.

Council is committed to effective risk and opportunity management to:

- Improve its ability to deliver community priorities, service delivery and outcomes for Council.
- Maximise opportunities and minimise the impact and likelihood of risk.
- Protect its employees, assets, liabilities and its community by avoiding or mitigating losses.
- Provide greater certainty for its employees, residents, stakeholders and the community in which Council operates by understanding and managing its risks.

Council acknowledges risk management is an essential part of best practice asset management. The risk assessment process identifies credible risks, the likelihood of the risk event occurring, and the consequences should the event occur, develops a risk rating, evaluates the risk and develops a risk treatment plan for unacceptable risks.

An assessment of risks associated with buildings using Council's risk matrix (Table 6-1), has identified, analysed and evaluated building asset risks. Table 6-2 outlines Council's risk management for buildings and is to be reviewed annually at a minimum outside of the Plan.

		Consequence				
		Catastrophic	Major	Moderate	Minor	Insignificant
Likelihood	Rare	Medium	Medium	Low	Low	Low
	Unlikely	High	Medium	Medium	Low	Low
	Possible	High	High	Medium	Medium	Low
	Likely	Extreme	High	High	Medium	Medium
	Almost Certain	Extreme	Extreme	High	High	Medium

Table 6-1: Risk matrix

Ref	Risk Description *(event or potential event focused and their impact upon objectives)*	**INHERENT RISK** *Level of risk with NO controls in place*			Controls *already* in place *(What existing controls are in place to prevent and/or manage the risk?)*	Are the Controls effective at managing the risk?	**RESIDUAL RISK** *Level of risk if existing controls are effective*			Is the Residual Risk *Rating* Tolerable?	Treatments/Additional Controls *(additional controls that can be implemented to further reduce the level of Risk)*	Treatment Owner & Timing *(**Who** is responsible for implementing the treatment and **When** it should be implemented/completed)*	**RISK LEVEL *after* Treatments** *If treatments implemented are effective*		
		Consequence	Likelihood	Risk Rating			Consequence	Likelihood	Risk Rating				Consequence	Likelihood	Risk Rating
1	Unsustainable management of assets due to poor quality data within asset management plan	Catastrophic	Likely	High	Periodic delivery of condition assessments and revaluations in line with industry standards.	Partially effective	Catastrophic	Possible	High	No	Continuous improvements in asset management maturity and activities through the improvement program.	Assets and Operations and Finance & Procurement See improvement program (Section 8.2)	Catastrophic	Unlikely	Medium
2	Council staff and/or members of the public injured as a result of Council activities or using Council buildings/facilities	Catastrophic	Likely	High	Annual maintenance budgets. Periodic delivery of condition assessments. Maintenance inspections.	Majority effective	Catastrophic	Unlikely	Medium	Yes	N/A	N/A	N/A	N/A	N/A
3	Non-compliance with safety standards within buildings	Catastrophic	Likely	High	Ensure all compliance and mandated inspections are met.	Majority effective	Catastrophic	Rare	Medium	Yes	N/A	N/A	N/A	N/A	N/A
4	Council unable to fund required capital and maintenance due to economic downturn.	Moderate	Likely	High	Maintain strong sustainability ratio to avoid a backlog of capital works. Ability to fund capital program through borrowings. Ability to reduce levels of service.	Majority effective	Moderate	Rare	Low	Yes	N/A	N/A	N/A	N/A	N/A

Ref	Risk Description *(event or potential event focused and their impact upon objectives)*	**INHERENT RISK** *Level of risk with NO controls in place*			Controls *already* in place *(What existing controls are in place to prevent and/or manage the risk?)*	Are the Controls effective at managing the risk?	**RESIDUAL RISK** *Level of risk if existing controls are effective*			Is the Residual Risk *Rating* Tolerable?	Treatments/Additional Controls *(additional controls that can be implemented to further reduce the level of Risk)*	Treatment Owner & Timing *(**Who** is responsible for implementing the treatment and **When** it should be implemented/completed)*	**RISK LEVEL *after* Treatments** *If treatments implemented are effective*		
		Consequence	Likelihood	Risk Rating			Consequence	Likelihood	Risk Rating				Consequence	Likelihood	Risk Rating
5	Climate change not appropriately planned for with respect to asset management.	Moderate	Likely	High	High level targets are set through the objectives and targets within the Environmental Sustainability Strategy.	Partially effective	Moderate	Likely	Medium	No	Climate change addressed with respect to Councils impact on the environment as well as the environments impact to councils' assets. Include climate change as a considered factor throughout the Plans, outlining the impact and associated demand on assets. Address assets within Climate and Energy Plan.	Assets and Operations Ongoing as asset management plans and council strategies are updated	Moderate	Possible	Medium
6	Assets not fit for purpose to support service delivery targets.	Moderate	Likely	High	The Plan is updated every four years (minimum) to reflect current legislation and adopted strategic direction from Council. This ensures appropriate operational and capital planning is undertaken to maintain the assets at the agreed level of service.	Majority effective	Moderate	Unlikely	Medium	Yes	N/A	N/A	N/A	N/A	N/A

Table 6-2: Building risks

7 Financial Summary

This section contains the financial requirements resulting from all the information presented in Section 5 of the Plan. The financial projections will be refined as part of the ongoing revision of the Plan.

7.1 Valuation forecast

Asset values are projected to increase as additional assets are added through capital works. Additional assets will generally increase the operational and maintenance requirements in the longer term, as well as the need for renewal. Additional assets will be included for future depreciation forecasts.

7.2 Expenditure forecast

Figure 7-1 outlines the financial projections for maintenance and capital renewal and capital new expenditure for the buildings.

The total forecast expenditure for buildings is relatively constant over the ten year period. The predictability of this budget allows Council to undertake capital programs as and when required in each year.

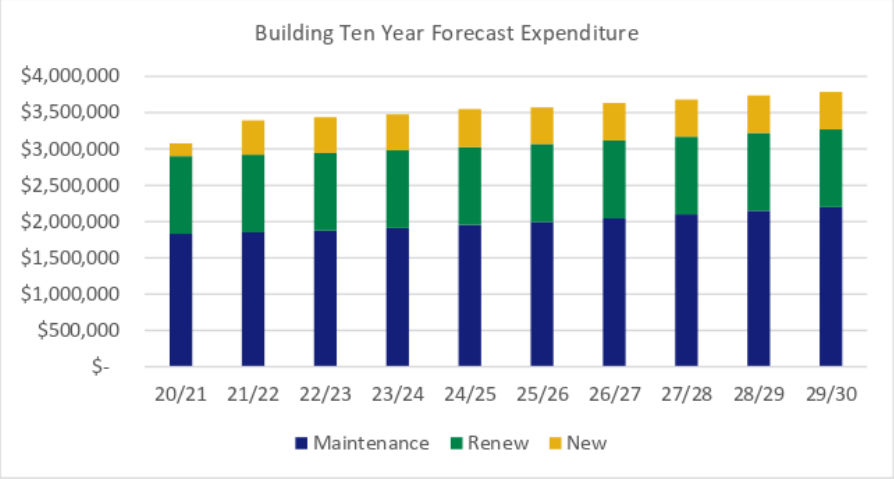


Figure 7-1 Building ten year forecast expenditure

7.3 Asset Renewal Funding Ratio

This ratio indicates whether Council has the financial capacity to fund asset renewal at continued existing service levels. Council's target is a 100% average over the next ten years.

Asset Renewal Funding Ratio – Buildings: 85%

This ratio is an important budget indicator over the next ten years. Council's LTFP has budgeted 85% of funds identified in this plan for the optimal renewal and replacement of building assets. An increase of $1,636,000 to the renewal budget over ten years is required to maintain a ratio of 100%.

7.4 Funding Strategy

An approach to asset management driven from a service perspective is currently being introduced to Council based more directly on the declared levels of service for each specific asset.

Key strategic milestones:

- The Plan will inform the future LTFP.

- The next major condition assessment and revaluation will be in 2022/23 and inform future renewal strategies.
- The Depot operations service review will be undertaken in 2020/21, which will inform future maintenance and operating budgets.

Repayment of existing loans has been extracted from the current loan schedule. The LTFP assumption indicates no additional funding through borrowings is required to meet new capital commitments in the future. The Local Government Finance Authority (LGFA) Cash Advance Debenture (CAD) Facility will continue to be used to balance funding requirements in terms of borrowing.

The projected expenditure is to be funded from Council's operating, maintenance and capital budgets.

7.5 Key Assumptions

The assumptions and data used in presenting this forecast information were:

- Replacement costs derived from the fixed asset register in Technology One asset database.
- Condition data derived from the building condition assessment from 2018.
- Key financial assumptions derived from LTFP 2020/21.
- Operation funding will be made without reduction.
- Capital funding will be made without reduction.
- Appropriate resources will be made available to manage the Plan.
- Council income will remain consistent with LTFP.
- There will be no natural disasters.

7.6 Forecast Reliability and Confidence

The expenditure projections are based on the best available data. Data confidence is critical for an accurate expenditure projection. As new data becomes available, the forward plans will be updated. There are five levels that measures data confidence:

Confidence Level	Description
A - Highly Reliable	Data based on sound records, procedures, investigations and analysis, documented properly and agreed as the best method of assessment. Data set is complete and estimated to be accurate +-2%.
B – Reliable	Data based on sound records, procedures, investigations and analysis, documented properly but has minor shortcomings, e.g. some of the data is old, some documentation is missing and /or reliance is placed on unconfirmed reports or some extrapolation. Dataset is complete and estimated to be accurate +-10%.
C - Uncertain	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 - Very Uncertain	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 – Unknown	None or very little data held.

Table 7-1: Data confidence level

Council's building data confidence is *(B) – Reliable* across condition, spatial and financial data. This confidence level has been achieved thorough condition assessments completed over two full revaluation cycles. The improvement program outlines steps to continue to increase the maturity and confidence of the data through the next revaluation.

8 Improvement and Monitoring

8.1 Status of Asset Management Practices

Council is committed to improve the data quality and confidence by implementing actions within the improvement program in Table 8-1.

8.1.1 Accounting and Financial Systems

Council uses Technology One as its financial management and accounting system. Technology One has the capability to report the full lifecycle of assets providing full transparency from acquisition to disposal of assets.

8.1.2 Asset Management System

Council uses Technology One – Enterprise Asset Management software as its Asset Management System. Initial set up of the asset management system is crucial to ensure integration between operating and financial functions. Council's initial set up of the asset management system was incomplete and is being addressed through the improvement program, periodically updating the asset registers during revaluations.

A future improvement is to integrate the financial system and asset management system following each asset categories condition assessment and revaluation.

Council's geographic information system (GIS) data is stored within a specialised GIS software suite. An improvement will be to integrate the GIS data with the asset register to provide live spatial data.

8.2 Improvement Programs

The improvement program derived from the Plan is shown in Table 8-1.

Task No.	Task	Responsible officer	Resource Required	Due Date
1	Continual review and update of the asset register.	Asset Management Officer	Internal	Revaluation 2022/23
2	Condition audit to be completed	Coordinator Property and Facilities	Internal / External	2022/23
3	Full integration of building assets with Asset Management System, the finance module in TechOne and GIS.	Asset Management Officer Manager Business Systems Solutions	Internal	Ongoing staged approach
4	Undertake customer research on building assets. This will provide data for future planning of building assets ensuring the required level of services are met.	Assets and Engineering Lead	Internal	2020/21

Table 8-1: Improvement program

8.3 Monitoring and Review Procedure

Council will schedule the Plan review into its strategic and annual planning and budget processes. The Plan has a life of four years.

8.4 Performance Measures

Council will track the performance of the Plan through the following performance measures:

1. Level of Service Key Performance Indicators (KPIs).
2. Delivery of improvement program.
3. Improved data confidence.
4. Review of the Plan every four years.

THE CITY OF UNLEY

OPEN SPACE

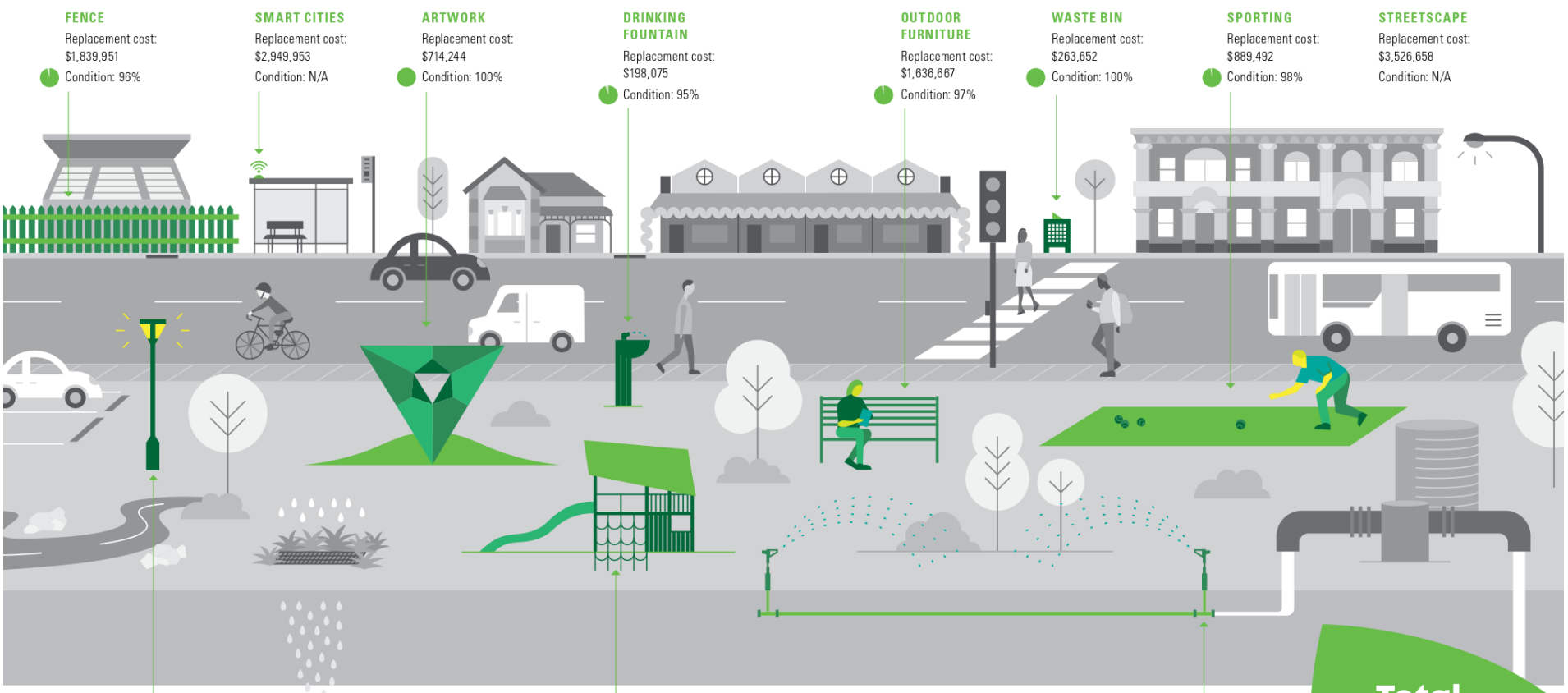
ASSET MANAGEMENT PLAN

2020

Contents

Issue	Date	Issue Details	Author	Checked	Approved
V.1	July 2020	Framework – Sproutt Consulting	SW	TY	JM
V.2	August 2020	Draft for Audit Committee	JM	AW	CM
V.3	October 2020	Draft for Community engagement			
V.4	November 2020	Final			

Open Space Assets Summary



FENCE
Replacement cost: $1,839,951
Condition: 96%

SMART CITIES
Replacement cost: $2,949,953
Condition: N/A

ARTWORK
Replacement cost: $714,244
Condition: 100%

DRINKING FOUNTAIN
Replacement cost: $198,075
Condition: 95%

OUTDOOR FURNITURE
Replacement cost: $1,636,667
Condition: 97%

WASTE BIN
Replacement cost: $263,652
Condition: 100%

SPORTING
Replacement cost: $889,492
Condition: 98%

STREETSCAPE
Replacement cost: $3,526,658
Condition: N/A

LIGHTING
Replacement cost: $1,454,672
Condition: 98%

STRUCTURE
Replacement cost: $2,449,605
Condition: 96%

PLAYGROUND
Replacement cost: $3,786,941
Condition: 95%

OTHER INFRASTRUCTURE
Replacement cost: $34,569
Condition: 88%

IRRIGATION
Replacement cost: $2,829,029
Condition: 99%

Total
Replacement cost: $22,573,508
Condition: 95%
Condition percentage represents assets in fair to very good condition.

The City of Unley (Council) has adopted four asset management plans which set out its goals and objectives for managing key infrastructure and assets, namely building, open space, stormwater and transport.

1 Executive Summary

Open spaces are places where the community meet, providing opportunities for leisure and physical activity. They enhance the liveability of Council while encouraging biodiversity and resilience to climate change. This asset management plan (the Plan) focuses on the management of Council's open space assets.

The objective of asset management is to provide the desired level of service in the most cost-effective manner for present and future generations. A strategic approach to asset management aligning with industry standards and best-practice has been undertaken to ensure Council's sustainability.

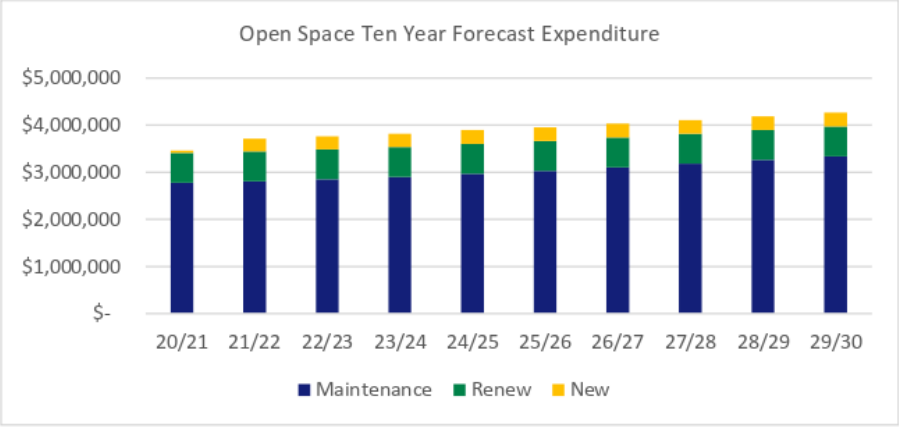
Effective asset management for open space assets demonstrated in the Plan is essential to achieve Council's vision: "Our City is recognised for its enviable lifestyle, environment, business strength and civic leadership."

Open Space Levels of Service:	
Quality	Open spaces are well maintained
Function	Assets meet the service needs
Capacity and Utilisation	Open spaces have the capacity to meet the community need
Condition	Physical state of open space assets are in serviceable condition
Renewal	Sustainably managing the renewal of assets
Accessibility	Open spaces are accessible to all
Safety	Safety compliance standards are achieved

Future Demands:	
Population and demographics	Population is forecast to increase 13% by 2040 Over the last five years 30% of residents are new to Council Demands for sporting, recreation and leisure activities
Climate Change	Awareness of Council's role in climate sustainability Increasing trend of severe weather events
Technology	Global trends towards smart cities

Condition:	95% open space asset condition satisfaction

Financial Summary:



The forecast contained within the Plan will be reviewed annually with an update completed every four years.

Council is committed to continuously improving the quality and maturity of its asset management practices. The improvement program specifies its commitment to increase asset management maturity and data confidence. Key performance measures have been established to track Council's performance of its assets and asset management practices.

2 Introduction

2.1 Background

Council's open space assets are found within our parks, streets and the public realm. The open space within Council is highly valued and recognised to:

- Provide opportunity for people to meet, gather and socialise.
- Support healthy living, recognising the ageing population, the need for more opportunities for physical activity, and the benefits of positive mental health.
- Emphasise a greener city image that values open spaces, streetscapes and other civic spaces.
- Enhance the liveability of Council, providing a range of activities and interest within the open space network for all.
- Encourage biodiversity, habitat creation and the community's connection with nature.
- Strengthen resilience to climate change, including susceptibility to increased storm events and rising temperatures.

Council's open space assets covered in the Plan include:

- Artwork
- Drinking Fountains
- Fences
- Irrigation
- Lighting
- Other Infrastructure
- Outdoor Furniture
- Playgrounds
- Smart City Technology
- Sporting Assets
- Streetscape
- Structures
- Waste Bins

The Plan is developed to demonstrate proactive management of assets (and services provided by assets), compliance with regulatory requirements and to communicate funding required to provide the required levels of service over a ten year planning period.

The Plan aims to:

- Align with ISO 55000:2014 (international standard for asset management) without seeking accreditation as an ISO document or process.
- Align the delivery of asset management activities with the organisation's goals and objectives; this is known as the "line of sight" with asset management.
- Create transparency and accountability through all aspects of asset management, ensuring all stakeholders understand their roles and responsibilities for achieving the Plan's aims.

The Plan is developed and implemented in conjunction with the following Council plans, strategies and policies (Table 2-1):

Plans, Strategies and Policies	
Community Plan 2033	Living Active – Sport and Recreation Plan
4 Year Delivery Plan 2017 - 2021	The Living City – Open Space Strategy
Active Ageing Strategy	Tree Strategy
Digital Unley	Walking & Cycling Plan 2016-2021
Environmental Sustainability	Long Term Financial Plan 2020-21 to 2029-30
Asset Management Policy	Community Land Management Plan
Asset Management Plans	

Table 2-1: Plans, strategies and policies

Council's open space asset key stakeholders for service delivery of the Plan are contained in Table 2-2:

Key Stakeholders	Roles in Asset Management Plan
Residents/ Community	Opportunity to provide input into the development and review of the Council's strategic management plans.
Elected Members	Represent needs and views of community. Ensure Council's objectives and policies are appropriate and effective. Ensure Council's resource allocation, expenditure and activities, and the efficiency and effectiveness of its service delivery is appropriate. Ensure Council is financially sustainable.
Audit Committee	Audit Committee will review, make recommendations and observations to Council on the financial outcomes of the Plans.
Chief Executive Officer	Ensures administration deliver strategic planning and direction of the Council. Ensures administration implement the strategic plan goals and objectives by providing services within the allocated resourcing while managing risks. Ensures Council is financially sustainable.
General Manager – City Development	Ensures asset management plans are completed and reported to CEO and Council. Ensures the capital works programs are delivered in line with strategic planning. Ensures the maintenance programs are achieving service standards.
Assets and Operations Manager	Ensures the review of asset management and the delivery of improvement strategies. Manages maintenance programs to ensure they are active and achieving service standards. Ensures the capital works programs are achieved.
Senior Assets and Engineering Lead	Manages development and review of asset management plans. Responsible for advancing asset management within the organisation. Review infrastructure data integrity within the asset management system and GIS applications. Review and manage condition audits of infrastructure. Review asset valuation data. Coordinates the annual capital works program.
Team Leader Open Space, Sports and Recreation Team	Coordinate Council resources to deliver the maintenance program.
Asset Management Team	Deliver the annual capital works programs. Undertake data collection and operational asset management projects.
Open Space, Sports and Recreation Team	Deliver operations and maintenance.
Community and Cultural Development Team	Coordinates event management, cultural activities and artwork.

Table 2-2: Key stakeholders for the Plan

2.2 Goals and Objectives of Asset Ownership

The goal of asset management is to provide the desired level of service through the provision and management of physical assets in the most cost-effective manner, for present and future generations.

The Plan demonstrates alignment with the Council's Community Plan 2033 through its vision and themes:

Our City is recognised for its enviable lifestyle, environment, business strength and civic leadership.

Community Living

Goal: People value our City with its enviable lifestyle, activities, facilities and services.

Objectives:

- Our Community is active, healthy and feels safe.
- Our Community participates in community activities, learning opportunities and volunteering.
- Our City meets the needs of all generations.
- Our Community is proud to be part of our City.
- Our City is connected and accessible.

Environment Stewardship

Goal: We will maintain and enhance our urban environment and strengthen our City's resilience to climate change by providing leadership to our Community.

Objectives:

- Unley's urban forest is maintained and improved.
- Excellence in waste management is achieved through avoidance, re-use and diversion.
- The energy efficiency of the City if increased and our carbon footprint reduced.
- Efficient, effective & sustainable water management is ensured.
- The City's resilience to climate change is increased.

Economic Prosperity

Goal: Our businesses are valued because of the range of goods, services and facilities they provide, and new businesses are supported, not burdened with bureaucracy.

Objectives:

- Unley is recognised as an easy place to do business.
- Thriving main streets and other business activities operate across our City.

Civic Leadership

Goal: Council will listen to the community and make transparent decisions for the long-term benefit of the City.

Objectives:

- We have strong leadership and governance.
- Council provides best value services to the community.
- Our business systems are effective and transparent.

These objectives will be considered in all decision-making aspects regarding open space assets to ensure Council consistently strives to achieve these strategic objectives. There are several initiatives that feed into the above objectives outside of the asset management process that ultimately support the stated objectives.

2.3 Plan Framework

Key elements of the Plan include:

- Levels of service – specifies the levels of service objectives and how they are measured.
- Future demand – how this will impact on future service delivery and how the demand will be met.
- Lifecycle management – how Council manages existing and future assets to provide the levels of service.
- Risk management – how Council manages asset risks.
- Financial summary – funds required to provide the levels of service.
- Improvement plan and monitoring – how Council will improve asset management maturity and how the Plan will be measured to ensure it's meeting Council's objectives.

The asset management framework is shown in Figure 2-1 and the roadmap for preparing an asset management plan is in Figure 2-2.

The Community Plan is a comprehensive community vision for Council. The vision is broken down into themes, goals and objectives outlining how we plan to achieve our vision.

The 4-Year Delivery Plan outlines how we will deliver the Community Plan's vision, strategies and framework.
Corporate Strategies identify the challenges and opportunities across key areas of our Council, and outline the plans and actions required to achieve the long-term goals as set out in the Community Plan.

The Plan demonstrates long-term (ten years) asset management planning and outcomes and outlines asset activities and resources to provide a defined level of service in the most cost-effective way while managing risks.

The Long Term Financial Plan (LTFP) demonstrates financial sustainability in the medium to long term, while achieving the objectives in the Community Plan.

The Annual Business Plan outlines Council's activities to progress towards meeting our Community Plan objectives, outlines how Council plans to allocate its budget and what services and projects will be developed in the forthcoming financial year.

Figure 2-1: Asset management framework

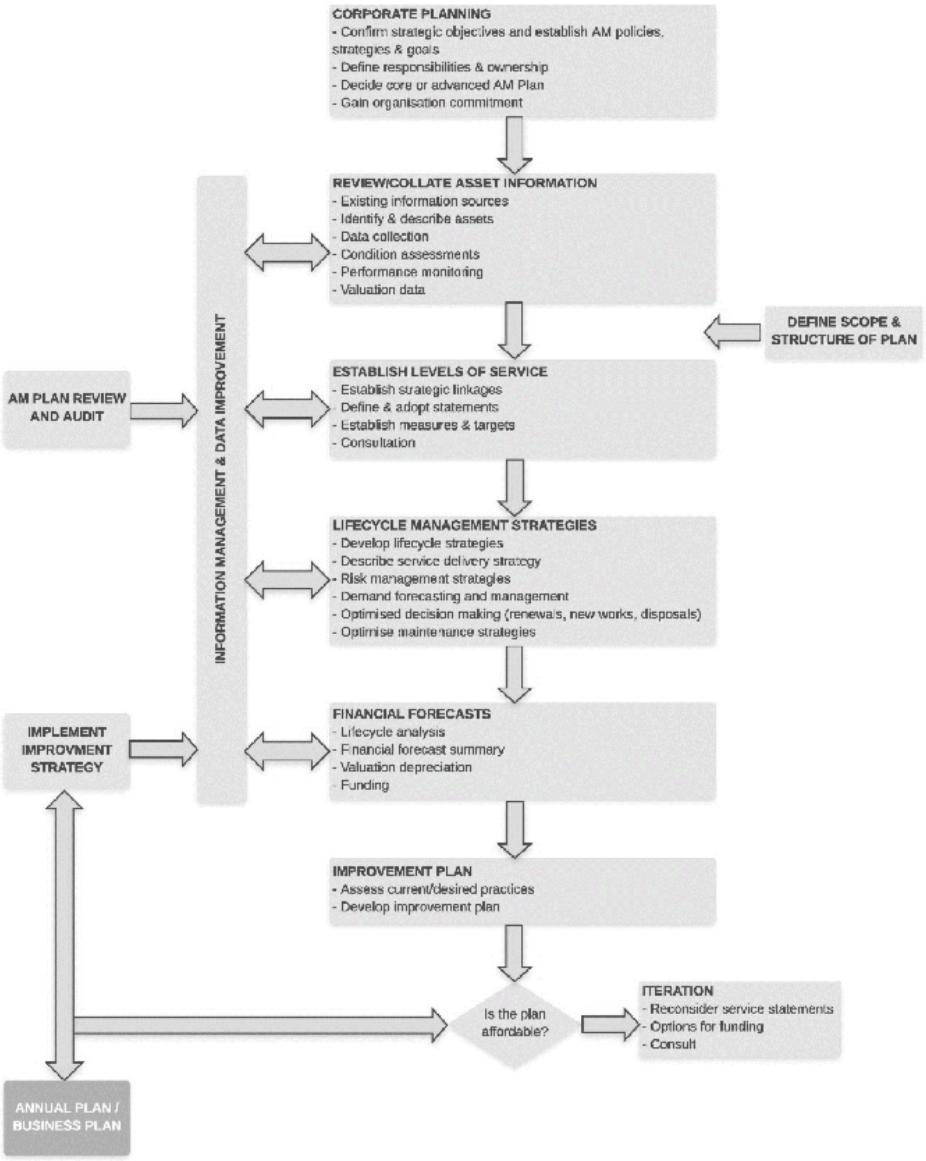


Figure 2-2: Road map for preparing an Asset Management Plan
Source: IPWEA, 2006, International Infrastructure Management Manual (IIMM) Fig 1.5.1, p 1.11

2.4 Core and Advanced Asset Management

The Plan is prepared as a core level maturity over the ten year planning period in line with the International Infrastructure Management Manual (IIMM). Core asset management is a top down approach with analysis applied at a network level. The Plan is prepared to meet legislative and organisational requirements for sustainable service delivery and long-term financial planning and reporting. The improvement program (Section 8) outlines and prioritises the steps required to an advanced asset management maturity.

3 Levels of Service

3.1 Customer Research and Expectation

Council receives continuous community feedback from a variety of sources including, but not limited to:

- Community enquiries and requests
- Community Plan consultation process
- Council Strategies
- Annual Business Plan and LTFP consultation process
- Project feedback
- Development of the Asset Management Plan
- Customer satisfaction surveys
- Service satisfaction surveys

This feedback is built into the development of the Plan and the levels of service it aims to deliver.

Through the development of the community levels of service outlined in the Plan, Council will actively survey the community on its assets and associated services to ensure it is delivering on its levels of service. In 2020/21 Council will develop a benchmark for community levels of service to measure performance against.

3.2 Legislative Requirements

Council must meet many legislative requirements including Federal and State Government legislation and regulations as well as non-legislative requirements including Australian Standards and Council policies as contained in (Table 3-1).

Legislation	Requirement
Aboriginal Heritage Act 1988	An Act to provide for the protection and preservation of the Aboriginal heritage; to repeal the Aboriginal and Historic Relics Preservation Act 1965 and the Aboriginal Heritage Act 1979; and for other purposes.
Australian Accounting Standards	Standards applied in preparing financial statements, relating to the valuation, revaluation and depreciation of open space assets.
Development Act 1993	Regulates the use and managements of land and buildings including their design and construction, ongoing maintenance, and conservation of land and buildings where appropriate.
Disability Discrimination Act 1992	To ensure persons with disabilities have access to the building and facilities.
Environment Protection Act 1993	An Act to provide the protection of the environment; to establish the Environment Protection Authority and define its functions and powers; and for other purposes. Consideration of this act should be undertaken for the provision, development or management of transport assets.
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.
Native Title Act (South Australia) 1994	Consideration should be undertaken in the provision, development and management of open space.
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.

Legislation	Requirement
SA Public Health Act 2011	An Act to promote and to provide for the protection of the health of the public of South Australia and to reduce the incidence of preventable illness, injury and disability; and for other purposes.
Work Health & Safety Act 2012	Provide a safe work environment for workers on the site

Table 3-1: Legislative requirements

3.3 Current Level of Service

Levels of service are a key business driver and influence all asset management decisions. It describes:

- The outputs Council intends to deliver to customers.
- The service attributes such as quality, functionality and capacity.
- The performance measures.

Performance measures are used to indicate how Council is doing in relation to delivering levels of service.

Council has defined two levels of service categories:

- Community Levels of Service – measures the service the community expects.
- Technical Levels of Service – measures the service the organisation provides.

Community levels of service measure the community's perception of Council's service performance, while the technical levels of service measure against technical indicators of performance.

Council's desired level of service is the technical level of service as a minimum. The level of service will be constantly monitored and reviewed with the introduction of the community survey to develop community level of service key performance indicators (KPIs). It's anticipated the next review will be in four years. Council's levels of service are captured in Table 3-3.

Community Levels of Service

Performance Measure	Level of Service Objective	Performance Measure	KPI	2020
Quality	Open spaces are well maintained	Community survey on the physical quality of open space assets	KPI based on 2020/21 survey (to be developed)	2020/21 survey to set baseline
Function	Asset to meet service needs – 'fit for purpose'	Community survey on the functionality of open space	KPI based on 2020/21 survey (to be developed)	2020/21 survey to set baseline

Technical Levels of Service

Performance Measure	Level of Service Objective	Performance Measure	KPI	2020
Condition	Physical state of open space assets in a serviceable condition	Average condition of open space assets	Equal or less than condition rating 3	2.3
Renewal	Sustainably managing the renewal of assets	Asset Renewal Ratio	90%-110%	90%
Capacity and Utilisation	Open spaces have the capacity to meet the community need	Parks within 500m of each property	95% Compliance	99%
Accessibility	Open spaces are accessible to all	Open space accessibility is improved through renewal and new capital	Increase in accessibility compliance of open space assets	Yes
Safety	Safety compliance standards are achieved	Open space safety inspections to inform compliance standards are met	Annual playground safety inspection	Yes

Table 3-2: Levels of service

4 Future Demand

The community's demand for services changes overtime. The reason for change can be varied, some of the common drivers are population, demographics, environment and technology. As service demand changes, Council's assets may also need to change to meet the changing demand. A summary of Council's forecast demands and how these are proposed to be managed is contained in Table 4.1.

Population and Demographics

Current position	Demand forecast	Demand impact	Demand management plan	Impact on assets
Population increase: - Total estimated population 39,208 (ABS 2019).	Planned to accommodate an additional 5000 people by 2040. Higher than average provision of medium density housing (38%), which is anticipated to further increase in the next 30 years.	Additional demand on open space, public realm, facilities and services. Increased housing/development densities result in a reduction of private open space. Increase pressure on public spaces to accommodate more uses. Residents living in smaller homes in denser/elevated settings require access to quality open spaces for recreation and leisure to compensate for reduced private open space.	Track the level of service KPI for capacity to determine if Council is providing enough open space. Currently 99% of dwellings are within 500m of open space. Council has less than 8sqm of open space per person, which is 3% of the council area. This excludes Adelaide's South Park Lands located on Councils northern border. The Community Plan objective 1.1a is delivered thought the Living City Open Space Strategy. The strategy outlines the changing roles of open space including community demands, management demands and changing needs. The strategy outlines opportunities for the open space network and provides an implementation framework.	Tracking utilisation trends of open space will inform the long-term new capital investment. The Open Space Strategy informs, coordinates and supports the provision of services, programs and project planning in the context of the open space capital forecast. The Open Space Strategy nominates key spaces and project opportunities. These project opportunities inform strategic and renewal projects.

Changing demographics: - 11,257 new residents have moved into the Council within the last five years – 30% are new to Council. - Average age is 39 years old. - A quarter of the population are families (couples with children).	Growth in aging population. Growth in children aged between 0-9 years. Increase in families moving to Council. Increasing multiculturalism. Increasing accessibility considerations.	Diverse lifestyles create demand for new services/facilities such as community gardens and productive landscapes. Ensure Council is inclusive and accessible for people of all ages and capabilities. An all ages and accessibility appeal will be required for the open space network. The long-term provision of services for young families will need to plan for changing needs of families to suit the community as demographics continue to change.	Track the level of service KPI for function to determine if we are providing the correct assets to suit the changing needs of the community. The Living City Open Space Strategy outlines the changing roles of open space including community demands, management demands and changing needs. The strategy outlines opportunities for the open space network and provides an implementation framework. The Community Plan objective 1.3 is delivered through - The Active Ageing. The Active Ageing Strategy 6: Parks, Garden and Open Space goal for outdoor spaces and buildings is to create an environment that is pleasant, safe and accessible. - The Disability Access and Inclusion Plan currently being developed by Council.	If the community level of service for function decreases, it will indicate a change in open space function may be required. Tracking these trends will inform the long-term new capital investment. The Open Space Strategy informs, coordinates and supports the provision of services, programs and project planning in the context of the open space capital forecast. The Open Space Strategy nominates key spaces and project opportunities. These project opportunities inform strategic and renewal projects. The future objectives in the Active Ageing Strategy include: - Consider an active ageing focus to upgrades of park, event facilities and amenities. - Parklet program continued in mainstreet precincts to provide further opportunities for rest and relaxation.
Current demands for recreation from the population: - Sporting - Recreation/leisure	Higher participation activities for children include various organised cultural and recreation activities. Key recreation activities for people aged over 15 years are walking, fitness, yoga and Pilates, cycling, running and jogging. High proportion of residents are active with a projected need for walking, bike tracks, BMX and skate facilities, fitness-based activities and spaces for dog exercise. Playground use is high, indicating the need for quality play opportunities throughout the city.	Mixed age groups suggest there will be a demand for a range of sport and recreation facilities, services and programs, including active play opportunities for all ages. Demand on the limited open spaces will require coordination and balance between use of open space for organised sport, general recreation and dog exercise opportunities.	The Living Active – Sport and Recreation Plan supports the Community Living goal of Council's Community Plan 2033 and is a key document to guide the delivery of projects and services outlined in Council's 4-Year Delivery Plan 2017-2021.	The Sport and Recreation Plan's implementation plan provides strategic direction and principles to inform renewal and new capital programs for open space with respect to recreation.

Climate change

Current position	Demand forecast	Demand impact	Demand management plan	Impact on assets
Council and the community are increasingly aware of our impact on the environment and Council's role in environmental sustainability.	Council is committed to pursuing, supporting and creating an environment that will sustain current and future generations. This goal is shared by our community and is a primary objective of most governments across the world.	Council is committed to using fewer precious resources, reducing its carbon footprint and looking for smarter ways to achieve this objective.	The Environmental Sustainability Strategy 2016-2020 is the lead strategy implementing the Environmental Stewardship goal and objectives identified in the Community Plan 2033 and 4-Year Delivery Plan. The Strategy's themes guide our direction and inform our priorities for environmental projects: - Green Unley - Waterwise Unley - Resilient Unley - Resourceful Unley - Energywise Unley The City of Unley have aligned with Resilient East, which provides opportunities for the eastern region to collaborate to increase our resilience to climate change. Council is developing a Climate and Energy Plan to be endorsed in 2020/21.	The Environmental Strategy provides principals for the delivery of new and renewal of assets, these have included: - Energy efficient devices in Council's open spaces such as LED lighting. - Natural and renewable materials to be used in manufacturing our open space assets (furniture, structures, playgrounds) - Implementation of electric car charging station at Hayward Park to promote energy efficient lifestyles in the community. - Looking for opportunities to use renewable energy such as solar in our open spaces. - Increasing tree population to absorb carbon dioxide from the air and cool/shade our streets.

Decrease in average annual rainfall	Trend for a decrease in average annual rainfall and an increased awareness to minimise our water usage.	Council is committed to have Water Sensitive Urban Design (WSUD) as a feature and reducing its dependency on River Murray water, while also maintaining its parks, reserves and street trees.	The Environmental Sustainability Strategy priority of Waterwise Unley promotes efficient, effective and sustainable water management.	The strategy is delivered through our open spaces and natural assets. Asset initiatives include: - WSUD in open space (for example diversions for watering street trees, bio swales, rain gardens). More information in the Stormwater Asset Management Plan. - Continue to expand our MAR (Managed Aquifer Recharge) schemes, which collect and use recycled water to green our reserves. More information in the Stormwater Plan. - Identifying suitable trees and flora that will flourish in the changing conditions and require minimal watering. - Improved irrigation systems to efficiently and effectively water our reserves.
While South Australia's climate has always been variable, a strong warming has been observed since the 1970's, and according to the Bureau of Meteorology, average temperatures across the state have warmed by almost 1°C during the past century, with overall rainfall declining.	Hot and dry consecutive summer days on the rise. The number of days over 40°C in eastern Adelaide is projected to double by 2050, and the frequency and duration of heatwaves is projected to increase.	High importance will be placed on Council to find methods to cool and combat the city's urban heat.	The Environmental Sustainability Strategy Resilient Unley priority promotes the increasing resilience to changes in climate. The Tree Strategy links to the delivery of several strategies and plans, specifically the Community Plan goal 2.1, Living Well Public Health Plan (Priority 3 - Preparing for Climate Change), the Open Space Strategy and the Active Ageing Strategy. The Tree Strategy sets out a plan to manage trees in a strategic and balanced way to deliver on Council and community aspirations.	Through the delivery and management of assets, Council looks to mitigate the increasing effects of temperature rises within our open spaces through: - Increase in shading within councils open space through natural shading (trees) or shade structures. - Introduction of drinking fountains and access to water for people and dogs. - Increase in trees within our open space in line with the Tree Strategy.

Technology

Current position	Demand forecast	Demand impact	Demand management plan	Impact on assets
Global trend towards smart cities creating simplified services through smart technology.	Growing expectation to implement digital service improvements.	Council must adapt to the changing way the community operates, thinks and plans. Smart technology can reduce operating and maintenance costs while providing direct environmental benefits in terms of reduced water usage, electricity consumption and reduced waste.	Digital Unley outlines Council's Digital Vision through the strategic use of digital technologies to enhance the lifestyle of residents, better manage the environment, support the local economy and continuously improve the delivery of Council services. Emphasis on smart technologies and digital solutions are fit for purpose and can scale over time.	New digital assets are being incorporated into open spaces. These include the provision of Wi-Fi, sensors, device charging stations, smart benches, digital wayfinding, electric car charging stations, smart lights, smart bins and solar powered technology. Assets are being introduced through trials such as Heywood Park. The success of these trials will inform future implementation of these assets. The introduction of sensors (such as environmental, toilet or waste bin sensors) can assist with council's decision-making process and improve our operational efficiency. Level of service improvements for parks will impact our maintenance and renewal programs.

Table 4-1: Future demands

5 Lifecycle Management

5.1 Background

Lifecycle management details how Council plans to manage and operate (from planning to disposing) its open space assets at the agreed level of service while optimising total cost of ownership at an appropriate level of risk.

This section outlines the open space asset data (condition, valuation, revaluation, useful life) and processes needed to effectively manage, renew and upgrade the infrastructure assets.

Significant time is spent on the decision to create or acquire a new asset, likewise financial costs of maintaining an asset from creation to disposal or replacement will need to be planned. New assets require initial expenditure; however, the required financial commitment for the asset's lifecycle costs can be up to five times the initial expenditure.

The cost of an asset lifecycle can be divided into four major stages:

- Creation/Acquisition (Design/Procurement, Construction Commissioning)
- Maintenance and Operations (Operate, Maintain, Monitor)
- Capital Renewal/Replacement (Requirements/Specifications, Upgrade/Modify, Replace)
- Decommission (Trigger, Decommission, Disposal)

These major stages are further detailed in this Lifecycle Management section.

Variability of these stages also exists within different open space categories, as function may influence the renewal versus replacement strategies.

The major stages can be further divided into specific processes as listed in Figure 5-1.

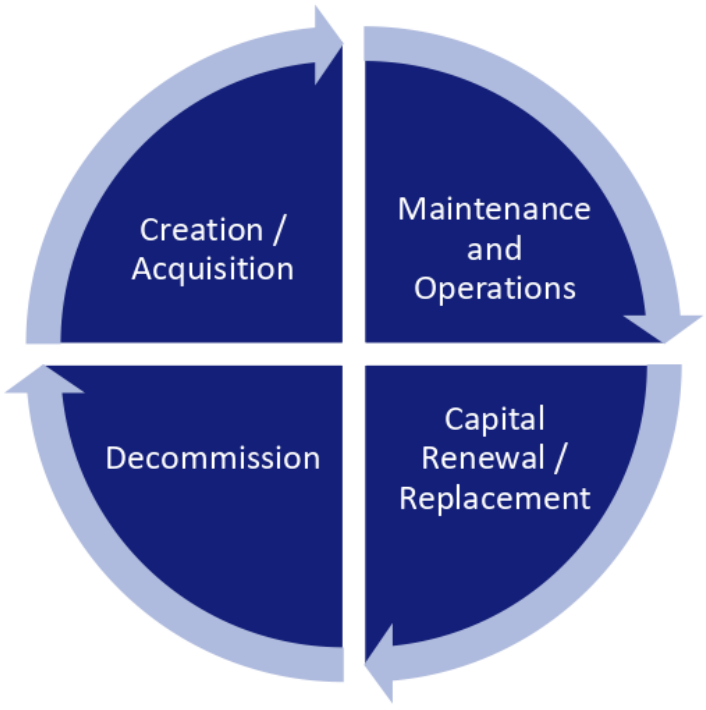


Figure 5-1: Asset lifecycle flowchart

Figure 5-2: Parks and Playgrounds

5.1.1 Physical Parameters

The Living City – Open Space Strategy identifies three types of open space within a coordinated network spanning across Council:

1. Parks – Identifying the traditional green spaces. The parks typology is made up of the following categories:

    - Local Parks
    - Neighbourhood Parks
    - District Parks
    - Regional Parks

2. Living Streets – Maximising opportunities to better design, manage and maintain key streets.

3. Public Realm – Highlighting the importance of civic or urban spaces.

Figure 5-2 illustrates the locality of Council's open space network.

5.1.2 Asset Condition

The objective of a condition assessment is to provide sufficient information on asset condition to allow informed strategic asset planning and asset management decisions to be made. The condition rating is based on the collected asset audits undertaken through visual inspections.

The condition rating is based on the 2017 condition assessment. The next condition assessment will be completed in 2021/22. The 2017 condition assessment excluded irrigation and was limited to open space within reserves. Currently an irrigation audit is in process and data will be updated accordingly upon completion of the audit.

Open space asset condition is measured using a 1-5 rating system summarised in Table 5-1, where condition rating 1 relates to assets in very good condition and rating 5 relates to assets in very poor condition.

Rating	Condition	Condition Description	Action
1	Very Good	A new or near new asset with no visible signs of deterioration.	No action required
2	Good	Early stages of minor deterioration causing no serviceability problems.	Minor defect only, no action required
3	Fair	Some obvious deterioration evident. Serviceability may be impaired slightly.	Maintenance required to return to accepted level of service
4	Poor	Severe deterioration evident, starting to limit the serviceability of the asset.	Consider renewal
5	Very Poor	Serviceability problems needing immediate rehabilitation. Possible risk to remain in service.	Replace/dispose

Table 5-1 Asset condition rating

The overall rating of Council's open space is displayed in Figure 5-3, the condition identifies:

- 70% of assets do not require intervention.
- 25% of assets are assessed for maintenance requirements.
- 5% of assets are assessed for renewal/replacement requirements.

A quarter of open space assets are in fair condition, which will require renewal in 10-20 years as they transition into poor condition. Renewal strategies will be required to address this wave and avoid substantial increases to the renewal program in future years. See renewal Section 5.3.

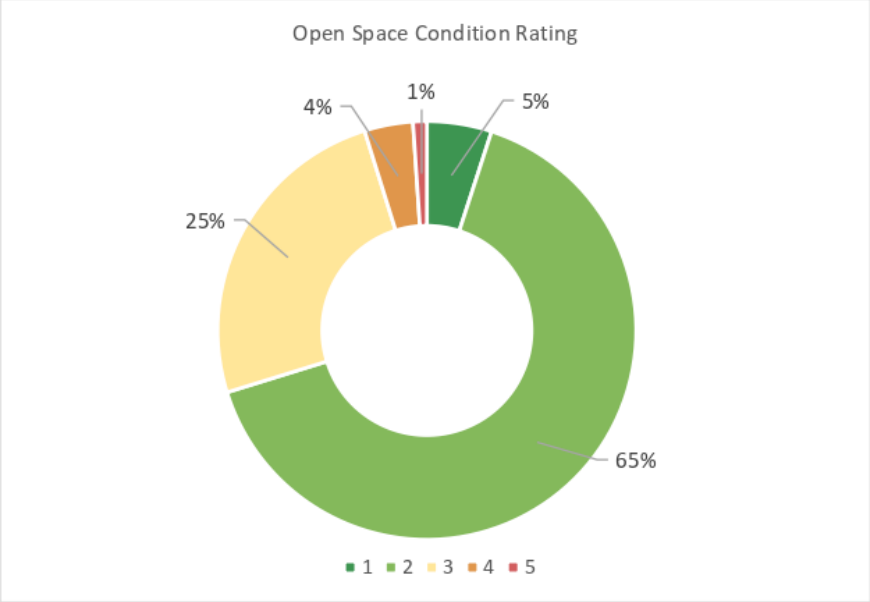


Figure 5-3: Open Space Condition

Asset Category	Average Condition Rating	Target Condition
Artwork	2.2	≤ 3.0
Drinking Fountains	2.2	≤ 3.0
Fences	2.2	≤ 3.0
Irrigation	2.2	≤ 3.0
Lighting	2.1	≤ 3.0
Other Infrastructure	2.6	≤ 3.0
Outdoor Furniture	2.2	≤ 3.0
Playgrounds	2.3	≤ 3.0
Smart City Technology	Not available	≤ 3.0
Sporting Assets	2.3	≤ 3.0
Streetscape	Not available	≤ 3.0
Structure	2.3	≤ 3.0
Waste Bins	2.1	≤ 3.0
TOTAL	**2.3**	**≤ 3.0**

Figure 5-2: Open Space Category Condition

5.1.3 Useful Life

A summary of useful life is further defined into asset groups in Table 5-3:

Asset Category	Asset Group	Asset Count	Useful Life (years)
Artwork	Artwork	99	10-100
Drinking Fountains	Drinking Fountain	72	10-20
Fences	Bollard	127	10-50
Fences	Fence	203	10-50
Fences	Gate	17	10-30
Fences	Hand rail	4	10
Irrigation	Irrigation	92	10-30
Lighting	Lighting	250	5-30
Other Infrastructure	Open Space Area	16	N/A
Other Infrastructure	Other	14	5-30
Other Infrastructure	Sign	85	10-30
Other Infrastructure	Tree Guard	4	20
Outdoor Furniture	Barbeques	36	10-20
Outdoor Furniture	Bicycle Fitting	36	10-20
Outdoor Furniture	Planter Box	8	10
Outdoor Furniture	Seat	333	10-40
Outdoor Furniture	Street Furniture	12	10-40
Outdoor Furniture	Table	116	10-50
Playgrounds	Playground	232	10-20
Playgrounds	Softfall	122	10-45
Smart City Technology	Smart City Technology	31	10-50
Sporting Assets	Basketball	10	10-20
Sporting Assets	Cricket	13	10-30
Sporting Assets	Exercise Equipment	19	10-20
Sporting Assets	Goal	19	10-20
Sporting Assets	Netball	7	20

Sporting Assets	Skate	2	30-40
Sporting Assets	Softfall	2	10
Sporting Assets	Sporting Asset	2	10-15
Sporting Assets	Tennis	21	7-10
Streetscape	Streetscape	10	10-30
Structures	Banner Pole	6	10
Structures	Edging	34	10-50
Structures	Retaining Wall	54	20-75
Structures	Shade Sail	18	10-40
Structures	Shelter	73	10-75
Structures	Stairs	10	10-80
Structures	Structures	9	10-100
Waste Bins	Waste Bin	157	10-20

Table 5-3: Asset useful life

The impact of climate change to infrastructure assets useful life is not yet quantified and may continue to change as increased temperature, heatwaves, higher storm and rainfall intensities will increasingly affect the useful life of infrastructure at a material level. These impacts have been identified in risk management and future demands.

5.1.4 Asset Valuation

Valuations are undertaken in alignment with Australian Accounting Standard 'AASB13 Fair Value', and 'AASB116 Property Plant and Equipment'. These valuations are required every three to five years, with an independent audit required every five years. Valuations are undertaken to satisfy the financial reporting requirements and to understand the cost to replace assets. The next valuation will be completed 30 June 2022.

The valuation of Council's open space assets is summarised in the Table 5-4.

Asset Category	Current Replacement Cost	Accumulated Depreciation	Written Down Value
Artwork	$714,244	$257,544	$456,700
Drinking Fountains	$198,075	$43,999	$154,075
Fences	$1,839,951	$837,666	$1,002,285
Irrigation	$2,829,029	$971,700	$1,857,329
Lighting	$1,454,672	$670,031	$784,641
Other Infrastructure	$34,569	$29,540	$5,028
Outdoor Furniture	$1,636,667	$653,478	$983,189

Playgrounds	$3,786,941	$2,000,945	$1,785,996
Smart City Technology	$2,949,953	$58,935	$2,891,018
Sporting Assets	$889,492	$642,075	$247,417
Streetscape	$3,526,658	$689,649	$2,837,008
Structures	$2,449,605	$1,505,192	$944,413
Waste Bins	$263,652	$78,401	$185,252
TOTAL	**$22,573,508**	**$8,439,156**	**$14,134,352**

Table 5-4: Open space assets valuation

5.1.5 Historical Expenditure

Maintenance expenditure in open space has trended upward since 2016/17, reflecting an increase in the open space asset portfolio through consistent new expenditure. Renewal costs for open space have been above annual depreciation levels as we have looked to opportunistically renew assets prior to the end of their useful life in alignment with council strategies, grant opportunities and changes in standards and levels of service. The historic open space expenditure is contained in Figure 5-4.

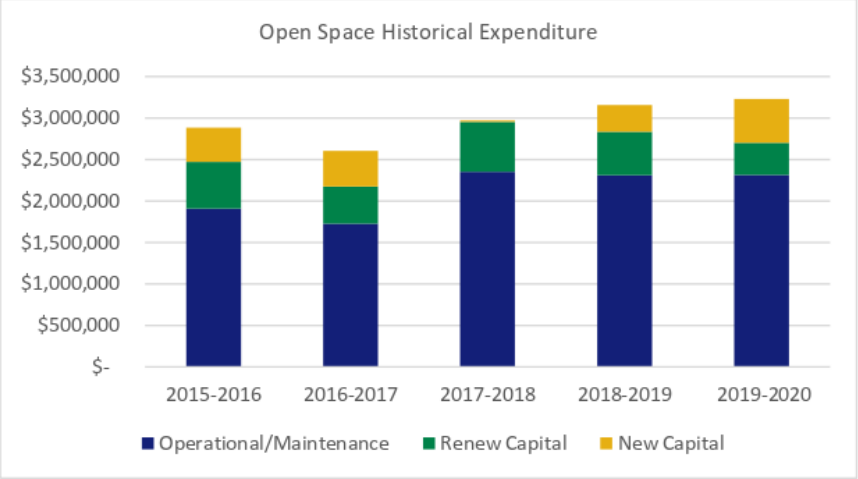


Figure 5-4: Historical expenditure

5.2 Operations and Maintenance Plan

5.2.1 Operations and Maintenance Strategies

Maintenance is recurrent expenditure, which is periodically or regularly required as part of the anticipated schedule of works to ensure the asset maintains its condition, achieves its useful life and provides the required level of service. The expenditure is anticipated in determining the asset's useful life.

As the years progress, the maintenance budget is projected to increase due to CPI and an asset portfolio growing in size, complexity and age.

Council's core maintenance activities include repair and upkeep of open space assets to ensure safety, functionality and operational capacity. Maintenance includes planned and reactive work activities:

- Planned maintenance is work carried out to a pre-determined schedule (e.g. routine mowing of grass in parks, gardens and sportsground).

- Reactive maintenance is unplanned work carried out in response to customer service requests and management decisions (e.g. vandalism and any ad hoc requests from the community).

In 2020/21 Council will conduct a review of all Depot operations in terms of levels of service to identify operational and financial efficiencies.

This review will be inclusive of all levels of service and processes to identify opportunities for efficiencies across all key depot operations including:

- Civil works
- Response and signage
- Open Space, Parks and Recreation
- Arboriculture

The outcomes of this service review may impact the operational and maintenance forecast with any changes made to be reflected in the LTFP following the conclusion of the review.

5.2.2 Summary of Future Costs

Figure 5-5 outlines the forecast of planned and unplanned operations and maintenance works over the next ten years. It has been projected with CPI increase over ten years. As Australia is facing economic impacts that will have unknown consequences at this time, the CPI assumptions will change on an annual basis through the LTFP.

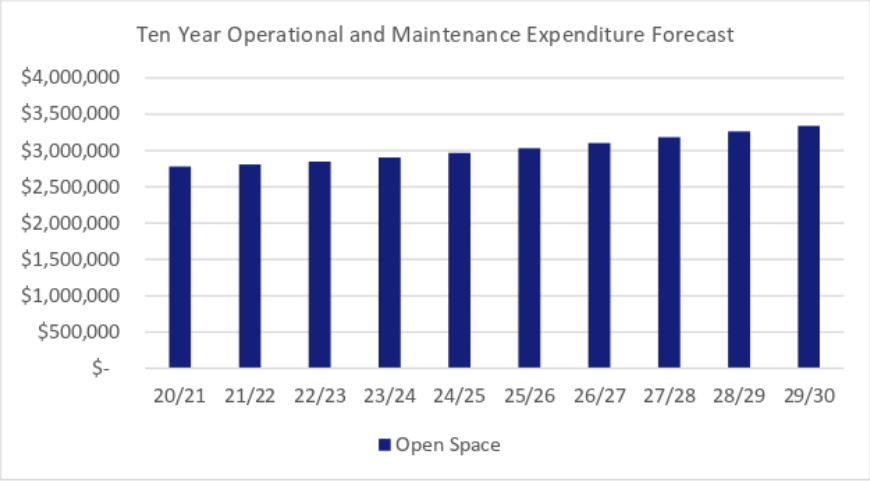


Figure 5-5: Ten Year operational and maintenance expenditure forecast

5.3 Renewal Plan (Capital)

Asset renewal is the replacement or refurbishment of an existing asset to return it to the modern standard equivalent performance and level of service. Renewal planning is necessary to ensure adequate funding is available, and assets are replaced at an optimum time to maintain the level of service.

5.3.1 Renewal Identification

Projected future renewal expenditures are forecast to increase over time as the asset portfolio grows in size, complexity and age.

Renewals are programmed across asset classes using the following methods:

1. Forward projection based on historic expenditure.
2. Broad estimates based on replacing assets at the end of their useful lives.
3. Predictive modelling of varying degrees of complexity.

4. Bottom-up approach with a high confidence in asset data. Projects are identified via asset monitoring, prioritised and allocated.

These methods increase in sophistication, which is reflected by the data confidence level.

It is recognised matching condition-based renewal fluctuations from year to year is not generally possible from both a budget and resourcing perspective. Distributing the renewal costs over the ten year timeframe is preferable from a budget and resourcing perspective.

The useful life may vary from the recorded average useful life for an asset due to early implementation of upgrades and replacements due to changes in function, standards, safety issues, changes in levels of service, funding opportunities or alignment with external strategies and plans. Similarly, some assets may experience extended useful lives due to a high level of maintenance over its life.

The 2017 open space condition assessment data was used to identify the renewal program for a majority of open space assets. Asset categories for irrigation, smart cities and streetscapes were excluded from this assessment.

Years 10-20 in the long-term renewal forecast includes significant renewal requirements due to the number of assets (25%) condition rated 3. A significant increase in spending, or reduction in the level of service, will be required over the second decade for the open space asset class.

5.3.2 Renewal Strategies

In addition to asset condition, Council's asset renewal program is strategically informed by the endorsed Open Space Implementation Recommendation (Chapter 8) of the Living City Open Space Strategy. The zone plans and identification of key projects are progressively reviewed and updated as change is implemented across Council.

Renewal works identified in terms of renewal strategies may be deferred if the cost is beyond the current financial ability to fund it. This can occur when there are higher priority works on other asset groups. When renewal works are deferred, the impact of the deferral on the assets ability to still provide the required level of service will be assessed. Although the deferral of some renewal works may not impact significantly on the short-term operation of the assets, repeated deferral will create a liability in the longer term.

Renewals are primarily programmed based on condition, however early implementation of renewal may also be undertaken for upgrades and replacements due to changes in function, standards, safety issues, changes in levels of service, funding opportunities or alignment with external projects, strategies and plans.

Renewal is projected in line with annual depreciation to continue early implementation of asset renewals in line with Council strategies and levels of service.

5.3.3 Summary of Future Costs

The projected future renewal expenditure is summarised in Figure 5-6.

The three sets of data in Figure 5-6 include:

- The renewal bar graph displays the replacement value of assets reaching the end of their useful life based on the 2017 condition assessment and using the asset data base remaining life for assets excluded from the 2017 condition assessment (irrigation, smart cities, streetscapes).
- The renewal average line displays the annual budget per year to meet the ten year renewal targets without the extreme variance indicated from the renewal bar graph.
- The LTFP line displays the current LTFP projection based on past asset management plans and asset data.

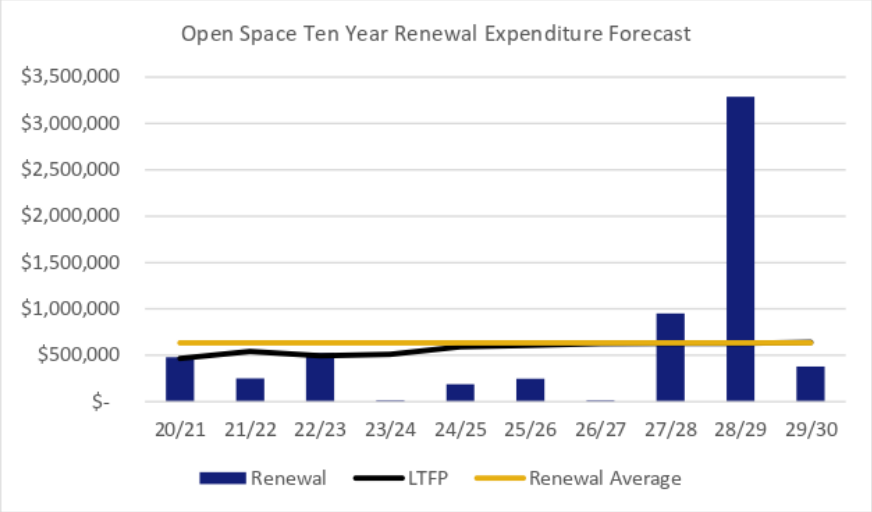


Figure 5-6: Open space ten year renewal expenditure forecast

The average annual expenditure for the next ten years:

Renewal projection	$634,200
LTFP	$573,700
Annual depreciation	$1,340,000

The Plan identifies an annual spend of $634,200 for open space asset renewal base on asset condition over the next ten years. The annual depreciation in 2020/21 for open space is $1,340,000, which indicates a significant increase in budget will be required in the LTFP for open space as the asset portfolio ages.

The condition based renewal increase from 2027/28 onwards is reflective of the asset portfolio aging and assets reaching the end of their useful life. Council will budget annual renewal in line with the renewal average and distribute these renewals across the ten years.

Council's asset renewal ratio (planned renewal / the Plan's identified renewal) is at 90% over the next ten years. The ratio represents the level of capital expenditure on the renewal of assets (LTFP) relative to the expenditure projected in the Plan.

The current LTFP expenditure is over the budget projection and an increase of $605,000 to the budget over ten years will be required to maintain a ratio of 100%. Council's target is a 100% average over the next ten years.

5.4 Creation/Acquisition Plan (New Capital)

New capital relates to new assets or a significantly improved level of service that did not previously exist. They may result from various needs derived from demands such as population growth, environmental and technology change (as mentioned in Section 4).

5.4.1 Capital Investment Strategies

Council provides a range of different open spaces performing multiple roles and responding to local, neighbourhood, district and regional demands. The distribution across Council has provided reasonable access with 99% of the Council area within 500m of open space. Where access to open space is limited, opportunities are identified to create new open spaces. An example of this is the acquisition of property in Katherine Street Fullarton for a new local park, which addressed a gap in the open space network. Future land purchases will be considered on a case by case basis.

The Community Land Management Plan (CLMP) describes the location, purpose and management of all Council's community land including parks, reserves, streetscapes, sport and recreation facilities and stormwater management areas. The CLMP defines community land management principals responding to community expectations, Council's responsibilities and available resources. The strategic management of this land is documented in the CLMP through seven community land categories and individual management plans for each site. The performance targets and measures for each site in the CLMP inform the requirements in terms of facilities, safety, access, use and amenities. These are to guide new and upgrade capital projects.

5.4.2 Summary of Future Costs

Figure 5-7 outlines the projected future spend through new capital works for open space assets. Council reviews its new capital projects on an annual basis, with one year (2020/21) of works to be shown as approved through the Annual Business Plan. The projection for the remainder of the ten year renewal is based upon Council's annual priorities for new capital expenditure across Council and the need for new capital across all asset classes based on upcoming projects.

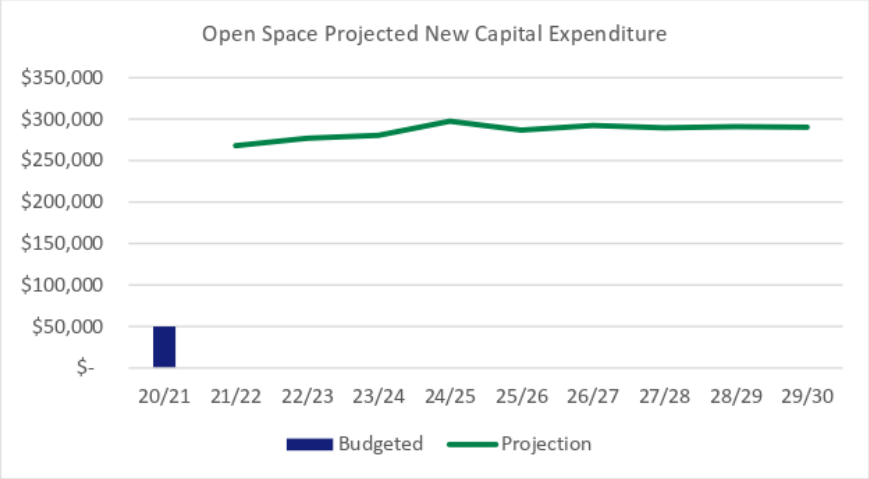


Figure 5-7: Projected new capital expenditure

As timing and costs for these projects are still to be confirmed the projection for open space assets has been distributed with an average of $286,000 per year expected to be budgeted across the nine years. These budgets are subject to individual year bids, Council strategies and funding opportunities and are expected to fluctuate year to year.

The upcoming new capital projects for the open space asset class in the next ten years include:

- Unley Oval surface drainage and irrigation upgrade
- Goodwood Oval surface drainage and irrigation upgrade
- Irrigation upgrades across our parks and reserves
- Pocket Park program
- Installation of shade sails in playgrounds
- Installation of drinking fountains across open spaces
- Smart technology considerations throughout open space projects

5.5 Decommission Plan

Disposal includes any activity associated with disposal of a decommissioned asset including sale, demolition or relocation.

Decommission of assets can be triggered in the following situations:

- The end of useful life of existing assets.

- Safety factors inherent to the asset.
- Non-compliance of the asset prompting a modern equivalent replacement.

Decommission of assets can involve the following courses of action:

- Design and replacement of the asset with a modern fit for purpose equivalent.
- Removal of the asset with the aim of repurposing the land in line with the long term strategy of Council.
- The sale of the asset (in part or in whole), in situations where Council is looking to consolidate the asset portfolio.

6 Risk Management

6.1 Critical Assets

Critical assets are those assets which have a high consequence of failure but not necessarily a high likelihood of failure. The identification of critical assets and failure modes means investigative activities, condition inspection programs, maintenance and capital expenditure plans can be effectively targeted.

Critical assets within open space are related to the health and safety of the community and include playgrounds (equipment and soft-fall surfaces), sporting assets and lighting.

6.2 Risk Assessment

The process for managing Council's risks is consistent with the International Risk Management Standard ISO 31000:2018. It involves five key steps, additional steps to ensure feedback through a monitoring and review process and appropriate communication and consultation.

Council is committed to effective risk and opportunity management to:

- Improve its ability to deliver community priorities, service delivery and outcomes for Council.
- Maximise opportunities and minimise the impact and likelihood of risk.
- Protect its employees, assets, liabilities and its community by avoiding or mitigating losses.
- Provide greater certainty for its employees, residents, stakeholders and the community in which Council operates by understanding and managing its risks.

Council acknowledges risk management is an essential part of best practice asset management. The risk assessment process identifies credible risks, the likelihood of the risk event occurring, and the consequences should the event occur, develops a risk rating, evaluates the risk and develops a risk treatment plan for unacceptable risks.

An assessment of risks associated with open space assets using Council's risk matrix (Table 6-1), has identified, analysed and evaluated open space risks. Table 6-2 outlines Council's risk management for open space assets and is to be reviewed annually at a minimum outside of the Plan.

		Consequence				
		Catastrophic	Major	Moderate	Minor	Insignificant
Likelihood	Rare	Medium	Medium	Low	Low	Low
	Unlikely	High	Medium	Medium	Low	Low
	Possible	High	High	Medium	Medium	Low
	Likely	Extreme	High	High	Medium	Medium
	Almost Certain	Extreme	Extreme	High	High	Medium

Table 6-1: Risk matrix

Ref	Risk Description *(event or potential event focused and their impact upon objectives)*	**INHERENT RISK** *Level of risk with NO controls in place*			Controls *already* in place *(What existing controls are in place to prevent and/or manage the risk?)*	Are the Controls effective at managing the risk?	**RESIDUAL RISK** *Level of risk if existing controls are effective*			Is the Residual Risk *Rating* Tolerable?	Treatments/Additional Controls *(additional controls that can be implemented to further reduce the level of Risk)*	Treatment Owner & Timing *(**Who** is responsible for implementing the treatment and **When** it should be implemented/completed)*	**RISK LEVEL *after* Treatments** *If treatments implemented are effective*		
		Consequence	Likelihood	Risk Rating			Consequence	Likelihood	Risk Rating				Consequence	Likelihood	Risk Rating
1	Unsustainable management of assets due to poor quality data within asset management plan	Major	Likely	High	Periodic delivery of condition assessments and revaluations in line with industry standards.	Partially effective	Major	Possible	High	No	Continuous improvements in asset management maturity and activities through the improvement program.	Assets and Operations and Finance & Procurement See improvement program (Section 8.2)	Major	Unlikely	Medium
2	Injury on playgrounds or sporting fields due to council activities or asset failures	Catastrophic	Likely	Extreme	Annual maintenance budgets. Annual playground safety inspection. Periodic delivery of condition assessments. Maintenance inspections.	Majority effective	Catastrophic	Rare	Medium	Yes	N/A	N/A	N/A	N/A	N/A
3	Council unable to fund required capital and maintenance due to economic downturn.	Moderate	Likely	High	Maintain strong sustainability ratio to avoid a backlog of capital works. Ability to fund capital program through borrowings. Ability to reduce levels of service.	Majority effective	Moderate	Rare	Low	Yes	N/A	N/A	N/A	N/A	N/A
4	Climate change not appropriately planned for with respect to asset management.	Moderate	Likely	High	High level targets are set through the objectives and targets within the Environmental Sustainability Strategy.	Partially effective	Moderate	Possible	Medium	No	Climate change addressed in the Plan with respect to Councils impact on the environment as well as the environments impact to councils' assets. Include climate change as a considered factor throughout the Plans, outlining the impact and associated demand on assets. Address assets within Climate and Energy Plan.	Assets and Operations Ongoing as asset management plans and council strategies are updated	Moderate	Rare	Low
5	Level of service and community expectations raised to unsustainable standards leading to poor presentation of open space	Moderate	Likely	High	Review and update operations and maintenance budgets to meet future levels of service against asset upgrades.	Majority effective	Moderate	Rare	Low	Yes	N/A	N/A	N/A	N/A	N/A

Ref	Risk Description *(event or potential event focused and their impact upon objectives)*	**INHERENT RISK** *Level of risk with NO controls in place*			Controls *already* in place *(What existing controls are in place to prevent and/or manage the risk?)*	Are the Controls effective at managing the risk?	**RESIDUAL RISK** *Level of risk if existing controls are effective*			Is the Residual Risk *Rating* Tolerable?	Treatments/Additional Controls *(additional controls that can be implemented to further reduce the level of Risk)*	Treatment Owner & Timing *(**Who** is responsible for implementing the treatment and **When** it should be implemented/completed)*	**RISK LEVEL *after* Treatments** *If treatments implemented are effective*		
		Consequence	Likelihood	Risk Rating			Consequence	Likelihood	Risk Rating				Consequence	Likelihood	Risk Rating
5	Falling limbs of significant or regulatory trees within reserves causing injury.	Major	Likely	High	Inspection programs in place to monitor health of significant and regulated trees. Maintenance and operational programs in place including tree trimming and pruning within reserves.	Majority effective	Major	Rare	Medium	Yes	N/A	N/A	N/A	N/A	N/A

Table 6-2: Open space risks

7 Financial Summary

This section contains the financial requirements resulting from all the information presented in Section 5 of the Plan. The financial projections will be refined as part of the ongoing revision of the Plan.

7.1 Valuation forecast

Asset values are projected to increase as additional assets are added through capital works. Additional assets will generally increase the operational and maintenance requirements in the longer term, as well as the need for renewal. Additional assets will be included for future depreciation forecasts.

7.2 Expenditure forecast

Figure 7-1 outlines the financial projections for maintenance and capital renewal and capital new expenditure for the open space asset class.

The total forecast expenditure for open space assets is relatively constant over the ten year period. The predictability of this budget allows Council to undertake capital programs as and when required in each year.

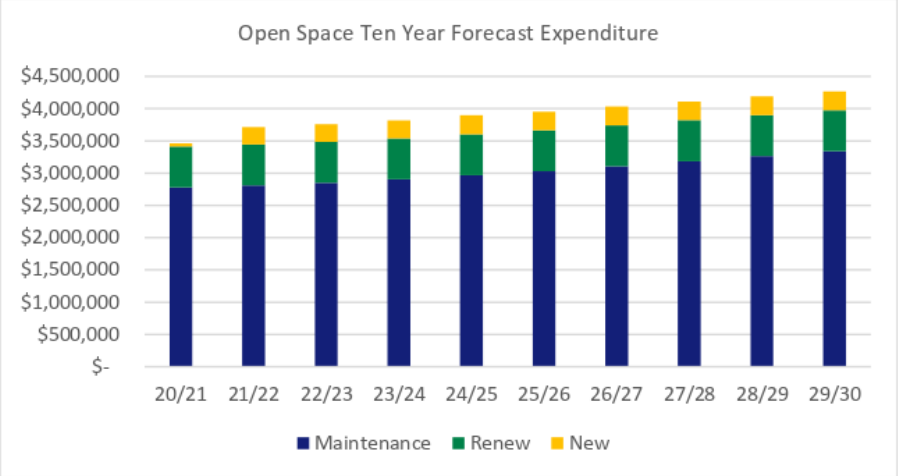


Figure 7-1 Open space ten year forecast expenditure

7.3 Asset Renewal Funding Ratio

This ratio indicates whether Council has the financial capacity to fund asset renewal at continued existing service levels. Council's target is a 100% average over the next ten years.

Asset Renewal Funding Ratio – Open Space: 90%

This ratio is an important budget indicator over the next ten years. Council's LTFP has budgeted 90% of funds identified in this plan for the optimal renewal and replacement of open space assets. An increase of $605,000 to the renewal budget over ten years is required to maintain a ratio of 100%.

7.4 Funding Strategy

Key strategic milestones:

- The Plan will inform Council's future LTFP.
- The next major condition assessment and revaluation is in 2021/22 and will inform future renewal strategies.

- The Depot operations service review will be undertaken in 2020/21, which will inform future maintenance and operating budgets.

Repayment of existing loans has been extracted from the current loan schedule. The LTFP assumption indicates no additional funding through borrowings is required to meet new capital commitments in the future. The Local Government Finance Authority Cash Advance Debenture (CAD) Facility will continue to be used to balance funding requirements in terms of borrowing.

The projected expenditure is to be funded from Council's operating, maintenance and capital budgets.

7.5 Key Assumptions

The assumptions and data used in presenting this forecast information were:

- Replacement costs derived from the fixed asset register in Technology One asset database.
- Condition data derived from open space condition assessment 2017.
- Key financial assumptions derived from LTFP 2020/21.
- Operation funding will be made without reduction.
- Capital funding will be made without reduction.
- Appropriate resources will be made available to manage the Plan.
- Council income will remain consistent with LTFP.
- There will be no natural disasters.

7.6 Forecast Reliability and Confidence

The expenditure projections are based on the best available data. Data confidence is critical for an accurate expenditure projection. As new data becomes available, the forward plans will be updated. There are five levels that measures data confidence:

Confidence Level	Description
A - Highly Reliable	Data based on sound records, procedures, investigations and analysis, documented properly and agreed as the best method of assessment. Data set is complete and estimated to be accurate +-2%.
B – Reliable	Data based on sound records, procedures, investigations and analysis, documented properly but has minor shortcomings, e.g. some of the data is old, some documentation is missing and /or reliance is placed on unconfirmed reports or some extrapolation. Dataset is complete and estimated to be accurate +-10%.
C - Uncertain	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 - Very Uncertain	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 – Unknown	None or very little data held.

Table 7-1: Data confidence level

Council's open space asset data confidence is currently *(C) Uncertain* across condition, spatial and financial data. The confidence level is due to multiple data registers, with the condition and spatial data individually both reliable. The improvement program outlines steps to increase maturity and confidence of the data through the next condition audit and revaluation in 2021/22.

8 Improvement and Monitoring

8.1 Status of Asset Management Practices

Council is committed to improve the data quality and confidence by implementing actions within the improvement program in Table 8-1.

8.1.1 Accounting and Financial Systems

Council uses Technology One as its financial management and accounting system. Technology One has the capability to report the full lifecycle of assets providing full transparency from acquisition to disposal of assets.

8.1.2 Asset Management System

Council uses Technology One – Enterprise Asset Management software as its Asset Management System. Initial set up of the asset management system is crucial to ensure integration between operating and financial functions. Council's initial set up of the asset management system was incomplete and is being addressed through the improvement program, periodically updating the asset registers during revaluations.

A future improvement is to integrate the financial system and asset management system following each asset categories condition assessment and revaluation.

Council's geographic information system (GIS) data is stored within a specialised GIS software suite. An improvement will be to integrate the GIS data with the asset register to provide live spatial data.

8.2 Improvement Programs

The improvement program derived from the Plan is shown in Table 8-1.

Task No.	Task	Responsible officer	Resource Required	Due Date
1	Continual review and update of the asset register.	Asset Management Officer	Internal	Revaluation 2021/22
2	Condition assessment to be completed	Senior Assets and Engineering Lead	Internal / External	2021/22
3	Integration of open space assets with Asset Management System, the finance module in TechOne and GIS.	Asset Management Officer Manager Business Systems Solutions	Internal	Ongoing staged approach
4	Undertake customer research on open space assets. This will provide data for future planning of open space assets ensuring the required level of services are met.	Senior Assets and Engineering Lead	Internal	2020/21
5	Review of the planned open space, parks and recreation programs through depot operations service review.	Manager Assets and Operations	Internal	2020/21

Table 8-1: Improvement program

8.3 Monitoring and Review Procedure

Council will schedule the Plan review into its strategic and annual planning and budget processes. The Plan has a life of four years.

8.4 Performance Measures

Council will track the performance of the Plan through the following performance measures:

1. Level of Service Key Performance Indicators (KPIs).
2. Delivery of improvement program.
3. Improved data confidence.
4. Review of the Plan every four years.

THE CITY OF UNLEY

STORMWATER

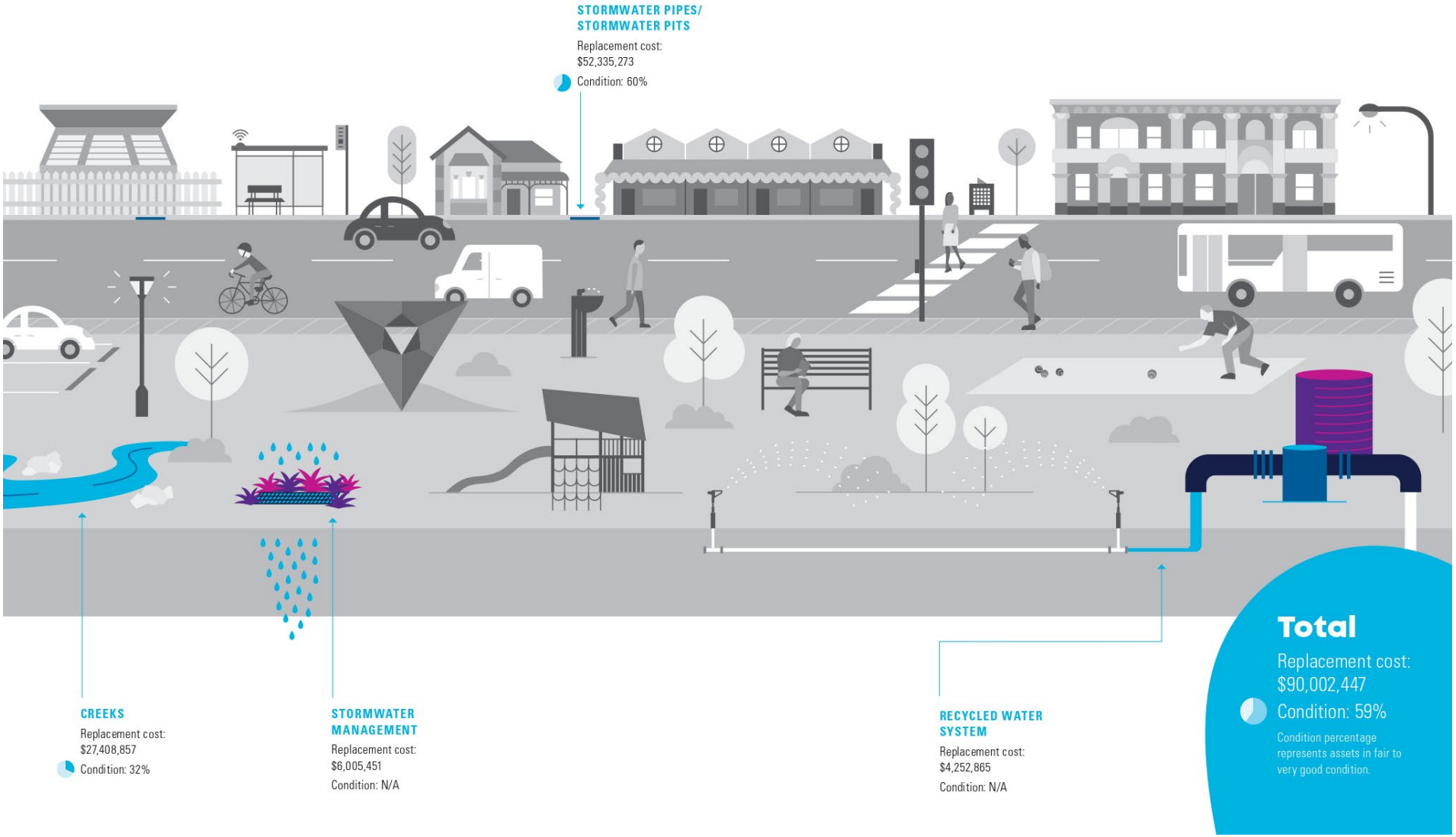
ASSET MANAGEMENT PLAN

2020

Contents

Issue	Date	Issue Details	Author	Checked	Approved
V.1	July 2020	Framework – Sproutt Consulting	SW	TY	JM
V.2	August 2020	Draft for Audit Committee	JM	AW	CM
V.3	October 2020	Draft for Community engagement			
V.4	November 2020	Final			

Stormwater Assets Summary



The City of Unley (Council) has adopted four asset management plans which set out its goals and objectives for managing key infrastructure and assets, namely building, open space, stormwater and transport.

1 Executive Summary

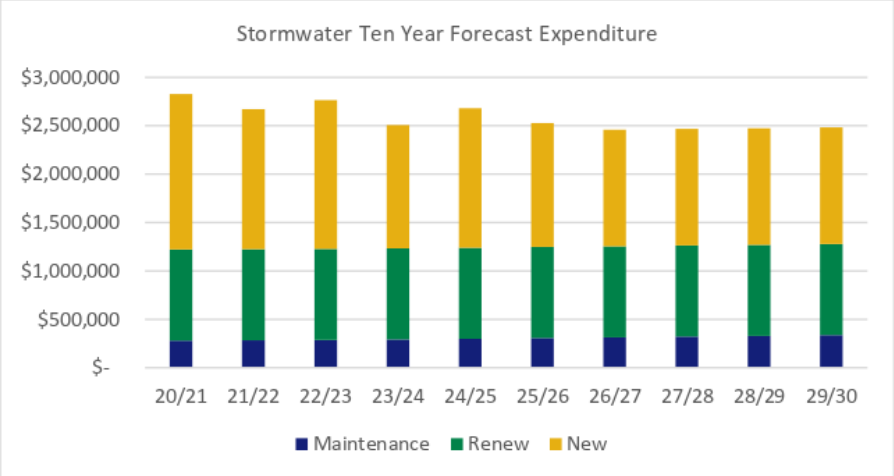
Council's stormwater assets manage the quality and quantity of rainfall runoff. Stormwater drainage serves to minimise property damage, danger and disruption to the community from flooding. This asset management plan (the Plan) focuses on the management of Council's stormwater assets.

The objective of asset management is to provide the desired level of service in the most cost-effective manner for present and future generations. A strategic approach to asset management aligning with industry standards and best-practice has been undertaken to ensure Council's sustainability.

Effective asset management for stormwater assets demonstrated in the Plan is essential to achieve Council's vision: "Our City is recognised for its enviable lifestyle, environment, business strength and civic leadership."

Stormwater Levels of Service:	
Quality	The stormwater network is well maintained
Function	Assets meet the service needs
Capacity and Utilisation	Stormwater assets have the capacity to meet the community need
Condition	Physical state of stormwater assets are in a serviceable condition
Renewal	Sustainably managing the renewal of assets
Safety	Stormwater compliance standards achieved
Future Demands:	
Population and demographics	Increased housing density
Climate Change	Awareness of Council's role in climate sustainability Increasing trend of severe weather events
Technology	Testing new research and technologies
Condition:	59% stormwater assets condition satisfaction

Financial Summary:



The forecast contained within the Plan will be reviewed annually with an update completed every four years.

Council is committed to continuously improving the quality and maturity of its asset management practices. The improvement program specifies its commitment to increase its asset management maturity and data confidence. Key performance measures have been established to track Council's performance of its assets and asset management practices.

2 Introduction

2.1 Background

The primary purpose of stormwater assets is to manage the quality and quantity of rainfall runoff. Stormwater drainage serves to minimise property damage, danger and disruption to the community from flooding. The core objectives for Council's stormwater assets are to:

- Minimise property flooding and damage.
- Protect the health and safety of the community.
- Minimise adverse impacts on the environment.

Council's stormwater assets covered in the Plan include:

- Underground drainage network (stormwater pits and pipes)
- Creeks
- Stormwater management devices (Water Sensitive Urban Design (WSUD), detention)
- Recycled water (Managed Aquifer Recharge (MAR))

Council owns and operates two MAR systems used to harvest water for storage and distribution, supplying water for irrigation on Council's reserves. These MAR systems are located at Ridge Park and Heywood Park.

The Plan aims to:

- Align with ISO 55000:2014 (international standard for asset management) without seeking accreditation as an ISO document or process.
- Align the delivery of asset management activities with the organisation's goals and objectives; this is known as the "line of sight" with asset management.
- Create transparency and accountability through all aspects of asset management, ensuring all stakeholders understand their roles and responsibilities for achieving the Plan's aims.

The Plan is developed and implemented in conjunction with the following Council plans, strategies and policies (Table 2-1):

Plans, Strategies and Policies	
Community Plan 2033	Long Term Financial Plan 2020-21 to 2029-30
4 Year Delivery Plan 2017-2021	Asset Management Policy
Environmental Sustainability	Asset Management Plans

Table 2-1: Plans, strategies and policies

Council's stormwater asset key stakeholders for service delivery of the Plan are contained in Table 2-2:

Key Stakeholders	**Roles in Asset Management Plan**
Residents/ Community	Opportunity to provide input into the development and review of the Council's strategic management plans.
Elected Members	Represent needs and views of community. Ensure Council's objectives and policies are appropriate and effective. Ensure Council's resource allocation, expenditure and activities, and the efficiency and effectiveness of its service delivery is appropriate. Ensure Council is financially sustainable.

Key Stakeholders	Roles in Asset Management Plan
Audit Committee	Audit Committee will review, make recommendations and observations to Council on the financial outcomes of the Plans.
Chief Executive Officer	Ensures administration deliver strategic planning and direction of the Council. Ensures administration implement the strategic plan goals and objectives by providing services within the allocated resourcing while managing risks. Ensures Council is financially sustainable.
General Manager – City Development	Ensures asset management plans are completed and reported to CEO and Council. Ensures the capital works programs are delivered in line with strategic planning. Ensures the maintenance programs are achieving service standards.
Assets and Operations Manager	Ensures the review of asset management and the delivery of improvement strategies. Manages maintenance programs to ensure they are active and achieving service standards. Ensures the capital works programs are achieved.
Senior Assets and Engineering Lead	Manages development and review of asset management plans. Responsible for advancing asset management within the organisation. Review infrastructure data integrity within the asset management system and GIS applications. Review and manage condition audits of infrastructure. Review asset valuation data. Coordinates the annual capital works program.
Team Leader Response and Signage	Coordinate Council resources to deliver the maintenance program.
Response and Signage Team	Deliver operations and maintenance.
Asset Management Team	Deliver the annual capital works programs. Undertake data collection and operational asset management projects.

Table 2-2: Key stakeholders for the Plan

2.2 Goals and Objectives of Asset Ownership

The goal of asset management is to provide the desired level of service through the provision and management of physical assets in the most cost-effective manner, for present and future generations.

The Plan demonstrates alignment with the Council's Community Plan 2033 through its vision and themes:

Our City is recognised for its enviable lifestyle, environment, business strength and civic leadership.

Community Living

Goal: People value our City with its enviable lifestyle, activities, facilities and services.

Objectives:

- Our Community is active, healthy and feels safe.
- Our Community participates in community activities, learning opportunities and volunteering.
- Our City meets the needs of all generations.
- Our Community is proud to be part of our City.
- Our City is connected and accessible.

Environment Stewardship

Goal: We will maintain and enhance our urban environment and strengthen our City's resilience to climate change by providing leadership to our Community.

Objectives:

- Unley's urban forest is maintained and improved.
- Excellence in waste management is achieved through avoidance, re-use and diversion.
- The energy efficiency of the City if increased and our carbon footprint reduced.
- Efficient, effective & sustainable water management is ensured.
- The City's resilience to climate change is increased.

Economic Prosperity

Goal: Our businesses are valued because of the range of goods, services and facilities they provide, and new businesses are supported, not burdened with bureaucracy.

Objectives:

- Unley is recognised as an easy place to do business.
- Thriving main streets and other business activities operate across our City.

Civic Leadership

Goal: Council will listen to the community and make transparent decisions for the long-term benefit of the City.

Objectives:

- We have strong leadership and governance.
- Council provides best value services to the community.
- Our business systems are effective and transparent.

These objectives will be considered in all decision-making aspects regarding stormwater assets to ensure Council consistently strives to achieve these strategic objectives. There are several initiatives that feed into the above objectives outside of the asset management process that ultimately support the stated objectives.

2.3 Plan Framework

Key elements of the Plan include:

- Levels of service – specifies the levels of service objectives and how they are measured.
- Future demand – how this will impact on future service delivery and how the demand will be met.
- Lifecycle management – how Council manages existing and future assets to provide the levels of service.
- Risk management – how Council manages asset risks.
- Financial summary – funds required to provide the levels of service.
- Improvement plan and monitoring – how Council will improve asset management maturity and how the Plan will be measured to ensure it's meeting Council's objectives.

The asset management framework is shown in Figure 2-1 and the roadmap for preparing an asset management plan is in Figure 2-2.

The Community Plan is a comprehensive community vision for Council. The vision is broken down into themes, goals and objectives outlining how we plan to achieve our vision.

The 4 Year Delivery Plan outlines how we will deliver the Community Plan's vision, strategies and framework.
Corporate Strategies identify the challenges and opportunities across key areas of our Council, and outline the plans and actions required to achieve the long-term goals as set out in the Community Plan.

The Plan demonstrates long-term (ten years) asset management planning and outcomes and outlines asset activities and resources to provide a defined level of service in the most cost-effective way while managing risks.

The Long Term Financial Plan (LTFP) demonstrates financial sustainability in the medium to long term, while achieving the objectives in the Community Plan.

The Annual Business Plan outlines Council's activities to progress towards meeting our Community Plan objectives, outlines how Council plans to allocate its budget and what services and projects will be developed in the forthcoming financial year.

Figure 2-1: Asset management framework

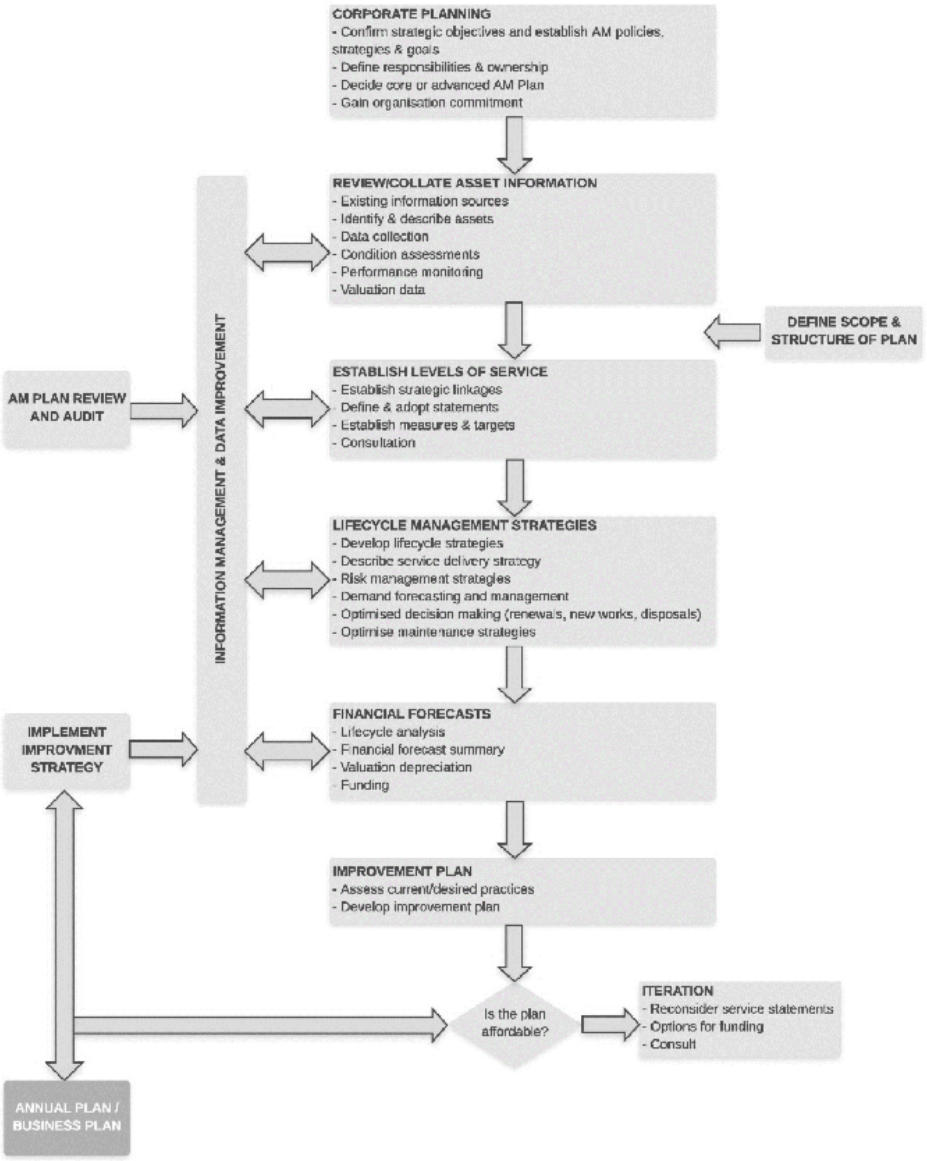


Figure 2-2: Road map for preparing an Asset Management Plan
Source: IPWEA, 2006, International Infrastructure Management Manual (IIMM) Fig 1.5.1, p 1.11

2.4 Core and Advanced Asset Management

The Plan is prepared as a core level maturity over the ten year planning period in line with the International Infrastructure Management Manual (IIMM). Core asset management is a top down approach with analysis applied at a network level. The Plan is prepared to meet legislative and organisational requirements for sustainable service delivery and long-term financial planning and reporting. The improvement program (Section 8) outlines and prioritises the steps required to an advanced asset management maturity.

3 Levels of Service

3.1 Customer Research and Expectation

Council receives continuous community feedback from a variety of sources including, but not limited to:

- Community enquiries and requests
- Community Plan consultation process
- Council Strategies
- Annual Business Plan and LTFP consultation process
- Project feedback
- Development of the Asset Management Plan
- Customer satisfaction surveys
- Service satisfaction surveys

This feedback is built into the development of the Plan and the levels of service it aims to deliver.

Through the development of the community levels of service outlined in the Plan, Council will actively survey the community on its assets and associated services to ensure it is delivering on its levels of service. In 2020/21 Council will develop a benchmark for community levels of service to measure performance against.

3.2 Legislative Requirements

Council must meet many legislative requirements including Federal and State Government legislation and regulations as well as non-legislative requirements including Australian Standards and Council policies as contained in (Table 3-1).

Legislation	Requirement
Aboriginal Heritage Act 1988	An Act to provide for the protection and preservation of the Aboriginal heritage; to repeal the Aboriginal and Historic Relics Preservation Act 1965 and the Aboriginal Heritage Act 1979; and for other purposes.
Australian Accounting Standards	Standards applied in preparing financial statements, relating to the valuation, revaluation and depreciation of stormwater assets.
Development Act 1993	Regulates the use and managements of land and buildings including their design and construction, ongoing maintenance, and conservation of land and buildings where appropriate.
Emergency Management Act 1994	Requires lifeline utilities to function at the fullest possible extent during and after an emergency and to have plans for such functioning (business continuity plans)
Environmental Protection Act	An Act to provide the protection of the environment; to establish the Environment Protection Authority and define its functions and powers; and for other purposes. Consideration of this act should be undertaken for the provision, development or management of stormwater.
Local Government (Stormwater Management) Amendment Act 2007.	Act empowering the Stormwater Management Authority
Local Government Act 1999	Sets out role, purpose, responsibilities and powers of local governments including the preparation of long term financial plan supported by asset management plans for sustainable service delivery.
Local Government Stormwater Management Act 2007	Outlines the Stormwater Management Agreement between State and Local Governments, establishment of the Stormwater Management Authority and preparation of Stormwater Management Plans.

Legislation	Requirement
National Construction Code 2014	Sets out minimum standards for stormwater management for property development.
Natural Resources Management Act 2004	An Act to promote sustainable and integrated management of the State's natural resources; to make provision for the protection of the State's natural resources.
Work Health and Safety Act 2012	An Act to provide for the health, safety and welfare of persons at work; and for other purposes.

Table 3-1: Legislative requirements

3.3 Current Level of Service

Levels of service are a key business driver and influence all asset management decisions. It describes:

- The outputs Council intends to deliver to customers.
- The service attributes such as quality, functionality and capacity.
- The performance measures.

Performance measures are used to indicate how Council is doing in relation to delivering levels of service.

Council has defined two levels of service categories:

- Community Levels of Service – measures the service the community expects.
- Technical Levels of Service – measures the service the organisation provides.

Community levels of service measure the community's perception of Council's service performance, while the technical levels of service measure against technical indicators of performance.

Council's desired level of service is the technical level of service as a minimum. The level of service will be constantly monitored and reviewed with the introduction of the community survey to develop community level of service key performance indicators (KPIs). It's anticipated the next review will be in four years. Council's levels of service are captured in Table 3-3.

Community Levels of Service

Performance Measure	Level of Service Objective	Performance Measure	KPI	2020
Quality	The stormwater network is well maintained	Community survey on the quality of stormwater assets	KPI based on 2020/21 survey (to be developed)	2020/21 survey to set baseline
Function	Asset to meet service needs – 'fit for purpose'	Community survey on the functionality of stormwater (sustainably and efficiently managing stormwater runoff)	KPI based on 2020/21 survey (to be developed)	2020/21 survey to set baseline

Technical Levels of Service

Performance Measure	Level of Service Objective	Performance Measure	KPI	2020
Condition	Physical state of stormwater assets in a serviceable condition	Average condition of stormwater assets.	Equal or less than condition rating 3	3.1
Renewal	Sustainably managing the renewal of assets	Asset Renewal Ratio	90%-100%	104%
Capacity and Utilisation	Stormwater assets have the capacity to meet the community need	Property flooding incidents for a ten-year AIR rain event	0 Property flooding reports for events under 1:10	0
Safety	Safety compliance standards are achieved	Number of injury or accidents	0 accidents attributed to infrastructure capacity and condition	0

Table 3-2: Levels of service

3.4 Stormwater Standards

Council aims to achieve service standards consistent with the Australian Rainfall and Runoff (ARR) Guidebook 2019. The guidebook is nationally regarded as the leading text in the design of stormwater networks and systems providing guidance for the design of underground stormwater systems and above ground overland flow paths under the major/minor flow principle.

This standard relates to the capacity of the assets to effectively cater for storms taking place at regular estimated intervals. Typically storms occurring more frequently create less runoff than storms of lower frequency. The major/minor drainage flow concept is the commonly accepted stormwater management approach and it is the approach adopted by Councils within South Australia and Australia.

Minor (Underground) System

The aim of the minor system of pits and pipes is to remove surface stormwater flows from the road and convey them underground to the appropriate outlet system. Generally, the minor system will be designed to cater for the flows of the 20% Annual Exceedance Probability (AEP) or five-year Annual Recurrence Interval (ARI) storm event. However, in flatter areas with minimal surface grade it may not be possible to achieve this design requirement.

Council aims to achieve the following design criteria as the minimum service standard for the installation of new drainage systems or the upgrade and replacement of existing systems for 20% AEP (five-year ARI) storms:

- Gutter flow width to be no greater than 2.5m (the width of water measured from the face of the kerb towards the centre of the road).
- Gutter flow width at pedestrian crossings to be no greater than 1.0m.
- Hydraulic grade line (HGL) to be a minimum of 150mm below the water table.

Major (Overland) System

The major system is typically comprised of the road and footpath areas up to the property boundary lines. The aim of the major system is to safely convey all stormwater overland to the appropriate outlet point without inundating properties for all events up to and including a 1% AEP storm (100-year ARI).

In all new developments this is the minimum design standard for the major system, with minimum freeboard (distance between top of flood water and house floor levels) to be no less than 200mm. In some existing areas it's not possible to cater for this overland flow within the road reserve. In this case (if possible) the minor system may be designed to a higher standard to reduce the overland flow.

4 Future Demand

The community's demand for services changes overtime. The reason for change can be varied, some of the common drivers are population, demographics, environment and technology. As service demand changes, Council's assets may also need to change to meet the changing demand. A summary of Council's forecast demands and how these are proposed to be managed is contained in Table 4.1.

Population and Demographics

Current position	Demand forecast	Demand impact	Demand management plan	Impact on assets
Increased housing density with 38.6% of dwellings are medium density compared to 23.9% for Greater Adelaide.	The higher than average provision of medium density housing (38%) is anticipated to further increase in the next 30 years.	Greater impervious areas through increased infill development has the potential to cause local flooding problems.	Deliver Council's 4 Year Delivery Plan, Strategy 2.4a – Increase stormwater management improvements in a minimum of 40 streets. Implementation of Brownhill Keswick Creek (BHKC) Stormwater Management Plan (SMP) and Sturt River SMP to manage catchment flows. Planning controls to reduce property damage through flood events and enforcing onsite stormwater detention to predevelopment levels.	Delivering stormwater management improvements including water sensitive urban design (WSUD) initiatives (raingardens, tree wells) as well as infrastructure expansions through the capital works program. Opportunities to be identified through capital planning to include stormwater benefits across the program. New and renewal capital budgets to be used to implement SMPs.

Climate change

Current position	Demand forecast	Demand impact	Demand management plan	Impact on assets
Council and the community are increasingly aware of our impact to the environment and Council's role in environmental sustainability.	Council is committed to pursuing, supporting and creating an environment that will sustain current and future generations. This goal is shared by our community and is a primary objective of most governments across the world.	We are committed to using fewer of our precious resources, reducing our carbon footprint and looking for smarter ways to achieve this objective.	The Environmental Sustainability Strategy 2016-2020 is the lead strategy implementing the Greening goals identified in the Community Plan 2033. The Environmental Sustainability Strategy 2016-2020 priority of Waterwise Unley promotes the efficient, effective and sustainable water management and increasing resilience to change in climate. The City of Unley have aligned with Resilient East provides opportunities for the eastern region to collaborate to increase our resilience to climate change. Council is developing a Climate and Energy Plan to be endorsed in 2020/21.	The environmental strategy provides principals for the delivery of new and renewal of assets, these include: - Natural and renewable materials used in the construction and manufacture of stormwater assets. - Water Sensitive Urban Design (WSUD) principals to be implemented (for example, stormwater diversions for watering street trees, bio swales, rain gardens). - Continue the expansion of our recycled water (MAR) networks and the use of recycled water.
Increase of severe weather events including droughts, storms and storm surges.	Severe weather events continue to increase based on current trends.	More intense rainfall events are likely to place increased pressure on the drainage network to carry larger volumes of stormwater runoff.	Potential for design standard definitions change through the increase rainfall intensity. This will decrease the standard currently in place for our existing infrastructure.	In future, as definitions change, larger pipes may be required to meet the same design standard. Upgrading current capacity of current systems may also be required.

Technology

Current position	Demand forecast	Demand impact	Demand management plan	Impact on assets
Testing new research and technologies being developed for stormwater management.	Looking for efficient and effective ways to improve stormwater management.	Taking advantage of opportunities through studies and grants to progress stormwater management technology.	Using new technologies to control stormwater flows within catchments to eliminate localised flooding. Funding received from Department of Environment and Water for the introduction of detention to delay flows and the use of smart tanks.	A study has been undertaken in the Fullarton stormwater catchment. Outcomes of this research have the potential to impact the strategies and techniques used to manage stormwater more effectively.

Table 4-1: Future demands

5 Lifecycle Management

5.1 Background

Lifecycle management details how Council plans to manage and operate (from planning to disposing) its stormwater assets at the agreed level of service while optimising total cost of ownership at an appropriate level of risk.

This section outlines the stormwater asset data (condition, valuation, revaluation, useful life) and processes needed to effectively manage, renew and upgrade the infrastructure assets.

Significant time is spent on the decision to create or acquire a new asset, likewise financial costs of maintaining an asset from creation to disposal or replacement will need to be planned. New assets require initial expenditure; however, the required financial commitment for the asset's lifecycle costs can be up to five times the initial expenditure.

The cost of an asset lifecycle can be divided into four major stages:

- Creation/Acquisition (Design/Procurement, Construction Commissioning)
- Maintenance and Operations (Operate, Maintain, Monitor)
- Capital Renewal/Replacement (Requirements/Specifications, Upgrade/Modify, Replace)
- Decommission (Trigger, Decommission, Disposal)

These major stages are further detailed in this Lifecycle Management section.

Variability of these stages also exists within different stormwater categories, as function may influence the renewal versus replacement strategies.

The major stages can be further divided into specific processes as listed in Figure 5-1.

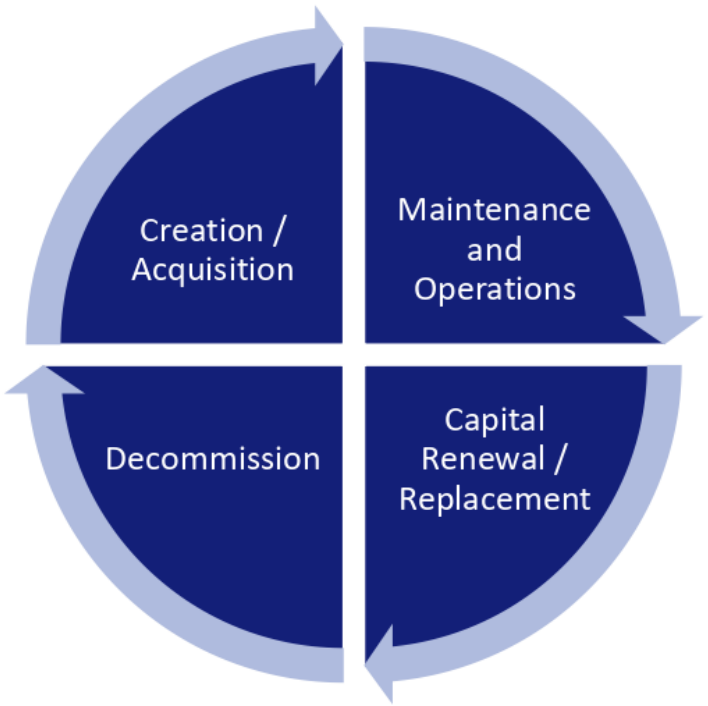


Figure 5-1: Asset lifecycle flowchart

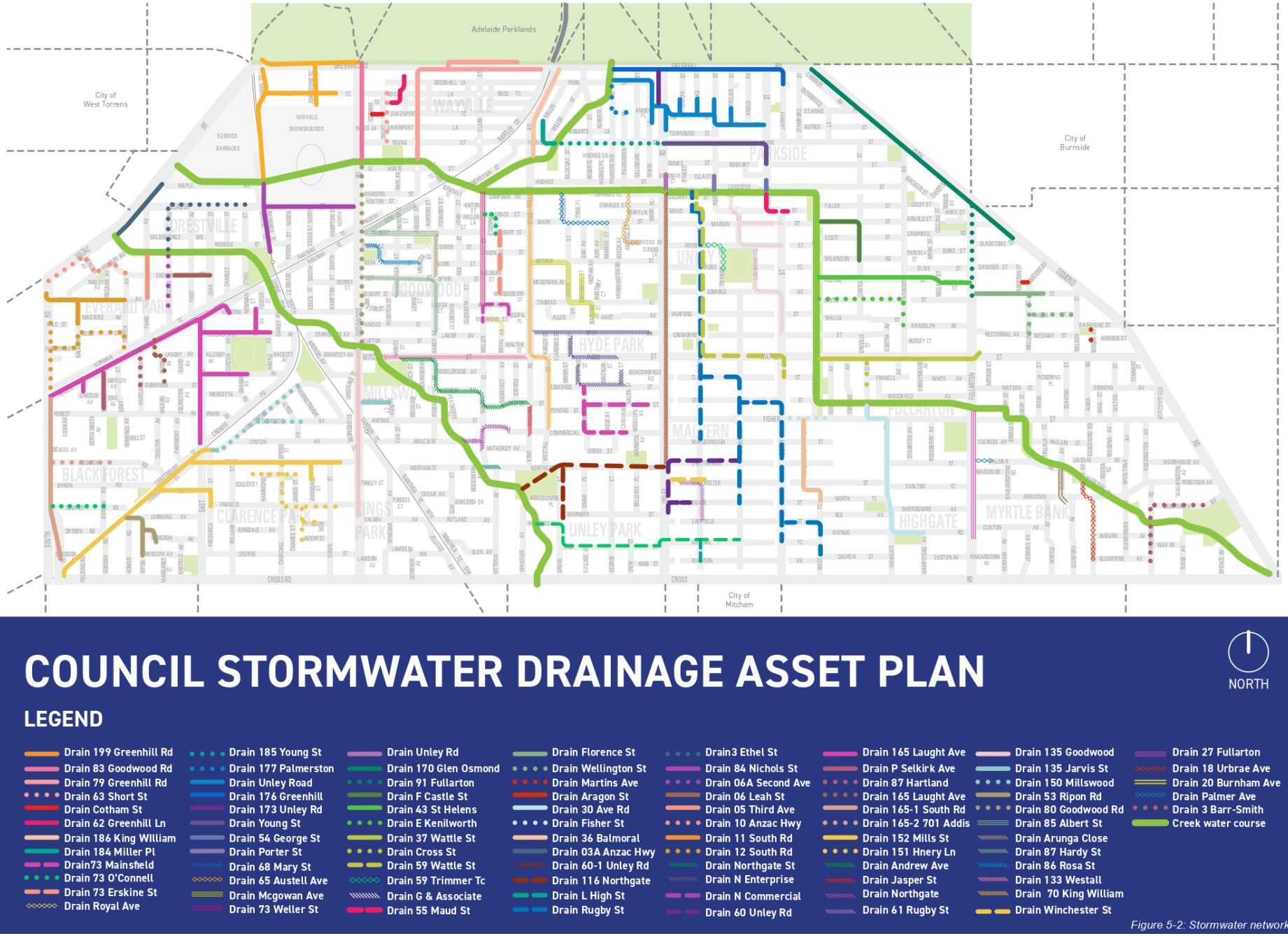


Figure 5-2: Stormwater network

5.1.1 Physical Parameters

Figure 5-2 contains Council's underground drainage network and Council is traversed by four creek systems:

- Parklands Creek (north)
- Glen Osmond Creek (south-east)
- Keswick Creek (Parkland Creek and Glen Osmond Creek merge to form Keswick Creek)
- Brown Hill Creek (south)

Ownership of the creeks is either with Council or the individual property owners as per their Certificate of Title. The concrete lining of creeks is a Council owned asset and Council has easements in place or is formalising the rights of entry for all concrete lined creeks within private land (improvement program item 12).

Council has two Managed Aquifer Recharge (MAR) schemes for the harvest and use of recycled water, reducing Council's dependency on River Murray water.

The Ridge Park MAR is used to harvest water from Glen Osmond Creek, which runs through the southern portion of Ridge Park. The Ridge Park MAR scheme and reticulation system allows for the capture, filtration and injection of up to 60ML per annum of harvested water into a fractured rock aquifer. The scheme involves extraction of water from Glen Osmond Creek, which is treated through a bioretention system and mechanical filters and stored in the aquifer. The water is then recovered to irrigate Fraser Reserve, Ferguson Avenue Reserve, Ridge Park, Scammell Reserve, Fullarton Park, Fern Avenue Reserve, Windsor Street Linear Park and biodiversity trail, Henry Codd Reserve and Unley Oval.

The Heywood Park MAR is used to harvest water from Brownhill Creek, which runs through the south west corner of Heywood Park, during the wetter seasons. The harvested water is treated through mechanical filters and up to 35ML per annum is injected into the aquifer for storage before being extracted during the dryer seasons to supply water for irrigation of Heywood Park, Soutar Park and Orphanage Park.

Under Section 128 of the Natural Resource Management (NRM) Act, the two MAR schemes will have restricted conditions for injection and extraction volumes from 1 July 2022. Council is undertaking a MAR improvement program in 2020/21 and 2021/22 to increase the performance of the MAR schemes in terms of water quality, capacity and control.

5.1.2 Asset Condition

The objective of a condition assessment is to provide sufficient information on asset condition to allow informed strategic asset planning and asset management decisions to be made. The condition rating is based on the 2017 stormwater condition assessment.

The next asset condition assessment and revaluation is to be completed in 2020/21.

Stormwater asset condition is measured using a 1-5 rating system summarised in Table 5-1, where condition rating 1 relates to assets in very good condition and rating 5 relates to assets in very poor condition.

Rating	Condition	Condition Description	Action
1	Very Good	A new or near new asset with no visible signs of deterioration.	No action required
2	Good	Early stages of minor deterioration causing no serviceability problems.	Minor defect only, no action required
3	Fair	Some obvious deterioration evident. Serviceability may be impaired slightly.	Maintenance required to return to accepted level of service

4	Poor	Severe deterioration evident, starting to limit the serviceability of the asset.	Consider renewal
5	Very Poor	Serviceability problems needing immediate rehabilitation. Possible risk to remain in service.	Replace/dispose

Table 5-1 Asset condition rating

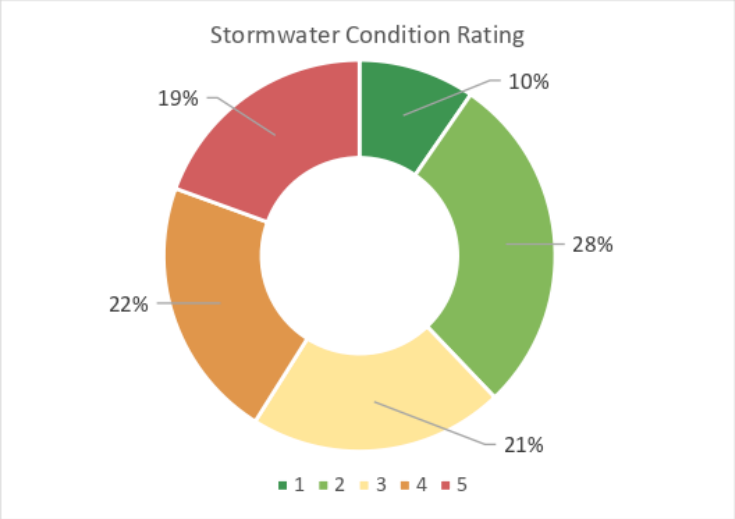


Figure 5-3: Stormwater asset condition

The overall rating (based on the 2017 condition assessment) of Council's stormwater assets is contained in Figure 5-3, which identifies:

- 38% of assets do not require intervention.
- 21% of assets to be assessed for maintenance requirements.
- 41% of assets to be assessed for renewal/replacement requirements.

Asset condition rating are shown in Table 5-2 by asset category. The average rating can be used as a benchmark for measuring against the stormwater category desired level of service.

Asset category	**Average Condition Rating**	**Target Portfolio LoS Condition Rating**
Creeks	3.3	≤ 3.0
Recycled Water	Not available	≤ 3.0
Stormwater Management	Not available	≤ 3.0
Stormwater Pipes	2.6	≤ 3.0
Stormwater Pits	3.4	≤ 3.0
TOTAL	**3.1**	**≤ 3.0**

Table 5-2 Asset condition rating

Stormwater assets are generally located underground and difficult to visually inspect. The age distribution can provide an indication of condition to inform upcoming renewals. The stormwater age distribution is depicted in Figure 5-4, the data indicates:

- 4% of the asset portfolio is over 80 years old (majority are creeks) and will be monitored for signs of deterioration.
- 25% of the stormwater assets (pipes, pits, creeks) were constructed 60-80 years ago. This will likely see a major increase in renewals in 20-40 years.
- Stormwater pipes and pits are considered to have useful service lives of 100 years, which are based on an estimated structural life and generally consistent with other metropolitan Councils.

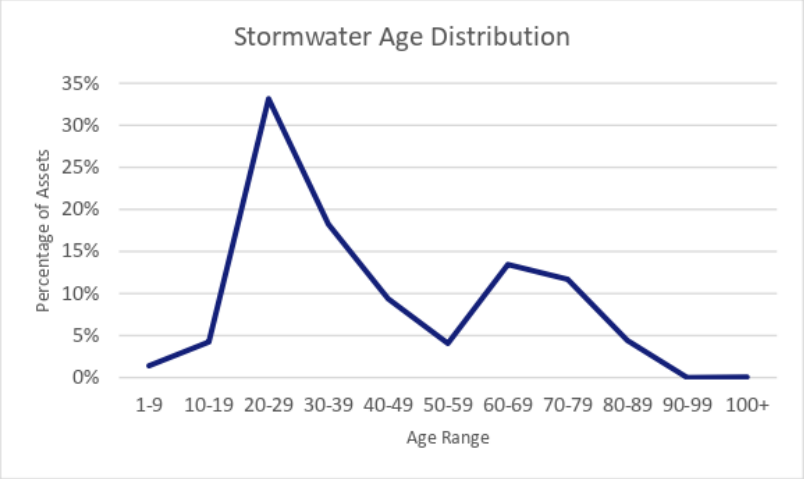


Figure 5-4: Stormwater age distribution

The Plan's improvement program includes frequent condition assessments to collect data to provide confidence, inform accurate useful life expectations and postpone replacement/renewal works on functional assets. A combination of frequent inspections and maintenance is used to extend the life of stormwater assets beyond their design life. Following the next condition assessment, Council will review the useful lives for stormwater assets.

5.1.3 Useful Life

A summary of useful life in asset groups is contained in Table 5-3:

Asset Category	Asset Group	Asset count	Useful Life (years)
Creeks	Open Channel - Concrete lined	3.1km	100
Creeks	Open Channel - Natural	2.1km	N/A
Creeks	Open Channel - Trapezoidal earth part concrete lined	1.6km	100
Creeks	Open Channel - Trapezoidal part stone lined	0.5km	100
Creeks	Box Culvert	3.2km	80
Creeks	Reinforced Concrete Pipe	1.2km	80
Recycled Water	MAR	5	40-50
Stormwater Management	Stormwater Management	7	35-100
Stormwater Pipes	Box Culvert	1.9km	80
Stormwater Pipes	Open Channel	0.4km	80

Stormwater Pipes	Pipes	76.9km	100
Stormwater Pits	Grated Inlet Pit	88	80
Stormwater Pits	Headwall	6	80
Stormwater Pits	Junction Box	553	80
Stormwater Pits	Letter Box Sump	11	80
Stormwater Pits	Side Entry Pit	1663	80

Table 5-3: Asset useful life

The impact of climate change on infrastructure assets useful life is not yet quantified and may continue to change as increased temperature, heatwaves, higher storm and rainfall intensities will increasingly affect the useful life of infrastructure at a material level. These impacts have been identified in risk management and future demands.

5.1.4 Asset Valuation

Valuations are undertaken in alignment with Australian Accounting Standard 'AASB13 Fair Value', and 'AASB116 Property Plant and Equipment'. These valuations are required every three to five years, with an independent audit required every five years. Valuations are undertaken to satisfy the financial reporting requirements and to understand the cost to replace assets.

The valuation of Council's stormwater assets is summarised in the Table 5-4.

Asset Category	Replacement Value	Accumulated Depreciation	Written Down Value
Creek	$27,408,857	$17,186,592	$10,222,265
Recycled Water System	$4,252,865	$529,918	$3,722,947
Stormwater Management	$6,005,451	$578,389	$5,427,062
Stormwater Pipe Stormwater Pit	$52,335,273	$24,225,936	$28,109,337
TOTAL	$90,002,447	$42,520,835	$47,481,612

Table 5-4: Stormwater Assets Valuation

5.1.5 Historical Expenditure

The maintenance budget has increase annually due to CPI and the asset portfolio growing in size, complexity and age. The renewal expenditure decreased for one year in 2019/20 to accommodate for cross category expenditure. A majority of the new capital expenditure has been allocated to the Brown Hill Keswick Creek Project (see Section 5.4.1). The historical expenditure for the last five years is contained in Figure 5-5.

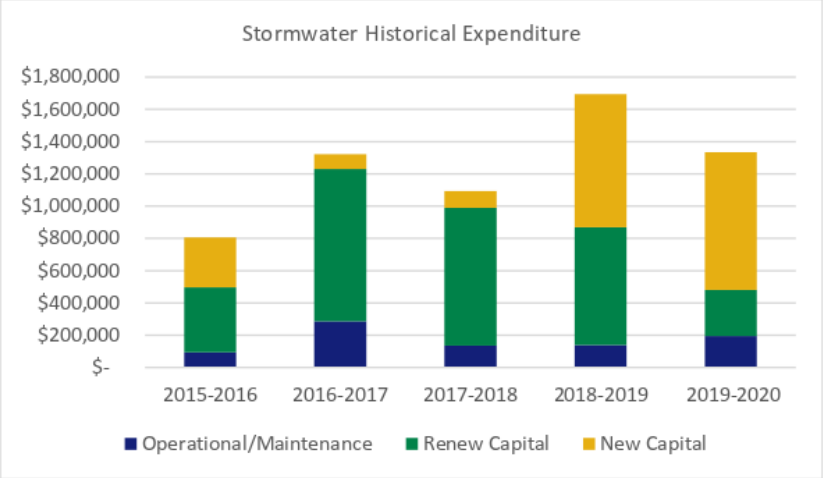


Figure 5-5: Historical expenditure

5.2 Operations and Maintenance Plan

5.2.1 Operations and Maintenance Strategies

Maintenance is recurrent expenditure, which is periodically or regularly required as part of the anticipated schedule of works to ensure the asset maintains its condition, achieves its useful life and provides the required level of service. The expenditure is anticipated in determining the asset's useful life.

As the years progress, the maintenance budget is projected to increase due to CPI and an asset portfolio growing in size, complexity and age.

Council's civil works and response team undertake maintenance for the physical structure and service of the stormwater network including creeks, stormwater pits (pit cleaning and street sweeping), stormwater pipes (cleaning and CCTV inspections) and stormwater management devices. The MAR schemes are largely automated through the SCADA (supervisory control and data acquisition) system, setting the operational parameters and in part through manual operation managed by Council.

In 2020/21 Council will conduct a review of all Depot operations in terms of levels of service to identify operational and financial efficiencies.

This review will be inclusive of all levels of service and processes to identify opportunities for efficiencies across all key depot operations including:

- Civil works
- Response and signage
- Open Space, Parks and Recreation
- Arboriculture

The outcomes of this service review may impact the operational and maintenance forecast with any changes made to be reflected in the LTFP following the conclusion of the review.

5.2.2 Summary of Future Costs

Figure 5-6 outlines the forecast of planned and unplanned operations and maintenance works over the next ten years. It has been projected with CPI increase over ten years. As Australia is facing economic impacts that will have unknown consequences at this time, the CPI assumptions will change on an annual basis through the LTFP.

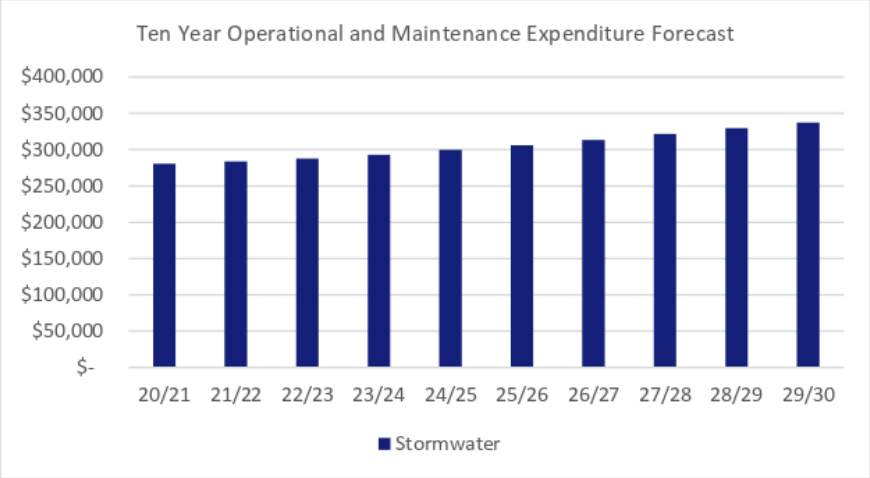


Figure 5-6: Ten year operational and maintenance expenditure forecast

5.3 Renewal Plan (Capital)

Asset renewal is the replacement or refurbishment of an existing asset to return it to the modern standard equivalent performance and level of service. Renewal planning is necessary to ensure adequate funding is available, and assets are replaced at an optimum time to maintain the level of service.

5.3.1 Renewal Identification

Projected future renewal expenditures are forecast to increase over time as the asset portfolio grows in size, complexity and age.

Renewals are programmed across asset classes using the following methods:

1. Forward projection based on historic expenditure.
2. Broad estimates based on replacing assets at the end of their useful lives.
3. Predictive modelling of varying degrees of complexity.
4. Bottom-up approach with a high confidence in asset data. Projects are identified via asset monitoring, prioritised and allocated.

These methods increase in sophistication, which is reflected by the data confidence level.

It is recognised matching condition-based renewal fluctuations from year to year is not generally possible from both a budget and resourcing perspective. Distributing the renewal costs over the ten year timeframe is preferable from a budget and resourcing perspective.

5.3.2 Renewal Strategies

Renewal works identified in terms of renewal strategies may be deferred if the cost is beyond the current financial ability to fund it. This can occur when there are higher priority works on other asset groups. When renewal works are deferred, the impact of the deferral on the assets ability to still provide the required level of service will be assessed. Although the deferral of some renewal works may not impact significantly on the short-term operation of the assets, repeated deferral will create a liability in the longer term.

Renewals are primarily programmed based on condition, however early implementation of renewal may be undertaken for upgrades and replacements due to changes in standards, safety issues, changes in levels of service, funding opportunities or alignment with external projects, strategies and plans.

5.3.3 Summary of Future Costs

The projected future required renewal expenditure is summarised in Figure 5-7. The three sets of data in Figure 5-7 include:

- The condition-based renewal bar graph displays the replacement value of assets reaching the end of their useful life based on the 2017 condition assessment.
- The condition-based renewal average line displays the annual budget per year to meet the ten year renewal targets without the extreme variance indicated from the renewal bar graph.
- The LTFP line displays the current LTFP projection based on past asset management plans and asset data.

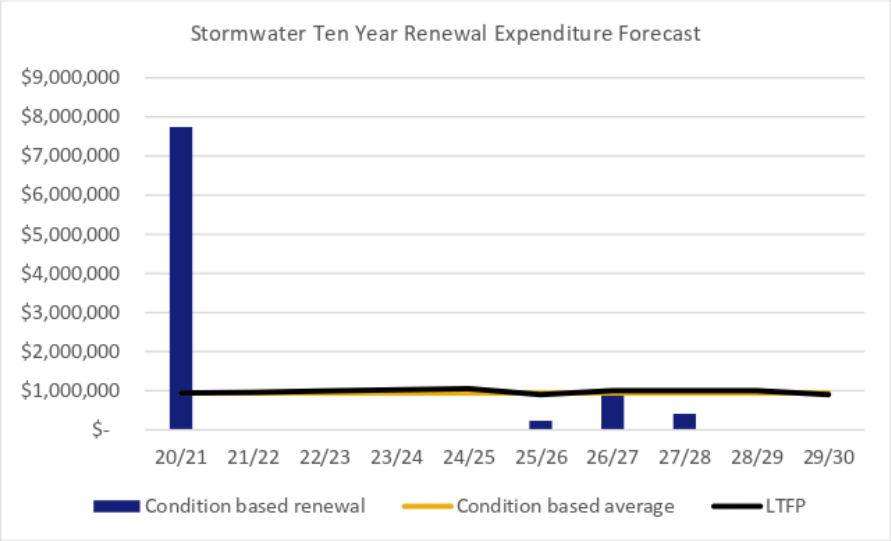


Figure 5-7: Stormwater ten year renewal expenditure forecast

The average annual expenditure for the next ten years:

Renewal projection	$941,000
LTFP	$976,600
Annual depreciation	$1,150,000

The Plan identifies an annual spend of $941,000 for stormwater asset renewal base on asset condition over the next ten years. The annual depreciation in 2020/21 for stormwater is $1,150,000, which indicates an increase will be required in the LTFP spending for stormwater as the asset portfolio ages.

Under current financial planning, the perceived stormwater 2020/21 renewal can be distributed over the next ten years, avoiding a major one-year budget increase. The condition assessment in 2020/21 will prioritise critical or high-risk assets for renewal to inform our future programs.

Council's asset renewal ratio (planned renewal / the Plan's identified renewal) is at 104% over the next ten years. The ratio represents the level of capital expenditure on the renewal of assets (LTFP) relative to the expenditure projected in the Plan.

The current LTFP expenditure is over the budget projection and a decrease of $357,000 to the budget over ten years will be required to maintain a ratio of 100%. Council's target is a 100% average over the next ten years.

5.4 Creation/Acquisition Plan (New Capital)

New capital relates to new assets or a significantly improved level of service that did not previously exist. They may result from various needs derived from demands such as population growth, environmental and technology change (as mentioned in Section 4).

5.4.1 Capital Investment Strategies

The need for new stormwater assets arises from a variety of sources including community requests, Council resolutions, proposals identified by Council strategies, grant opportunities or partnerships with external organisations. These projects are prioritised each year against all other asset categories and Council proposals.

The Brown Hill Keswick Creek (BHKC) Stormwater Management Plan (SMP) is a collaborative effort between catchment councils the City of Adelaide, the City of Burnside, the City of Mitcham, the City of Unley and the City of West Torrens. The primary objective of the BHKC SMP is to mitigate the risk and reduce the impact of major flooding on properties within the BHKC catchment up to and include a 100-year average recurrence interval (ARRI) flood. As part of this agreement between catchment councils, Council makes an annual new capital contribution to the project to deliver the SMP. This contribution will continue over the next ten years.

The Sturt River Catchment SMP is being delivered as a collaborative effort between catchment councils the City of Marion, the City of Mitcham, the City of Unley and the City of West Torrens. The Sturt River Catchment SMP is currently in draft form and associated capital works are not included within the new capital projections. Once the SMP outcomes are realised the associated projects and cost will be required to be included within the new capital program and the LTFP.

Along with the two major catchment SMPs, Council has undertaken stormwater studies on its sub-catchments to identify and prioritise stormwater upgrades across the network. The Unley Stormwater Management Plan Strategic Review 2012 has recommended $3M worth of high priority upgrade projects. It is recommended these projects are completed within the next ten years. An additional $6.6M medium priority projects and $9.8M low priority projects have been identified, however these are recommended to be deferred due to current funding limitations.

5.4.2 Summary of Future Costs

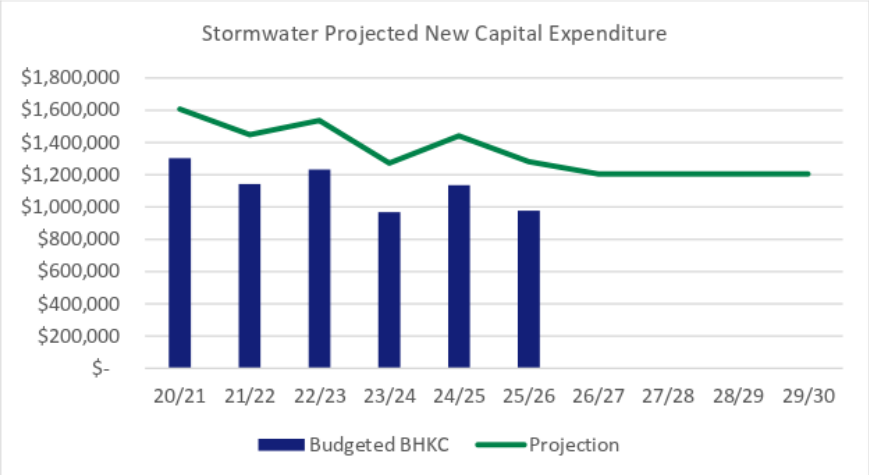


Figure 5-8: Stormwater projected new capital expenditure

Figure 5-8 outlines the projected future spend through new capital works for stormwater assets. The "Budgeted BHKC" bar graph represents the known annual contributions to the BHKC SMP, while the projection line is inclusive of other priority stormwater projects and a projected contribution to BHKC after 2025/26.

As timing and costs for these projects are still to be confirmed the projection for stormwater assets has been distributed with an average of $1,311,000 per year expected to be budgeted across the nine years. These budgets are subject to individual year bids, Council strategies and funding opportunities and are expected to fluctuate year to year.

Council reviews its new capital projects on an annual basis, with one year (2020/21) of works approved through the Annual Business Plan. The projection for the remainder of the ten year renewal is based upon Council's annual priorities for new capital expenditure across Council and the need for new capital across all asset classes based on upcoming projects.

The upcoming new capital projects for the stormwater asset class in the next ten years include:

- BHKC contributions
- Unley Stormwater Management Plan Strategic Review 2012 high priority implementations
- MAR Scheme upgrades

5.5 Decommission Plan

Disposal includes any activity associated with disposal of a decommissioned asset including sale, demolition or relocation.

Decommission of assets can be triggered in the following situations:

- The end of useful life of existing assets.
- Safety factors inherent to the asset.
- Non-compliance of the asset prompting a modern equivalent replacement.

Decommission of assets can involve the following courses of action:

- Design and replacement of the asset with a modern fit for purpose equivalent.
- Removal of the asset with the aim of repurposing the land in line with the long term strategy of Council.

6 Risk Management

6.1 Critical Assets

Critical assets are those assets which have a high consequence of failure but not necessarily a high likelihood of failure. The identification of critical assets and failure modes means investigative activities, condition inspection programs, maintenance and capital expenditure plans can be effectively targeted. Factors influencing criticality may be risk scored on safety, production/effort, cost and reputation.

The criticality of underground stormwater assets is increased relative to the above ground infrastructure, the criticality of stormwater below major roads and intersections is higher than assets below local roads.

6.2 Risk Assessment

The process for managing Council's risks is consistent with the International Risk Management Standard ISO 31000:2018. It involves five key steps, additional steps to ensure feedback through a monitoring and review process and appropriate communication and consultation.

Council is committed to effective risk and opportunity management to:

- Improve its ability to deliver community priorities, service delivery and outcomes for Council.
- Maximise opportunities and minimise the impact and likelihood of risk.
- Protect its employees, assets, liabilities and its community by avoiding or mitigating losses.
- Provide greater certainty for its employees, residents, stakeholders and the community in which Council operates by understanding and managing its risks.

Council acknowledges risk management is an essential part of best practice asset management. The risk assessment process identifies credible risks, the likelihood of the risk event occurring, and the consequences should the event occur, develops a risk rating, evaluates the risk and develops a risk treatment plan for unacceptable risks.

An assessment of risks associated with stormwater assets using Council's risk matrix (Table 6-1), has identified, analysed and evaluated stormwater risks. Table 6-2 outlines Council's risk management for stormwater assets and is to be reviewed annually at a minimum outside of the Plan.

		Consequence				
		Catastrophic	Major	Moderate	Minor	Insignificant
Likelihood	Rare	Medium	Medium	Low	Low	Low
	Unlikely	High	Medium	Medium	Low	Low
	Possible	High	High	Medium	Medium	Low
	Likely	Extreme	High	High	Medium	Medium
	Almost Certain	Extreme	Extreme	High	High	Medium

Table 6-1: Risk matrix

Ref	Risk Description *(event or potential event focused and their impact upon objectives)*	**INHERENT RISK** *Level of risk with NO controls in place*			Controls *already* in place *(What existing controls are in place to prevent and/or manage the risk?)*	Are the Controls effective at managing the risk?	**RESIDUAL RISK** *Level of risk if existing controls are effective*			Is the Residual Risk *Rating* Tolerable?	Treatments/Additional Controls *(additional controls that can be implemented to further reduce the level of Risk)*	Treatment Owner & Timing (***Who*** *is responsible for implementing the treatment and* ***When*** *it should be implemented/completed)*	**RISK LEVEL** ***after*** **Treatments** *If treatments implemented are effective*		
		Consequence	Likelihood	Risk Rating			Consequence	Likelihood	Risk Rating				Consequence	Likelihood	Risk Rating
1	Unsustainable management of assets due to poor quality data within asset management plan	Major	Likely	High	Periodic delivery of condition assessments and revaluations in line with industry standards.	Partially effective	Major	Possible	High	No	Continuous improvements in asset management maturity and activities through the improvement program.	Assets and Operations and Finance & Procurement See improvement program (Section 8.2)	Major	Unlikely	Medium
2	Council staff and/or members of the public injured as a result of poorly maintained infrastructure.	Catastrophic	Likely	Extreme	Annual maintenance budgets. Periodical delivery of condition assessments. Maintenance inspections.	Majority effective	Catastrophic	Unlikely	High	No	Continuous improvements in asset management maturity and activities through the improvement program.	Assets and Operations See improvement program (Section 8.2)	Catastrophic	Rare	Medium
3	Council unable to fund required capital and maintenance due to economic downturn.	Moderate	Likely	High	Maintain strong sustainability ratio to avoid a backlog of capital works. Ability to fund capital program through borrowings. Ability to reduce levels of service.	Majority effective	Moderate	Rare	Low	Yes	N/A	N/A	N/A	N/A	N/A
4	Climate change not appropriately planned for with respect to asset management.	Major	Likely	High	High level targets are set through the objectives and targets within the Environmental Sustainability Strategy.	Partially effective	Major	Possible	Medium	No	Climate change addressed in the Plan with respect to Councils impact on the environment as well as the environments impact to councils' assets. Include climate change as a considered factor throughout the Plan's, outlining the impact and associated demand on assets. Address assets within Climate and Energy Plan.	Assets and Operations Ongoing as asset management plans and council strategies are updated	Major	Rare	Medium

Ref	Risk Description *(event or potential event focused and their impact upon objectives)*	**INHERENT RISK** *Level of risk with NO controls in place*			Controls *already* in place *(What existing controls are in place to prevent and/or manage the risk?)*	Are the Controls effective at managing the risk?	**RESIDUAL RISK** *Level of risk if existing controls are effective*			Is the Residual Risk *Rating* Tolerable?	Treatments/Additional Controls *(additional controls that can be implemented to further reduce the level of Risk)*	Treatment Owner & Timing *(**Who** is responsible for implementing the treatment and **When** it should be implemented/completed)*	**RISK LEVEL *after* Treatments** *If treatments implemented are effective*		
		Consequence	Likelihood	Risk Rating			Consequence	Likelihood	Risk Rating				Consequence	Likelihood	Risk Rating
5	Property flooding due to insufficient stormwater capacity.	Major	Likely	High	Implementation of network upgrades through the stormwater management plan (SMP), prioritising locations of high risk. Working together with neighbouring councils through the SMPs to develop a holistic solution within the BHKC and Sturt River catchments.	Majority effective	Major	Unlikely	Medium	Yes	N/A	N/A	N/A	N/A	N/A
6	Blockages in critical infrastructure causing flooding and property damage.	Major	Possible	High	Street sweeping program to minimise leaves and debris entering the underground stormwater system. Cyclic cleaning program of pits.	Majority effective	Moderate	Unlikely	Medium	Yes	N/A	N/A	N/A	N/A	N/A
7	Collapse of major pipe or culvert.	Catastrophic	Possible	High	Proactive structural age-based inspections to inform appropriate management of critical assets.	Partially effective	Catastrophic	Unlikely	High	No	Increase the inspection frequency through CCTV.	Assets and Operations Ongoing through annual program planning for CCTV	Catastrophic	Rare	Medium

Table 6-2: Stormwater risks

7 Financial Summary

This section contains the financial requirements resulting from all the information presented in Section 5 of the Plan. The financial projections will be refined as part of the ongoing revision of the Plan.

7.1 Valuation forecast

Asset values are projected to increase as additional assets are added through capital works. Additional assets will generally increase the operational and maintenance requirements in the longer term, as well as the need for renewal. Additional assets will be included for future depreciation forecasts.

7.2 Expenditure forecast

Figure 7-1 outlines the financial projections for maintenance and capital renewal and capital new expenditure for the stormwater asset class.

The total forecast expenditure for stormwater assets is relatively constant over the ten year period. The predictability of this budget allows Council to undertake capital programs as and when required in each year.

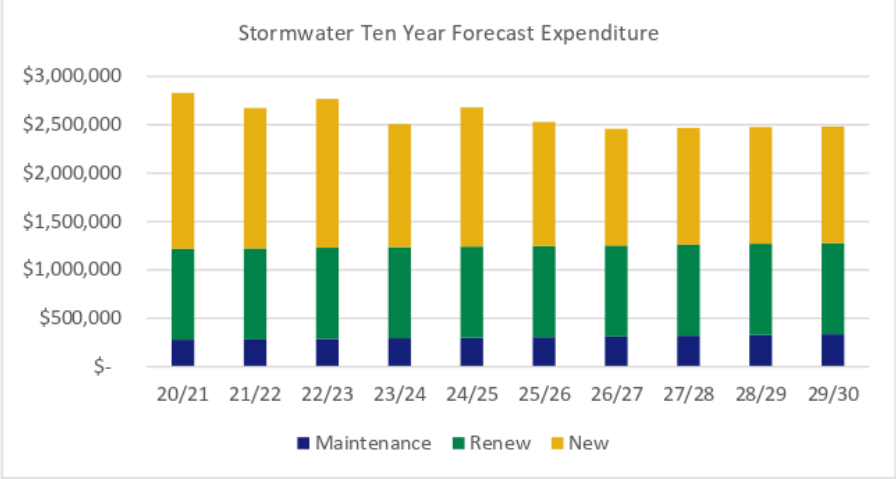


Figure 7-1 Stormwater ten year forecast expenditure

7.3 Asset Renewal Funding Ratio

This ratio indicates whether Council has the financial capacity to fund asset renewal at continued existing service levels. Council's target is a 100% average over the next ten years.

Asset Renewal Funding Ratio – Stormwater: 104%

This ratio is an important budget indicator over the next ten years. Council's LTFP has budgeted 104% of funds identified in this plan for the optimal renewal and replacement of stormwater assets. A decrease of $357,000 to the renewal budget over ten years is required to maintain a ratio of 100%.

7.4 Funding Strategy

Key strategic milestones:

- The Plan will inform Council's future LTFPs.
- The next major condition assessment and revaluation will be in 2020/21 and inform future renewal strategies.

- The Depot operations service review will be undertaken in 2020/21, which will inform future maintenance and operating budgets.

Repayment of existing loans has been extracted from the current loan schedule. The LTFP assumption indicates no additional funding through borrowings is required to meet new capital commitments in the future. The Local Government Finance Authority (LGFA) Cash Advance Debenture (CAD) Facility will continue to be used to balance funding requirements in terms of borrowing.

The projected expenditure is to be funded from Council's operating, maintenance and capital budgets.

7.5 Key Assumptions

The assumptions and data used in presenting this forecast information were:

- Replacement costs derived from the fixed asset register in Technology One asset database.
- Condition data derived from stormwater condition assessment 2017.
- Key financial assumptions derived from LTFP 2020/21.
- Operation funding will be made without reduction.
- Capital funding will be made without reduction.
- Appropriate resources will be made available to manage the Plan.
- Council income will remain consistent with LTFP.
- There will be no natural disasters.

7.6 Forecast Reliability and Confidence

The expenditure projections are based on the best available data. Data confidence is critical for an accurate expenditure projection. As new data becomes available, the forward plans will be updated. There are five levels that measures data confidence:

Confidence Level	Description
A - Highly Reliable	Data based on sound records, procedures, investigations and analysis, documented properly and agreed as the best method of assessment. Data set is complete and estimated to be accurate +-2%.
B – Reliable	Data based on sound records, procedures, investigations and analysis, documented properly but has minor shortcomings, e.g. some of the data is old, some documentation is missing and /or reliance is placed on unconfirmed reports or some extrapolation. Dataset is complete and estimated to be accurate +-10%.
C - Uncertain	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 - Very Uncertain	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 – Unknown	None or very little data held.

Table 7-1: Data confidence level

It's naturally difficult to visually inspect underground stormwater assets, bringing a level of uncertainty to the data confidence. Council's stormwater asset data confidence is currently *(C) Uncertain* across condition, spatial and financial data. This risk will be controlled through periodically assessing sections of the underground network through CCTV based on risk and criticality. The improvement program outlines steps to increase the maturity and confidence of the data through the next condition assessment and revaluation in 2020/21.

8 Improvement and Monitoring

8.1 Status of Asset Management Practices

Council is committed to improve the data quality and confidence by implementing actions within the improvement program in Table 8-1.

8.1.1 Accounting and Financial Systems

Council uses Technology One as its financial management and accounting system. Technology One has the capability to report the full lifecycle of assets providing full transparency from acquisition to disposal of assets.

8.1.2 Asset Management System

Council uses Technology One – Enterprise Asset Management software as its Asset Management System. Initial set up of the asset management system is crucial to ensure integration between operating and financial functions. Council's initial set up of the asset management system was incomplete and is being addressed through the improvement program, periodically updating the asset registers during revaluations.

A future improvement is to integrate the financial system and asset management system following each asset categories condition assessment and revaluation.

Council's geographic information system (GIS) data is stored within a specialised GIS software suite. An improvement will be to integrate the GIS data with the asset register to provide live spatial data.

8.2 Improvement Programs

The improvement program derived from the Plan is shown in Table 8-1.

Task No.	Task	Responsible officer	Resource Required	Due Date
1	Stormwater assets audit and link to GIS.	Asset Management Officer	External	2020-21
2	Condition assessment to be completed	Senior Assets and Engineering Lead	Internal / External	2020-21
3	Continual review and update of the asset register.	Asset Management Officer	Internal	Revaluation 2020-21
4	Integration of stormwater assets with Asset Management System, the finance module in TechOne and GIS.	Asset Management Officer Manager Business Systems Solutions	Internal	Ongoing staged approach
5	Undertake community research on stormwater assets. This will provide data for future planning of stormwater assets ensuring the required level of services are met.	Senior Assets and Engineering Lead	Internal	2020/21

Task No.	Task	Responsible officer	Resource Required	Due Date
6	Review of the stormwater related maintenance programs through depot operations service review.	Manager Assets and Operations	Internal	2020/21
7	Review useful life values for all stormwater assets.	Asset Management Officer	Internal	Revaluation 2020/21
8	Compete Sturt River Catchment SMP in collaboration with relevant stakeholder councils.	Senior Assets and Engineering Lead	Internal	2023/24
9	Proactive CCTV inspection program to inform condition and useful life.	Senior Assets and Engineering Lead	Internal	Ongoing
10	Develop and review flood mapping to identify and prioritise future upgrade works.	Senior Assets and Engineering Lead	Internal	Ongoing
11	Develop and implement improvement program for MAR systems to increase performance in terms of water quality, capacity and control.	Senior Assets and Engineering Lead	Internal / Eternal	1 July 2022 (Heywood Park MAR)
12	Creek review – ownership and maintenance	Senior Assets and Engineering Lead	Internal	2021/22

Table 8-1: Improvement program

8.3 Monitoring and Review Procedure

Council will schedule the Plan review into its strategic and annual planning and budget processes. The Plan has a life of four years.

8.4 Performance Measures

Council will track the performance of the Plan through the following performance measures:

1. Level of Service Key Performance Indicators (KPIs).
2. Delivery of improvement program.
3. Improved data confidence.
4. Review of the Plan every four years.

THE CITY of Unley

THE CITY OF UNLEY

TRANSPORT

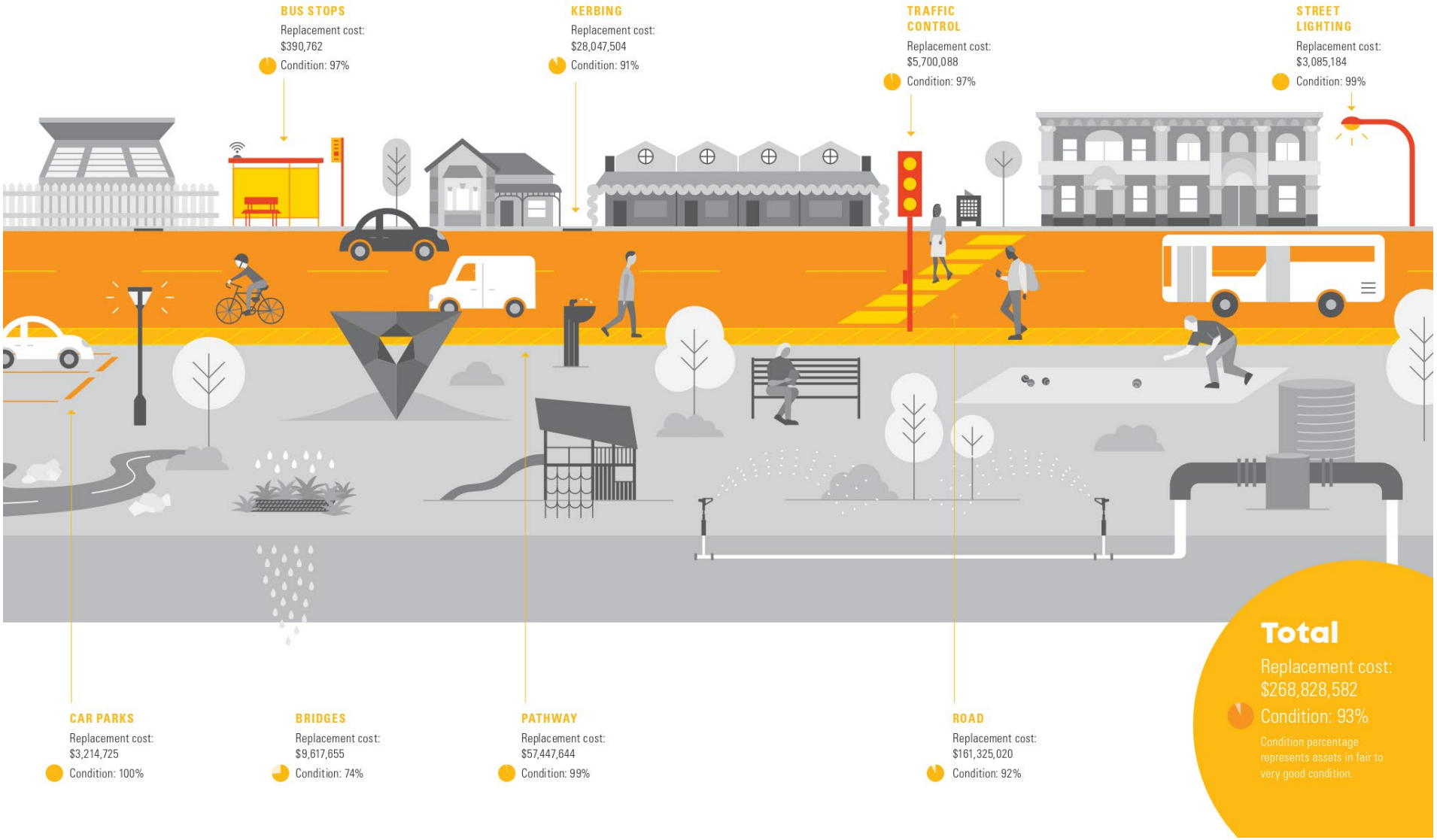
ASSET MANAGEMENT PLAN

2020

Contents

Issue	Date	Issue Details	Author	Checked	Approved
V.1	July 2020	Framework – Sproutt Consulting	SW	TY	JM
V.2	August 2020	Draft for Audit Committee	JM	AW	CM
V.3	October 2020	Draft for Community engagement			
V.4	November 2020	Final			

Transport Assets Summary



The City of Unley (Council) has adopted four asset management plans which set out its goals and objectives for managing key infrastructure and assets, namely building, open space, stormwater and transport.

1 Executive Summary

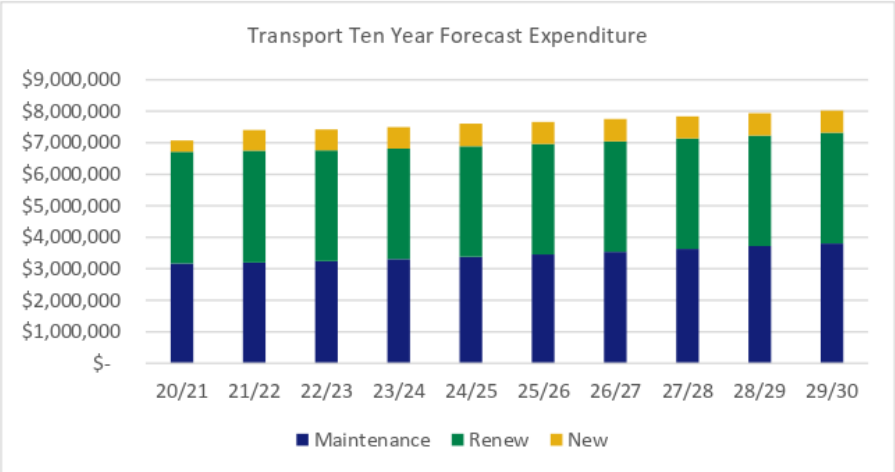
Council owns and manages numerous transport assets which connect people and places by providing an effective transport network to support safe and efficient movement. This asset management plan (the Plan) focuses on the management of Council's transport assets.

The objective of asset management is to provide the desired level of service in the most cost-effective manner for present and future generations. A strategic approach to asset management aligning with industry standards and best-practice has been undertaken to ensure Council's sustainability.

Effective asset management for transport assets demonstrated in the Plan is essential to achieve Council's vision: "Our City is recognised for its enviable lifestyle, environment, business strength and civic leadership."

Transport Levels of Service:	
Quality	Streets are well maintained
Function	Assets meet the service needs
Capacity and Utilisation	Streets have the capacity to meet the community need
Condition	Physical state of transport assets are in serviceable condition
Renewal	Sustainably managing the renewal of assets
Accessibility	Streets are accessible to all
Safety	Safety compliance standards are achieved
Future Demands:	
Population and demographics	Population is forecast to increase 13% by 2040 Over the last five years 30% of residents are new to Council
Climate Change	Awareness of the Council's role in climate sustainability Increasing trend of severe weather events
Technology	Global trends towards smart cities
Condition:	93% transport asset condition satisfaction

Financial Summary:



The forecast contained within the Plan will be reviewed annually with an update completed every four years.

Council is committed to continuously improving the quality and maturity of its asset management practices. The improvement program specifies its commitment to increase asset management maturity and data confidence. Key performance measures have been established to track Council's performance of its assets and asset management practices.

2 Introduction

2.1 Background

The Plan covers the transport assets serving Council's transportation needs by providing an effective transport network to supports safe and efficient movement, connecting people and places.

Council's transport assets covered in the Plan include:

- Bridges
- Bus Stops
- Car Parks
- Kerbing
- Pathways
- Roads
- Street Lighting
- Traffic Control

The Plan is developed to demonstrate proactive management of assets (and services provided from assets), compliance with regulatory requirements and to communicate funding required to provide the required levels of service over a ten year planning period.

The Plan aims to:

- Align with ISO 55000:2014 (international standard for asset management) without seeking accreditation as an ISO document or process.
- Align the delivery of asset management activities with the organisation's goals and objectives; this is known as the "line of sight" with asset management.
- Create transparency and accountability through all aspects of asset management, ensuring all stakeholders understand their roles and responsibilities for achieving the Plan's aims.

The Plan is developed and implemented in conjunction with the following Council plans, strategies and policies (Table 2-1):

Plans, Strategies and Policies	
Community Plan 2033	Active Ageing Strategy
4 Year Delivery Plan 2017-2021	Walking and Cycling Plan
Long Term Financial Plan 2020-21 to 2029-30	Integrated Transport Strategy
Environmental Sustainability	Tree Strategy
Digital Unley	Asset Management Plans
Asset Management Policy	

Table 2-1: Plans, strategies and policies

Council's transport asset key stakeholders for service delivery of the Plan are contained in Table 2-2:

Key Stakeholders	**Roles in Asset Management Plan**
Residents/ Community	Opportunity to provide input into the development and review of the Council's strategic management plans.
Elected Members	Represent needs and views of community. Ensure Council's objectives and policies are appropriate and effective.

Key Stakeholders	Roles in Asset Management Plan
	Ensure Council's resource allocation, expenditure and activities, and the efficiency and effectiveness of its service delivery is appropriate. Ensure Council is financially sustainable.
Audit Committee	Audit Committee will review, make recommendations and observations to Council on the financial outcomes of the Plans.
Chief Executive Officer	Ensures administration deliver strategic planning and direction of the Council. Ensures administration implement the strategic plan goals and objectives by providing services within the allocated resourcing while managing risks. Ensures Council is financially sustainable.
General Manager – City Development	Ensures asset management plans are completed and reported to CEO and Council. Ensures the capital works programs are delivered in line with strategic planning. Ensures the maintenance programs are achieving service standards.
Assets and Operations Manager	Ensures the review of asset management and the delivery of improvement strategies. Manages maintenance programs to ensure they are active and achieving service standards. Ensures the capital works programs are achieved.
Senior Assets and Engineering Lead	Manages development and review of asset management plans. Responsible for advancing asset management within the organisation. Review infrastructure data integrity within the asset management system and GIS applications. Review and manage condition audits of infrastructure. Review asset valuation data. Coordinates the annual capital works program.
Team Leader Civil Works and Maintenance	Coordinate Council resources to deliver the maintenance program.
Civil Works and Maintenance Team	Deliver operations and maintenance.
Asset Management Team	Deliver the annual capital works programs. Undertake data collection and operational asset management projects.

Table 2-2: Key stakeholders for the Plan

2.2 Goals and Objectives of Asset Ownership

The goal of asset management is to provide the desired level of service through the provision and management of physical assets in the most cost-effective manner, for present and future generations.

The Plan demonstrates alignment with the Council's Community Plan 2033 through its vision and themes:

Our City is recognised for its enviable lifestyle, environment, business strength and civic leadership.

Community Living

Goal: People value our City with its enviable lifestyle, activities, facilities and services.

Objectives:

- Our Community is active, healthy and feels safe.
- Our Community participates in community activities, learning opportunities and volunteering.
- Our City meets the needs of all generations.
- Our Community is proud to be part of our City.
- Our City is connected and accessible.

Environment Stewardship

Goal: We will maintain and enhance our urban environment and strengthen our City's resilience to climate change by providing leadership to our Community.

Objectives:

- Unley's urban forest is maintained and improved.
- Excellence in waste management is achieved through avoidance, re-use and diversion.
- The energy efficiency of the City if increased and our carbon footprint reduced.
- Efficient, effective & sustainable water management is ensured.
- The City's resilience to climate change is increased.

Economic Prosperity

Goal: Our businesses are valued because of the range of goods, services and facilities they provide, and new businesses are supported, not burdened with bureaucracy.

Objectives:

- Unley is recognised as an easy place to do business.
- Thriving main streets and other business activities operate across our City.

Civic Leadership

Goal: Council will listen to the community and make transparent decisions for the long-term benefit of the City.

Objectives:

- We have strong leadership and governance.
- Council provides best value services to the community.
- Our business systems are effective and transparent.

These objectives will be considered in all decision-making aspects regarding transport assets to ensure Council consistently strives to achieve these strategic objectives. There are several initiatives that feed into the above objectives outside of the asset management process that ultimately support the stated objectives.

2.3 Plan Framework

Key elements of the Plan include:

- Levels of service – specifies the levels of service objectives and how they are measured.
- Future demand – how this will impact on future service delivery and how the demand will be met.
- Lifecycle management – how Council manages existing and future assets to provide the levels of service.
- Risk management – how Council manages asset risks.
- Financial summary – funds required to provide the levels of service.
- Improvement plan and monitoring – how Council will improve asset management maturity and how the Plan will be measured to ensure it's meeting Council's objectives.

The asset management framework is shown in Figure 2-1 and the roadmap for preparing an asset management plan is in Figure 2-2.

The Community Plan is a comprehensive community vision for Council. The vision is broken down into themes, goals and objectives outlining how we plan to achieve our vision.

The 4 Year Delivery Plan outlines how we will deliver the Community Plan's vision, strategies and framework.
Corporate Strategies identify the challenges and opportunities across key areas of our Council, and outline the plans and actions required to achieve the long-term goals as set out in the Community Plan.

The Plan demonstrates long-term (ten years) asset management planning and outcomes and outlines asset activities and resources to provide a defined level of service in the most cost-effective way while managing risks.

The Long Term Financial Plan (LTFP) demonstrates financial sustainability in the medium to long term, while achieving the objectives in the Community Plan.

The Annual Business Plan outlines Council's activities to progress towards meeting our Community Plan objectives, outlines how Council plans to allocate its budget and what services and projects will be developed in the forthcoming financial year.

Figure 2-1: Asset management framework

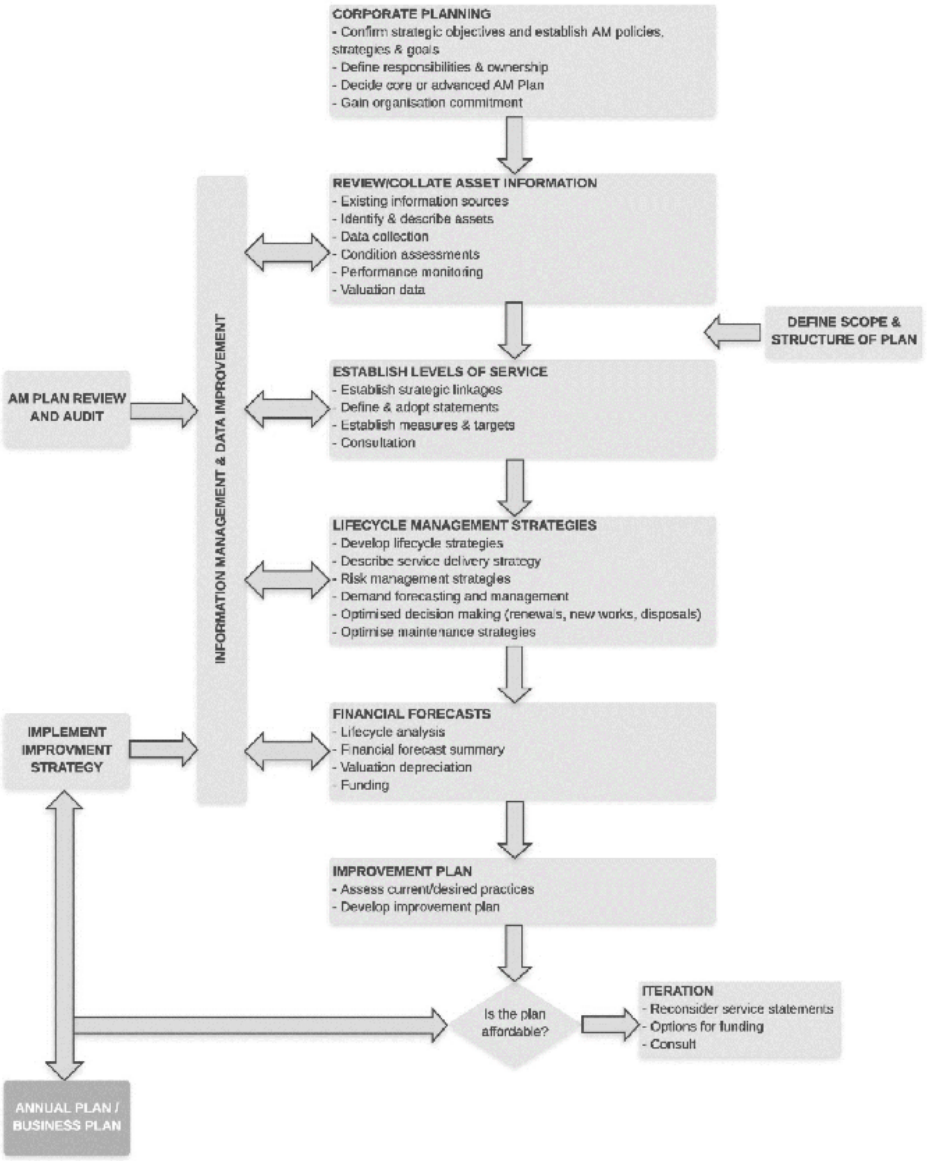


Figure 2-2: Road map for preparing an Asset Management Plan
Source: IPWEA, 2006, International Infrastructure Management Manual (IIMM) Fig 1.5.1, p 1.11

2.4 Core and Advanced Asset Management

The Plan is prepared as a core level maturity over the ten year planning period in line with the International Infrastructure Management Manual (IIMM). Core asset management is a top down approach with analysis applied at a network level. The Plan is prepared to meet legislative and organisational requirements for sustainable service delivery and long-term financial planning and reporting. The improvement program (Section 8) outlines and prioritises the steps required to an advanced asset management maturity.

3 Levels of Service

3.1 Customer Research and Expectation

Council receives continuous community feedback from a variety of sources including, but not limited to:

- Community enquiries and requests
- Community Plan consultation process
- Council Strategies
- Annual Business Plan and LTFP consultation process
- Project feedback
- Development of the Asset Management Plan
- Customer satisfaction surveys
- Service satisfaction surveys

This feedback is built into the development of the Plan and the levels of service it aims to deliver.

Through the development of the community levels of service (LoS) outlined in the Plan, Council will actively survey the community on its assets and associated services to ensure it is delivering on its levels of service. In 2020/21 Council will develop a benchmark for community levels of service to measure performance against.

3.2 Legislative Requirements

Council must meet many legislative requirements including Federal and State Government legislation and regulations as well as non-legislative requirements including Australian Standards and Council policies as contained in (Table 3-1).

Legislation	Requirement
Aboriginal Heritage Act 1988	An Act to provide for the protection and preservation of the Aboriginal heritage; to repeal the Aboriginal and Historic Relics Preservation Act 1965 and the Aboriginal Heritage Act 1979; and for other purposes.
AS / NZS 1428.2 Pedestrian & Cycling Paths	Have consideration of, adhere to and fulfil the requirements of the Standards.
Australian Accounting Standards	Standards applied in preparing financial statements, relating to the valuation, revaluation and depreciation of transport assets.
Development Act 1993	An Act to provide for planning and regulate development in the State; to regulate the use and management of land and buildings, and the design and construction of buildings; to make provision for the maintenance and conservation of land and buildings where appropriate; and for other purposes.
Disability Discrimination Act 1992	Provides protection for everyone in Australia against discrimination based on disability. It encourages everyone to be involved in implementing the Act and to share in the overall benefits to the community and the economy that flow from participation by the widest range of people.
Environmental Protection Act 1993	An Act to provide the protection of the environment; to establish the Environment Protection Authority and define its functions and powers; and for other purposes. Consideration of this act should be undertaken for the provision, development or management of transport assets.
Highways Act 1926	An Act to provide for the appointment of a Commissioner of Highways, and to make further and better provision for the construction and maintenance of roads and works and for other purposes.

Legislation	Requirement
Local Government Act 1999	Sets out role, purpose, responsibilities and powers of local governments including the preparation of long-term financial plan supported by asset management plans for sustainable service delivery.
Road Traffic Act 1961	An Act to consolidate and amend certain enactments relating to road traffic; and for other purposes.
Summary Offences Act 1953	This Act provides provisions for road closure to motor vehicles in accordance with section 59.
Work Health and Safety Act 2012	An Act to provide for the health, safety and welfare of persons at work; and for other purposes.

Table 3-1: Legislative requirements

3.3 Current Level of Service

Levels of service are a key business driver and influence all asset management decisions. It describes:

- The outputs Council intends to deliver to customers.
- The service attributes such as quality, functionality and capacity.
- The performance measures.

Performance measures are used to indicate how Council is doing in relation to delivering levels of service.

Council has defined two levels of service categories:

- Community Levels of Service – measures the service the community expects.
- Technical Levels of Service – measures the service the organisation provides.

Community levels of service measure the community's perception of Council's service performance, while the technical levels of service measure against technical indicators of performance.

Council's desired level of service is the technical level of service as a minimum. The level of service will be constantly monitored and reviewed with the introduction of the community survey to develop community level of service key performance indicators (KPIs. It's anticipated the next review will be in four years. Council's levels of service are captured in Table 3-3.

Community Levels of Service

Performance Measure	Level of Service Objective	Performance Measure	KPI	2020
Quality	Streets are well maintained	Community survey on the physical quality of the streets for driving, cycling, walking and public transport.	KPI based on 2020/21 survey (to be developed)	2020/21 survey to set baseline
Function	Asset to meet service needs – 'fit for purpose'	Community survey on the functionality of the streets for driving, cycling, walking and public transport.	KPI based on 2020/21 survey (to be developed)	2020/21 survey to set baseline

Technical Levels of Service

Performance Measure	Level of Service Objective	Performance Measure	KPI	2020
Condition	Physical state of transport assets in a serviceable condition	Average condition of transport assets	Equal or less than condition rating 3	2.1
		Bridges	Equal or less than condition rating 3	2.9
		Bus stops	Equal or less than condition rating 3	2.0
		Car Parks	Equal or less than condition rating 3	1.7
		Kerbing	Equal or less than condition rating 3	2.5
		Pathways	Equal or less than condition rating 3	1.5
		Roads	Equal or less than condition rating 3	1.9
		Street Lighting	Equal or less than condition rating 3	2.0
		Traffic Control	Equal or less than condition rating 3	2.4
Renewal	Sustainably managing the renewal of assets	Asset Renewal Ratio	90%-110%	91%
Capacity and Utilisation	Streets have the capacity to meet community need	Community use of public transport	Increase use of public transport	+0.2% 11.0% in 2016 (10.8% in 2011)
		Increase in active transport journeys to work	Increase people walking to work	-0.5% 4.4% walk in 2016 (4.9% in 2011)
			Increase people cycling to work	+0.9% 4.5% cycle in 2016 (3.6% in 2011)
Accessibility	Streets are accessible to all	Pathway and bus stop DDA compliance	Budgeting for DDA improvements through renewal program	Yes
Safety	Safety compliance standards are achieved	New traffic control will be compliant with relevant Australian Standards	Compliance 95%	95%

Table 3-2: Levels of service

4 Future Demand

The community's demand for services changes overtime. The reason for change can be varied, some of the common drivers are population, demographics, environment and technology. As service demand changes, Council's assets may also need to change to meet the changing demand. A summary of Council's forecast demands and how these are proposed to be managed is contained in Table 4.1.

Population and Demographics

Current position	Demand forecast	Demand impact	Demand management plan	Impact on assets
Population increase: - Total estimated population 39,208 (ABS 2019).	Planned to accommodate an additional 5000 people by 2040. Higher than average provision of medium density housing (38%), which is anticipated to further increase in the next 30 years.	Increased demand and use of transport assets. As streets have increased numbers, the demand will increase for traffic control, car parking and access for alternate forms of transport (cycling, public transport, walking).	Through Council's Community Plan Objective 1.5 – Our City is connected and accessible. Council has developed the Integrated Transport Strategy with the vision: 'Unley's transport system and people movement will be safe, accessible, sustainable and effective.' The strategy's focus areas include active transport, parking, public transport and shared transport, and traffic management and road safety. The strategy is actioned through the Walking and Cycling Plan and Local Area Traffic Management Studies.	Council's Walking and Cycling Plan and Local Area Traffic Management Study outcomes are delivered though the new capital budget. All transport asset renewals to be informed by modern standards and Council's integrated transport strategy. The addition of new transport assets and any increases in standards for renewals will have ongoing maintenance and operational costs.

Changing demographics: - 11,257 new residents have moved into Council within the last five years – 30% are new to Council. - Average age is 39 years old. - A quarter of the population are families (couples with children).	Growth in aging population. Growth in children aged between 0-9 years. Increase in families moving to Council. Increasing multiculturalism.	Diverse demographics may create demand for improved accessibility and service demands through transport infrastructure. This includes: - High standards of footpaths condition and DDA requirements. - Cycling infrastructure. - Bus stop infrastructure. - Signage including wayfinding. - Traffic control to control traffic movements and integrate vehicles, cyclists and pedestrians.	Along with the Integrated Transport Strategy, the Council has developed an Age Friendly Streetscape Guidelines through the Community Plan Objective 1.3 and the Active Aging strategy to consider in all redevelopments of streets and open spaces.	The Age Friendly Streetscape Guidelines includes design considerations for lighting, signage, footpaths and traffic management devices. The guidelines outline integration between transport assets and open space assets within the streets such as street furniture, seating and vegetation.

Climate change

Current position	Demand forecast	Demand impact	Demand management plan	Impact on assets
Council and the community are increasingly aware of its impact to the environment and Council's role in environmental sustainability.	Council is committed to pursuing, supporting and creating an environment that will sustain current and future generations. This goal is shared by the community and is a primary objective of most governments across the world.	Council is committed to using fewer of precious resources, reducing its carbon footprint and looking for smarter ways to achieve this objective. Greater environmental sustainability requirements placed on the construction industry.	Council's Environmental Sustainability Strategy 2016-2020 is the lead strategy implementing the Environmental Stewardship goal and objectives identified in the Community Plan 2033 and 4 Year Delivery Plan. The Strategy's themes guide direction and inform priorities for environmental projects: - Green Unley - Waterwise Unley - Resilient Unley - Resourceful Unley - Energywise Unley Council has aligned with Resilient East provides opportunities for the Eastern Region to collaborate to increase resilience to climate change.	Council's Environmental Sustainability Strategy provides principals for the delivery of new and renewal of assets, these include: - LED lighting introduced to local and collector streets. - Natural and renewable materials to be used in the construction of transport assets (recycled roads, composite materials for boardwalks and bridges, permeable surfaces) - Electric car changing station at Hayward Park promoting energy efficient lifestyles in the community. Integration of transport assets with natural and stormwater assets to deliver: - An Increase tree population in the streets to absorb carbon dioxide from the air. - Water Sensitive Urban Design (WSUD) within Council streets. See Stormwater Asset Management Plan. Higher costs are associated with environmentally sustainable construction methods.

Increase trend in severe weather events including heat, droughts, storms and storm surges.	Trend for a decrease in average annual rainfall and an increased awareness to minimise water usage. Hot and dry consecutive summer days on the rise. The number of days over 40°C in eastern Adelaide is projected to double by 2050, and the frequency and duration of heatwaves is projected to increase.	Assets not reaching their stated useful lives due to lack of consideration of climate change. Increasing management and maintenance demand associated with climate change adaptation.	Investigate the impact climate change on transport infrastructure with industry partners. Include climate change within the asset risk management plan. Council is developing a Climate and Energy Plan to be endorsed in 2020/21.	Condition is to be monitored for changes in asset performance within extreme climate conditions.
Technology				
Current position	**Demand forecast**	**Demand impact**	**Demand management plan**	**Impact on assets**
Global trend towards smart cities creating simplified services through smart technology.	Growing expectation to implement digital service improvements. Demand for increased technology provision/access.	Council must adapt to the changing way the community operates, thinks and plans.	Digital Unley outlines Council's Digital Vision through the strategic use of digital technologies to enhance the lifestyle of residents, better manage the environment, support the local economy and continuously improve the delivery of Council services.	Smart poles provide energy efficient LED lighting with the capability for Wi-Fi signal points, sensors and public address system. Interactive smart screens located around the City can deliver Council's messages in near real time. Smart infrastructure and data collection provide opportunities for business improvement. Maintenance and operating costs will be required for all smart systems.

Table 4-1: Future demands

5 Lifecycle Management

5.1 Background

Lifecycle management details how Council plans to manage and operate (from planning to disposing) its transport assets at the agreed level of service while optimising total cost of ownership at an appropriate level of risk.

This section outlines the transport asset data (condition, valuation, revaluation, useful life) and processes needed to effectively manage, renew and upgrade the infrastructure assets.

Significant time is spent on the decision to create or acquire a new asset, likewise financial costs of maintaining an asset from creation to disposal or replacement will need to be planned. New assets require initial expenditure; however, the required financial commitment for the asset's lifecycle costs can be up to five times the initial expenditure.

The cost of an asset lifecycle can be divided into four major stages:

- Creation/Acquisition (Design/Procurement, Construction Commissioning)
- Maintenance and Operations (Operate, Maintain, Monitor)
- Capital Renewal/Replacement (Requirements/Specifications, Upgrade/Modify, Replace)
- Decommission (Trigger, Decommission, Disposal)

These major stages are further detailed in this Lifecycle Management section.

Variability of these stages also exists within different transport categories, as function may influence the renewal versus replacement strategies.

The major stages can be further divided into specific processes as listed in Figure 5-1.

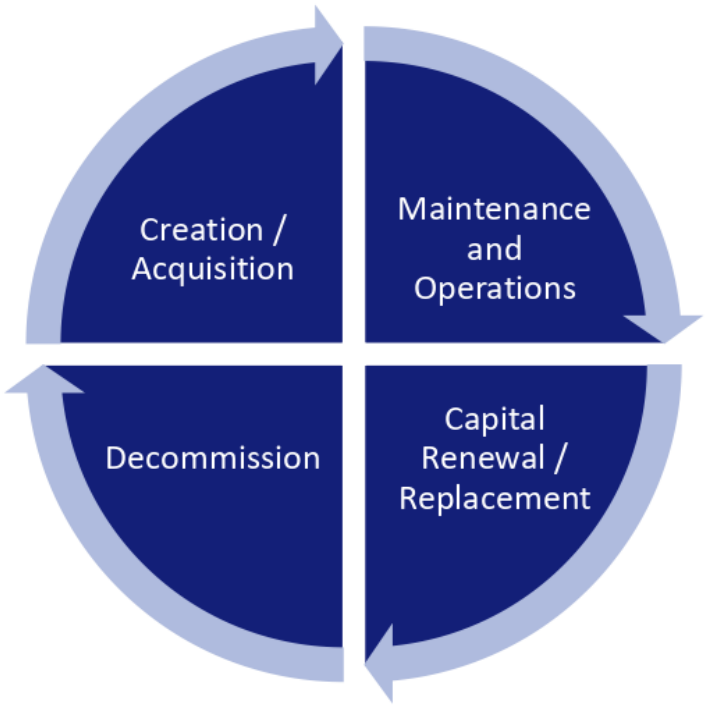
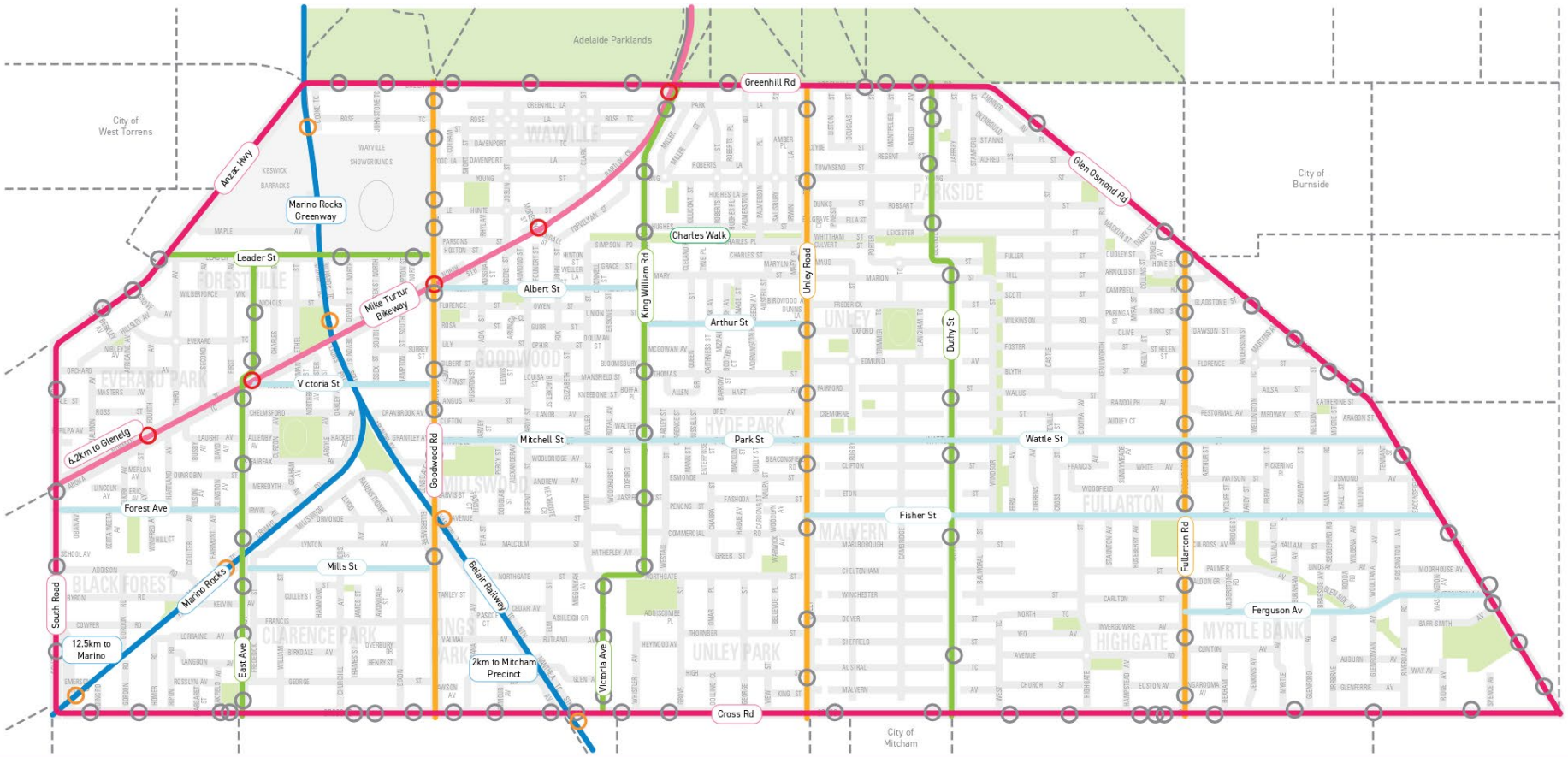


Figure 5-1: Asset lifecycle flowchart



ROAD HIERARCHY

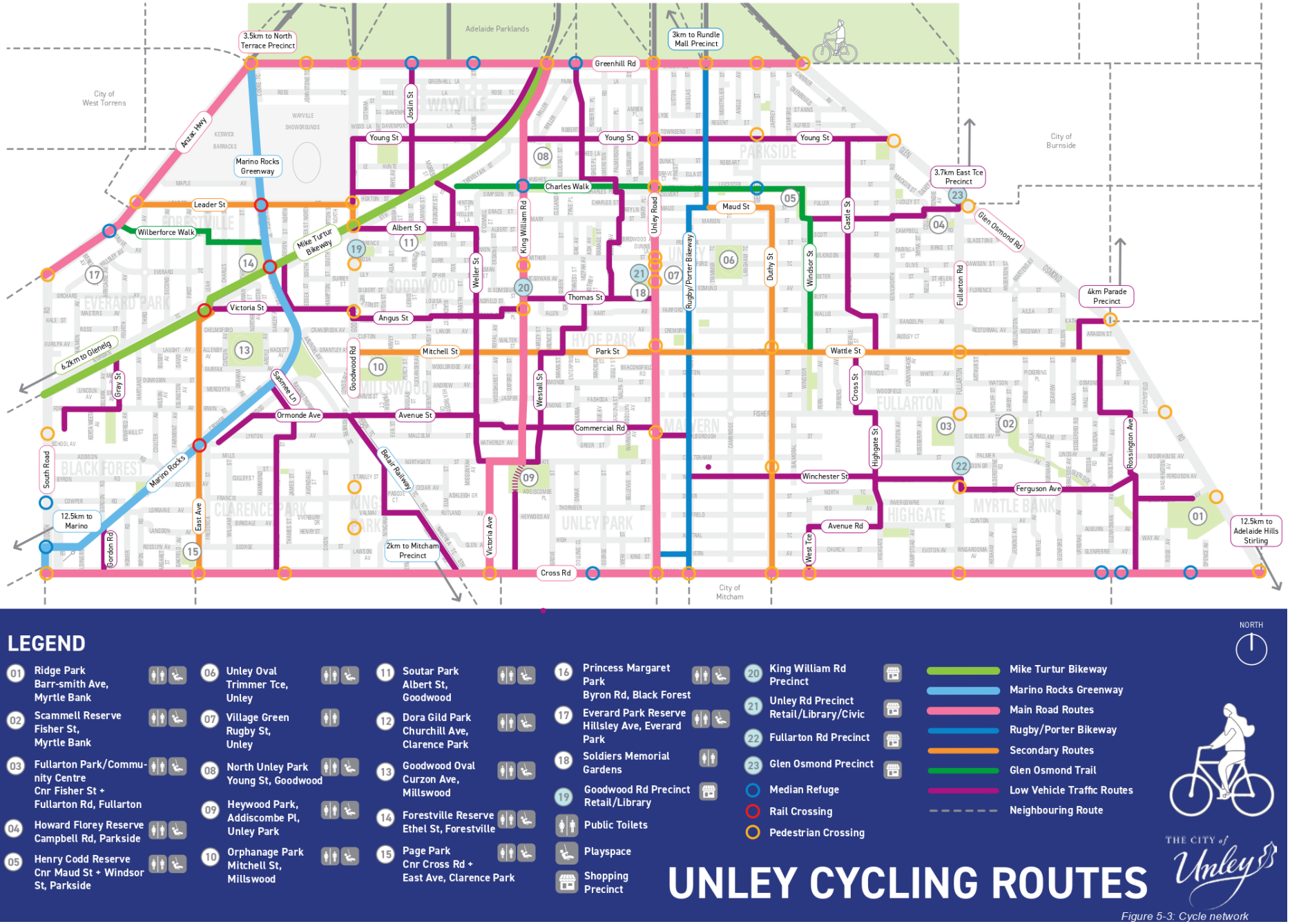
LEGEND

- Primary Arterial Road (State Government Road)
- Railway Line (State Government Rail)
- Secondary Arterial Road (State Government Road)
- Tram Line (State Government Tram)
- Major Collector Road
- Local Crossing Collector
- Local Road

- Train Station
- Tram Station
- Bus Stops

NORTH

Figure 5-2: Road network hierarchies



LEGEND

01 Ridge Park Barr-smith Ave, Myrtle Bank
02 Scammell Reserve Fisher St, Myrtle Bank
03 Fullarton Park/Community Centre Cnr Fisher St + Fullarton Rd, Fullarton
04 Howard Florey Reserve Campbell Rd, Parkside
05 Henry Codd Reserve Cnr Maud St + Windsor St, Parkside
06 Unley Oval Trimmer Tce, Unley
07 Village Green Rugby St, Unley
08 North Unley Park Young St, Goodwood
09 Heywood Park, Addiscombe Pl, Unley Park
10 Orphanage Park Mitchell St, Millswood
11 Soutar Park Albert St, Goodwood
12 Dora Gild Park Churchill Ave, Clarence Park
13 Goodwood Oval Curzon Ave, Millswood
14 Forestville Reserve Ethel St, Forestville
15 Page Park Cnr Cross Rd + East Ave, Clarence Park
16 Princess Margaret Park Byron Rd, Black Forest
17 Everard Park Reserve Hillsley Ave, Everard Park
18 Soldiers Memorial Gardens
19 Goodwood Rd Precinct Retail/Library
Public Toilets
Playspace
Shopping Precinct
20 King William Rd Precinct
21 Unley Rd Precinct Retail/Library/Civic
22 Fullarton Rd Precinct
23 Glen Osmond Precinct
Median Refuge
Rail Crossing
Pedestrian Crossing
Mike Turtur Bikeway
Marino Rocks Greenway
Main Road Routes
Rugby/Porter Bikeway
Secondary Routes
Glen Osmond Trail
Low Vehicle Traffic Routes
Neighbouring Route
NORTH

UNLEY CYCLING ROUTES

THE CITY of Unley

Figure 5-3: Cycle network

5.1.1 Physical Parameters

Figure 5-2 and 5-3 define Council's road and cycling networks, which inform strategic decision making and levels of service to optimise transport network supporting safe and efficient movement.

Council maintains a higher level of service within our main street precincts. These are active and economically prosperous public spaces which support community interaction and gathering. The upgraded King William Road precinct is an example of a higher level of service. The project was designed through surveys, research, discussions and feedback from the community to deliver social, environmental and economic benefits on top of the scheduled asset renewal. The project included renewal of the road pavement, stormwater and footpaths, planting of over 80 mature trees to create a cooler environment, installation of LED lighting and the introduction of over 70 flexible street spaces for on street parking, outdoor dining and other activations. The design features key safety improvements including two additional pedestrian crossings whilst respecting the precinct's distinctive village character and heritage. Council recognises these improved levels of service required higher operational and maintenance resourcing and a King William Road maintenance guideline was created with this project to inform future operational costs. Similarly design guidelines for our other main street precincts such as Unley Road are being created to inform their unique levels of service.

5.1.2 Asset Condition

The objective of a condition assessment is to provide sufficient information on asset condition to allow informed strategic asset planning and asset management decisions to be made. The condition rating is based on the collected asset audits undertaken through visual inspections.

Condition assessments are undertaken every three to five years, Table 5-1 outlines the frequency of these assessments by asset category:

Asset Category	Last condition assessment	Next condition assessment
Bridges	2017	2021
Bus Stops	2020	2024
Car Parks	2020	2024
Kerbing	2017	2022
Pathway	2020	2024
Road	2017	2022
Street Lighting	2020	2024
Traffic Control	2020	2024

Table 5-1 Condition assessment schedule

Following the next cycle of condition assessments, the assets will be assessed on a four year cycle.

Transport asset condition is measured using a 1-5 rating system summarised in Table 5-2, where condition rating 1 relates to assets in very good condition and rating 5 relates to assets in very poor condition.

Rating	Condition	Condition Description	Action
1	Very Good	A new or near new asset with no visible signs of deterioration.	No action required
2	Good	Early stages of minor deterioration causing no serviceability problems.	Minor defect only, no action required
3	Fair	Some obvious deterioration evident. Serviceability may be impaired slightly.	Maintenance required to return to accepted level of service
4	Poor	Severe deterioration evident, starting to limit the serviceability of the asset.	Consider renewal
5	Very Poor	Serviceability problems needing immediate rehabilitation. Possible risk to remain in service.	Replace/dispose

Table 5-2 Asset condition rating

Asset condition ratings are shown in the Table 5-3 by asset category. The average rating can be used as a benchmark for measuring against the desired level of service. A further breakdown of the asset condition can be seen in Table 5-4.

The transport asset categories have a level of service based on maintaining a condition rating of 3. When a transport asset falls below this default condition rating to a poor or very poor condition (a rating of 4 or 5), maintenance or renewal is programmed to ensure the asset condition is lifted to an excellent or good condition (a rating of 1 or 2). This cyclic process is repeated as transport assets deteriorate, to ensure an overall portfolio condition rating of 3 is sustained. Table 5-3 summarises the average condition rating for the transport asset categories. Table 5-4 summarises the condition percentage of each asset category.

Asset Category	Length / Quantity	Average Condition	Target
Bridges	38 bridges	2.9	≤ 3
Bus Stops	36 bus stops	2.0	≤ 3
Car Parks	28 car parks	1.6	≤ 3
Kerbing	307km	2.5	≤ 3
Pathway	329km	1.5	≤ 3
Road	172km	Surface: 2.2 Pavement: 2.3 Sub-base: 1.3	≤ 3
Street Lighting	72 lights	2.0	≤ 3
Traffic Control	953 devices	2.4	≤ 3

Table 5-3: Average condition

Asset Category	Condition 1	Condition 2	Condition 3	Condition 4	Condition 5
Bridges	8%	15%	50%	26%	2%
Bus Stops	22%	58%	17%	3%	0%
Car Parks	25%	75%	0%	0%	0%
Kerbing	17%	30%	44%	5%	4%
Pathway	57%	40%	2%	1%	0%
Road:					
Surface	23%	31%	29%	11%	6%
Pavement	4%	58%	32%	5%	1%
Sub-base	60%	33%	5%	1%	0%
Street Lighting	17%	72%	10%	1%	0%
Traffic Control	2%	63%	33%	3%	0%
TOTAL	**24%**	**48%**	**22%**	**6%**	**1%**

Table 5-4: Condition percentage

5.1.3 Useful Life

A summary of useful life is further defined into asset groups in Table 5-5:

Asset Category	Asset Group	Useful Life (years)
Bridges	Pedestrian Bridge	50-100
Bridges	Road Bridge	50-100
Bus Stops	Shelter	30
Car Parks	Surface	15-40
Car Parks	Pavement	80
Car Parks	Sub-base	100
Kerbing	Kerbing	35-100
Kerbing	Spoon Drain	80
Pathway	Boardwalk	10-20
Pathway	Footpath	15-50
Pathway	Reserve Path	10-50
Pathway	Shared Use Path	30-50
Road	Surface	25-35
Road	Pavement	20-100

Road	Sub-base	25-400
Street Lighting	Street Lighting	20-40
Traffic Control	Crossing	20-40
Traffic Control	Dead End	40
Traffic Control	One Way	40
Traffic Control	Protuberance	30-40
Traffic Control	Roundabout	40
Traffic Control	Slow Point	30-40
Traffic Control	Speed Hump	15-40
Traffic Control	Traffic Control	20-50
Traffic Control	Traffic Lights	40

Table 5-5: Asset useful life

The impact of climate change to infrastructure assets useful life is not yet quantified and may continue to change as increased temperature, heatwaves, higher storm and rainfall intensities will increasingly affect the useful life of infrastructure at a material level. These impacts have been identified in risk management and future demands.

5.1.4 Asset Valuation

Valuations are undertaken in alignment with Australian Accounting Standard 'AASB13 Fair Value', and 'AASB116 Property Plant and Equipment'. These valuations are required every three to five years, with an independent audit required every five years. Valuations are undertaken to satisfy the financial reporting requirements and to understand the cost to replace assets. The next valuations will be at the end of the financial year following the condition assessment identified in Table 5-1.

The valuation of Council's transport assets is summarised in the Table 5-6.

Asset Category	Replacement Value	Accumulated Depreciation	Written Down Value
Bridges	$9,617,655	$6,174,765	$3,442,890
Bus Stops	$390,762	$77,193	$313,569
Car Parks	$3,214,725	$743,971	$2,470,754
Kerbing	$28,047,504	$13,925,174	$14,122,330
Pathway	$57,447,644	$12,000,380	$45,447,264
Road	$161,325,020	$28,405,128	$132,919,892
Street Lighting	$3,085,184	$57,122	$3,028,062
Traffic Control	$5,700,088	$1,786,746	$3,913,341
TOTAL	**$268,828,582**	**$63,170,480**	**$205,658,103**

Table 5-6: Transport Assets Valuation

5.1.5 Historical Expenditure

The maintenance budget has increase annually due to CPI and the asset portfolio growing in size, complexity and age. The new capital budget in 2019/20 was significantly increased due to the delivery of the King William Road Upgrade, with renewal funding being diverted to King William Road for the renewal portion of the project. Historical expenditure information is contained in Figure 5-4.

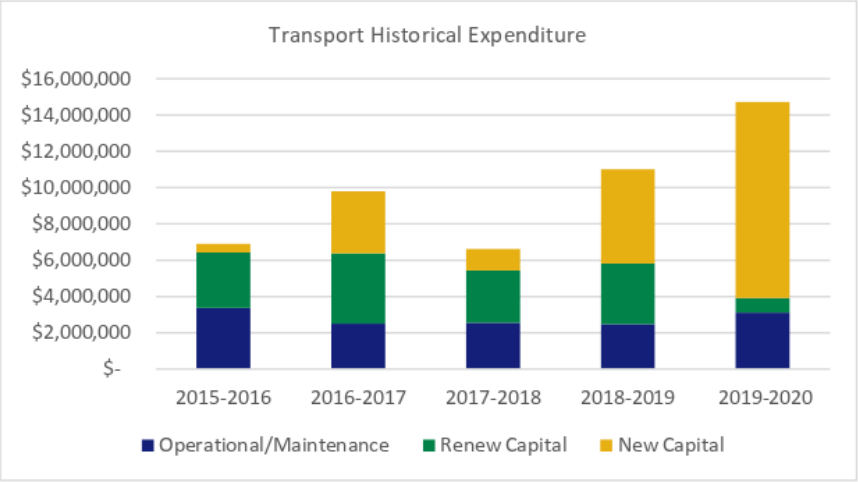


Figure 5-4: Historical expenditure

5.2 Operations and Maintenance Plan

5.2.1 Operations and Maintenance Strategies

Maintenance is recurrent expenditure, which is periodically or regularly required as part of the anticipated schedule of works to ensure the asset maintains its condition, achieves its useful life and provides the required level of service. The expenditure is anticipated in determining the asset's useful life.

As the years progress, the maintenance budget is projected to increase due to CPI and an asset portfolio growing in size, complexity and age. Figure 5-5 outlines the asset maintenance process.

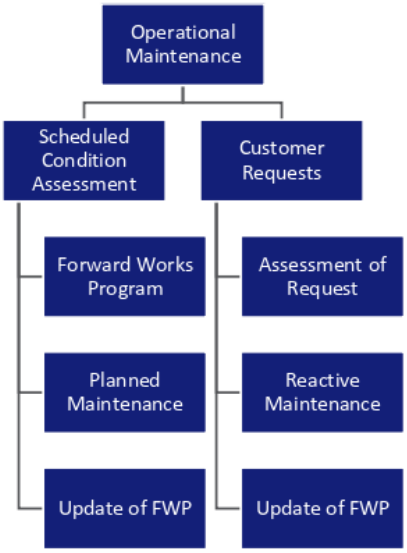


Figure 5-5: Asset maintenance process flowchart

In 2020/21 Council will conduct a review of all Depot operations in terms of levels of service to identify operational and financial efficiencies.

This review will be inclusive of all levels of service and processes to identify opportunities for efficiencies across all key depot operations including:

- Civil works
- Response and signage
- Open Space, Parks and Recreation
- Arboriculture

The outcomes of this service review may impact the operational and maintenance forecast with any changes made to be reflected in the LTFP following the conclusion of the review.

The civil works and maintenance team undertake maintenance and operational activities for bridges, bus stops, car parks, kerbing, pathways, roads and traffic control. The maintenance process flowchart (Figure 5-6) outlines how maintenance is programmed. The condition assessments inform the forward maintenance program and additional maintenance is identified though routine customer enquiries and staff inspections until the next cycle of condition assessments.

Bridges are identified as a critical asset and can undergo three levels of assessments to inform maintenance and operational programs along with capital programs:

- Level 1: Routine maintenance inspection, visual inspection to check the general serviceability of the structure, particularly for the safety of road users, and to identify any emerging problems.
  Level 2: Condition rating inspection to assess and rate the condition of a structure (as a basis for assessing the effectiveness of past maintenance treatments, identifying current maintenance needs, modelling and forecasting future changes in condition and estimating future budget requirements).
- Level 3: Special inspection, typically an engineering inspection to provide improved knowledge of the condition, load capacity, in-service performance or any other characteristic beyond the scope of other types of inspection.

The next bridge level 2 inspection will be completed in 2020/21 to inform the forward maintenance and capital programs. Between level 2 inspections, additional maintenance is identified though and customer enquiries and staff inspections.

Bus stop asset requirements are determined by the state government bus service routes. Council does not operate the bus services, however provides infrastructure including bus pads and bus shelters at suitable locations. Council has a target for 100% compliance of existing bus shelters and pads by 31 December 2022. A shelter is not a DDA requirement for bus stops.

Council currently has an external agreement for the operation and maintenance of 50 additional bus shelters to the Plan. The maintenance obligations include 24-hour response to personal safety hazards, 48-hour response to hazards preventing use and a weekly inspection and cleaning program. The current contract concludes in 2021, where a new agreement will be negotiated, or the assets will be handed over to council. The bus stop assets owned by council are maintained through the internal maintenance and operations teams.

Council has completed a LED changeover for all local street lighting and is progressing this rollout to all collector roads. A vast majority of lighting on the Council's road network are South Australia Power Network (SAPN) owned lighting with asset renewal and maintenance covered by tariffs. The remaining lights are either CLER lighting (customer lighting equipment rate) owned by council or individually metered lighting where it's not practical to connect to the SAPN lighting network. All lighting is renewed and maintained to SAPN and Australian Standards.

5.2.2 Summary of Future Costs

Figure 5-6 outlines the forecast of planned and unplanned operations and maintenance works over the next ten years. It has been projected with CPI increase over ten years. As Australia is facing economic impacts that will have unknown consequences at this time, the CPI assumptions will change on an annual basis through the LTFP.

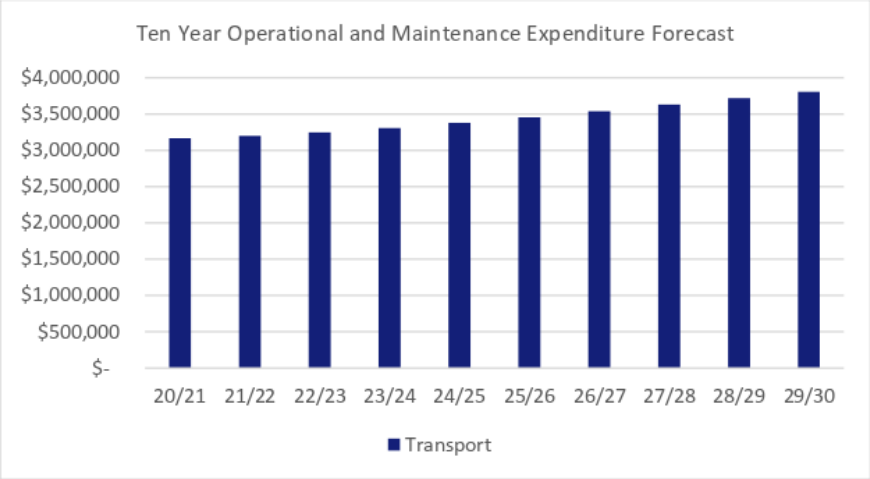


Figure 5-6: Ten Year operational and maintenance expenditure forecast

5.3 Renewal Plan (Capital)

Asset renewal is the replacement or refurbishment of an existing asset to return it to the modern standard equivalent performance and level of service. Renewal planning is necessary to ensure adequate funding is available, and assets are replaced at an optimum time to maintain the level of service.

5.3.1 Renewal Identification

Projected future renewal expenditures are forecast to increase over time as the asset portfolio grows in size, complexity and age.

Renewals are programmed across asset classes using the following methods:

1. Forward projection based on historic expenditure.
2. Broad estimates based on replacing assets at the end of their useful lives.
3. Predictive modelling of varying degrees of complexity.
4. Bottom-up approach with a high confidence in asset data. Projects are identified via asset monitoring, prioritised and allocated.

These methods increase in sophistication, which is reflected by the data confidence level.

It is recognised matching condition-based renewal fluctuations from year to year is not generally possible from both a budget and resourcing perspective. Distributing the renewal costs over the ten year timeframe is preferable from a budget and resourcing perspective.

5.3.2 Renewal Strategies

Renewal works identified in terms of renewal strategies may be deferred if the cost is beyond the current financial ability to fund it. This can occur when there are higher priority works on other asset groups. When renewal works are deferred, the impact of the deferral on the assets ability to still provide the required level of service will be assessed. Although the deferral of some renewal works may not impact significantly on the short-term operation of the assets, repeated deferral will create a liability in the longer term.

Renewals are primarily programmed based on condition, however early implementation of renewal may be undertaken for upgrades and replacements due to changes in standards, safety issues, changes in levels of service, funding opportunities or alignment with external projects, strategies and plans.

5.3.3 Summary of Future Costs

The projected future required renewal expenditure is summarised in Figure 5-7 and the transport category ten year renewal forecast is contained in Table 5-9. The four sets of data in the graphs include:

- The condition-based renewal bar graph displays the replacement value of assets reaching the end of their useful life.
- The LTFP line displays the current LTFP projection based on past Plans and asset data.
- The annual depreciation dashed line displays the annual cost of depreciation for the asset class. Annual depreciation is the standard yearly rate at which depreciation is charged to a fixed asset. This rate is consistent from year to year using the straight-line method and can provide a guide to the annual spend per year for an asset class.
- The projection line indicates the projected future renewal forecasted expenditure for the asset category based on the Plan.

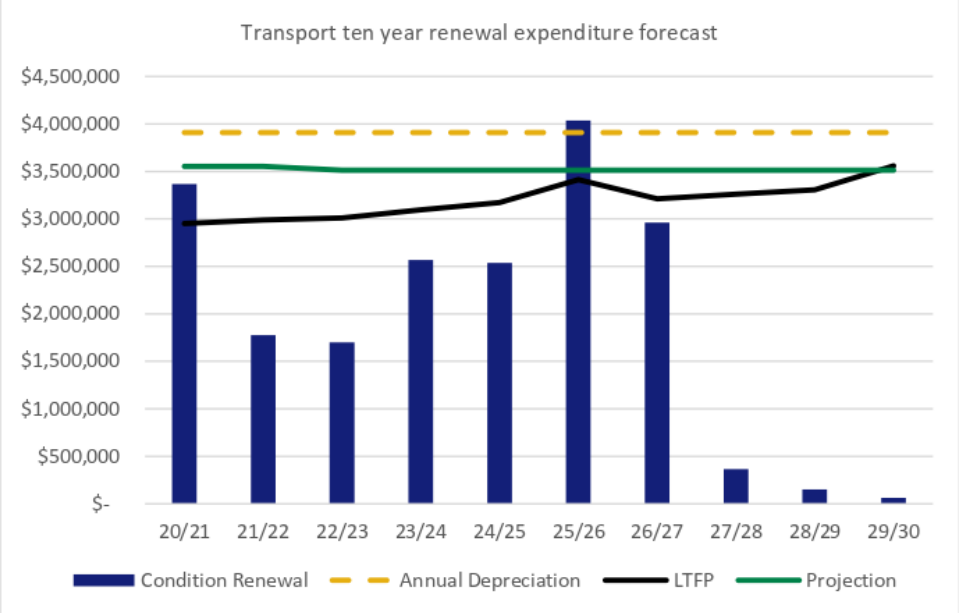


Figure 5-7: Transport ten year renewal expenditure forecast

The average annual expenditure for the next ten years:

Renewal projection	$3,520,875
LTFP	$3,196,400
Annual depreciation	$3,909,000

The condition-based renewal for road and kerbing assets contained in Figure 5-7 is based on condition modelling validated by visual assessments from Council. The projection for kerbing is based on the average annual condition-based funding and the projection for roads is based on the annual depreciation. These projections are contained in Table 5-9. Council will reassess the road and kerbing category funding following the next condition assessment in 2021/22.

A budget of $60,000 for bus stop infrastructure renewal has been committed to 2020/21 and 2021/22 for compliance with the Disability Discrimination Act (DDA). Legislation requires all bus stops to be DDA

compliant by December 2022. Following 2021/22 a $20,000 budget will be allocated for the continuing renewal of bus stops.

Council's street lighting and car park assets were condition assessed and revalued in 2019/20 with high confidence. The condition of these assets has been assessed as good with minimal condition based forecasted expenditure in the next ten years. An annual budget of $20,000 for renewals in each of these asset categories has been projected for early implementation of renewals based on changes in standards, safety issues, changes in levels of service, funding opportunities or alignment with external projects, strategies and plans.

Council's bridge asset projections are currently in line with the annual depreciation. In 2020/21 the bridge assets will undergo a condition audit to inform future renewal projections.

Council's pathway assets were condition assessed and revalued in 2019/20 with high confidence. The condition of pathways is good with minimal condition based forecasted expenditure in the next ten years. A total of $250,000 is projected for the renewal program to improve the walkability, safety and functionality of footpaths and kerb ramps for:

- Paving lift and relay to prevent trip hazards.
- Early renewal implementation for pathway assets projected to address functionality and non-compliance.
- DDA compliance of kerb ramps based on the 2019/20 condition assessment identifying 51% of kerb ramps not meeting DDA compliance.

Council's traffic control assets were condition assessed and revalued in 2019/20. The overall condition of traffic control is fair with minimal condition based forecasted expenditure in the next ten years. An annual budget of $50,000 for traffic control renewals is forecasted due to the criticality of these assets, physical damage attained on these assets prior to the end of their useful life and early implementation of renewals based on changes in standards, safety issues, changes in levels of service, funding opportunities or alignment with external projects, strategies and plans. This figure includes signage renewal ($20,000).

Council's data confidence level is discussed further in Section 7.4, which dictate assumptions built into the forward program.

Asset Category	Ten Year Renewal Projection	Ten Year LTFP	Asset Renewal Ratio (LTFP / Renewal Projection)	Average Annual Renewal Budget	Annual Depreciation 2020/21
Bridges	$1,090,000	$530,000	49%	$109,000	$109,000
Bus Stops	$280,000	$220,000	79%	$28,000	$85,000
Car Parks	$200,000	$270,000	135%	$20,000	$75,000
Kerbing	$11,758,750	$9,600,000	82%	$1,175,875	$270,000
Pathway	$2,500,000	$5,550,000	222%	$250,000	$1,160,000
Road	$18,680,000	$15,040,000	81%	$1,868,000	$1,868,000
Street Lighting	$200,000	$205,000	103%	$20,000	$190,000
Traffic Control	$500,000	$549,000	110%	$50,000	$152,000
TOTAL	**$35,208,750**	**$31,964,000**	**91%**	**$3,520,875**	**$3,909,000**

Table 5-9: Transport ten year renewal expenditure projection

The Plan identifies an average annual spend of $3,520,875 for transport asset renewal over the next ten years. The annual depreciation in 2020/21 for transport is $3,909,000, which indicates an increase will be required in the LTFP spending for transport as the asset portfolio ages.

Council's asset renewal ratio (planned renewal / the Plan's identified renewal) is at 91% over the next ten years. The ratio represents the level of capital expenditure on the renewal of assets (LTFP) relative to the expenditure projected in the Plan.

The current LTFP expenditure is under the budget projection and an increase of $3,245,000 to the budget over ten years will be required to maintain a ratio of 100%. Council's target is a 100% average over the next ten years.

5.4 Creation/Acquisition Plan (New Capital)

New capital relates to new assets or a significantly improved level of service that did not previously exist. They may result from various needs derived from demands such as population growth, environmental and technology change (as mentioned in Section 4).

5.4.1 Capital Investment Strategies

The need for new transport assets arises from a variety of sources including community requests, Council resolutions, proposals identified by Council strategies, grant opportunities or partnerships with external organisations. These projects are prioritised each year against all other asset categories and Council proposals.

5.4.2 Summary of Future Costs

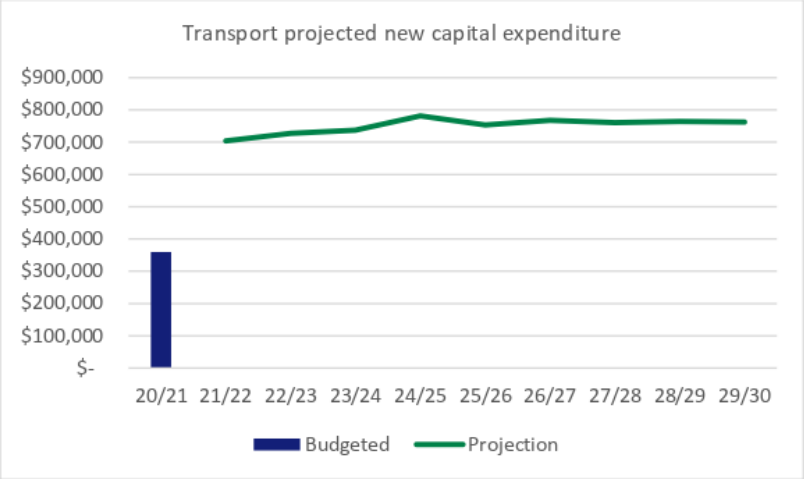


Figure 5-8: Projected new capital expenditure

Figure 5-8 outlines the projected future spend through new capital works for transport assets. Council reviews its new capital projects on an annual basis, allowing only one year (2020/21) of works to be shown as approved through the Annual Business Plan. The projection for the remainder of the ten year renewal is based upon Council's annual priorities for new capital expenditure across Council and the need for new capital across all asset classes based on upcoming projects.

As timing and costs for these projects are still to be confirmed the projection for transport assets has been distributed with an average of $751,000 per year expected to be budgeted across the nine years. These budgets are subject to individual year bids, Council strategies and funding opportunities and are expected to fluctuate year to year.

The upcoming new capital projects for the transport asset class in the next ten years include:

- Local Area Traffic Management (LATM) Implementation.
- Walking and Cycling Plan Implementation – This project proposes to implement priorities contained in Council's Walking and Cycling Plan as adopted in 2016.
- Unley Road Infrastructure and Public Realm Upgrade.
- Glen Osmond Road Infrastructure and Public Realm Upgrade.

5.5 Decommission Plan

Disposal includes any activity associated with disposal of a decommissioned asset including sale, demolition or relocation.

Decommission of assets can be triggered in the following situations:

- The end of useful life of existing assets.
- Safety factors inherent to the asset.
- Non-compliance of the asset and prompting a modern equivalent replacement.

Decommission of assets can involve the following courses of action:

- Design and replacement of the asset with a modern fit for purpose equivalent.
- Removal of the asset with the aim of repurposing the land in line with the long term strategy of Council.
- The sale of the asset (in part or in whole), in situations where Council is looking to consolidate the asset portfolio.

6 Risk Management

6.1 Critical Assets

Critical assets are those assets which have a high consequence of failure but not necessarily a high likelihood of failure. The identification of critical assets and failure modes means investigative activities, condition inspection programs, maintenance and capital expenditure plans can be effectively targeted.

Factors influencing criticality may be risk scored on safety, production/effort, cost and reputation.

Critical assets within the transport assets include road bridges, traffic control and street lighting, which all directly impact public safety. Other critical transport assets include the roads and pathways, making sure Council provide surfaces that are rideable for vehicles and cyclists and walkable for all users.

6.2 Risk Assessment

The process for managing Council's risks is consistent with the International Risk Management Standard ISO 31000:2018. It involves five key steps, additional steps to ensure feedback through a monitoring and review process and appropriate communication and consultation.

Council is committed to effective risk and opportunity management to:

- Improve its ability to deliver community priorities, service delivery and outcomes for Council.
- Maximise opportunities and minimise the impact and likelihood of risk.
- Protect its employees, assets, liabilities and its community by avoiding or mitigating losses.
- Provide greater certainty for its employees, residents, stakeholders and the community in which Council operates by understanding and managing its risks.

Council acknowledges risk management is an essential part of best practice asset management. The risk assessment process identifies credible risks, the likelihood of the risk event occurring, and the consequences should the event occur, develops a risk rating, evaluates the risk and develops a risk treatment plan for unacceptable risks.

An assessment of risks associated with transport assets using Council's risk matrix (Table 6-1), has identified, analysed and evaluated transport risks. Table 6-2 outlines Council's risk management for transport assets and is to be reviewed annually at a minimum outside of the Plan.

		Consequence				
		Catastrophic	Major	Moderate	Minor	Insignificant
Likelihood	Rare	Medium	Medium	Low	Low	Low
	Unlikely	High	Medium	Medium	Low	Low
	Possible	High	High	Medium	Medium	Low
	Likely	Extreme	High	High	Medium	Medium
	Almost Certain	Extreme	Extreme	High	High	Medium

Table 6-1: Risk matrix

Ref	Risk Description *(event or potential event focused and their impact upon objectives)*	**INHERENT RISK** *Level of risk with NO controls in place*			Controls *already* in place *(What existing controls are in place to prevent and/or manage the risk?)*	Are the Controls effective at managing the risk?	**RESIDUAL RISK** *Level of risk if existing controls are effective*			Is the Residual Risk *Rating* Tolerable?	Treatments/Additional Controls *(additional controls that can be implemented to further reduce the level of Risk)*	Treatment Owner & Timing *(**Who** is responsible for implementing the treatment and **When** it should be implemented/completed)*	**RISK LEVEL *after* Treatments** *If treatments implemented are effective*		
		Consequence	Likelihood	Risk Rating			Consequence	Likelihood	Risk Rating				Consequence	Likelihood	Risk Rating
1	Unsustainable management of assets due to poor quality data within asset management plan	Major	Likely	High	Periodic delivery of condition assessments and revaluations in line with industry standards.	Partially effective	Major	Possible	High	No	Continuous improvements in asset management maturity and activities through the improvement program.	Assets and Operations and Finance and Procurement See improvement program (Section 8.2)	Major	Unlikely	Medium
2	Council staff and/or members of the public injured as a result of poorly maintained infrastructure.	Catastrophic	Likely	Extreme	Annual maintenance budgets. Periodic delivery of condition assessments. Maintenance inspections.	Majority effective	Catastrophic	Rare	Medium	Yes	N/A	N/A	N/A	N/A	N/A
4	Council staff and/or members of the public injured as a result of non-compliance to standards.	Catastrophic	Likely	Extreme	Engaging suitably qualified consultants to undertake transport designs compliant to relevant Australian Standards.	Majority effective	Catastrophic	Rare	Medium	Yes	N/A	N/A	N/A	N/A	N/A
3	Council unable to fund required capital and maintenance due to economic downturn.	Moderate	Likely	High	Maintain strong sustainability ratio to avoid a backlog of capital works. Ability to fund capital program through borrowings. Ability to reduce levels of service.	Majority effective	Moderate	Rare	Low	Yes	N/A	N/A	N/A	N/A	N/A
4	Climate change not appropriately planned for with respect to asset management.	Moderate	Likely	High	High level targets are set through the objectives and targets within the Environmental Sustainability Strategy.	Partially effective	Moderate	Possible	Medium	No	Climate change addressed with respect to Councils impact on the environment as well as the environments impact to councils' assets. Include climate change as a considered factor throughout the Plan's, outlining the impact and associated demand on assets. Address assets within Climate and Energy Plan.	Assets and Operations Ongoing as asset management plans and council strategies are updated	Moderate	Rare	Low

Table 6-2: Transport risks

7 Financial Summary

This section contains the financial requirements resulting from all the information presented in Section 5 of the Plan. The financial projections will be refined as part of the ongoing revision of the Plan.

7.1 Valuation forecast

Asset values are projected to increase as additional assets are added through capital works. Additional assets will generally increase the operational and maintenance requirements in the longer term, as well as the need for renewal. Additional assets will be included for future depreciation forecasts.

7.2 Expenditure forecast

Figure 7-1 outlines the financial projections for maintenance and capital renewal and capital new expenditure for the transport asset class.

The total forecast expenditure for transport assets is relatively constant over the ten year period. The predictability of this budget allows Council to undertake capital programs as and when required in each year.

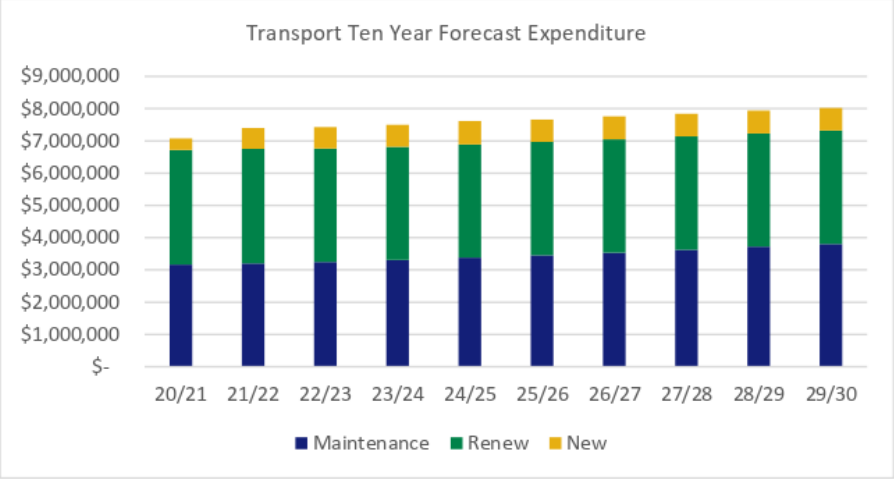


Figure 7-1 Transport ten year forecast expenditure

7.3 Asset Renewal Funding Ratio

This ratio indicates whether Council has the financial capacity to fund asset renewal at continued existing service levels. Council's target is a 100% average over the next ten years.

Asset Renewal Funding Ratio – Transport: 91%

This ratio is an important budget indicator over the next ten years. Council's LTFP has budgeted 91% of funds identified in this plan for the optimal renewal and replacement of transport assets. An increase of $3,245,000 to the renewal budget over ten years is required to maintain a ratio of 100%.

7.4 Funding Strategy

Key strategic milestones:

- The Plan will inform Council's future LTFPs.
- The next major condition assessment and revaluation will as outlined in Table 5-1 and will inform future renewal strategies.

- The Depot operations service review will be undertaken in 2020/21, which will inform future maintenance and operating budgets.

Repayment of existing loans has been extracted from the current loan schedule. The LTFP assumption indicates no additional funding through borrowings is required to meet new capital commitments in the future. The Local Government Finance Authority (LGFA) Cash Advance Debenture (CAD) Facility will continue to be used to balance funding requirements in terms of borrowing.

The projected expenditure is to be funded from Council's operating, maintenance and capital budgets.

7.5 Key Assumptions

The assumptions and data used in presenting this forecast information were:

- Replacement costs derived from the fixed asset register in Technology One asset database.
- Condition data derived from:
  - Bridges Condition Assessment 2017
  - Bus Stop Condition Assessment 2020
  - Car Park Condition Assessment 2020
  - Kerbing Condition Assessment 2017
  - Pathway Condition Assessment 2020
  - Road Condition Assessment 2017
  - Street Lighting Condition Assessment 2020
  - Traffic Control Condition Assessment 2020
- Key financial assumptions derived from LTFP 2020/21.
- Operation funding will be made without reduction.
- Capital funding will be made without reduction.
- Appropriate resources will be made available to manage the Plan.
- Council income will remain consistent with LTFP.
- There will be no natural disasters.

7.6 Forecast Reliability and Confidence

The expenditure projections are based on the best available data. Data confidence is critical for an accurate expenditure projection. As new data becomes available, the forward plans will be updated. There are five levels that measures data confidence:

Confidence Level	Description
A - Highly Reliable	Data based on sound records, procedures, investigations and analysis, documented properly and agreed as the best method of assessment. Data set is complete and estimated to be accurate +-2%.
B – Reliable	Data based on sound records, procedures, investigations and analysis, documented properly but has minor shortcomings, e.g. some of the data is old, some documentation is missing and /or reliance is placed on unconfirmed reports or some extrapolation. Dataset is complete and estimated to be accurate +-10%.
C - Uncertain	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 - Very Uncertain	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 – Unknown	None or very little data held.

Table 7-1: Data confidence level

Council's transport asset data confidence is displayed below in Table 7-2. Major categories including bridges, traffic control, road and kerbing have a C rating and will be progressed to B through the condition assessment program outlined in the Plan.

Asset Category	Confidence Level
Bridges	C - Uncertain
Bus Stops	B – Reliable
Car Parks	B – Reliable
Kerbing	C - Uncertain
Pathway	B – Reliable
Road	C - Uncertain
Street Lighting	B – Reliable
Traffic Control	B – Reliable
Overall	**C - Uncertain**

Table 7-2: Transport data confidence level

8 Improvement and Monitoring

8.1 Status of Asset Management Practices

Council is committed to improve the data quality and confidence by implementing actions within the improvement program in Table 8-1.

8.1.1 Accounting and Financial Systems

Council uses Technology One as its financial management and accounting system. Technology One has the capability to report the full lifecycle of assets providing full transparency from acquisition to disposal of assets.

8.1.2 Asset Management System

Council uses Technology One – Enterprise Asset Management software as its Asset Management System. Initial set up of the asset management system is crucial to ensure integration between operating and financial functions. Council's initial set up of the asset management system was incomplete and is being addressed through the improvement program, periodically updating the asset registers during revaluations.

A future improvement is to integrate the financial system and asset management system following each asset categories condition assessment and revaluation.

Council's geographic information system (GIS) data is stored within a specialised GIS software suite. An improvement will be to integrate the GIS data with the asset register to provide live spatial data.

8.2 Improvement Programs

The improvement program derived from the Plan is shown in Table 8-1.

Task No.	Task	Responsible officer	Resource Required	Due Date
1	Continual review and update of the asset register.	Asset Management Officer	Internal	Revaluation Varies (see Table 5-1)
2	Condition assessment to be completed	Senior Assets and Engineering Lead	Internal / External	Varies (see Table 5-1)
3	Integration of transport assets with Asset Management System, the finance module in TechOne and GIS.	Asset Management Officer Manager Business Systems Solutions	Internal	Ongoing staged approach
4	Undertake customer research on transport assets. This will provide data for future planning of transport assets ensuring the required level of services are met.	Senior Assets and Engineering Lead	Internal	2020/21
5	Review classification of bridge and culvert asset definitions.	Asset Management Officer	Internal	2020/21
6	Review of the planned civil works maintenance programs through depot operations service review.	Manager Assets and Operations	Internal	2020/21

Table 8-1: Improvement program

8.3 Monitoring and Review Procedure

Council will schedule the Plan review into its strategic and annual planning and budget processes. The Plan has a life of four years.

8.4 Performance Measures

Council will track the performance of the Plan through the following performance measures:

1. Level of Service Key Performance Indicators (KPIs).
2. Delivery of improvement program.
3. Improved data confidence.
4. Review of the Plan every four years.