



Linear Park Shared Path Upgrade

# Asset Management Plan

## *Civil Infrastructure 2025–2034*



City of  
Norwood  
Payneham  
& St Peters



Document Control		2025-2034 ASSET MANAGEMENT PLAN CIVIL INFRASTRUCTURE			
Rev No	Date	Revision Details	Author	Reviewer	Approver
0	August 2024	Draft for Community Consultation	JC	DL	DL

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## 1.0 EXECUTIVE SUMMARY

### 1.1 Asset Management Plans

The City of Norwood Payneham & St Peters Asset Management Plans (the AMPs), provide a comprehensive overview of the City's assets, encompassing their replacement value, current condition, performance, service levels, objectives, and the Council's financial position in relation to these assets.

Its purpose is to ensure that the Council can effectively deliver services, maintain assets and achieve its strategic goals in a financially sustainable manner over the short, medium and long terms.

The AMPs outline the requirements for managing, inspecting and replacing assets, including projected annual expenditure over a ten (10) year period, while also detailing the Council's planned activities for its assets to achieve its strategic goals and deliver community services in the medium to long term.

The AMPs comprise of four documents, each of which have been developed to encompass the major classes of assets, including civil infrastructure, stormwater management, buildings, and recreation and open space.

#### *Purpose of AMPs*

The AMPs are crucial strategic documents for the Council to ensure the efficient management of its assets throughout the lifespan of these respective assets, which ultimately achieves the Council's strategic objectives, while maintaining compliance with legislation and delivering a high level of service to the community.

The purpose of the AMPs is to communicate the requirements for the sustainable delivery of services through the management of the assets, compliance with regulatory requirements and required funding to provide the appropriate levels of service over the long-term planning period.

#### *Requirement under Local Government Act*

Section 122 of *Local Government Act 1999*, requires the Council to develop and adopt an AMP, relating to the management and development of its infrastructure and major assets for a period of at least ten (10) years.

This requirement to develop and adopt an AMP ensures that the Council considers the management and development of its infrastructure and major assets at a strategic level and in line with its strategic management plan (i.e., *CityPlan 2030*). It also includes provisions for asset renewal over the next ten (10) years, aligned with the Council's Long-term Financial Plan (LTFP).

### 1.2 Asset Description

The City's Civil Infrastructure Network comprises of the following:

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

The Civil Infrastructure Network has a significant total renewal value estimated at \$313,047,727.

### 1.3 Levels of Service

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

The main service consequences of the 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.

## 1.4 Future Demand

The main demands for new services are created by:

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

Meeting these demands will be approached by using a combination of managing existing assets, upgrading existing assets and providing new assets to meet demand. Demand management practices may 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; and
- planning for demographic changes over time.

## 1.5 Life-Cycle Management Plan

### 1.5.1 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 (10) years. Therefore, a summary output from the AMP is the forecast of ten (10) year total costs which for the Civil Infrastructure Network is estimated as \$135,516,913 or \$13,551,691 on average per year.

## 1.6 Financial Summary

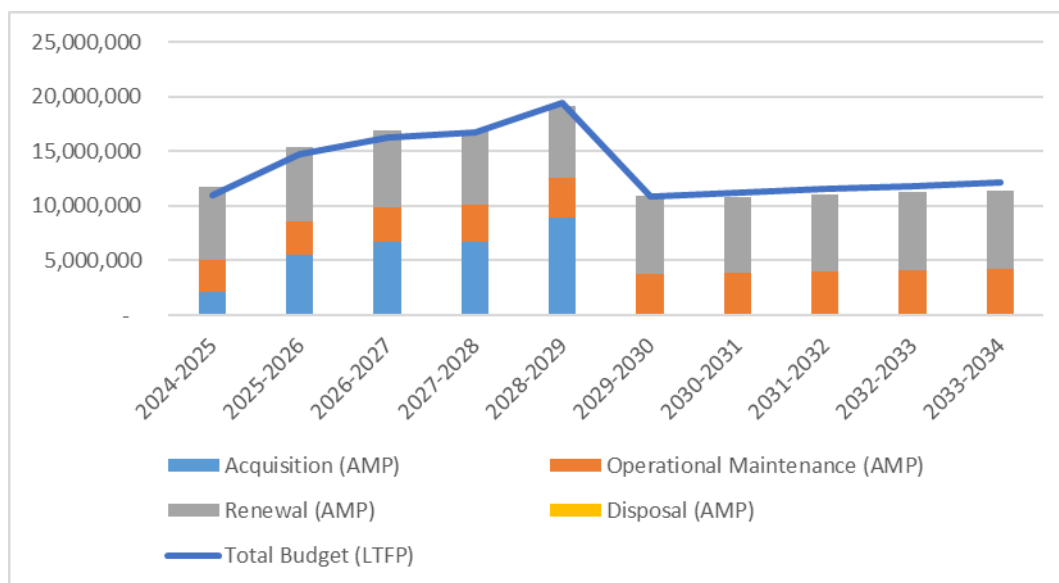
### 1.6.1 What the Council will do

Estimated available funding for the ten (10) year period is \$135,773,771 (or \$13,577,377 on average per year) as set out in the LTFP. This is approximately 100% of the cost to sustain the current level of service at the lowest life-cycle cost.

The reality is that 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 Network results in nil shortfall per year 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 1.6.1 below.

**Figure 1.6.1: FORECAST LIFE-CYCLE COSTS AND PLANNED BUDGETS**



The Council plans to undertake the following in respect to the existing Civil Infrastructure Network:

- undertaking of major acquisition works within the ten (10) year planning period consisting of various road reconstruction projects, bikeway projects, and streetscape upgrade projects as set out in the Council’s LTFP; and
- provision of operational maintenance and renewal works on existing and proposed new assets to meet current service levels.

### 1.6.2 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.

### 1.6.3 Managing the Risks

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:

- 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 works.

## 1.7 Asset Management Practices

The Council’s systems to manage assets include:

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

## 1.8 Monitoring and Improvement Program

The next steps resulting from this AMP to improve 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;
- further develop risk assessment and management planning;
- improve GIS data storage system integration with asset database; and
- review resilience of critical infrastructure.

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## 2.0 INTRODUCTION

### 2.1 Background

This AMP communicates 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.

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; and
- City of Norwood Payneham & St Peters Community Survey Report.

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 underpinning continuous improvement to ensure the minimum required investment provides the greatest value outcome.

#### *Strategic Direction*

The Council's strategic direction is defined 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) of environmental, social and economic sustainability highlights the importance of protecting and enhancing our City’s unique character and sense of place.

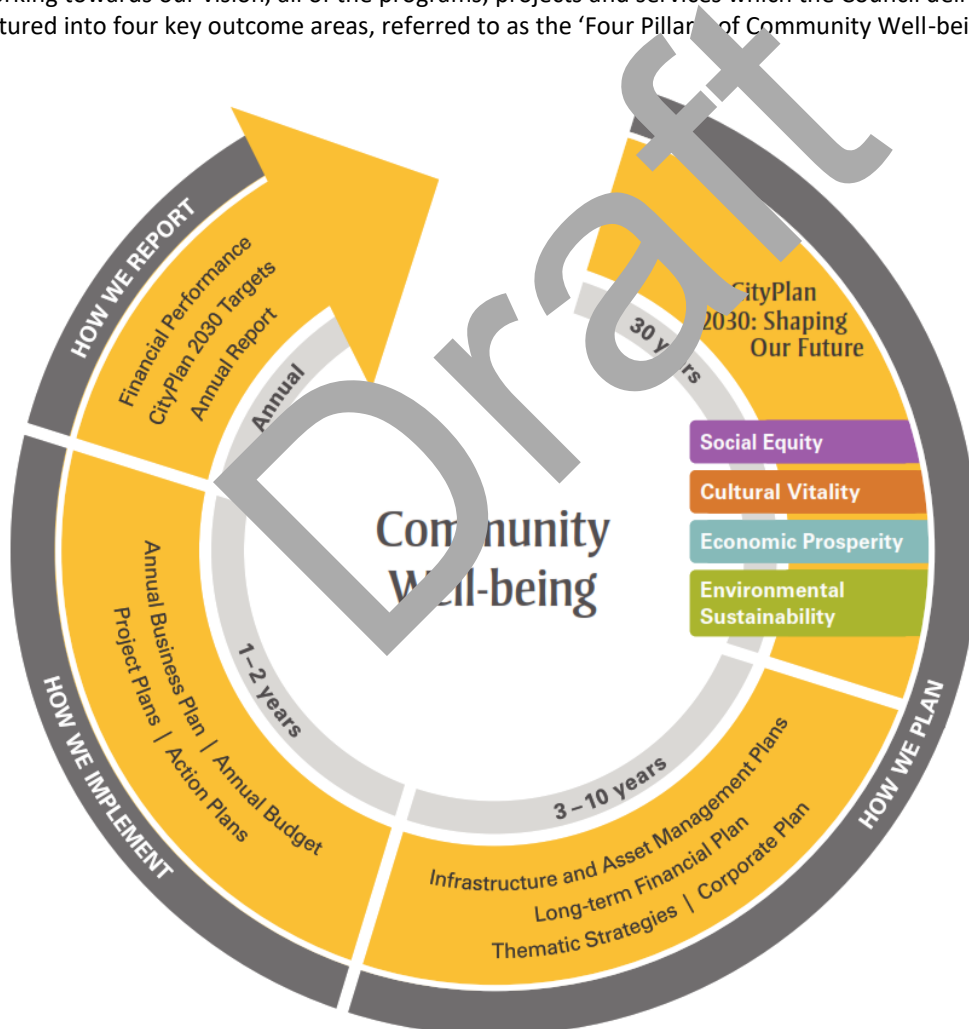
The objectives set out in *CityPlan 2030: Shaping Our Future*, which outline the priorities for what needs to happen to achieve the four outcomes, reflect the community’s aspirations, the policy commitments of the Council and the likely trends and issues which our City will face over the course of *CityPlan 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 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 we realise the future which we want for ourselves and the next generation, rather than just ‘letting things happen’.

*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.



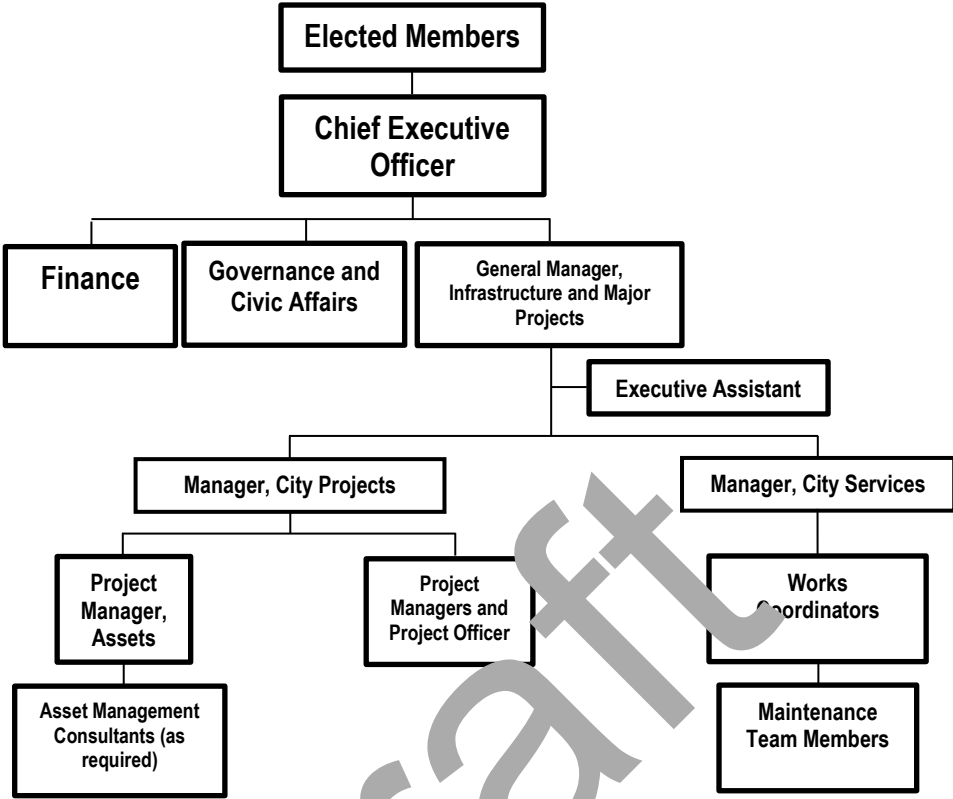
Key stakeholders in the preparation and implementation of this AMP are shown in Table 2.1 below.

**Table 2.1: KEY STAKEHOLDERS IN THE AMP**

Key Stakeholder	Role in AMP
Elected Members	Represent needs of community and shareholders, allocate 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 and Major Projects Manager, City Projects	Set high level priorities for asset management development and support the implementation of actions resulting from this AMP.
Finance Governance and Civic Affairs	Development of supporting policies such as capitalisation and depreciation. Provision of GIS applications and support.
Asset Management Consultants	Preparation of asset sustainability and financial reports incorporating asset depreciation in compliance with current accounting standards. Host and consolidate asset registers including updating valuations, capitalisation and depreciation. 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.
City Assets / City Projects	Assist the Project Manager Assets in the development of the AMP.
City Services	Provide a high 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	Local Residents; Local Businesses; Utilities; Developers; and Federal and State Governments.

The Council’s organisational structure for service delivery of infrastructure assets is detailed in Figure 2.1 below.

**Figure 2.1: ORGANISATIONAL STRUCTURE**



**2.2 Goals and Objectives of Asset Management Plan**

The Council’s goal 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 consumers. The key elements of 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.

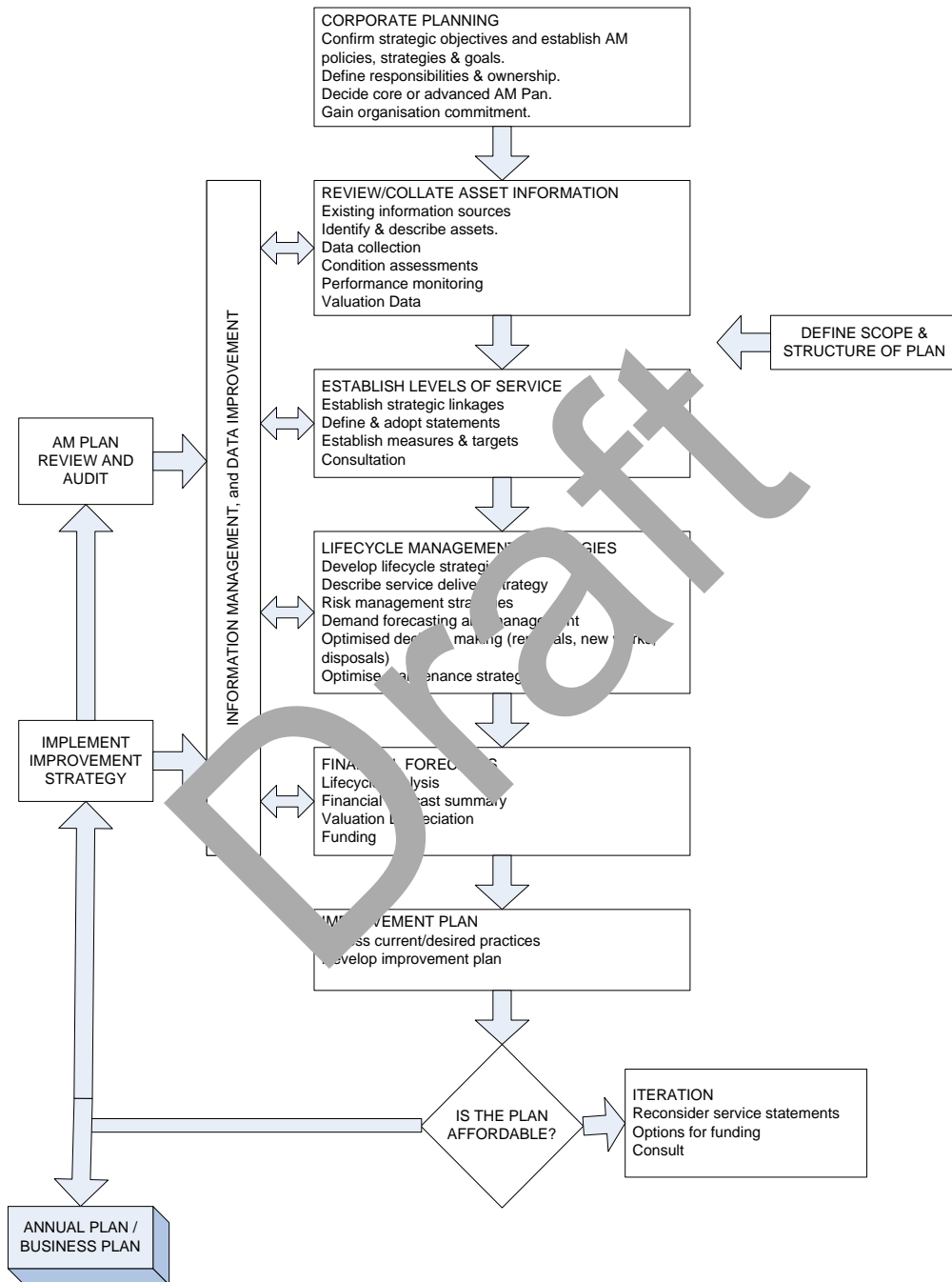


Other references to the benefits, fundamentals principles and objectives of asset management are:

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

A road map for preparing an AMP is shown in Figure 2.2 below.

**Figure 2.2: ROAD MAP FOR PREPARING AN AMP**



Source: IPWEA, 2006, IIMM, Fig 1.5.1, p 1.11

<sup>1</sup> Based on IPWEA 2015 IIMM, Sec 2.1.3, p 2 | 13

<sup>2</sup> ISO 55000 Overview, principles and terminology

### 3.0 LEVELS OF SERVICE

#### 3.1 Community Research and Expectations

The Council conducts Community Surveys at regular intervals 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, with 1 being very dissatisfied, and 5 being very satisfied. The last version of the AMP included data up to 2019. Table 3.1 below summarises the results from the Council’s Resident Surveys.

**Table 3.1: 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	3.5	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

#### 3.2 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 2025: Shaping our Future*.

The Council’s Vision 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.’**

Council’s strategic goals, and how these are addressed in this AMP, are summarised in Table 3.2 below.

**Table 3.2: GOALS AND HOW THESE ARE ADDRESSED IN THIS AMP**

Goal	Objective	How Goal and Objectives are Addressed in the AMP
Social Equity - A connected, accessible and pedestrian friendly community	A people friendly, integrated and sustainable transport and pedestrian network.	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.
Environmental Sustainability – A leader in environmental sustainability	Sustainable and attractive streetscapes and open spaces	Development of service levels provided by the infrastructure and the balancing of this with the available funding and acceptable risk.
Environmental Sustainability – A leader in environmental sustainability	Mitigating and adapting to the impacts of climate change	Planning of long-term sustainable infrastructure is important and to enable appropriate resources to be identified and provided.

### 3.3 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 Network are set out in Table 3.3 below.

**Table 3.3: 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 sets out 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	Sets out requirements for any works to comply with, as well as water quality standards.
Local Government Act 1999	Sets out role, purpose, responsibilities and powers of local governments including the preparation of a LTFP supported by AMPs 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.

### 3.4 Citizen Values

Service levels are defined in three (3) 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 3.4 below.

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**Table 3.4: CITIZEN VALUES**

Citizen Values	Citizen Satisfaction Measure	Current Feedback	Expected Trend Based on Planned Budget
Providing and Maintaining Roads	Community Survey Report	Community survey results indicate: <ul style="list-style-type: none"> <li>this is the second most important factor which impacts overall satisfaction with community services</li> <li>satisfaction has slightly increased when compared to 2019 (i.e., when the AMP was last renewed)</li> </ul>	Improved strategic alignment of works is expected to increase the efficiency of the renewal program.
The Provision and Maintenance of Cycling Pathways	Community Survey Report	Community survey results indicate: <ul style="list-style-type: none"> <li>this is the sixth most important factor which impacts overall satisfaction with community services</li> <li>satisfaction remains consistent when compared to 2019</li> </ul>	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 Report	Community survey results indicate: <ul style="list-style-type: none"> <li>this is the fourth most important factor which impacts overall satisfaction with community services</li> <li>satisfaction has slightly decreased when compared to 2019</li> </ul>	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 Report	Community survey results indicate: <ul style="list-style-type: none"> <li>this is the most important factor which impacts overall satisfaction with community services</li> <li>satisfaction has slightly decreased when compared to 2019</li> </ul>	Targeted street sweeping and footpath blowing program implemented to current expenditure. Complaints expected to maintain current level due street tree leaf drop.

### 3.5 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 3.5 below.

Confidence levels of current performance and expected trend are set out in Table 3.5 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 3.5: CITIZEN LEVELS OF SERVICE MEASURES**

Type of Measure	Level of Service	Performance Measure	Current Performance	Expected Trend Based on Planned Budget
<b>Quality</b>	Asset condition is 'fit for purpose'	Community Survey on Providing and Maintaining of Roads and Footpaths	Community survey results indicate satisfaction has remained consistent with 2019 (i.e., when the AMP was last updated)	Improved strategic alignment of works is expected to increase the efficiency of the renewal program
	<b>Confidence levels</b>		<b>High</b>	<b>Medium</b>
<b>Function</b>	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
	<b>Confidence levels</b>		<b>High</b>	<b>Medium</b>
<b>Capacity</b>	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
	<b>Confidence levels</b>		<b>High</b>	<b>Medium</b>

### 3.6 Technical Levels of Service

To deliver the Citizen Values and impact the achieved Citizen Levels of Service, operational or technical measures of performance are used. 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 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 to retain an asset as near as practicable to an appropriate service condition (e.g. pothole patching);
- **renewal:** the activities that return the service capability of an asset up to that which it had originally provided (e.g. road resurfacing); and
- **disposal:** the activities associated with the disposal of a decommissioned 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.<sup>3</sup>

Table 3.6 below shows the activities expected to be provided under the current Planned Budget allocation and the forecast activity requirements being recommended in this AMP.

**Table 3.6: TECHNICAL LEVELS OF SERVICE**

Life-Cycle Activity	Purpose of Activity	Activity Measure	Current Performance (LTFP)	Recommended Performance (AMP)	
<b>Acquisition</b>	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	
		<b>Budget</b>	<b>\$30,010,000 over ten (10) years</b>	<b>\$30,010,000 over ten (10) years</b>	
<b>Operational Maintenance</b>	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	
			<b>Budget</b>	<b>\$36,436,562 over ten (10) years</b>	<b>\$36,436,562 over ten (10) years</b>
	<b>Renewal</b>	Road surface	Renewal as per lifecycle model	Current implementation budget smoothed over ten (10) year timeframe	Current implementation budget smoothed over ten (10) year timeframe

<sup>3</sup> IPWEA, 2015, IIMM, p 2|28.

Life-Cycle Activity	Purpose of Activity	Activity Measure	Current Performance (LTFP)	Recommended Performance (AMP)
	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
		<b>Budget</b>	<b>\$69,070,350 over ten (10) years</b>	<b>\$69,327,209 over ten (10) years</b>
<b>Disposal</b>	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
		<b>Budget</b>	<b>\$0 over ten (10) years</b>	<b>\$0 over ten (10) years</b>

It is important to regularly monitor the service levels provided to the Council as these will change. The current performance is influenced by work efficiencies and technology, and community priorities will change over time.

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## 4.0 FUTURE DEMAND

### 4.1 Demand Drivers

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

### 4.2 Demand Forecasts

The present position and projections for demand drivers that may impact future service delivery and use of assets have been identified and documented.

### 4.3 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 4.3 below.

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 4.3 below. Further opportunities will be developed in future revisions of this AMP.

**Table 4.3: DEMAND MANAGEMENT PLAN**

Demand Driver	Current Position	Projection	Impact on Services	Demand Management Plan
Climate change			Refer to Section 4.5	
Change in frequency of use	Renewal and maintenance programs designed for current utilisation	Higher population and more land subdivisions 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)

### 4.4 Asset Programs to Meet Demand

The new assets required to meet demand may be acquired, donated or constructed and these assets are discussed in Section 5.5.

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 Section 5).

### 4.5 Climate Change and Adaptation

The impacts of climate change can have a significant impact on the assets which the Council 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 will impact on assets can vary significantly depending on the location and the type of asset and services 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 to climate change in 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 4.5.1 below.

**Table 4.5.1: MANAGING THE IMPACT OF CLIMATE CHANGE ON ASSETS**

Climate Change Description	Projected Change	Potential Impact on Assets and Services	Management
Temperature	Higher maximum temperatures, lower minimum temperatures	Increased rate of deterioration of assets	Increase monitoring and condition assessment of assets as required
Storm Events	Increase rainfall and wind intensity during rainfall events	Increased rate of deterioration of assets	Increase monitoring and condition assessment of assets as required

The way in which the Council constructs new assets should recognise that there is opportunity to develop resilience to the impacts of climate change. Developing resilience offers 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 4.5.2 below summarises some of the climate change resilience opportunities.

**Table 4.5.2: DEVELOPING ASSET RESILIENCE TO CLIMATE CHANGE**

New Asset Description	Climate Change Impact These Assets?	Develop Resilience in New Works
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.
WSUD infrastructure	Reduced annual rainfall	Utilising rainfall for passive irrigation of street trees and landscaping through streetscape WSUD initiatives.

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 relatively new and complex issue, and further opportunities will be developed in future revisions of this AMP.

## 5.0 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 (refer to Section 3) while managing life-cycle costs.

### 5.1 Background Data

#### 5.1.1 Physical parameters

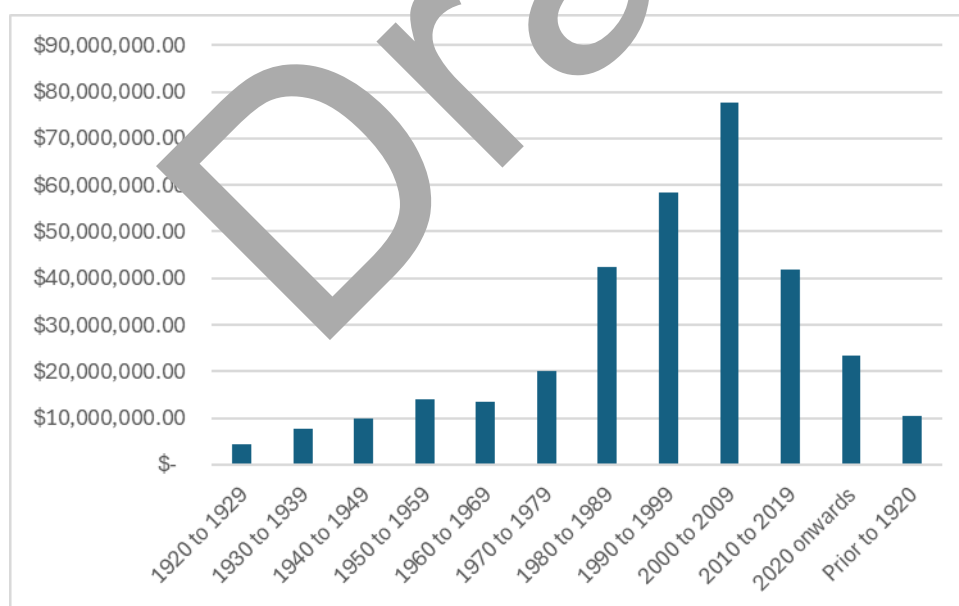
The assets covered by this AMP are shown in Table 5.1.1 below.

The age profile of the assets included in this AMP are shown in Figure 5.1.1 below.

**Table 5.1.1: ASSETS COVERED BY THIS AMP**

Asset Category	Replacement Value (\$)
Road	155,622,160
Kerbing	89,504,775
Footpath	55,263,733
Traffic control devices	7,155,727
Other Assets (Off-Road Carparks, Shared Pathways)	801,000
<b>TOTAL</b>	<b>310,147,727</b>

**Figure 5.1.1: ASSET AGE PROFILE**



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.

#### 5.1.2 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 5.1.2 below.

**Table 5.1.2: 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.

### 5.1.3 Asset condition

The condition of assets is currently monitored by undertaking a condition assessment of the Civil Infrastructure assets once every five (5) 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 system<sup>4</sup> as detailed in Table 5.1.3 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 utilizing different condition scales, however, for reporting in the AMP they are all translated to the 1 to 5 grading scale.

**Table 5.1.3: SIMPLE CONDITION GRADING METHOD**

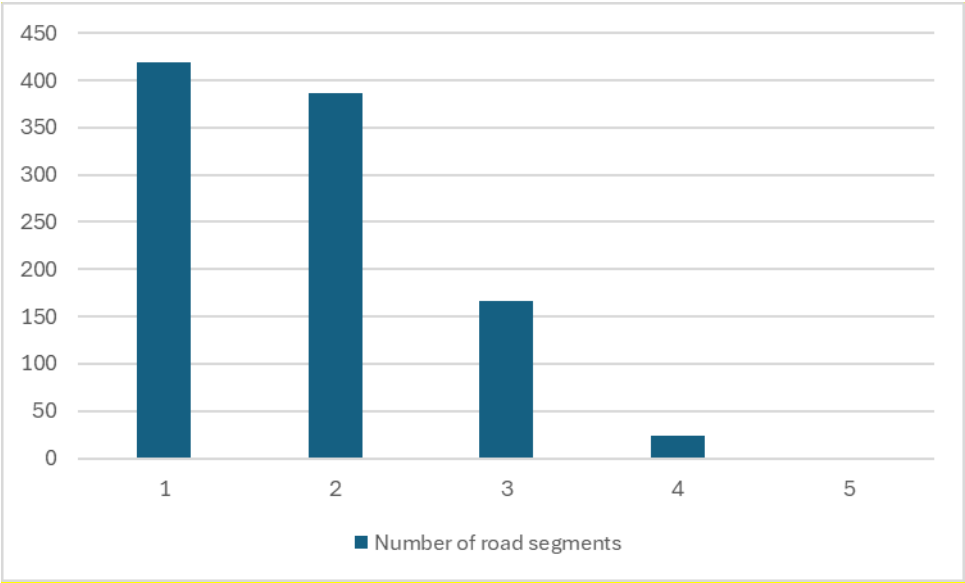
Condition Grading	Description of Condition
1	<b>Very Good:</b> only planned maintenance required
2	<b>Good:</b> minor maintenance required plus planned maintenance
3	<b>Fair:</b> significant maintenance required
4	<b>Poor:</b> significant renewal/rehabilitation required
5	<b>Very Poor:</b> physically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

The condition grading profiles for roads and footpaths are shown in Figure 5.1.3a and Figure 5.1.3b below.

<sup>4</sup> IPWEA, 2015, IIMM, Sec 2.5.4, p 2|80.



**Figure 5.1.3a: ASSET CONDITION PROFILE - ROADS**



**Figure 5.1.3b: 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.

## 5.2 Operational Maintenance Plan

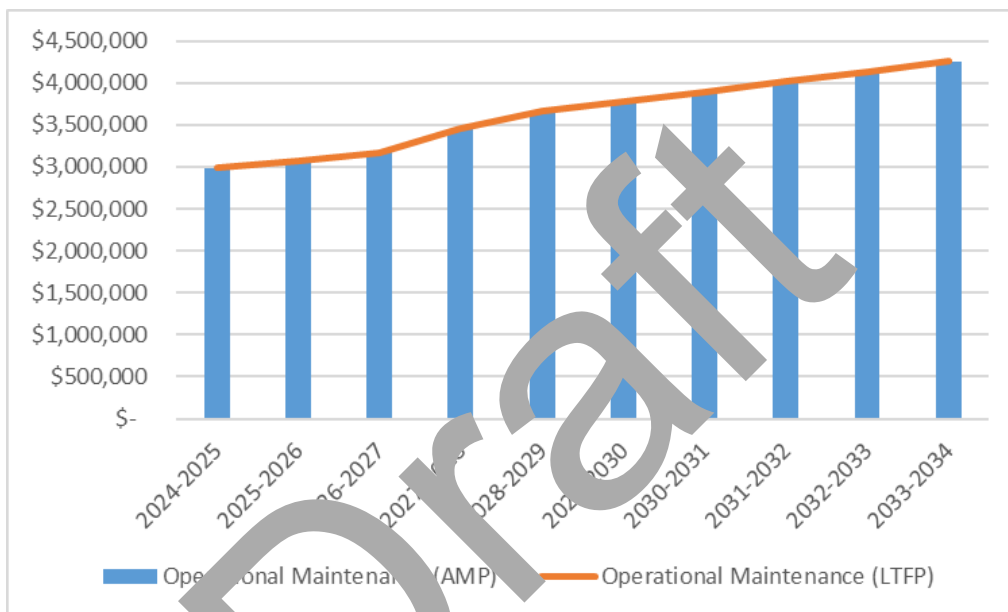
Operational maintenance works focus on the efficiency of assets to ensure the achievement of organisational objectives and the improvement of performance. They include all actions necessary for retaining an asset as near as practicable to an appropriate service condition including regular ongoing day-to-day 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 5.2 below shows the forecast operational maintenance costs relative to the proposed operational maintenance Planned Budget.

**Figure 5.2: 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.

## 5.3 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 5.3 below.

**Table 5.3: 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

### 5.3.1 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.<sup>5</sup>

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 more equivalent asset that would provide the equivalent service.<sup>6</sup>

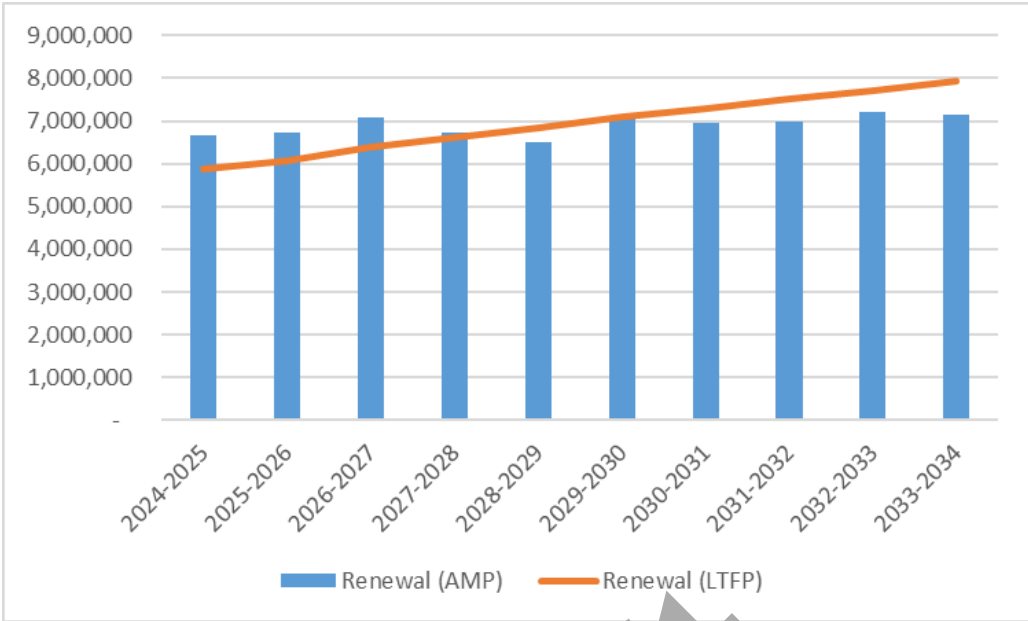
### 5.4 Summary of Future Renewal Costs

The forecast costs associated with renewals are shown relative to the proposed renewal budget in Figure 5.4 below.

<sup>5</sup> IPWEA, 2015, IIMM, Sec 3.4.4, p 3|91.

<sup>6</sup> Based on IPWEA, 2015, IIMM, Sec 3.4.5, p 3|97.

**Figure 5.4: 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 shown in Section 5.1.3 is maintained and does not worsen over the ten (10) year timeframe. As per Section 5.1.3, 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 2023-2024, a works program will be formulated to gain a better understanding of the expenditure and timeframe required to complete the conversion of concrete and asphalt footpaths to brick-paved footpaths.

Should there be 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.

**5.5 Acquisition Plan**

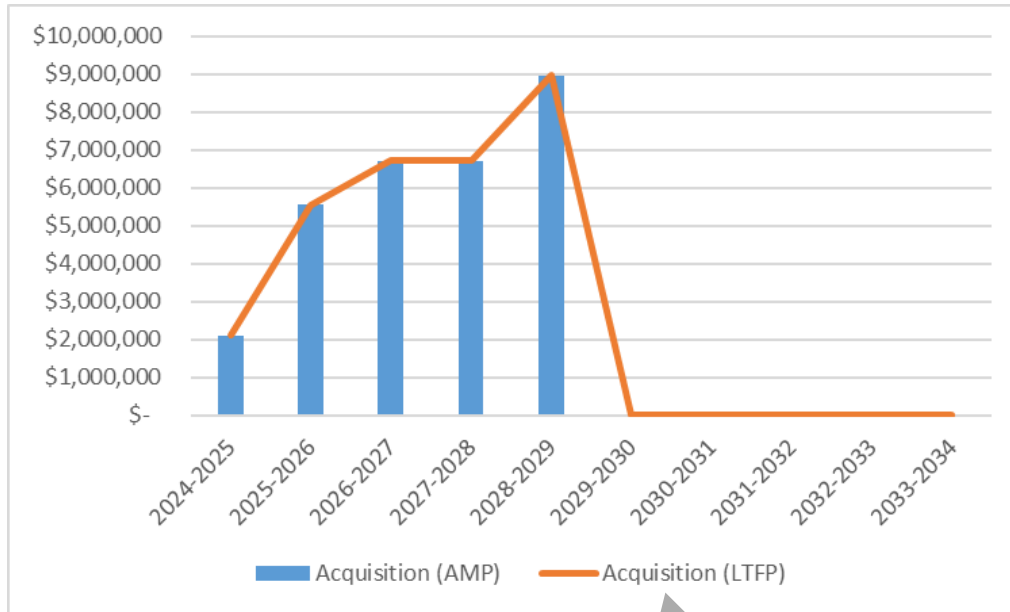
Acquisition reflects new assets that did not previously exist or works which will upgrade or improve an existing asset beyond its existing capacity. They may result from growth, demand, social or environmental needs. Assets may also be donated to the Council.

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

**Summary of future asset acquisition costs**

Forecast acquisition asset costs are summarised in Figure 5.5 and shown relative to the proposed acquisition budget. The forecast acquisition projects are shown in Appendix A.

**Figure 5.5: FORECAST ACQUISITION COSTS**



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.

### 5.6 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 (10) years.

## 6.0 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’<sup>7</sup>.

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.

### 6.1 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 6.1 below.

**Table 6.1: 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

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.

### 6.2 Risk Assessment

The risk management process used is shown in Figure 6.2 below.

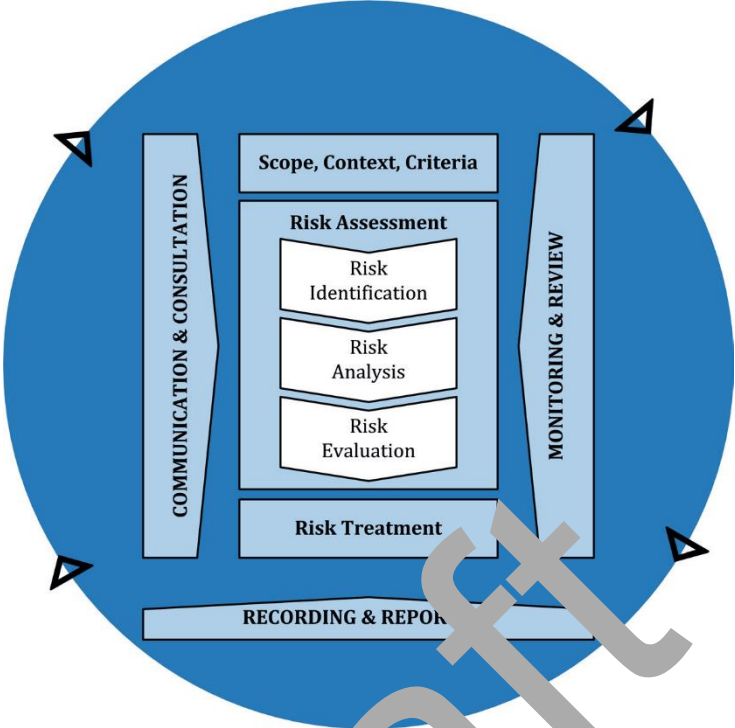
It is an analysis and problem-solving technique designed to provide a logical process for the selection of treatment plans and management actions to protect the community against unacceptable risks.

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

<sup>7</sup> ISO 31000:2009, p 2



**Figure 6.2: RISK MANAGEMENT PROCESS – ABRIDGED**



Source: ISO 31000:2018, Figure 6.9

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 non-acceptable 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, 'financial shock', reputational impacts or other consequences. This is outlined in Table 6.2 below.

**Table 6.2: RISKS AND TREATMENT PLANS**

Service or Asset at Risk	What Can Happen	Impact Category	Risk Rating	Risk Treatment Plan	Residual Risk
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)

### 6.3 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 on aspects such as response and recovery planning, financial capacity, climate change and crisis leadership.

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

### 6.4 Service and Risk Trade-Off

The decisions made in adopting the AMP are based on the objective to achieve the optimum benefits from the available resources.

#### 6.4.1 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.

#### 6.4.2 Service trade-off

If there are forecast works (operational maintenance, renewal, acquisition or disposal) which 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.

### 6.4.3 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 works.

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## 7.0 FINANCIAL SUMMARY

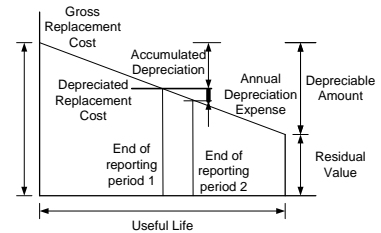
This section contains the financial requirements resulting from the information presented in the previous sections of this AMP. The financial projections will be improved as the discussion on desired levels of service and asset performance matures.

### 7.1 Financial Statements and Projections

#### 7.1.1 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 <sup>8</sup>	\$189,026,721
Depreciation during the 2022-2023 Financial Year	\$4,957,783



#### 7.1.2 Sustainability of service delivery

There are two key indicators of sustainable service delivery that are considered in the AMP for this service area, namely:

- asset renewal funding ratio (proposed LTFP renewal budget for the next ten (10) years / forecast AMP renewal costs for next ten (10) years); and
- medium term forecast costs / proposed budget (over ten (10) years of the planning period).

##### Asset Renewal Funding Ratio

Asset Renewal Funding Ratio<sup>9</sup> 100.37%

The Asset Renewal Funding Ratio is an important indicator and illustrates that over the next ten (10) years, the Council expects to have approximately 100% of the funds required for the optimal renewal of assets.

The forecast renewal work along with the proposed renewal budget is illustrated in Appendix C.

##### Medium term – ten (10) year financial planning period

This AMP identifies the forecast operational maintenance and renewal costs required to provide an agreed level of service to the community over a ten (10) year period. This provides input into ten (10) 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 (10) year period to identify any funding shortfall.

The forecast AMP operational maintenance and renewal costs over the ten (10) 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 1.0 for the first years of the AMP and ideally over the ten (10) year life of the LTFP.

<sup>8</sup> Also reported as Written Down Value, Carrying or Net Book Value.

<sup>9</sup> AIFMM, 2015, Version 1.0, Financial Sustainability Indicator 3, Sec 2.6, p 9.

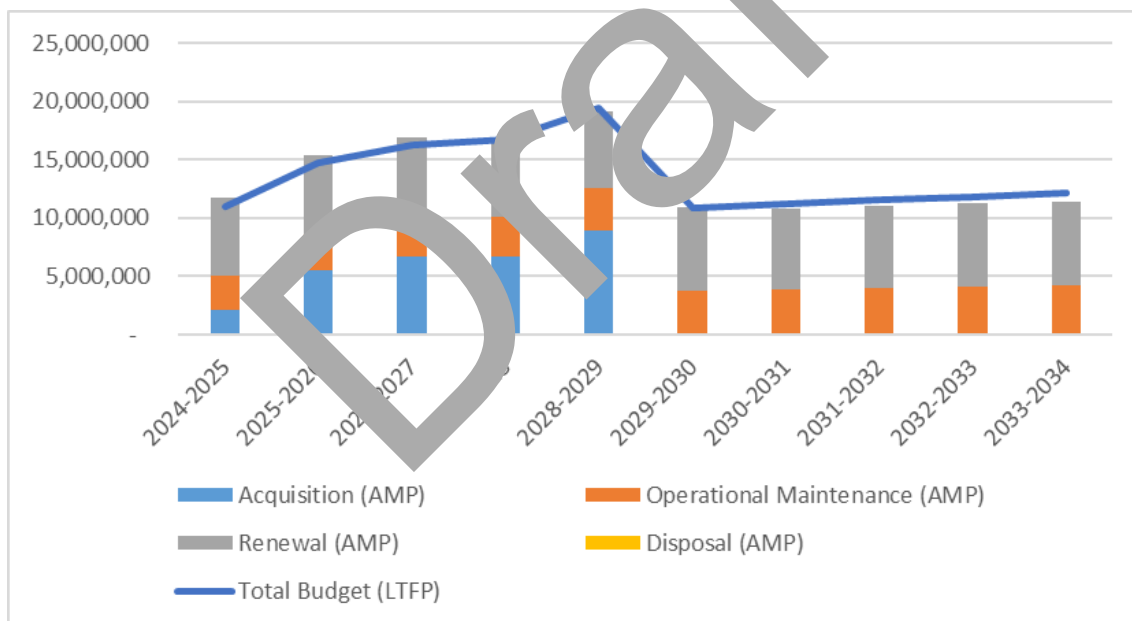
### 7.1.3 Forecast Costs

A summary of the anticipated AMP forecast life-cycle costs compared with the LTFP planned budget are shown in Table 7.1.3 and Figure 7.1.3 below.

**Table 7.1.3: FORECAST LIFE-CYCLE COSTS AND PLANNED BUDGETS**

Year	Acquisition (AMP) (\$)	Operational Maintenance (AMP) (\$)	Renewal (AMP) (\$)	Disposal (AMP) (\$)	Total Budget (LTFP) (\$)
2024-2025	2,110,000	2,987,455	6,674,028	0	10,986,439
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	7,108,067	0	11,840,806
2033-2034	0	4,256,167	7,135,555	0	12,177,489

**Figure 7.1.3: FORECAST LIFE-CYCLE COSTS AND PLANNED BUDGETS**



### 7.2 Funding Strategy

The proposed funding for 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 communicates how and when this will be spent, along with the service and risk consequences of various service alternatives.

### 7.3 Valuation Forecasts

Asset values are forecast to increase as additional assets are added to service.

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.

#### 7.4 Key Assumptions Made in Financial Forecasts

In compiling this AMP, it has been necessary to make some assumptions. This section details the key assumptions made in the development of this AMP and should provide readers with an understanding of the level of confidence in the data behind the financial forecasts.

Key assumptions made in this AMP are:

- acquisition and renewal costs have been based on professional judgement; and
- forecasted operational maintenance costs are based on previous expenditure for the same service levels.

#### 7.5 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 scale<sup>10</sup> in accordance with Table 7.5.1 below.

**Table 7.5.1: DATA CONFIDENCE GRADING SYSTEM**

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. Dataset is complete and estimated to be accurate $\pm 2\%$
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. Dataset is complete and estimated to be accurate $\pm 10\%$
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 is available. Dataset is substantially complete but up to 50% is extrapolated data and accuracy estimated $\pm 20\%$
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 $\pm 40\%$
E. Unknown	None or very little data held.

The estimated confidence level for and reliability of data used in this AMP is shown in Table 7.5.2 below.

**Table 7.5.2: DATA CONFIDENCE ASSESSMENT FOR DATA USED IN AMP**

Data	Confidence Assessment	Comment
Demand drivers	C	Based on development application trends, <i>profile.id</i> data, climate change data, community surveys

<sup>10</sup> IPWEA, 2015, IIMM, Table 2.4.6, p 2 | 71.



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	B	As per approved methodology
- Asset values	B	Current estimates from asset register
- Asset useful lives	B	Methodology and data capture to be updated
- Condition modelling	B	Methodology and data capture to be updated
Disposal forecast	E	No disposal forecast

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

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## 8.0 PLAN IMPROVEMENT AND MONITORING

### 8.1 Status of Asset Management Practices

#### 8.1.1 Accounting and financial data sources

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

#### 8.1.2 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.

### 8.2 Improvement Plan

It is important that the Council recognise areas of their AMP and planning process that require future improvements to ensure effective asset management and informed decision making. The improvement plan generated from this AMP is shown in Table 8.2 below.

**Table 8.2: IMPROVEMENT PLAN**

Task No.	Task	Responsibility	Resources Required	Timeline
1	Formalise ongoing monitoring and reporting of improvement plan tasks and performance measures	Project Manager, Assets	Manager, City Projects	1 year
2	Review condition assessment data collected in 2023-2024	Project Manager, Assets	Manager, City Projects	1 year
3	Further develop risk assessment and management planning	Project Manager, Assets	Project Officer, Assets and Asset Consultants	2 years
4	Improve GIS data storage system, integrate with asset databases	Project Manager, Assets	Information Services, Consultants	3 years
5	Review resilience of critical infrastructure	Project Manager, Assets	City Assets and Asset Consultants	4 years

### 8.3 Monitoring and Review Procedures

The AMP will be reviewed and updated annually to ensure 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 (4) years and is due for complete revision and updating within two (2) years of each Council election.

### 8.4 Performance Measures

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

- the degree to which the required forecast costs identified in this AMP are incorporated into the LTFP;
- the degree to which the short-term detailed works programs, budgets, business plans and corporate structures take into account the 'global' works program trends provided by the AMP;
- the Asset Renewal Funding Ratio achieving the Organisational Target (this target is often 1.0).

## 9.0 REFERENCES

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- IPWEA, 2015, 3rd edn., 'International Infrastructure Management Manual', Institute of Public Works Engineering Australasia, Sydney, [www.ipwea.org/IIMM](http://www.ipwea.org/IIMM);
- 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

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## 10.0 APPENDICES

### 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

**Table A2: 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
2025-2026	Implementation of The Parade Master Plan	5,250,000
2025-2026	Traffic Management in Payneham South, Firla 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

##### A.3 – Acquisition Forecast Summary

**Table A3: ACQUISITION FORECAST SUMMARY**

Year	Acquisition (AMP) (\$)	Acquisition (LTFP) (\$)
2024-2025	2,110,000	2,110,000
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**

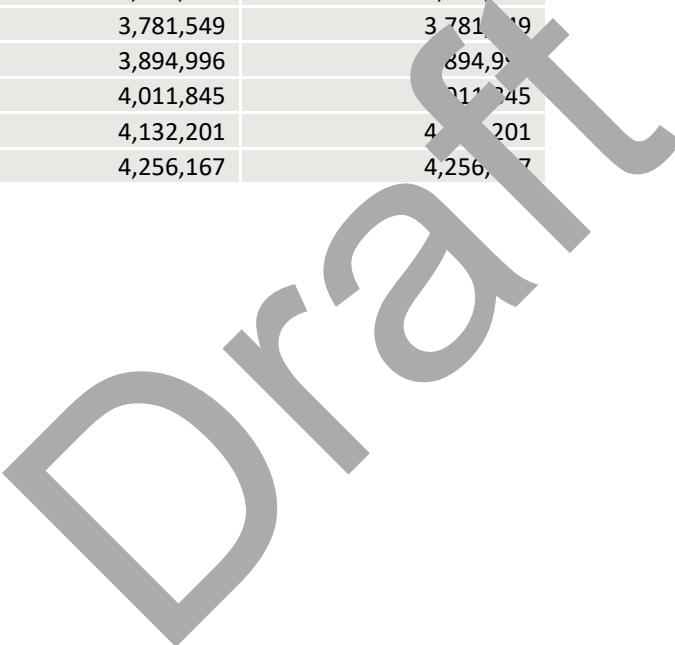
**B.1 – Operational Maintenance Forecast Assumptions and Source**

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**

**Table B2: 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

**Table C2: RENEWAL FORECAST SUMMARY**

Year	Renewal (AMP) (\$)	Renewal (LTFP) (\$)
2024-2025	6,674,028	5,888,984
2025-2026	6,709,623	6,082,630
2026-2027	7,002,695	6,394,817
2027-2028	6,721,030	6,613,037
2028-2029	6,490,811	6,837,201
2029-2030	7,007,595	7,086,234
2030-2031	6,803,776	7,292,344
2031-2032	6,803,250	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

**Table D2: DISPOSAL ACTIVITY 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

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