



Asset Management Plan

Civil Infrastructure

2025–2034



City of
Norwood
Payneham
& St Peters

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Executive summary

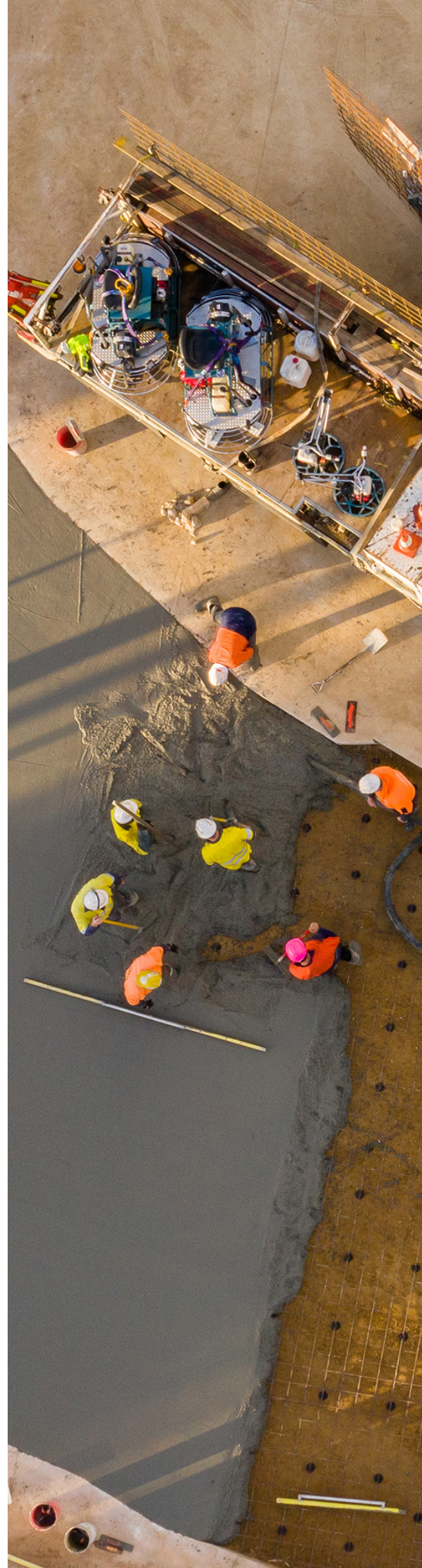
Asset Management Plans

The City of Norwood Payneham & St Peters' Asset Management Plans (AMPs), provide a comprehensive overview of the City's assets, including replacement value and condition of the assets, performance of the assets, service levels, and associated financial considerations. The primary aim of the AMPs is to ensure that the Council can deliver essential services, maintain assets, and achieve its strategic objective in a financially sustainable, appropriate and prudent manner over the short, medium, and long term.

The AMPs outline the management, inspection and replacement requirements associated with the prudent curation of assets, including projected annual expenditure over a ten-year planning horizon. The AMPs also set out the planned activities to align with the Council's strategic objectives, therefore ensuring continued services to the community.

Requirement under the Local Government Act 1999

Section 122 of the *Local Government Act 1999*, requires the Council to develop and adopt AMPs to guide the management and development of its infrastructure and major assets over a ten year planning horizon. This ensures that strategic asset management aligns with the Council's overarching strategic management plan (*CityPlan 2030: Shaping Our Future*) and the *Long-term Financial Plan* (LTFP), particularly in respect to asset renewal.





The Council's AMPs are set out in four separate documents, namely:

[Civil Infrastructure](#)

[Stormwater Management](#)

[Buildings](#)

[Recreation and Open Space](#)

Asset Description

The City's Civil Infrastructure assets comprise of the following components:

- road pavement and surface;
- kerbing;
- footpaths;
- traffic control devices;
- off-road carparks; and
- shared paths.

The Civil Infrastructure assets have a significant total renewal value currently estimated at \$313,047,727.

Levels of Service

The Council's present funding levels are sufficient to continue to provide existing services at current service levels.

The main impacts of the Council's planned budget expenditure are:

- assets will deteriorate over time and be renewed only at the end of life;
- operational maintenance of assets will be undertaken to ensure functionality is maintained and asset life maximised; and
- user expectations likely to be met in regards to maintained assets appearance.

Future Demand

The main demands for new services are generated by:

- the impacts of climate change;
- increased citizen expectations;
- increased rate of loadings on roads; and
- increased population density resultant from urban development.

These demands will be approached using a combination of managing existing assets, upgrading existing assets and providing new assets to meet demand. Demand management practices can also include a combination of non-asset solutions, insuring against risks and managing failures, including:

- monitoring the condition of assets;
- undertaking of citizen expectation surveys;
- assessment of climate risks; and
- planning for demographic changes over time.

Life-Cycle Management Plan

What does it Cost?

The forecast life-cycle costs necessary to provide the services covered by this AMP, includes operational maintenance, renewal, acquisition, and disposal of assets. Although the AMP may be prepared for a range of time periods, it typically informs a long-term financial planning period of ten years. Therefore, a summary output from the AMP is the forecast of total outlays over a ten year period which in respect to the Civil Infrastructure assets is estimated at \$135,586,913 or \$13,558,691 on average per year.

Asset Management Practices

The Council's systems that are used to manage assets include:

- the Council's asset management system;
- the Council's financial system; and
- the Council's strategic and planning documents.

Monitoring and Improvement Program

The next steps resulting from this AMP, in respect to improving asset management practices are to:

- formalise ongoing monitoring and reporting of improvement plan tasks and performance measures;
- review condition assessment data collected in 2023–2024;
- develop further the risk assessment and management planning;
- improve GIS data storage system integration with asset database;
- review resilience of critical infrastructure; and
- integrate climate risk assessment into asset management planning.

Financial Summary

What the Council will do

Estimated available funding for the ten year period (2024–2025 to 2033–2034) is \$135,843,771 (or \$13,584,377 on average per year) as set out in the Council's Long-term Financial Plan (LTFP). This is approximately 100% of the cost to sustain the current level of service at the lowest life-cycle cost.

In practice, only what is funded in the LTFP can be provided. The informed decision-making depends on the AMP emphasising the consequences of planned budgets on the service levels which are provided and the associated risks.

The anticipated planned budget for the City's Civil Infrastructure assets, results in a nil shortfall for the forecast life-cycle costs required to provide services in the AMP compared with the planned budget currently included in the LTFP. This is shown in Figure 1 below.

The Council plans to undertake the following in respect to the City's Civil Infrastructure assets:

- provision of operational maintenance and renewal works for existing assets to meet current service levels; and
- undertaking of major acquisition works within the ten year planning horizon, which consists of various road reconstruction projects, bikeway projects, and streetscape upgrade projects as set out in the Council's LTFP.

What the Council cannot do

Works and services that cannot be provided under present funding levels are:

- undertaking of major acquisition works which are not set out in Council's LTFP; and
- provision of operational maintenance and renewal works above the current service levels.

Managing the Risks

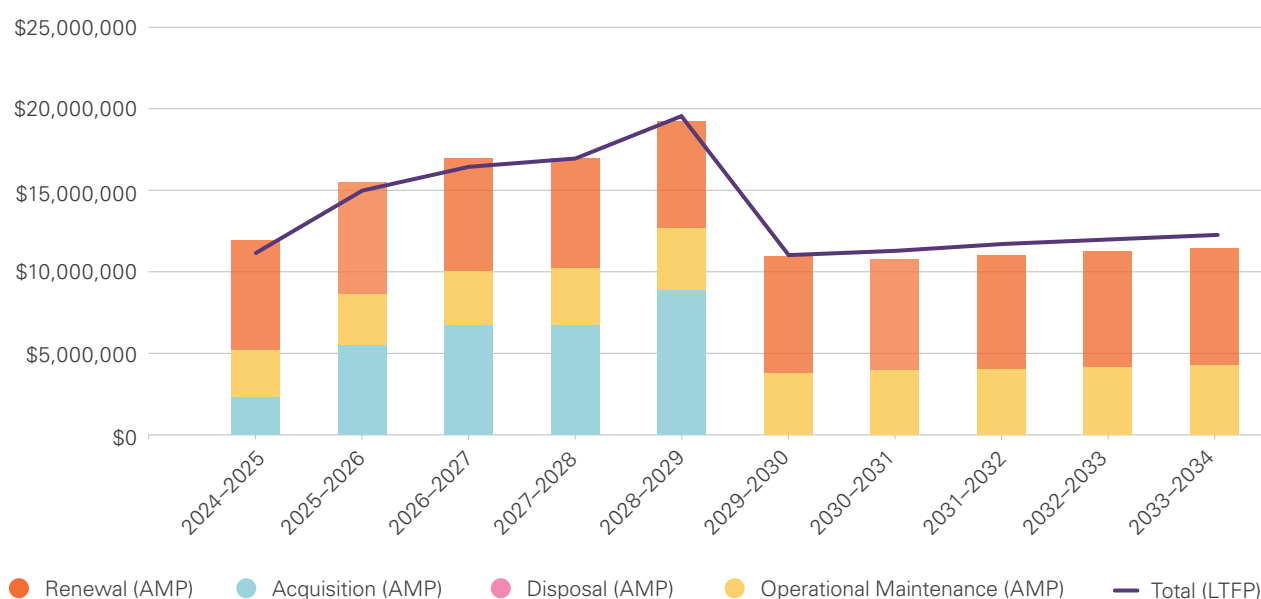
If there is forecast work (operational maintenance, renewal, acquisition or disposal) that cannot be undertaken due to insufficient financial resources, then this could result in service consequences for users. These include:

- deterioration of asset condition quicker than planned;
- increase in hazards; and
- changes to asset performance requirements due to external factors.

The Council will endeavour to manage these risks within the available funding allocation by:

- finding efficiencies within the current operational maintenance program; and
- prioritisation of renewal projects.

Figure 1: Forecast Life-Cycle Costs and Planned Budgets



Introduction

Background

This AMP sets out the requirements for the sustainable delivery of services through the management of assets, compliance with regulatory requirements and required funding to provide the appropriate levels of service over the long-term planning period.

The Council has a strong focus on asset management, with continuous improvements during the revision of the AMP. Integration of acquisition and renewal planning is undergoing continuous improvement to ensure the minimum required investment provides the greatest value outcomes.

This AMP is to be read in conjunction with the following key planning documents:

CityPlan 2030: Shaping Our Future

Long-term Financial Plan

Annual Business Plan

City-Wide Cycling Plan

Kent Town Urban Design Framework and Public Realm Manual

River Torrens Linear Park Strategic Integrated Asset Management Plan

Private Laneways Policy and Procedure

Asset Management Policy

City of Norwood Payneham & St Peters Community Survey Outcomes





Road and Footpath Reconstruction

Strategic Direction

The Council's strategic direction is guided by four Outcomes or Pillars which contribute to the realisation of the Council's Vision and are based on the four Pillars of the Quadruple Bottom Line (QBL) framework. The four Outcomes are **Social Equity**, **Cultural Vitality**, **Economic Prosperity** and **Environmental Sustainability**.

For our City, adding the fourth Pillar of culture to the traditional Triple Bottom Line (TBL) approach to decision making of environmental, social and economic sustainability, highlights the importance of protecting and enhancing our City's unique character and strong 'sense of place'.

The Objectives set out in *CityPlan 2030: Shaping Our Future*, which outline the priorities for what needs to happen to achieve the four Outcomes, reflect the community's aspirations, the policy commitments which have been made by the Council and the likely trends and issues which the City will face in achieving the objectives set out in *CityPlan 2030*.

CityPlan 2030 plays a pivotal role in guiding the City of Norwood Payneham & St Peters towards the community's vision for the future. Achieving the objectives and strategies contained in *CityPlan 2030*, requires transparent and accountable governance structures and processes which are both flexible and responsive to the future opportunities and challenges that will present themselves.

It will also require a positive 'can-do attitude' and approach to ensure that the Council realises the future which we want for ourselves and the next generations, rather than just 'letting things happen'.

We exist to improve the Well-being of our citizens and our community, through:

Social Equity

Cultural Vitality

Economic Prosperity

Environmental Sustainability



Strategic Planning Framework

In working towards our vision, all of the programs, projects and services which the Council delivers are structured into four key outcome areas, referred to as the 'Four Pillars' of Community Well-being.



Key Stakeholders in the Asset Management Plan

Key Stakeholder Roles

Key stakeholders who have been involved in the preparation and implementation of this AMP are shown in Table 1 below.

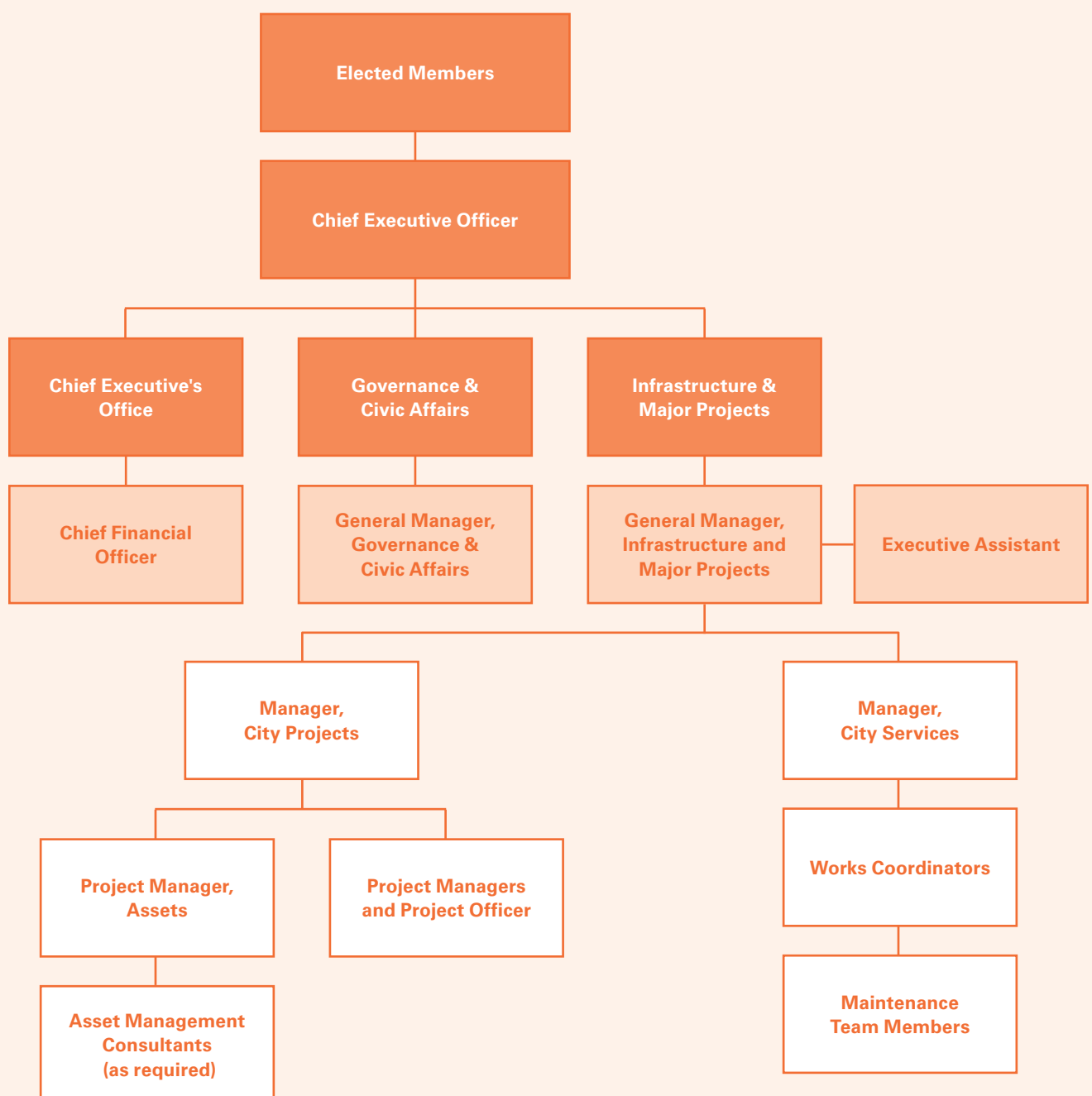
Table 1: Key Stakeholders and their Roles

Key Stakeholder	Role in AMP
Elected Members	Representing the needs of the community and stakeholders, decide on the allocation of resources to meet planning objectives in providing services while managing risks and ensure services are sustainable.
Chief Executive Officer	Endorse the development of the AMP and provide resources (as funded by the Council) required to complete the task.
General Manager, Infrastructure & Major Projects Manager, City Projects	Set high level priorities for asset management development and support the implementation of actions resulting from this AMP.
Chief Financial Officer, Chief Executive's Office General Manager, Governance & Civic Affairs	Develop supporting policies in respect to matters such as capitalisation and depreciation. Provide GIS applications and support.
Asset Management Consultants	Prepare asset sustainability and financial reports incorporating asset depreciation in compliance with current accounting standards. Host and consolidate asset register including updating valuations, capitalisation and disposals. Provide support for development of the AMP and the implementation of effective asset management principles. Independently endorse asset revaluation methodology.
Project Manager, Assets	Responsible for the overall development of the AMP. Coordinate input of other stakeholders into the AMP. Manage the periodic collection of asset condition data.
Project Managers and Project Officer	Assist the Project Manager, Assets in the development of the AMP.
Manager, City Services Works Coordinators Maintenance Team Members	Provide local knowledge level of detail of the assets. Describe the maintenance standards deployed and the ability to meet the technical and citizen levels of service.
External Parties	Citizens; Local Business Owners and Operators; Utilities; Developers; and Federal and State Governments.

Key Stakeholder Structure

The Council's organisational structure for the management and service delivery associated with infrastructure assets is detailed in Figure 2 below.

Figure 2: Key Stakeholder Structure





Concrete Work over Third Creek Culvert

Goals and Objectives of Asset Ownership

The Council's objective in respect to the management of infrastructure assets, is to meet the defined level of service (as amended from time to time) in the most cost-effective manner for present and future citizens. The key elements of infrastructure asset management are:

- providing a defined level of service and monitoring performance;
- managing the impact of growth through demand management and infrastructure investment;
- taking a life-cycle approach to developing cost-effective management strategies for the long-term that meet the defined level of service;
- identifying, assessing and appropriately controlling risks; and
- linking to the LTFP which identifies required, affordable forecast costs and how it will be allocated.

Key elements of the planning framework are:

- **levels of service** – specifies the services and levels of service to be provided;
- **future demand** – how this will impact on future service delivery and how this is to be met;
- **life-cycle management** – how to manage its existing and future assets to provide defined levels of service;
- **financial summary** – what funds are required to provide the defined services;
- **asset management practices** – how the Council manages the provision of the services;
- **monitoring** – how the AMP will be monitored to ensure objectives are met; and
- **asset management improvement plan** – how the Council increases asset management maturity.

Other references to the benefits, fundamentals principles and objectives of asset management are:

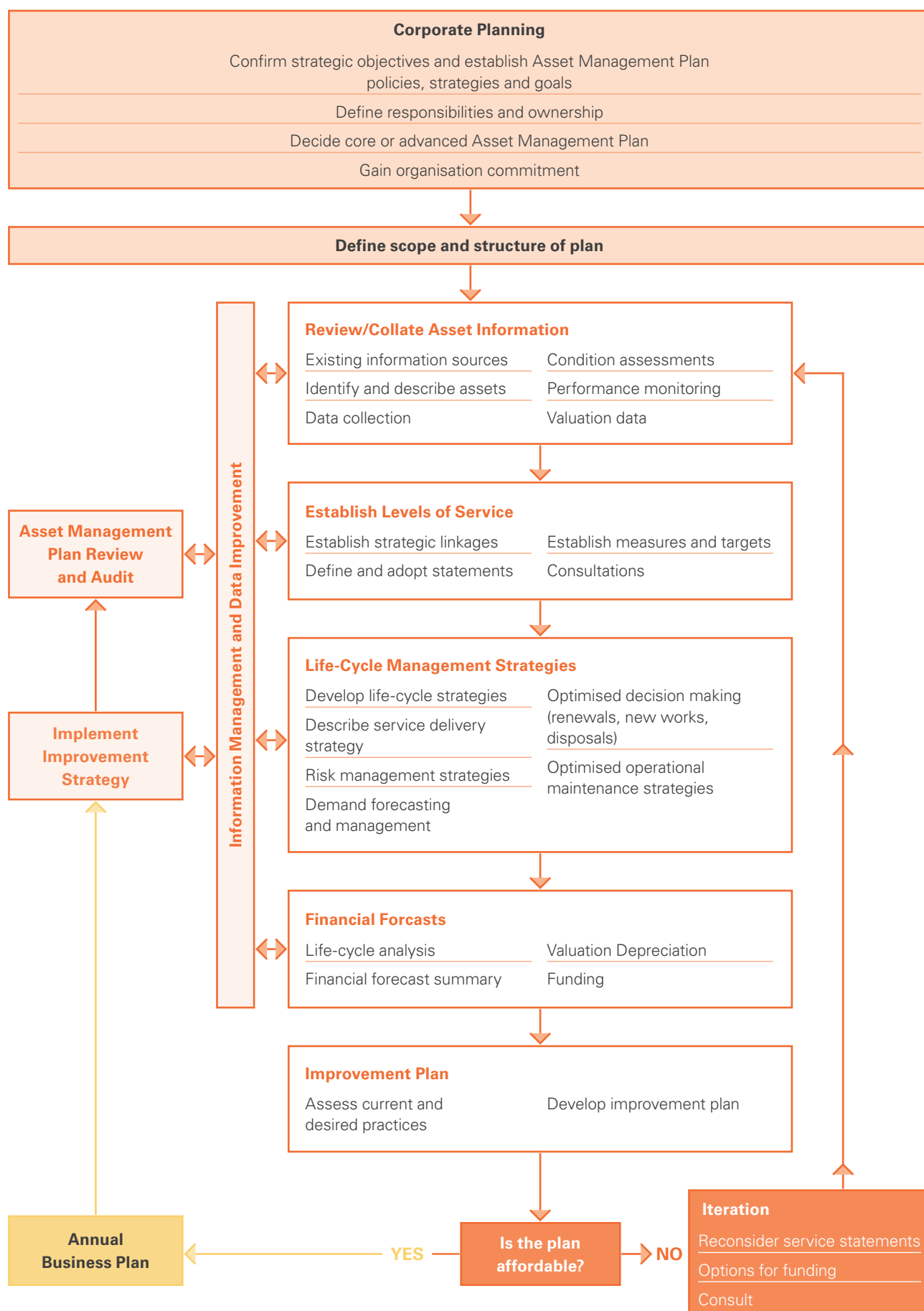
- International Infrastructure Management Manual 2015 ¹; and
- International Organisation for Standardisation (ISO) 55000 ².

A road map used for preparing an AMP is shown in Figure 3 (page 13).

¹ Based on IPWEA 2015 IIMM, Sec 2.1.3

² ISO 55000 Overview, principles and terminology

Figure 3: Road Map for Preparing an Asset Management Plan



Source: IPWEA, 2006, IIMM, Fig 1.5.1

Levels of Service

Research and Community Expectations

The Council conducts Biennial Community Surveys to establish how the Council is performing in a number of key indicators. Community Surveys have been conducted in 2009, 2011, 2013, 2017, 2019 and 2021, with the most recent survey undertaken in 2023.

The survey uses a 5-point scale to determine satisfaction levels, with 1 being Very Dissatisfied and 5 being Very Satisfied. The last version of the AMP included data up to 2019. Table 2 below summarises the results from the Council’s Community Surveys.

Table 2: Resident Satisfaction Survey Levels

Performance Measure	Satisfaction Level						
	2023	2021	2019	2017	2013	2011	2009
Overall Infrastructure Satisfaction	3.8	3.9	3.8	3.8	4.0	4.0	3.6
Providing and Maintaining Roads	3.7	3.7	3.6	3.6	3.8	3.8	3.6
The Provision and Maintenance of Cycling Pathways	3.6	3.8	3.6	3.6	3.7	3.7	3.3
Providing and Maintaining Footpaths	3.1	3.4	3.2	3.2	3.4	3.3	3.1
The Presentation and Cleanliness of the Council Area	4.0	4.2	4.1	4.1	4.2	4.1	4.0

Strategic and Corporate Goals

This AMP has been prepared in accordance with the Council’s Vision, Mission, Goals and Objectives as set out in its Strategic Management Plan, *CityPlan 2030: Shaping our Future*.

Council’s strategic objectives, and how these are addressed in this AMP, are summarised in Table 3 (page 15).

The Vision contained in *CityPlan 2030* is:

‘A City which values its heritage, cultural diversity, sense of place and natural environment.

A progressive City which is prosperous, sustainable and socially cohesive, with a strong community spirit.’

Table 3: Objectives and how these are addressed in this Asset Management Plan

A people-friendly, integrated and sustainable transport network

CityPlan 2030 Outcome

Social Equity: An inclusive, connected, accessible and friendly community.

How goals and objectives are addressed in the AMP

Civil Infrastructure assets exist to support and provide services to the community.

Planning the long-term management of these assets is essential to the sustainability of these services.

Generous tree canopy, and sustainable streets and open spaces

CityPlan 2030 Outcome

Environmental Sustainability: A leader in environmental sustainability.

How goals and objectives are addressed in the AMP

Development of service levels provided by the infrastructure and the balancing of this with the available funding and acceptable risk.

Mitigating and adapting to the impacts of climate change

CityPlan 2030 Outcome

Environmental Sustainability: A leader in environmental sustainability.

How goals and objectives are addressed in the AMP

Identification of climate change impacts and transition risks to enable appropriate resources to be identified and provided.

Greater planning and integration of urban greening and cooling with asset renewal programs.

Legislative Requirements

There are a number of legislative requirements relating to the management of assets. Legislative requirements that impact upon the delivery of the Civil Infrastructure assets are set out in Table 4 below.

Table 4: Legislative Requirements

Legislation	Requirement
Aboriginal Heritage Act 1988	An act to provide for the protection and preservation of the Aboriginal heritage, and for other purposes.
Australian Accounting Standards	Standards applied in preparing financial statements, relating to the valuation, revaluation and depreciation of transport assets.
Australian Standards	Council’s infrastructure projects are undertaken in accordance with Australian Standards, or in the absence of, best practice techniques.
Building Code of Australia	Sets out minimum standards for construction of new assets. Also provides minimum standards for new properties.
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	Provides the regulatory framework to protect South Australia's environment, including land, air and water.
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.
Local Government Act 1999	Sets out role, purpose, responsibilities and powers of local governments including the preparation of a Long-term Financial Plan supported by Asset Management Plans for sustainable service delivery.
Manual of Legal Responsibilities and Technical Requirements for Traffic Control Devices – Part 2 – Code of Technical Requirements	Defines legal requirements for the installation of traffic control devices.
Road Traffic Act 1961	Defines responsibilities pertaining to roadways and standards.
Roads (Opening & Closing Act) 1991	Allows for the formalisation of roadways status.
Work Health and Safety Act 2012	Provides minimum standards for health and safety of individuals performing works.

Citizen Values

Service levels are defined in three ways: Citizen Values, Citizen Levels of Service and Technical Levels of Service.

Citizens Values indicate:

- what aspects of a service is important to the citizen;
- whether they see value in what is currently being provided; and
- the likely trend over time based on the current budget provision.

A summary of the satisfaction measure being used, the current feedback and the expected performance based on the current funding level is set out in Table 5 below.

Table 5: Citizen Values

Citizen Values	Citizen Satisfaction Measure	Current Feedback	Expected Trend Based on Planned Budget
Providing and Maintaining Roads	Community Survey	<p>Community Survey results indicate that:</p> <ul style="list-style-type: none"> • this is the second most important factor which impacts overall satisfaction with community services • satisfaction has slightly increased when compared to 2019 (i.e., when the AMP was last reviewed) 	Improved strategic alignment of works is expected to increase the efficiency of the renewal program
The Provision and Maintenance of Cycling Pathways	Community Survey	<p>Community Survey results indicate that:</p> <ul style="list-style-type: none"> • this is the sixth most important factor which impacts overall satisfaction with community services • satisfaction remains consistent when compared to 2019 	Both the importance factor and satisfaction are expected to increase in the coming years, as a result of a greater focus on cycling strategies and infrastructure by both the Council and citizens
Providing and Maintaining Footpaths	Community Survey	<p>Community Survey results indicate that:</p> <ul style="list-style-type: none"> • this is the fourth most important factor which impacts overall satisfaction with community services • satisfaction has slightly decreased when compared to 2019 	Increased expenditure in footpath renewal works is expected to result in a decrease hazards and therefore higher satisfaction
The Presentation and Cleanliness of the Council Area	Community Survey	<p>Community Survey results indicate that:</p> <ul style="list-style-type: none"> • this is the most important factor which impacts overall satisfaction with community services • satisfaction has slightly decreased when compared to 2019 	Targeted street sweeping and footpath blowing program implemented to current expenditure. Complaints expected to maintain current level due street tree leaf drop



Concrete Culvert Installation for Second Creek Gross Pollutant Trap

Citizen Levels of Service

The Citizen Levels of Service are considered in terms of:

Quality: How good is the service?

What is the condition or quality of the service?

Function: Is it suitable for its intended purpose?

Is it the right service?

Capacity: Is the service over or under used?

Does the Council need more or less of these assets?

A summary of the performance measure being used, the current performance and the expected performance based on the current funding level is set out in Table 6 below.

Confidence levels of current performance and expected trend are set out in Table 6 below and are categorised as follows:

High: professional judgement supported by extensive data;

Medium: professional judgement supported by data sampling; or

Low: professional judgement with no data evidence.

Table 6: Citizen Levels of Service Measures

Type of Measure	Level of Service	Performance Measure	Current Performance	Expected Trend Based on Planned Budget
Quality	Asset condition is <i>'fit for purpose'</i>	Community Survey on Providing and Maintaining of Roads and Footpaths	Community survey results indicate satisfaction has slightly increased when compared to 2019 (i.e., when the AMP was last reviewed)	Improved strategic alignment of works is expected to increase the efficiency of the renewal program
	Confidence level:		High	Medium
Function	Different assets (roads, footpaths, cycle paths) are linked in a functional and user-friendly manner	Community Survey on Provision and Maintenance of Cycling Pathways	Community survey results indicate satisfaction has remained consistent with 2019	Upgrade of Council's bikeways will continue, leading to improved service levels
	Confidence level:		High	Medium
Capacity	Capacity of assets to meet demands	Community Survey on Overall Infrastructure Satisfaction	Community survey results indicate satisfaction has remained consistent with 2019	Continued upgrade of infrastructure expected to balance out the forecasted increase in demand
	Confidence level:		High	Medium

Technical Levels of Service

Technical Levels of Service refers to the performance standards that define how well Council's assets meet their intended function. These technical measures relate to the activities and allocation of resources to best achieve the desired community outcomes and demonstrate effective performance.

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

Acquisition: the activities that are undertaken to provide a higher level of service or a new service that did not exist previously (e.g. conversion of a private laneway to a public road);

Operational Maintenance: the regular activities that are undertaken to retain an asset as near as practicable to an appropriate service condition (e.g. pothole patching);

Renewal: the activities that are undertaken to ensure the service capability is retained (e.g. road resurfacing); and

Disposal: the activities associated with the disposal of a de-commissioned asset including sale, demolition or relocation (e.g. sale of a section of a road).

Service and asset managers plan, implement and control technical service levels to influence the service outcomes.³

Table 7 (page 21) sets out the activities expected to be provided under the current planned budget allocation and the forecast activity requirements being recommended in this AMP.

Table 7: Technical Levels of Service

Life-Cycle Activity	Purpose of Activity	Activity Measure	Current Performance (LTFP)	Recommended Performance (AMP)
Acquisition	Upgrade of The Parade streetscape	Budget allocation	Budgeted within the LTFP	As recommended by The Parade Masterplan
	Upgrade of active transport corridor streetscapes	Budget allocation	Budgeted within the LTFP	As recommended by the City-Wide Cycling Plan
	Gifted infrastructure from developers	Incorporate into asset register upon ownership	Occurs on an ad hoc basis dependent on development	Occurs on an ad hoc basis dependent on development
	Budget:		\$30,080,000 over ten years	\$30,080,000 over ten years

³ IPWEA, 2015, IIMM

Table 7: Technical Levels of Service (continued)

Life-Cycle Activity	Purpose of Activity	Activity Measure	Current Performance (LTFP)	Recommended Performance (AMP)
Operational Maintenance	Asset Condition Assessment	Frequency	Asset Condition Assessment undertaken once every five years	Asset Condition Assessment undertaken once every five years
	Road surface	Maintenance frequency	Reactive to limit of budget to repair surface defects which lead to hazards	Reactive to limit of budget to repair surface defects which lead to hazards
	Footpaths	Maintenance frequency	Programmed and reactive to citizen requests. Footpath free of defects and hazards greater than 10mm	Programmed and reactive to citizen requests. Footpath free of defects and hazards greater than 10mm
	Kerbing	Maintenance frequency	Reactive to limit of budget to repair defects which cause hazards by preventing free flow of stormwater	Reactive to limit of budget to repair defects which cause hazards by preventing free flow of stormwater
	Traffic control devices	Maintenance frequency	Reactive to limit of budget to repair defects which cause sight line and collision hazards	Reactive to limit of budget to repair defects which cause sight line and collision hazards
	Budget:		\$36,436,562 over ten years	\$36,436,562 over ten years
Renewal	Road surface	Renewal as per lifecycle model	Current implementation budget smoothed over ten year timeframe	Current implementation budget smoothed over ten year timeframe
	Kerbing	Renewal as per lifecycle model	Renewal program and budget to align with road surface program	Renewal program and budget to align with road surface program
	Traffic control devices	Renewal as per lifecycle model	Renewal program and budget to align with road surface program	Renewal program and budget to align with road surface program
	Footpaths	Renewal as per lifecycle model	Targeted renewal of high-risk and high-traffic areas	Accelerated renewal program to replace all asphalt and concrete with block paving
	Budget:		\$69,070,350 over ten years	\$69,327,209 over ten years
Disposal	Disposal of assets no longer in use	As identified in the AMP	No assets identified as no longer in use	No assets identified as no longer in use
	Budget:		\$0 over ten years	\$0 over ten years

Future Demand

Drivers of Demand

Drivers affecting demand include (but are not limited to), changes in population, legislation, changes in demographics, seasonal factors, vehicle ownership rates, consumer preferences and expectations, technological changes, economic factors, agricultural practices and environmental awareness.

Demand Impact and Demand Management Plan

The impact of demand drivers that may affect future service delivery and use of assets are shown in Table 8 (page 23).

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

Opportunities identified to date for demand management are shown in Table 8 (page 23). Further opportunities will be developed in future revisions of this AMP.

Asset Programs to Meet Demand

The new assets required to meet demand may be acquired, donated or constructed and these assets are discussed on page 30 under 'Acquisition Plan'.

Acquiring new assets will commit the Council to increased ongoing operational maintenance and renewal costs for the period that the service provided from the assets is required. These future costs are identified and considered in developing forecasts of future operational maintenance and renewal costs for inclusion in the LTFP (refer to page 26 under 'Life-Cycle Management Plan').



Table 8: Demand Management Plan

Demand Driver	Current Position	Projection	Impact on Services	Demand Management Plan
Climate change	Refer to page 24 under 'Climate Change and Adaptation'.			
Change in frequency of use	Renewal and maintenance programs designed for current utilisation	Higher population and more land sub-divisions will lead to increase use of assets, particularly roads	Increased deterioration of assets	Increase condition assessment and inspections of assets.
Change in transport preference	Strategic corridors identified for upgrade	Increased demand for cycling and shared path infrastructure	More diverse and higher service level expected	Implement recommendations of strategic plans (such as City-Wide Cycling Plan)



Climate Change and Adaptation

The impacts of climate change can have a significant impact on the assets which the Council owns and manages and the services which are provided. In the context of the asset management planning process, climate change can be considered as both a future demand and a risk.

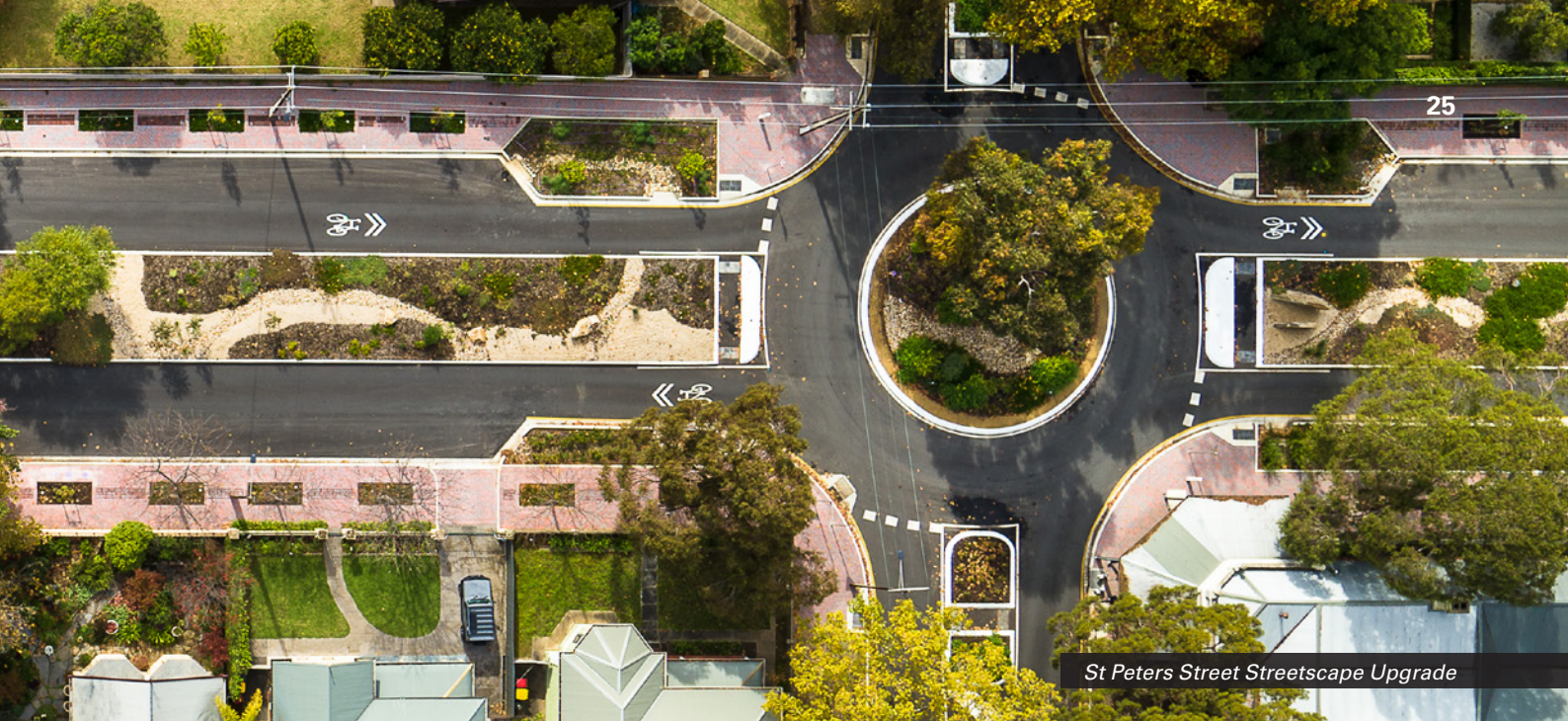
How climate change impacts on the City's assets can vary significantly, depending on the location and the type of asset and services that are provided, as will the way in which the Council responds and manage these impacts.

As a minimum, the Council should consider both how to manage existing assets given the potential impacts of climate change and how to create resilience and adapt to climate change when undertaking any new works or acquisitions.

Opportunities which have been identified to date to manage the impacts of climate change on existing assets are shown in Table 9 below.

Table 9: Managing the Impact of Climate Change on Assets

Climate Change Description	Projected Change	Potential Impact on Assets and Services	Management
Temperature	Higher maximum temperatures, longer and more intense heat waves	Increased rate of deterioration of assets. Negative impact on user experience and utilisation of assets.	Increase monitoring and condition assessment of assets as required. Consider climate impact on users in design of asset renewals.
Storm events and flooding	Increase rainfall and wind intensity during rainfall events	Increased rate of deterioration of assets. Disruption of user access to assets.	Increase monitoring and condition assessment of assets as required.



The way in which the Council constructs new assets, should take into consideration the opportunity to build in resilience to the impacts of climate change. Developing resilience has a number of benefits including but not limited to:

- assets will be able to withstand the impacts of climate change;
- services can be sustained; and
- assets that can endure the impacts of climate change may potentially lower the life-cycle cost and reduce their carbon footprint

Table 10 below sets out some asset climate change resilience opportunities.

These initiatives are currently being implemented within Council projects where possible. However, it is acknowledged that the impact of climate change on assets is a complex and evolving issue, and further opportunities will be developed in future revisions of this AMP.

Table 10: Developing Asset Resilience to Climate Change

New Asset Description	Climate Change Impacts on Assets	Build Resilience in New Works
Water Sustainable Urban Design (WSUD)	Reduced annual rainfall	Utilising rainfall for passive irrigation of street trees and landscaping through streetscape WSUD initiatives.
Civil assets	Higher maximum temperatures	Align road and footpath renewals with tree planting program where possible. Increase in tree canopy cover to provide cooling through shade.
Civil assets	Reducing carbon emissions	Incorporating low embodied carbon and recycled materials into asset renewals.

Life-Cycle Management Plan

The Life-Cycle Management Plan details how the Council plans to manage and operate the assets at the agreed levels of service while managing life-cycle costs.

Background Data

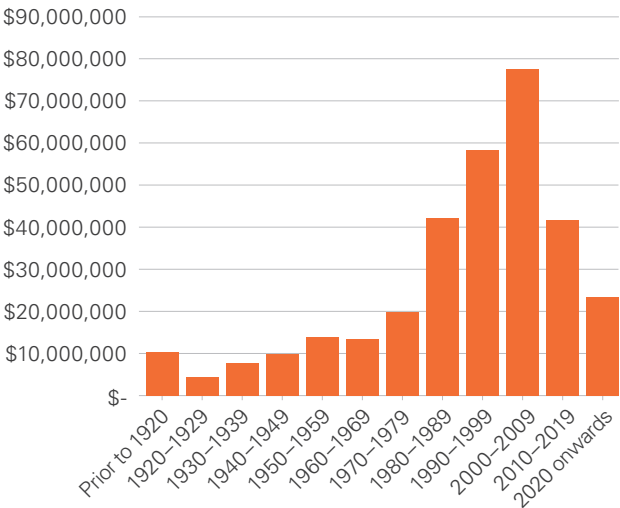
Physical Parameters

The assets covered by this AMP are shown in Table 11 below and the age profile of the assets included in this AMP are shown in Figure 4 below.

Table 11: Assets Covered by this Asset Management Plan

Asset Category	Replacement Value (\$)
Road	155,622,160
Kerbing	89,504,775
Footpath	55,263,733
Traffic control devices	7,855,672
Other Assets (Off-Road Carparks, Shared Pathways)	4,801,387
TOTAL	313,047,727

Figure 4: Civil Infrastructure construction periods*



*Total dollar values reflect the current value of existing Civil Infrastructure.

The majority of assets acquired prior to the 1990s, are long-life assets such as road pavement and kerbing. The more recent assets are typically shorter life assets, such as road seals, that have been through one or more renewal cycles and require renewal more frequently.

Asset Capacity and Performance

Assets are generally provided to meet design standards where these are available. However, there is insufficient resources to address all known deficiencies. Locations where deficiencies in service performance are known are detailed in Table 12 below.

Table 12: Known Service Performance Deficiencies

Location	Service Deficiency
Footpath tripping hazards due to tree roots	Regardless of the footpath material and when the footpath segment was last renewed, tree roots will cause tripping hazards over time
Roads on bus routes	Pavement not designed for bus loading resulting in premature failure
Various pram ramp road crossings	Pram ramp crossing does not meet current design and DDA criteria
Significant leaf fall on roads and footpaths	Segments of footpaths and roads experience heavy leaf fall during autumn season, especially in heavily tree-lined suburbs such as Norwood and St Peters

The above service deficiencies were identified from the asset condition assessment completed in the 2023–2024 financial year, as well as via internally-conducted inspections. The identified service deficiencies are addressed systematically through the annual works programs and operational maintenance works wherever feasible.

Condition of Assets

The condition of assets is currently monitored by undertaking a condition assessment of the Civil Infrastructure assets once every five years, the last being in the 2023–2024 financial year. Annual inspections of the worst-conditioned assets are completed to inform the following year's asset renewal program.

Condition is measured using a 1 to 5 grading system⁴ as detailed in Table 13 below. It is important that consistent condition grades be used in reporting various assets across an organisation. This supports effective communication. At the detailed level, assets may be measured utilising different condition scales, however, for reporting in the AMP they are all translated to the 1 to 5 grading scale.

Table 13: Simple Condition Grading Model

Condition Grading	Description of Condition
1	Very Good: only planned maintenance required
2	Good: minor maintenance required plus planned maintenance
3	Fair: significant maintenance required
4	Poor: significant renewal/rehabilitation required
5	Very Poor: physically unsound and/or beyond rehabilitation

The condition grading profiles for roads and footpaths are shown in Figure 5 and Figure 6.

Figure 5: Asset Condition Profile - Roads

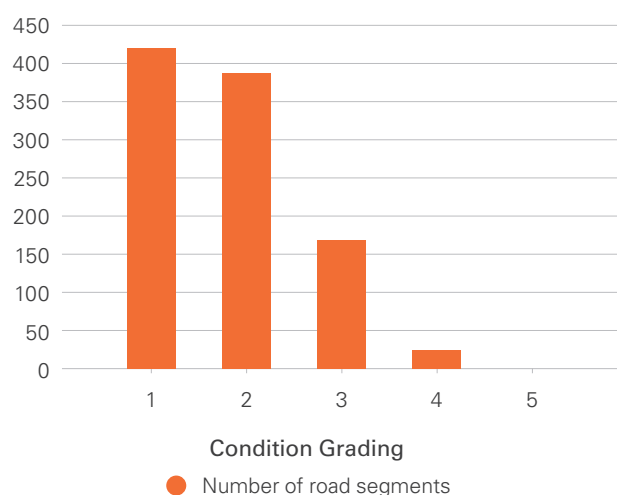


Figure 6: Asset Condition Profile - Footpaths



The condition rating profile of road assets (road seal, road pavement) are essential to monitor, as the renewal of these assets will drive the renewal of adjacent civil assets, namely kerbing, traffic control devices and off-road carparks. It can be seen that the majority of roads are rated as 3 or better. There are a number of renewal of lowly-rated roads which have been deferred to ensure optimal alignment with other projects. For example, the streets in Stepney and Maylands within the Trinity Valley, such as Clifton Street, were due for renewal several years ago. However, they have been scheduled to be renewed in conjunction with the Trinity Valley Stormwater Drainage Upgrade Project, which allows for work efficiencies and optimal budget expenditure.

The condition rating profile of footpath assets shows that a majority of footpaths are in 'good' condition. From an asset management perspective, it is noted that the proposed accelerated conversion of concrete footpaths to brick-paved footpaths is not necessarily driven by the current condition of footpaths, but more so to increase consistency and efficiency with regards to ongoing operational maintenance works.

⁴ IPWEA, 2015, IIMM, Sec 2.5.4



Reconstruction of Footpaths

Operational Maintenance Plan

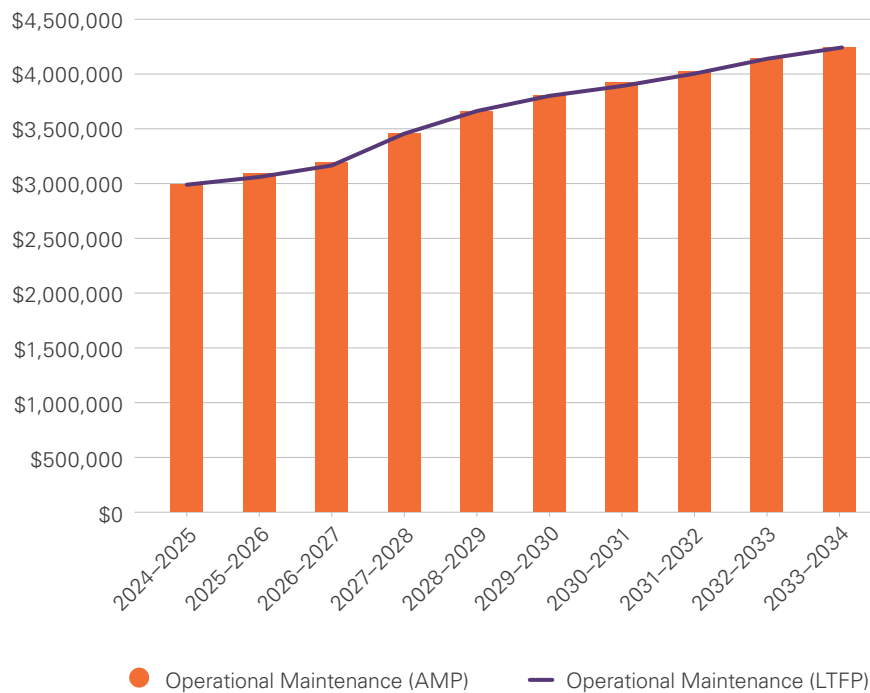
Operational maintenance works focus on the efficiency of assets to ensure the achievement of organisational objectives and the improvement of performance. They include all actions necessary for retaining an asset as near as practicable to an appropriate service condition including regular ongoing day-to-day work necessary to keep assets operating.

Examples of typical operational maintenance activities include asset inspections and patch repairs.

Summary of Forecast Operational Maintenance Costs

Forecast operational maintenance costs are expected to vary in relation to the total value of the asset stock. If additional assets are acquired, the future operational maintenance costs are forecast to increase. If assets are disposed, the forecast operational maintenance costs are expected to decrease. Figure 7 below shows the forecast operational maintenance costs relative to the proposed operational maintenance planned budget.

Figure 7: Operational Maintenance Summary



Additional operational maintenance costs due to the undertaking of acquisition projects have been allowed for. However, these additional costs will be required to be monitored to ensure that the same service levels are being provided following the acquisition of new assets.

Renewal Plan

Renewal involves major capital work which does not significantly alter the original service provided by the asset, but restores, rehabilitates, replaces or renews an existing asset to its original service potential. Work over and above restoring an asset to original service potential is considered to be an acquisition resulting in additional future operational maintenance costs.

The typical 'useful lives' of assets used to develop projected asset renewal forecasts are shown in Table 14 below.

Renewal Ranking Criteria

Asset renewal is typically undertaken to either:

- ensure the reliability of the existing infrastructure to deliver the service it was constructed to facilitate; or
- to ensure the infrastructure is of sufficient quality to meet the service requirements. ⁵

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

- have a high consequence of failure;
- have high use and subsequent impact on users would be significant;
- have higher than expected operational maintenance costs; and
- have potential to reduce life-cycle costs by replacement with a modern equivalent asset that would provide the equivalent service. ⁶

Table 14: Useful Lives of Assets

Asset Category	Useful Life
Road Pavement	80 to 300 years
Road Surface	15 to 40 years
Kerbing	40 to 70 years
Footpath	30 to 50 years
Linear Park Shared Path Pavement	60 years
Linear Park Shared Path Surface	30 years
Roundabouts	50 years
Traffic Control Devices	30 to 60 years

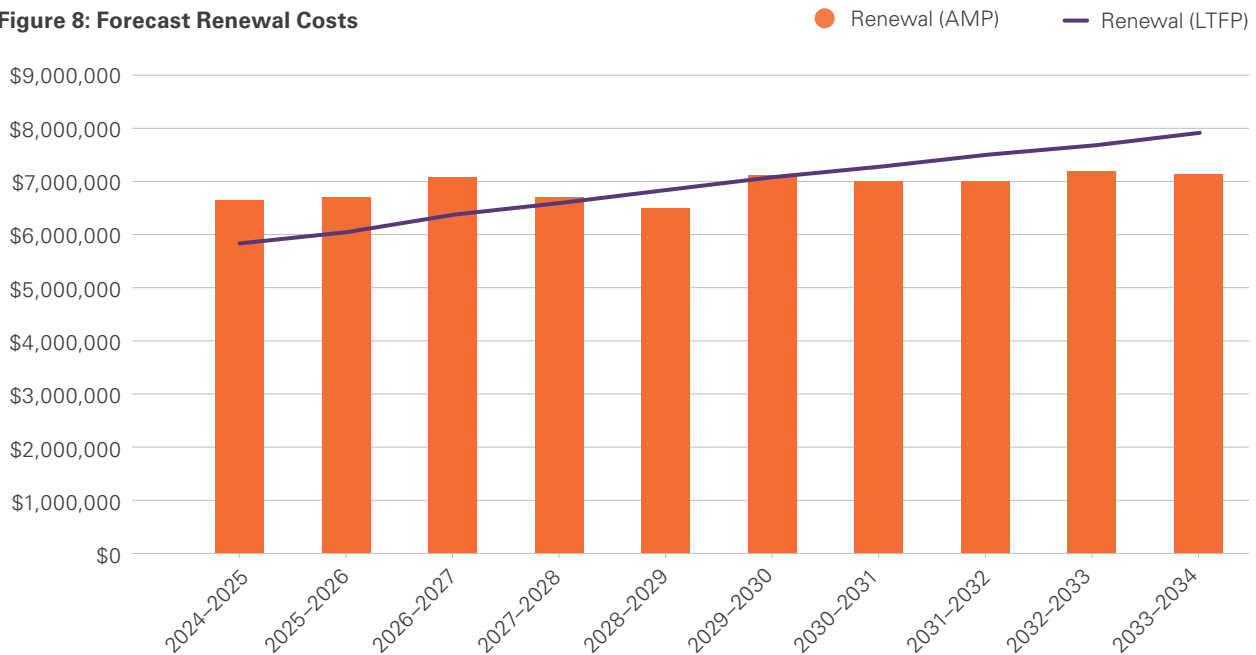
⁵ IPWEA, 2015, IIMM, Sec 3.4.4

⁶ Based on IPWEA, 2015, IIMM, Sec 3.4.5

Summary of Future Renewal Costs

The forecast costs associated with renewals are shown relative to the proposed renewal budget in Figure 8 below.

Figure 8: Forecast Renewal Costs



It has been determined through asset management models that expenditure of approximately \$3.75 million per year on road seal asset renewals, will ensure that current road asset condition profile as shown on page 27 (under Condition of Assets), is maintained and does not worsen over the ten year timeframe. Additionally, the renewal of kerbing and traffic control devices, will be strategically aligned where possible, such as via the 'whole street' renewal approach or the City-wide Cycling Plan.

Following the review and processing of the condition assessment data which was collected during the 2023-2024 financial year, a works program will be formulated to gain a better understanding of the expenditure required and the timeframe to complete the conversion of concrete and asphalt footpaths to brick-paved footpaths.

Should there be financial resourcing issues, prioritisation of these renewals will need to be determined, with high-risk assets to be renewed when required and lower-risk assets being deferred.

Acquisition Plan

Acquisition reflects new assets that did not previously exist or works which will upgrade or improve an existing asset beyond its existing capacity. They may result from growth, demand, social or environmental needs. Assets may also be donated to the Council.

The acquisition projects included in the AMP are projects that are identified within Council’s strategies.

Summary of future asset acquisition costs

Forecast acquisition asset costs are summarised in Figure 9 below and shown relative to the proposed acquisition budget.

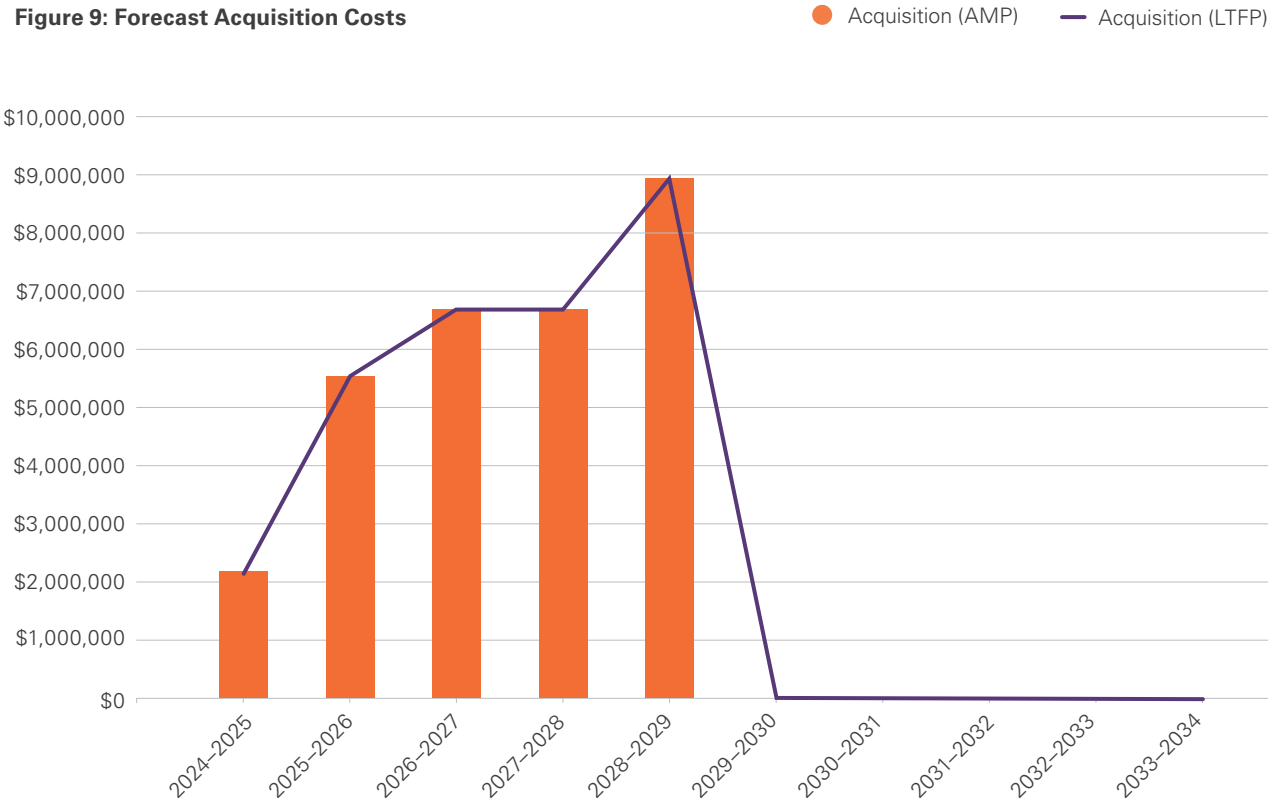
The proposed new and upgraded Civil Infrastructure assets have been programmed to be constructed in conjunction with the requirement for renewal wherever feasible to ensure the full value of existing assets are utilised and that the renewal budget is fully available to assist with the construction of the upgraded asset.

Disposal Plan

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

At this stage, there are no disposal costs forecasted in the next ten years.

Figure 9: Forecast Acquisition Costs



Risk Management Planning

The purpose of risk management associated with infrastructure assets is to document the findings and recommendations resulting from the periodic identification, assessment and treatment of risks associated with providing services from infrastructure, using the fundamentals of International Standard ISO 31000:2018 Risk management – Principles and guidelines.

Risk Management is defined in ISO 31000:2018 as: 'coordinated activities to direct and control with regard to risk'.⁷

An assessment of risks associated with service delivery will identify risks that will result in loss or reduction in service, personal injury, environmental impacts, a 'financial shock', reputational impacts, or other consequences. The risk assessment process identifies credible risks, the likelihood of the risk event occurring, and the consequences should the event occur. The risk assessment should also include the development of a risk rating, evaluation of the risks and development of a risk treatment plan for those risks that are deemed to be non-acceptable.

Critical Assets

Critical assets are defined as those which have a high consequence of failure causing significant loss or reduction of service. Critical assets have been identified and along with their typical failure mode, and the impact on service delivery are summarised in Table 15 below.

By identifying critical assets and failure modes, an organisation can ensure that investigative activities, condition inspection programs, operational maintenance and capital expenditure plans are targeted at critical assets.

Table 15: Critical Assets

Critical Assets	Failure Mode	Impact
Traffic Control Device	Degradation, third party damage	Service interruption
Footpaths	Degradation, third party damage	Service interruption
Road seal	Degradation, third party damage resulting in permeability	Failure of underlying pavement

⁷ISO 31000:2009

Risk Assessment

The risk management process used is shown in Figure 10.

The risk management process is an analysis and problem-solving technique that is designed to provide logical process for the selection of treatment plans and management actions to protect the community against unacceptable risks.

The process is based on the fundamentals of International Standard ISO 31000:2018.

The risk assessment process identifies credible risks, the likelihood of the risk event occurring, the consequences should the event occur, development of a risk rating, evaluation of the risk and development of a risk treatment plan for unacceptable risks.

An assessment of risks associated with service delivery will identify risks that will result in loss or reduction in service, personal injury, environmental impacts, a ‘financial shock’, reputational impacts or other consequences. This is outlined in Table 16 below.

Figure 10: Risk Management Process – Abridged

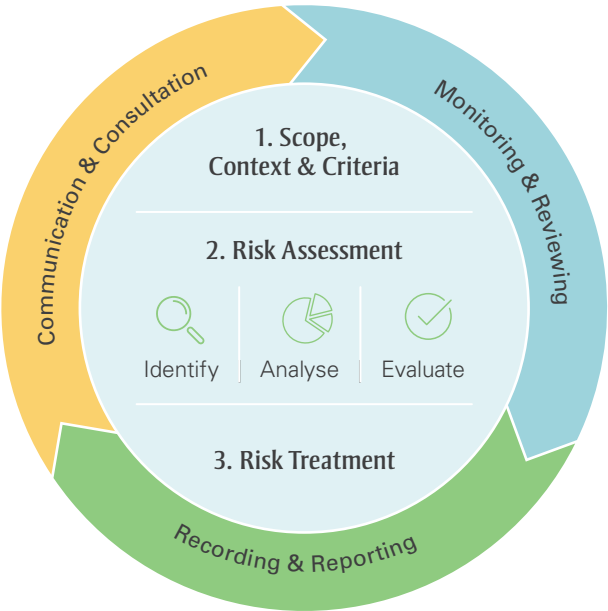


Table 16: Risks and Treatment Plans

Service or Asset at Risk	Risk Event	Impact Category	Risk Rating	Risk Treatment Plan	Residual Rating
Footpaths	Tripping hazards	Service / Reputation	Substantial (13)	Accelerated conversion of concrete and asphalt footpaths to brick-paved footpaths leads to immediate decrease in hazards. Over the long-term, consistency in footpath material will lead to increased efficiencies with regards to operational maintenance works.	Medium (17)
Strategic alignment of asset renewal and upgrade projects	Missed opportunities for 'whole street' projects. Inefficiencies in renewal program.	Reputation	Medium (17)	Establishment of effective GIS to enable optimal alignment of renewals, upgrades and strategies.	Low (22)

* Refer to Risk Matrix in Table 17 (page 35).

Table 17: Council's Risk Matrix

A 'risk rating'—sometimes known as the risk level—is obtained by applying the likelihood and consequence in the context of existing and proposed control measures to arrive at the level of risk, as per the Risk Matrix shown below.

	Catastrophic	Major	Moderate	Minor	Insignificant
Almost Certain	Extreme 1	Extreme 4	High 8	High 10	Substantial 15
Likely	Extreme 2	Extreme 5	High 9	Substantial 14	Medium 20
Possible	Extreme 3	High 7	Substantial 13	Medium 19	Low 23
Unlikely	High 6	Substantial 12	Medium 17	Low 21	Low 24
Very Unlikely	Substantial 11	Medium 16	Medium 18	Low 22	Low 25

Service and Risk Trade-offs

The decisions made when adopting this AMP have been based on the objective of achieving the optimum benefits from the available resources (financial and human).

What the Council cannot do

Works and services that cannot be provided under present funding levels are:

- undertaking of major acquisition works which are not set out in Council's LTFP; and
- provision of operational maintenance and renewal works above the current service levels.

Service Trade-off

If there is forecast work (operational maintenance, renewal, acquisition or disposal) that cannot be undertaken due to insufficient resources, then this will result in service consequences for users. These service consequences include:

- decreased levels of service;
- potential asset failures; and
- limited acquisition of new assets.

Risk Trade-off

The forecast works not being undertaken due to insufficient resources, may sustain or create risk consequences. These risk consequences include:

- unsafe condition of assets leading to user risk;
- service provided by assets not to the standard of the users; and
- loss of the Council's reputation.

The Council will endeavour to manage these risks within the available funding allocation by:

- finding efficiencies within the current operational maintenance program; and
- prioritisation of renewal projects.

Infrastructure Resilience Approach

The resilience of the Council's critical infrastructure is vital to the ongoing provision of services to the community. To adapt to changing conditions, the Council needs to understand its capacity to 'withstand a given level of stress or demand' and to respond to possible disruptions to ensure continuity of service.

Resilience is built upon aspects such as response and recovery planning, financial capacity, climate change and crisis leadership.

The Council does not currently measure its resilience in service delivery. This will be included in future iterations of the AMP.

Financial Summary

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

Financial Statements and Projections

Asset Valuations

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

Current (Gross) Replacement Cost	\$313,047,727
Depreciable Amount	\$313,047,727
Depreciated Replacement Cost ⁸	\$189,026,721
Depreciation during the 2022–2023 Financial Year	\$4,957,783

Sustainability of Service Delivery

There are two key indicators of sustainable service delivery that have been considered in developing this AMP, namely:

- Asset Renewal Funding Ratio (proposed LTFP renewal budget for the next ten years / forecast AMP renewal costs for next ten years); and
- medium term forecast costs / proposed budget (over ten years of the planning period).

Asset Renewal Funding Ratio

The **Asset Renewal Funding Ratio** is an important indicator and illustrates that over the next ten years, the Council expects to have 100% of the funds that are required for the optimal renewal of assets.

The forecast renewal work together with the proposed renewal budget is illustrated in Appendix C (page 45).

Asset Renewal Funding Ratio ⁹	100.37%
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⁸ Also reported as Written Down Value, Carrying or Net Book Value.
⁹ AIFMM, 2015, Version 1.0, Financial Sustainability Indicator 3, Sec 2.6.

Medium Term – Ten Year Financial Planning Period

This AMP identifies the forecast operational maintenance and renewal costs that are required to provide an agreed level of service to the community over a ten year period. This provides input into ten year financial and funding plans aimed at providing the required services in a sustainable manner.

This forecast work can be compared to the proposed budget over the ten year period to identify any funding shortfall.

The forecast AMP operational maintenance and renewal costs over the ten year planning period is \$10,550,691 on average per year.

The LTFP operational maintenance and renewal funding is \$10,576,377 on average per year, resulting in nil funding shortfall. This indicates that 100% of the forecast costs needed to provide the services documented in this AMP are accommodated in the proposed budget.

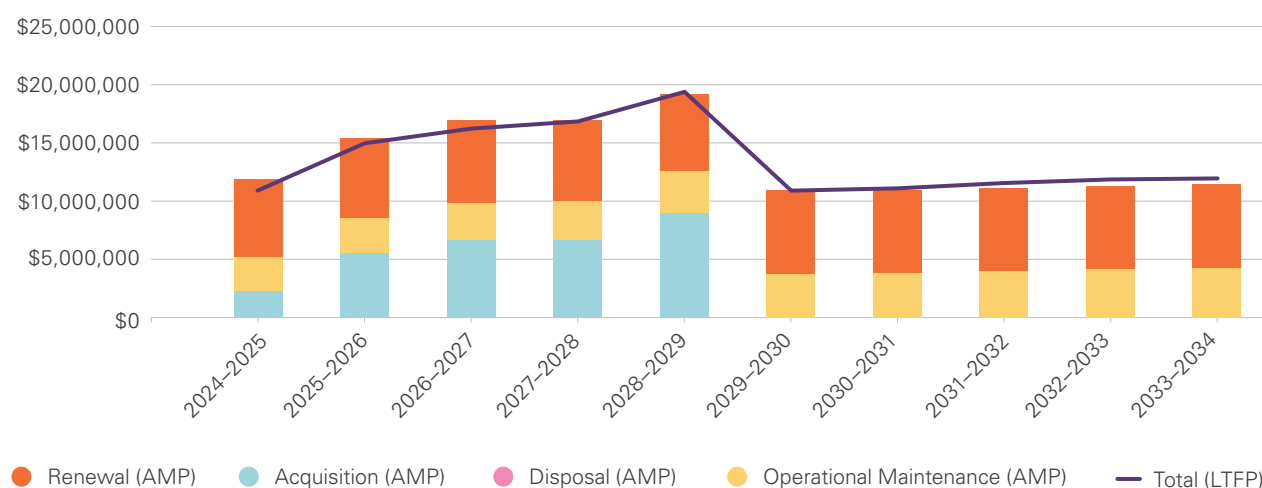
Providing sustainable services from infrastructure requires the management of service levels, risks, forecast outlays and financing to achieve a financial indicator of approximately 100% for the first years of the AMP and ideally over the ten year life of the LTFP.

Forecast Costs (outlays) for the LTFP

A summary of the anticipated AMP forecast life-cycle costs compared with the LTFP planned budget are shown in Table 18 below and Figure 11 on the following page.

Table 18: Forecast Life-Cycle Costs and Planned Budgets

Year	Acquisition (AMP) (\$)	Operational Maintenance (AMP) (\$)	Renewal (AMP) (\$)	Disposal (AMP) (\$)	Total Budget (LTFP) (\$)
2024–2025	2,180,000	2,987,455	6,674,028	0	11,056,439
2025–2026	5,550,000	3,077,079	6,715,623	0	14,709,709
2026–2027	6,700,000	3,169,391	7,092,695	0	16,264,208
2027–2028	6,700,000	3,454,473	6,720,930	0	16,767,510
2028–2029	8,950,000	3,671,407	6,490,875	0	19,458,608
2029–2030	0	3,781,549	7,107,595	0	10,867,783
2030–2031	0	3,894,996	6,943,776	0	11,187,340
2031–2032	0	4,011,845	6,993,250	0	11,513,880
2032–2033	0	4,132,201	7,198,067	0	11,840,806
2033–2034	0	4,256,167	7,133,512	0	12,177,489

Figure 11: Forecast Life-Cycle Costs and Planned Budgets

Funding Strategy

The proposed funding for the acquisition, renewal, operational maintenance and disposal of assets is outlined in the Council's Annual Budget and LTFP.

The Council's financial strategy outlines how funding will be provided, whereas the AMP sets out how and when this will be spent, together with the service and risk consequences of various service alternatives.

Valuation Forecasts

Asset values are forecast to increase as additional assets are added to the stock of assets.

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

Key Assumptions Made in Financial Forecasts

In preparing this AMP, it has been necessary to make some assumptions. This section details the key assumptions that have been made in the development of this AMP and provide an understanding of the level of confidence in the data that has been used to calculate the financial forecasts.

Key assumptions made in this AMP are:

- renewal costs have been based on previous projects undertaken by the Council; and
- forecasted operational maintenance costs are based on previous expenditure for the same service levels.

Forecast Reliability and Confidence

The forecast costs, proposed budgets and valuation projections in this AMP, are based on the best available data. For effective asset and financial management, it is critical that the information is current and accurate. Data confidence is classified on an A to E level scale¹⁰ in accordance with Table 19 (page 39).

¹⁰ IPWEA, 2015, IIMM, Table 2.4.6

Table 19: Data Confidence Grading System

Grade	Confidence Grade	Description
A	Highly reliable	Data based on sound records, procedures, investigations and analysis, documented properly and agreed as the best method of assessment.
B	Reliable	Data based on sound records, procedures, investigations and analysis, documented properly but has minor shortcomings, for example some of the data is old, some documentation is missing and/or reliance is placed on unconfirmed reports or some extrapolation.
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.
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.
E	Unknown	None or very little data is held.

The estimated confidence level for and reliability of data used in this AMP is shown in Table 19 below.

Table 20: Data Confidence Assessment for Data Used in Asset Management Plan

Data	Confidence Assessment	Comment
Demand drivers	C	Based on development application trends, <i>profile.id</i> data, climate change data, community surveys
Growth projections	C	Based on development application trends, <i>profile.id</i> data
Acquisition forecast	B	In line with strategic plans, policy and procedures
Operational maintenance forecast	B	Based on previous years
Renewal forecast		
- Asset values	B	As per approved methodology
- Asset useful lives	B	Current estimates from asset register
- Condition modelling	B	Methodology and data capture to be updated
Disposal forecast	E	No disposal of assets anticipated

The estimated confidence level for and reliability of data used in this AMP is considered to be reliable.

Plan Improvement and Monitoring

Status of Asset Management Practices

Accounting and Financial Data Sources

The Council uses Authority and Conquest as its financial management and accounting IT systems. These systems have the capability to report on the full life-cycle of assets, providing full transparency from acquisition to disposal.

Asset Management Data Sources

The Council uses Conquest as its asset management system, and Spectrum Spatial as its geographical information system. There are plans to improve integration between the GIS data with the asset management register to provide a live and amalgamated asset data system.

Improvement Plan

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

Task 1: Formalise ongoing monitoring and reporting of improvement plan tasks and performance measures

Responsibility: Project Manager, Assets
Resources Required: Manager, City Project
Timeline: 1 year

Task 2: Review condition assessment data collected in 2023–2024

Responsibility: Project Manager, Assets
Resources Required: Manager, City Project
Timeline: 1 year

Task 3: Develop further the risk assessment and management planning

Responsibility: Project Manager, Assets
Resources Required: Project Officer, Assets and Asset Consultants
Timeline: 2 years

Task 4: Improve GIS data storage system integration with asset database

Responsibility: Project Manager, Assets
Resources Required: Information Services, Consultants
Timeline: 3 years

Task 5: Review resilience of critical infrastructure

Responsibility: Project Manager, Assets
Resources Required: City Assets and Asset Consultants
Timeline: 4 years

Task 6 : Integrate climate risk assessment into asset management planning

Responsibility: Project Manager, Assets
Resources Required: City Assets and Asset Consultants
Timeline: 4 years



Construction of New Path - River Torrens Linear Park

Monitoring and Review Procedures

This AMP will be reviewed and updated annually to ensure that it represents the current service level, asset values, forecast operational maintenance, renewals, acquisition and disposal costs and proposed budgets. These forecast costs and proposed budget are incorporated into the LTFP or will be incorporated into the LTFP once completed.

The AMP has a maximum life of four years and is due for complete revision and updating within two years of each Local Government election.

Performance Measures

The effectiveness of this AMP can be measured in the following ways:

Forecast costs identified in this AMP are incorporated into the LTFP;

Short-term detailed works programs, budgets, business plans and corporate structures take into account the 'global' works program trends provided by the AMP; and

The Asset Renewal Funding Ratio achieving the Organisational Target (between 90% and 110%).

References

- IPWEA, 2006, 'International Infrastructure Management Manual', Institute of Public Works Engineering Australasia, Sydney, www.ipwea.org/IIMM;
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- IPWEA, 2012 LTFP Practice Note 6 PN Long-Term Financial Plan, Institute of Public Works Engineering Australasia, Sydney;
- ISO, 2018, ISO 31000:2018, Risk management – Guidelines;
- *CityPlan 2030: Shaping Our Future*;
- Long-term Financial Plan;
- Annual Business Plan;
- City-Wide Cycling Plan;
- Kent Town Urban Design Framework and Public Realm Manual;
- River Torrens Linear Park Strategic Integrated Asset Management Plan;
- Private Laneways Policy and Procedure;
- Asset Management Policy; and
- City of Norwood Payneham & St Peters Community Survey Report.

Appendices

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Appendix A

Acquisition Forecast

A.1 – Acquisition Forecast Assumptions and Source

The acquisition projects contained within this AMP have been derived from the Council's strategies.

A.2 – Acquisition Project Summary

Year	Project	Cost (\$)
2024–2025	Traffic Management Marden & Royston Park - Detailed Design	30,000
2024–2025	Traffic Management Marden & Royston Park - Construction	250,000
2024–2025	Traffic Management in Payneham South, Firle and Trinity Gardens - Detailed Design	70,000
2024–2025	Richmond St, Hackney & Eighth Ave, St Peters - Detailed Design	50,000
2024–2025	Installation of Speed Cushions in Langman Grove	150,000
2024–2025	George Street Upgrade - Additional Funding	1,560,000
2024–2025	40km/h Speed Limit - Hackney to Marden	70,000
2025–2026	Implementation of The Parade Master Plan	5,250,000
2025–2026	Traffic Management in Payneham South, Firle and Trinity Gardens - Construction	300,000
2026–2027	Implementation of The Parade Master Plan	6,700,000
2027–2028	Implementation of The Parade Master Plan	6,700,000
2028–2029	Implementation of The Parade Master Plan	8,950,000

Appendix A (continued)

A.3 – Acquisition Forecast Summary

Year	Operational Maintenance (AMP) (\$)	Operational Maintenance (LTFP) (\$)
2024–2025	2,180,000	2,180,000
2025–2026	5,550,000	5,550,000
2026–2027	6,700,000	6,700,000
2027–2028	6,700,000	6,700,000
2028–2029	8,950,000	8,950,000
2029–2030	0	0
2030–2031	0	0
2031–2032	0	0
2032–2033	0	0
2033–2034	0	0

Appendix B

Operational Maintenance Forecast

B.1 – Operational Maintenance Forecast Assumptions and Source

The operational maintenance forecast has been based on previous expenditure for the same service levels, with requirements of additional operational maintenance expenditure due to acquisition projects factored in.

B.2 – Operational Maintenance Forecast Summary

Year	Operational Maintenance (AMP) (\$)	Operational Maintenance (LTFP) (\$)
2024–2025	2,987,455	2,987,455
2025–2026	3,077,079	3,077,079
2026–2027	3,169,391	3,169,391
2027–2028	3,454,473	3,454,473
2028–2029	3,671,407	3,671,407
2029–2030	3,781,549	3,781,549
2030–2031	3,894,996	3,894,996
2031–2032	4,011,845	4,011,845
2032–2033	4,132,201	4,132,201
2033–2034	4,256,167	4,256,167

Appendix C

Renewal Forecast Summary

C.1 – Renewal Forecast Assumptions and Source

The asset renewal program was derived from asset condition audits and the Council's asset register. Additional factors were all considered for some asset classes as described below.

Road Pavements and Surfaces were modelled using Road Surface Manager to provide a program for optimal intervention times and extent of works required.

Kerbing was programmed in conjunction with the road resealing program. Works programmed with the road resealing program are not necessarily full reconstructions and can be limited to repair of sections that have incurred external damage.

Traffic Control Devices were programmed in conjunction with the road resealing program. Certain types of traffic control devices such as speed humps will require reconstruction with the reseal of the road and have been programmed accordingly.

Footpaths have been programmed from the asset register. An accelerated program to replace asphalt and concrete footpaths with block pavers will be implemented and will be based on observations from the findings of the asset condition assessment works.

C.2 – Renewal Forecast Summary

Year	Renewal (AMP) (\$)	Renewal (LTFP) (\$)
2024–2025	6,674,028	5,888,984
2025–2026	6,715,623	6,082,630
2026–2027	7,092,695	6,394,817
2027–2028	6,720,930	6,613,037
2028–2029	6,490,875	6,837,201
2029–2030	7,107,595	7,086,234
2030–2031	6,943,776	7,292,344
2031–2032	6,993,250	7,502,035
2032–2033	7,198,067	7,708,605
2033–2034	7,133,512	7,921,322

Appendix D

Disposal Summary

D.1 – Disposal Forecast Assumptions and Source

No disposals have been forecast over the AMP period.

D.2 – Disposal Forecast Summary

Year	Disposal (AMP) (\$)	Disposal (LTFP) (\$)
2024–2025	0	0
2025–2026	0	0
2026–2027	0	0
2027–2028	0	0
2028–2029	0	0
2029–2030	0	0
2030–2031	0	0
2031–2032	0	0
2032–2033	0	0
2033–2034	0	0

Further Information

For information on the Council's *Asset Management Plan: Civil Infrastructure 2025–2034*, please visit www.npsp.sa.gov.au or phone 8366 4555.

You can also visit the Council's Customer Service Centre at the Norwood Town Hall, 175 The Parade, Norwood.

Additional Copies

The *Asset Management Plan: Civil Infrastructure 2025–2034* can be viewed online at www.npsp.sa.gov.au

Additional copies may also be obtained by:



- visiting Norwood Town Hall
- visiting any of the Council's Libraries
- emailing townhall@npsp.sa.gov.au
- contacting the Council on 8366 4555
- writing to the Council at PO Box 204, Kent Town SA 5074

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