Parks Asset Management Plan 2025-2029

City of Kalamunda

Document Control					
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1. EXECUTIVE SUMMARY

1.1. The Purpose of the Plan

An Asset Management Plan is a strategic planning document designed to demonstrate the financial position of an asset portfolio based on current management practices. Infrastructure assets are a key service provided by Local Governments, and the cost to provide and upkeep the assets to an acceptable standard is significant. Asset Management Plans are therefore vital to understand and optimise the required investment into the portfolio now and into the future.

The plan considers:

- What assets we have (a summary of our existing portfolio);
- How we look after the portfolio, including level of service and risks;
- Future demand for the assets;
- The cost to manage the portfolio, over a 10-year period; and,
- Actions to improve.

1.2. Asset Description- What We Have

This Asset Management Plan covers the City's parks assets, as outlined in the below table. The network of the park assets with the current replacement cost of $66,692,628.

Table 1.2.1 Parks asset category with replacement cost

SN	Asset Category	Nos of assets	Gross Replacement Cost	Percentage of the park Portfolio
1	Fences	605	$12,622,758	18.93%
2	Irrigation	500	$5,424,496	8.13%
3	Lighting	595	$7,547,052	11.32%
4	Open Space Furniture	402	$1,251,347	1.88%
5	Playground Equipment	615	$9,718,536	14.57%
6	Park Infrastructure	324	$2,299,606	3.45%
7	Parks and Gardens	328	$19,187,846	28.77%
8	Retaining Wall	294	$8,640,987	12.96%
	Total	**3663**	**$66,692,628**	**100%**

The Asset Management Plan financial forecasting focuses on built infrastructure and excludes green assets.

1.3. Levels of Service

The City aims to provide services that meet community aspirations; however, financial capacity and technical requirements must be balanced. The resulting standard of provision is called a "level of service," and an Asset Management Plan uses this level of service as a benchmark for cost analysis.

Building New

Desired investment into new or upgraded parks as per the City's Public Open Space Strategy and Masterplans.

Renewing Existing

Renewing existing parks infrastructure when in poor or very poor condition (known as intervention level 4).

Maintenance & Operation

Undertaking planned maintenance and operation programs.

1.4. Future Demand

The Asset Management Plan also considers future demand and its impact on service delivery. Factors influencing the plan include:

- Population growth
- Strategic drivers
- Community need analysis
- Community demographics (increase in population of elderly and young children)
- Trends in sporting, play and recreation

The City's approach to service the future demand is outlined in the Plan.

1.5. Financial Summary

The City has undertaken financial modelling of the parks portfolio to determine the funding required over a 10-year period to meet the level of service. This Asset Management Plan has found that the planned budget in the Long-Term Financial Plan is currently insufficient to meet the intended levels of service over a 10-year period.

The modelling indicates:

The City needs to invest $4,630,939 per year into parks assets to meet the level of service.

The current funding available in the Long-Term Financial Plan for parks assets is $3,352,632.

The City is therefore underfunding the parks portfolio by $1,278,308 per year.

The graph below demonstrates this funding gap.

Figure 1.1 Forecast Lifecycle Costs and Planned Budgets

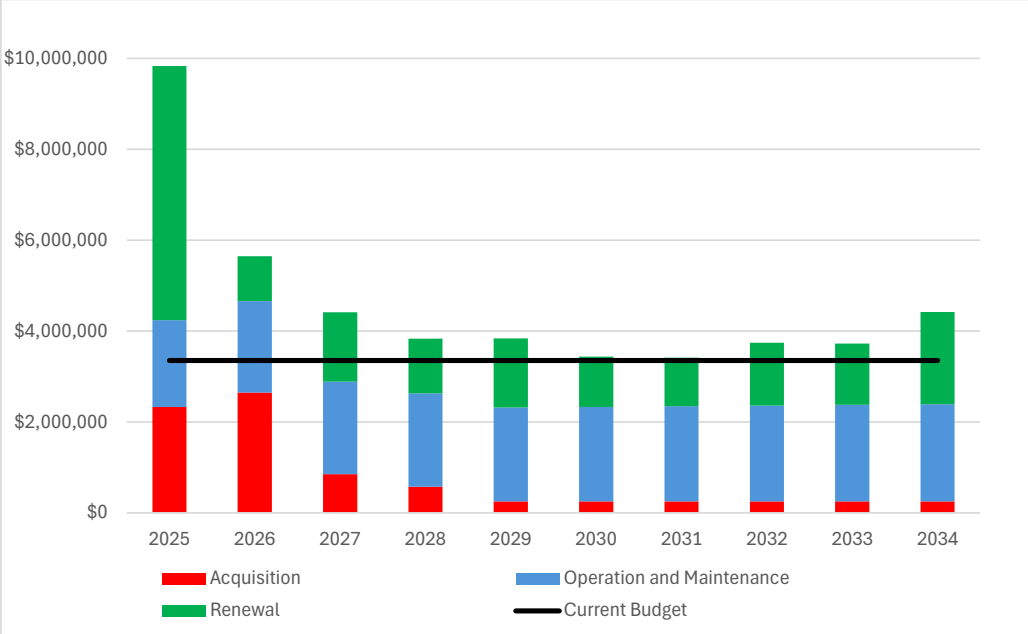


Figure Values are in current dollars.

In the event of such a funding gap, the City must either:

- Reduce its intended level of service, or
- Increase funding on the Long Term Financial plan for the acquisition, renewal, maintenance, and operation of the parks portfolio.

What We Cannot Do	What We Can Do
Some service levels cannot be reduced to save costs, due to the associated risks. We cannot: • Allow assets to deteriorate to an unsafe standard • Reduce our standards when constructing new assets, as the City is obliged to meet Australian Standards.	To address the funding gap, the City can: • Increase funding or reduce service levels through rationalisation of infrastructure • Prioritise renewal of existing assets over the construction of new assets, to ensure the existing portfolio remains at an acceptable standard • Revise strategic direction for the provision of new infrastructure, and approach to customer requests.

The risks to the City are outlined in the body of the Asset Management Plan.	

1.6. Monitoring and Improvement Program

The Asset Management Plan also includes a review of the City's management processes to ensure continual improvement, which assists in optimising the cost of the portfolio. The City has identified the following actions to monitor and improve our processes, to be implemented over the life of the plan:

- Develop a Maintenance Management Plan.
- Implement an Enterprise Resource Planning (ERP) system with a Maintenance Management System including a mobile device for field data collection.
- Carry out community consultation to determine community levels of service and agreed technical levels of service.
- Update the Public Open Space Strategy with consideration of diversifying play offerings.
- Consider analysis of green assets in future iterations of the Plan.
- Continue organisational education about the importance of asset management systems, Asset Management Plans, and the link to the Long-Term Financial Plan.
- Ensure future needs are reflected in this Asset Management Plan and considered in the development of the Long-Term Financial Plan.
- Continue to monitor and improve the accuracy and validity of park asset data to improve confidence levels.

2. INTRODUCTION

2.1. Background

An Asset Management Plan is a strategic planning document designed to demonstrate the financial position of an asset portfolio based on current management practices. Infrastructure assets are a key service provided by Local Governments, and the cost to provide and upkeep the assets to an acceptable standard is significant. Asset Management Plans are therefore vital to understand and optimise the required investment into the portfolio now and into the future.

The City is responsible for managing, operating, and maintaining major infrastructure asset classes such as roads, pathways, drainage, parks infrastructure, parks, reserves, car parks, and buildings.

Asset Management Plans are developed for each asset class for the following purposes:

- Implementing objectives in the City's Asset Management Policy, Strategy and other strategic guiding documents.
- Ensuring that the City's assets continue to provide an adequate level of service to the community.
- Providing guidance on the long-term funding needs for the renewal of the City's assets.
- Supporting external funding applications.
- Documenting existing and planned works programs and practices.

This Asset Management Plan covers the City's park infrastructure including:

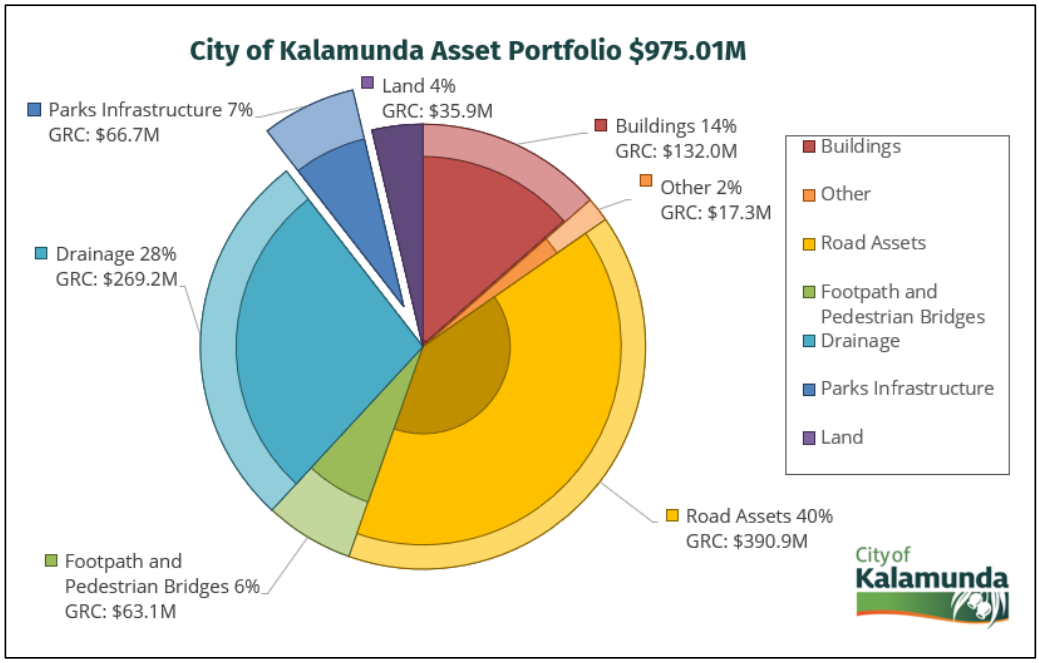
SN	Asset Category	Asset details	Total Measure	Replacement Cost
1	Fences	Fences have numerous types based on material and fence height (75.5 km).	605 Assets	$12,622,758
2	Irrigation	• Reticulation Pipe System (273 assets,124 Ha irrigated) • Bore and Pump System (77 Assets) • Controller System (89 Assets) • Irrigation Tank System (23 assets) • Pump System (23 Assets) • Pond Aerator System (10 Assets) • Fire Control Tank System (5 assets)	500 Assets	$5,424,496
3	Lighting	• Street (51 Assets) • Park and Reserve (128 Assets) • Sports Field (112 Assets) • Carpark (139 Assets) • Sports Court (78 Assets) • Security (15 Assets) • Public Realm (31 Assets) • Building & Public Realm (27 Assets) • Building (14 Assets)	595 Assets	$7,547,052
4	Open Space Furniture	• Picnic Setting (112 Assets) • Seat (285 Assets) • Bench (5 Assets)	402 Assets	$1,251,347

5	Playground Equipment	• Fitness Equipment (319 Assets) • Play Equipment (32 Assets) • Shade Sails (74 Assets) • Skate Parks (6 Assets) • Softfall (182 assets) • Campsite (2 Assets)	615 Assets	$9,718,536
6	Park Infrastructure	• Barbeque (22 Assets) • Drinking Fountain (30 Assets) • Shelter (86 Assets) • Sport Goal (74 Assets) • Bike Rack (12 Assets) • Bin Surround (57 Assets) • Playground equipment (31 Assets) • Handrail (4 Assets) • Arbour (4 Assets) • Tunnel (2 Assets) • Parklet (1 Assets) • Birth Bath (1 Assets)	324 Assets	$2,299,606
7	Parks and Gardens	• Outdoor Sports Hard Surface (69 assets covering 63,156 sqm) • Park Turf (20 Assets covering 31,920 sqm) • Sports Field Turf (78 Assets covering 593,808 sqm) • Outdoor Park Hard Surface (140 Assets covering 7,490 sqm) • Landscaping (1 Asset covering 940 sqm) ** • Sand Bunker (20 Assets covering 6,809 Sqm)	328 Assets	$19,187,846
8	Retaining Wall	• Rock Pitching (70 Assets with 527 m Long) • Retaining 0.5 to 1.5m (14 Assets with 1065 m Long) • Garden Edge (178 Assets with 6386 m Long) • Retaining >1.5 (11 Assets with 147 m Long) • Retaining (0.5 m to 1.5 m) (21 Assets with 717 m Long)	294 Assets	$8,640,987
				$66,692,628

** The City has not undertaken a comprehensive data capture in relation to landscaping, and therefore this Plan does not undertaking forecasting relating to landscaping assets.

Parks infrastructure is an important part of the City's asset portfolio, comprising 7% of the total gross replacement value (see Figure 2.1.1 below).

***Figure 2.1.1. City of Kalamunda asset portfolio* (As of 30 June 2024)**



The aim of the City for the parks and recreation assets is to achieve the following essential objectives:

- Safe,
- Accessible,
- Fit for purpose, and
- Affordable.

Strategic Context

The AM Plan is to be read with the City of Kalamunda planning documents. This should include the Asset Management Policy and Asset Management Strategy, where developed, along with other key planning documents:

- Asset Management Policy
- Asset Management Strategy to 2021
- Strategic Community Plan to 2031 – "Kalamunda Advancing"
- Long-Term Financial Plan
- Corporate Business Plan to 2023 - "Kalamunda Achieving"
- Disability Access and Inclusion Plan to 2022
- Kalamunda Clean and Green, Local Environment Strategy 2019-2029
- Kalamunda Futures, Youth Plan 2023-2028
- Public Open Space Strategy 2018 and associated Master Plans

- Non-Potable Water Action Plan
- Water Action Plan 2009
- Local Planning Strategy
- Local Structural Plans

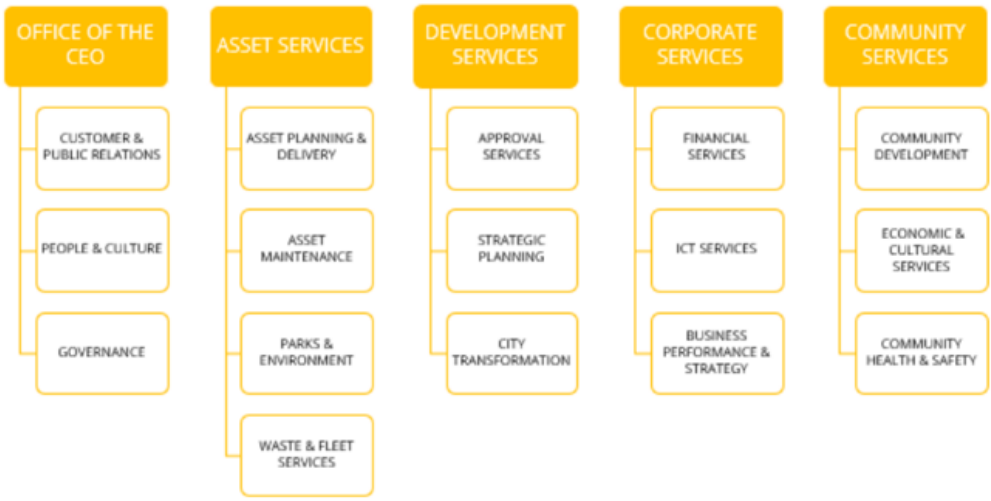
Asset Management Practices are also aligned to the following standards:

- ISO 55000:2024 Asset Management – Vocabulary, overview, and principles
- International Infrastructure Management Manual[1]

Governance

Our organisational structure for service delivery from infrastructure assets is detailed below,

Figure 2.1.2. Organizational structure



Stakeholders

Key stakeholders in the preparation and implementation of this AM Plan are shown in Table 2.1.

Table 2.1: Key Stakeholders in the AM Plan

Key Stakeholder	Role in Asset Management Plan
Elected Board	• Stewards of the City of Kalamunda's assets to ensure sustainable infrastructure provision for current and future generations • Set strategic direction for the portfolio • Represent the needs of the community/shareholders,

[1] IPWEA International Infrastructure Management Manual (IIMM), Sec 2.1

Key Stakeholder	Role in Asset Management Plan
	• Allocate resources to meet planning objectives in providing services while managing risks
City Administration/Officers	• Undertake asset management practices across the asset lifecycle including creation, renewal, maintenance, operation and disposal. • Set levels of services in accordance with the strategic direction and community feedback • Make sure the quality of service offered satisfies both locals' and visitor's requirements.
Residents, Ratepayers, Businesses and Visitors	• End user of the assets • Contribute to establishing levels of service of the assets through communicating needs and aspirations

2.2. Goals and Objectives of Asset Ownership

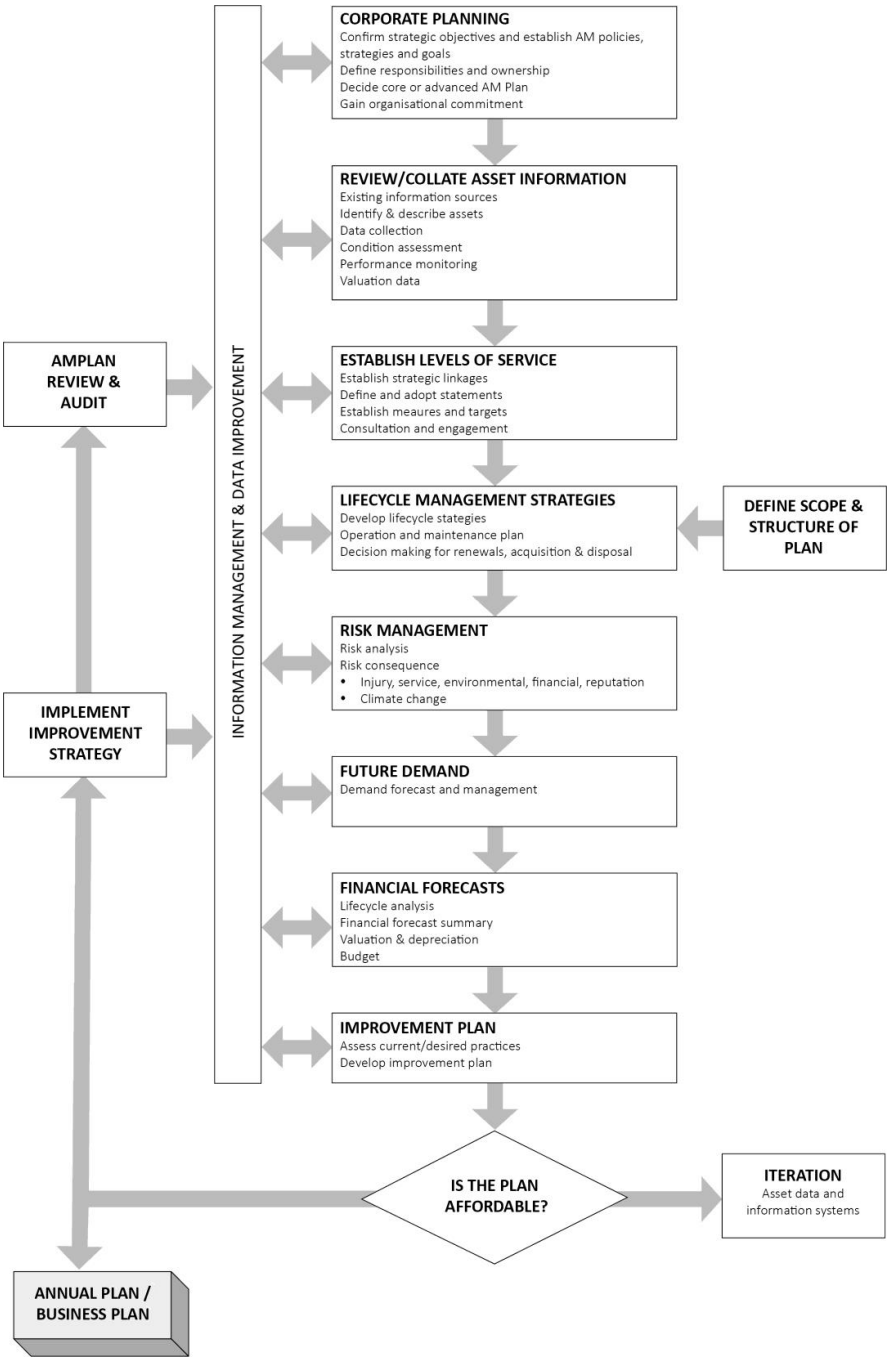
Our goal for managing infrastructure assets is to meet the defined level of service (as amended from time to time) in the most cost effective manner for present and future consumers. The key elements of infrastructure asset management are:

- Providing a defined level of service and monitoring performance,
- Managing the impact of growth through demand management and infrastructure investment,
- Taking a lifecycle approach to developing cost-effective management strategies for the long-term that meet the defined level of service,
- Identifying, assessing and appropriately controlling risks, and
- Linking to a Long-Term Financial Plan which identifies required, affordable forecast costs and how it will be allocated.

The key elements of the planning framework are outlined in the road map as shown below.

Road Map for Preparing an Asset Management Plan

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



3. LEVELS OF SERVICE

The City aims to provide services that meet community aspirations; however, financial capacity and technical requirements must be balanced. The resulting standard of provision is called a "level of service," and an Asset Management Plan uses this level of service as a benchmark for cost analysis.

In setting levels of service, we consider:

- Customer values
- City values and relevant legislation
- Customer levels of service
- Technical levels of service

3.1. Customer Research and Expectations

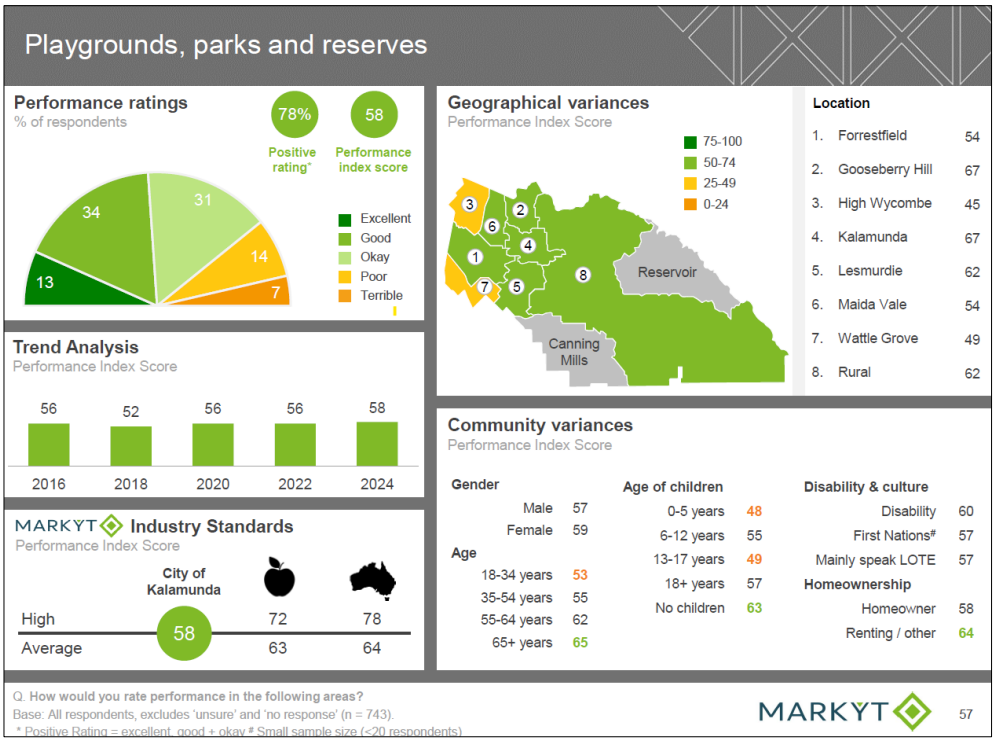
The following data has been collected by the City and analysed to understand the community's expectations in relation to pathway assets:

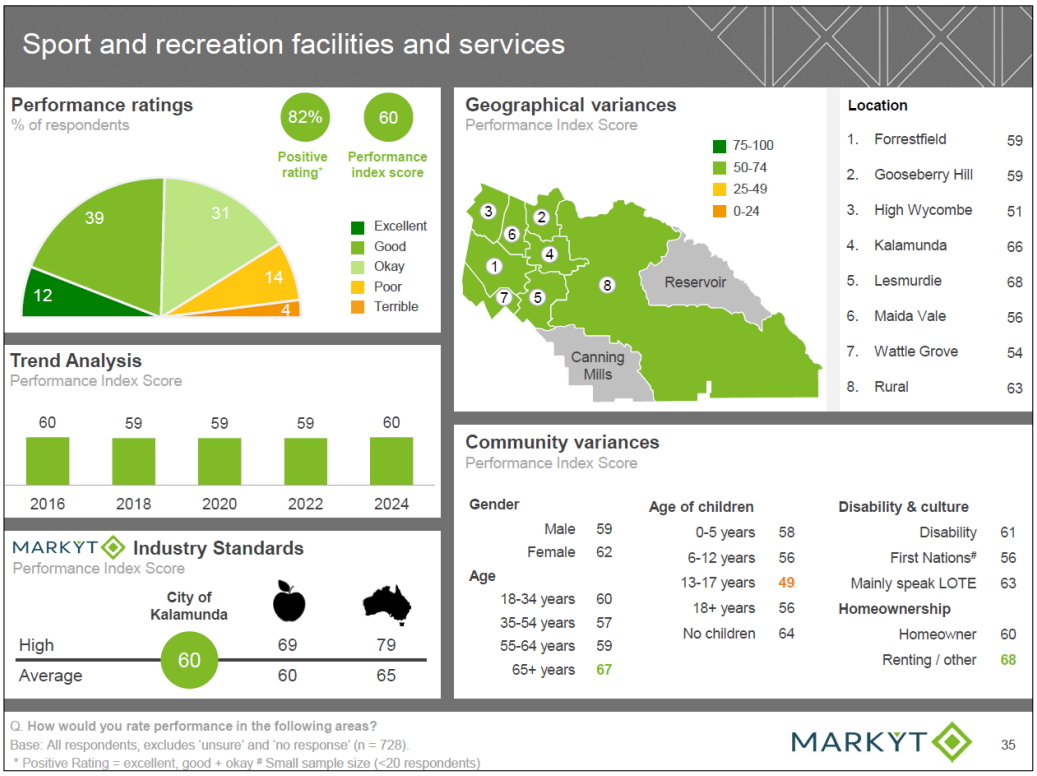
Community Scorecard

The City commissioned Catalyse to conduct a community survey in 2024 to measure the City's performance against key indicators in the Strategic Community Plan.

Satisfaction levels with playgrounds, parks and reserves, and sport and recreation facilities and services was assessed in this survey, as outlined in the tables below.

Table 3.1: Customer Satisfaction Survey Levels





The survey indicates that:

- 78% of the respondents indicate a positive performance (excellent, good or okay) with playgrounds, parks and reserves.
- 82% of the respondents indicate a positive performance (excellent, good, or okay) with sports and recreation facilities.

The City's performance index score is below the average of other participating Local Government Authorities in WA. This indicates that the community has a greater expectation than what is currently being provided by the City of Kalamunda.

City staff have reviewed the commentary associated with the survey results. There were 80 total comments relating to Playgrounds and Parks infrastructure.

- 17 mentioned the lack of regular maintenance and operation of the infrastructure
- 20 mentioned the lack of infrastructure inside the parks (benches, shades, toilets, sports lighting)
- 15 mentioned the need for better playgrounds than the current one
- 14 mentioned the safety (fences around the playgrounds, lighting, cameras)
- 8 mentioned the requirement of planting more trees
- 3 mentioned the need for dedicated dog playgrounds
- 3 mentioned the requirement of an off-road dirt bike and pump track.

Stirk Park was mentioned by 20 respondents indicating the community priority of the site.

The results indicate the following are high-priority actions:

- Regular maintenance of park infrastructure
- Funding renewals in accordance with the Asset Management Plan to address condition issues

Community Service Requests

The number of requests from the community relating to the services provided by the City indicates the community's perception of the level of service.

Figure 3.2 shows the total number of requests about the Parks assets in the last five years. Most requests are from Forrestfield (2,794 Nos).

Figure 3.2: Community Services Requests

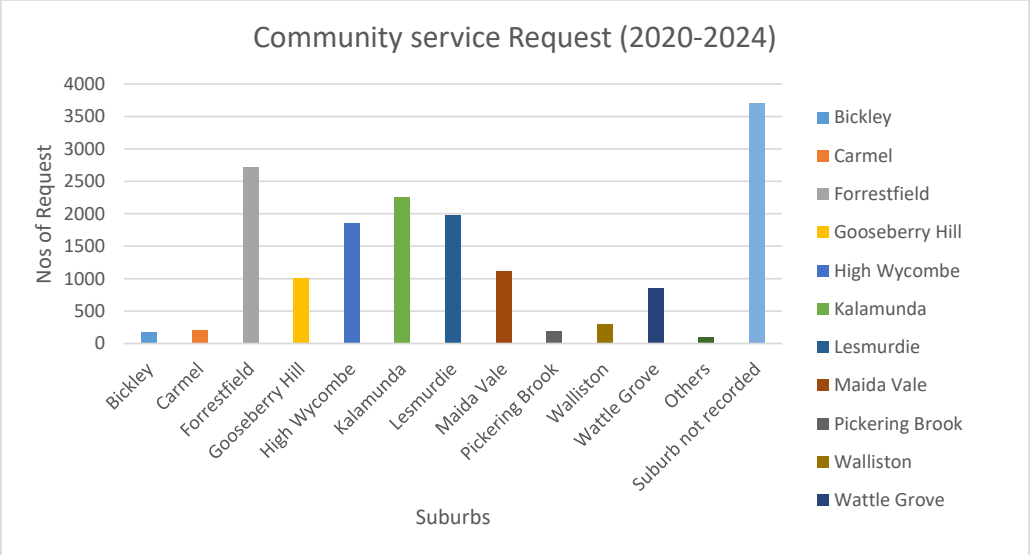
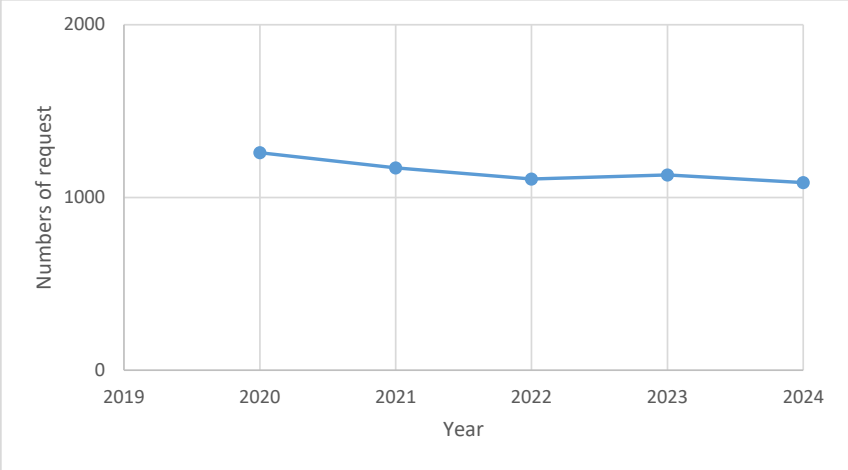


Figure 3.3: Community Services Requests by year



The City will endeavor the benchmark this data in future iteration of the plan. The description of the request has been considered in table 3.2 in this AMP.

Table 3.2: Description of Community Services Requests

Description of request	Nos of requests
Asset Condition Maintenance	43
Mow/Slash/Clean/Other	2972
Parks and Car Parks Lighting	16
Playground Safety Inspections	280
Reticulation	314
Verge Maintenance	1465
Weed/Pest Control	663
TOTAL	**5753**

3.2. Strategic and Corporate Goals

This Plan is prepared under the direction of the City Of Kalamunda's vision, mission, goals, and objectives.

Our vision is: *Connected Communities, Valuing Nature and Creating our Future Together*

Our Values are:

- Core Values
  - Service
  - Professionalism
  - Quality
- Aspirational Values
  - Courage

- Diversity
- Innovation

This Plan has been prepared to align with the following objectives and strategies of the City's Strategic Community Plan 2031. The relevant goals and objectives and how these are addressed in this AM Plan are summarized in Table 3.3.

Table 3.3: Goals and how these are addressed in this Plan

Goal	Objective	Link to the Asset Management Plan
Plan for population growth	To plan for sustainable population growth	This Plan considers the estimated population growth within the City of Kalamunda
Improved Infrastructure	To develop and enhance the City's economy	Priorities are set for the assets nearing the end of their useful life. This plan will help the City to plan for the management of a wide range of assets
Tourism Destination	To be recognised as a preferred tourism destination	Maintenance, renewal, and upgrade of assets in a timely manner when funding is available will enhance the condition of the assets and will attract tourists.
Safer Community	To provide safe and healthy environments for the community to enjoy	Maintenance, renewal, and upgrade of assets in a timely manner when funding is available will enhance the condition of the assets and will contribute to healthy communities.
Transparent Governance	To provide leadership through transparent governance	This Plan is a public document and provides transparency around management practices and financial capacity.

3.3. Legislative Requirements

There are many legislative requirements relating to the management of assets. Legislative requirements that impact the delivery of the Parks service are outlined in Table 3.4.

Table 3.4: Legislative Requirements

Legislation	*Requirement*
Local Government Act 1995 (WA)	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.
Australian Accounting Standards AASB 116 – Property, Plant and equipment AASB 136 - Impairment	Prescribes requirements for recognition, depreciation and fair value measurement of property (including infrastructure assets), plant and equipment assets.
Work Health and Safety 2020 (WA)	Safe work practices, Safety at worksites, Public Safety
Work Health and Safety (General) Regulations 2022	Safety regulations at worksites

Limitations Act 2005	Asset inspection and management requirements, Evidence-based maintenance system addressing risks appropriately
Land Administration Act 1997	Responsibility for land and improvements, Permitted uses on public land
Disability Discrimination Act 1992 (Commonwealth)	The responsibilities and power of the council to provide equitable access for a person with a disability.
Aboriginal Heritage Act 1972 and Heritage Act of WA 2018	Minimise impact on heritage site as a result of infrastructure works.
Contaminated Sites Act 2003 & Contaminated Sites Regulations 2006	Some current parks are built on former tip and contaminated sites, effects quality of bore water and regulates treatment for contaminated soils
State Records Act 2000 (WA)	Preservation of public records, Record keeping
Rights in Water and Irrigation Act 1914	Regulates water access, use, and management to ensure sustainable water distribution

3.4. Customer Values

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

Customer Values indicate:

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

Table 3.5: Customer Values

Service Objective:

Customer Values	Customer Satisfaction Measure	Current Feedback	Expected Trend Based on Planned Budget
Well-maintained parks with attractive playgrounds for children	Customer services request Community Scorecard	The number of customer service requests is more than 1000 each year. Maintenance and safety were both raised as focus areas in the Community Scorecard. Performance is below industry average.	If funding is not increased for renewals and maintenance, customer requests are expected to increase, and the Community Scorecard performance is expected to decrease.
Well-maintained sporting infrastructure which is fit for purpose			
Well-functioning lights at all times as needed			
Parks that are safe to use at any time			

3.5. Customer Levels of Service

The Customer Levels of Service are considered in terms of:

Condition How good is the service … what is the condition or quality of the service?

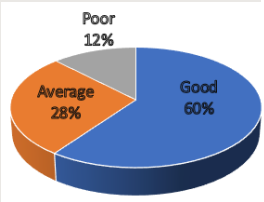
Function Is it suitable for its intended purpose …. Is it the right service?

Capacity/Use Is the service over or under used … do we need more or less of these assets?

In Table 3.6 under each of the service measure types (Condition, Function, Capacity/Use) there is a summary of the performance measure being used, the current performance, and the expected performance based on the current budget allocation.

These are measures of fact related to the service delivery outcome (e.g. number of occasions when service is not available or proportion of replacement value by condition %'s) to provide a balance in comparison to the customer perception that may be more subjective.

Table 3.6: Customer Level of Service Measures

Type of Measure	*Level of Service*	*Performance Measure*	*Current Performance*	*Expected Trend Based on Planned Budget*
Condition	Condition of the assets	Condition rating of the asset	Most assets are in average and good condition 	Asset renewals are currently not fully funded, and therefore asset conditions are likely to deteriorate. Inadequate maintenance budgets can also contribute to early asset deterioration.
	Confidence levels		High (Professional judgement supported by extensive data sampling)	Medium (Professional judgement supported by data sampling)
Function	Assets are functional and able to provide services to the community	Customer Service Requests – when assets fail to function as required	More than 1000 customer requests each year.	Expected to increase over the long term if funding for renewal and maintenance is not prioritised.
	Confidence levels		Low (Professional Judgement with no data evidence)	Low (Professional Judgement with no data evidence)
Capacity	Number and quality of parks and reserves	Community Scorecard	Over 65% of comments received in the Community Scorecard requested improved infrastructure offerings at public open spaces.	The City is actively master planning major reserves; however, community satisfaction is expected to decline without a strategic review of play offerings.
	Confidence levels		Medium (Professional judgement supported by data sampling)	Medium (Professional judgement supported by data sampling)

3.6. Technical Levels of Service

To deliver the customer values, and impact the achieved Customer Levels of Service, are operational or technical measures of performance. These technical measures relate to the activities and allocation of resources to best achieve the desired customer outcomes and demonstrate effective performance.

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

Acquisition	Operation	Maintenance	Renewal
• The activities to provide a higher level of service (e.g. widening a road, sealing an unsealed road, replacing a pipeline with a larger size) or a new service that did not exist previously (e.g. a new library)	• The regular activities to provide services (e.g. opening hours, cleansing, mowing grass, energy, inspections, etc	• The activities necessary to retain an asset as near as practicable to an appropriate service condition. Maintenance activities enable an asset to provide service for its planned life (e.g. road patching, unsealed road grading, building and structure repairs)	• The activities that return the service capability of an asset up to that which it had originally provided (e.g. road resurfacing and pavement reconstruction, pipeline replacement, and building component replacement)

Table 3.7 shows the activities expected to be provided under the current 10-year planned budget allocation, and the Forecast activity requirements being recommended in this AM Plan.

Table 3.7: Technical Levels of Service

Lifecycle Activity	Purpose of Activity	Activity Measure	Current Performance*	Recommended Performance **
TECHNICAL LEVELS OF SERVICE				
Acquisition	New and upgraded parks to meet demand.	Identification of assets acquisition within forward capital planning, as per relevant strategic plans. Acquisitions for development areas are suitably identified and delivered.	Strategies are translated into master planning which are currently scheduled in the Long-Term Financial Plan and grants are frequently obtained. Development Structure Plans and associated planning documents ensure that acquisitions for new communities are scheduled.	Continue strategically assessing acquisition needs and applying for grants to support this activity.
		Budget	$790,262	$ 790,262
Operation	Keep public open spaces in neat and tidy condition	Cleaning/mowing frequency	Scheduled mowing/ cleaning program as per the hierarchy of the open space.	The operation budget should increase as additional assets are constructed and require operation
Maintenance	Ensure that the assets are well maintained and free of hazards for all asset users	Frequency	Hazards are identified and prioritised to maintain within budget limitations.	The maintenance budget should increase due to unsatisfactory service levels and provision for additional assets
		Budget (O & M)	$1,822,368	$2,064,118

Lifecycle Activity	Purpose of Activity	Activity Measure	Current Performance*	Recommended Performance **
Renewal	Renew existing assets that are in poor condition and reach the end of life.	Asset condition assessment	Assets in poor condition were added to the capital works program.	Completion of the renewal activities detailed as per plan
		Budget	$740,000	$1,776,558
Disposal	Disposal of assets no longer in use	Identification of assets disposal within the forward capital planning	Forward Capital Plan upgrade on an annual basis to incorporate future needs	No additional disposal planned at this time
		Budget	*Nil in future years*	*Nil in future years*

Note: * Current activities related to Planned Budget.

** Expected performance related to forecast lifecycle costs.

It is important to monitor the service levels regularly as circumstances can and do change. Current performance is based on existing resource provision and work efficiencies. It is acknowledged changing circumstances such as technology and customer priorities will change over time.

4. FUTURE DEMAND

4.1. Demand Impact and Demand Management Plan

Drivers affecting demand include things such as population change, regulations, changes in demographics, seasonal factors, vehicle ownership rates, consumer preferences and expectations, technological changes, economic factors, agricultural practices, environmental awareness, etc.

The impact of demand drivers that may affect future service delivery and use of assets are shown in Table 4.3.

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. Further opportunities will be developed in future revisions of this AM Plan.

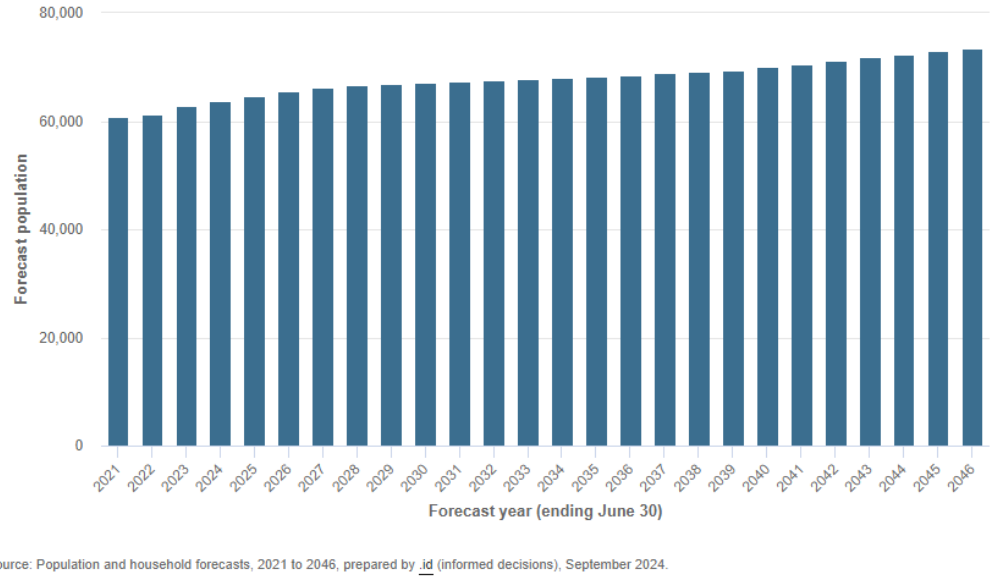
Table 4.3: Demand Management Plan

Demand driver	Current position	Projection	Impact on services	Demand Management Plan
Population Growth	58,762 (Census 2021)	Between 2021 and 2046, the population is forecast to increase by 20.71%, at an average annual change of 0.76% (Forecast.id.com.au)	Population growth will mean an increased use of assets	Demand for new assets and services will be managed through a combination of managing existing assets, upgrading of existing assets and providing new and expanded assets to meet demand. As new developments are completed, gifted assets will help meet the demand created.
Community demographics (increase of population of elderly and young children)	The median age of people in Kalamunda is 47. Children aged 0 - 14 comprised 15.7% of the population, and people aged 65 and over made up 26.1%.	A significant increase in people aged 65 years and over is expected over the next 10 years.	An ageing will have an impact on the functionality of the Parks assets. Increase demand for passive, unstructured open space areas. Demand for improved accessibility to open space areas, to cater for residents with reduced mobility.	All new renewal programs will ensure that the City's Parks assets are built to accessibility standards as per Australian standards.

				Demographics may influence the use of parks including equipment and furniture. A future revision of the Public Open Space Strategy should consider this.
Social connectivity	Healthy lifestyles are promoted with people recognise the importance of social connectivity	Industry trends indicate changing preferences in utilisation of public open spaces.	Diversification of offerings and multi-functional spaces	Developing some master plans and strategies accordingly to ensure diversification is considered strategically.
Increasing Community Expectations	Current limited expectation	Higher expectations and awareness	Increase in cost/resources to the city	Balancing the priorities with community needs.

Between 2021 and 2046, the population is forecast to increase by 20.71%, at an average annual change of 0.76% (Figure 4.1)

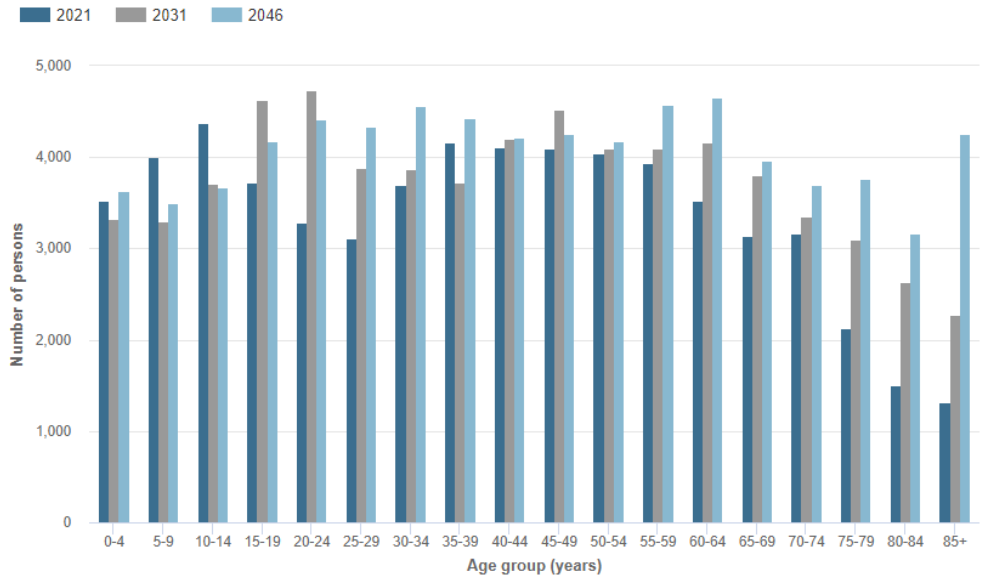
Figure 4.1: Population forecast (Forecast.id.com.au)



Source: Population and household forecasts, 2021 to 2046, prepared by .id (informed decisions), September 2024.

Between 2021 and 2031, the age structure forecasts for the City of Kalamunda indicate a 13.2% decrease in the population under working age, a 34.7% increase in the population of retirement age, and an 11.2% increase in the population of working age (Figure 4.2)

Figure 4.2: Forecast age structure (Forecast.id.com.au)

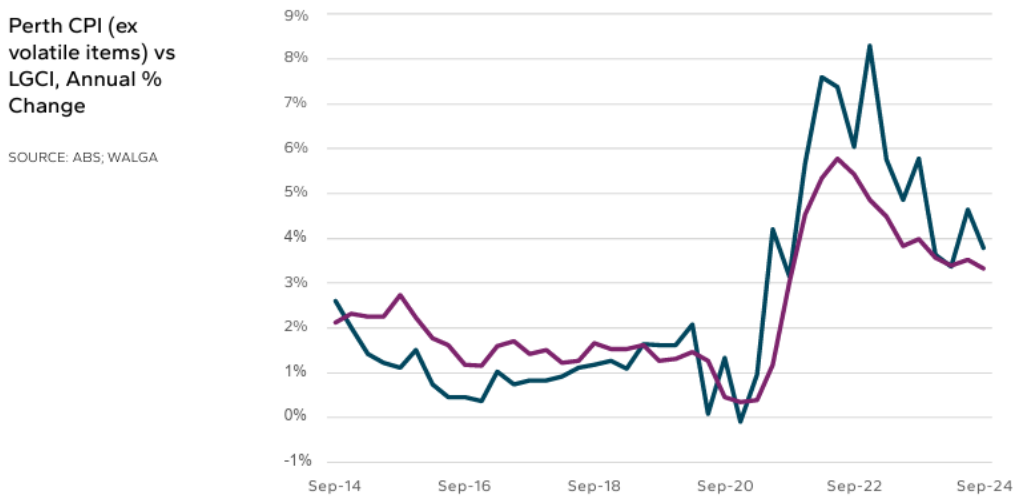


Source: Population and household forecasts, 2021 to 2046, prepared by .id (informed decisions), September 2024.

4.2. Industry Trend

The WALGA Economic Briefing for December 2024 shows the below graph showing the % Change in Perth CPI and the LGCI. The Local Government Cost Index (LGCI) increased by 0.8% in the September quarter, the same as the June quarter. In annual terms, the LGCI increased by 3.3%, falling from 3.5% in the June quarter. Construction costs have increased by approximately 20% over the last three years. The rate of price rises has slowed on average across the State as global supply chain constraints have eased and post-pandemic stimulus works its way through the system. However there remains significant upside pressure on construction costs as high-levels of investment in public infrastructure projects continue and Governments respond to the housing crisis by incentivising construction. With ongoing strong population growth, and a more robust private sector than elsewhere in the country, there is a risk of construction cost increases re-escalating.

Figure 4.3: Local Government Cost Index



4.3. Climate Change Adaptation

The impacts of climate change may have a significant impact on the assets we manage and the services we provide. 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 assets will vary depending on the location and the type of services provided, as will how we respond and manage those impacts.[2]

As a minimum, we consider how to manage our existing assets given potential climate change impacts for our region.

Risks and opportunities identified to date are shown in Table 4.5.1

Table 4.5.1 Managing the Impact of Climate Change on Assets and Services

Climate Change Description	Projected Change	Potential Impact on Assets and Services	Management
Drying climate	Reduction in rainfall	Reduction in available water sources to keep parks at high amenity.	• Water Action Plan and Non-Potable Water Action Plan • Aquifer recharge infrastructure • Water sensitive design principles when renewing or redesigned parks, including appropriate species selection and hydrozoning

[2] IPWEA Practice Note 12.1 Climate Change Impacts on the Useful Life of Infrastructure

More extreme weather events	Increase in temperatures	This could increase the rate of asset deterioration resulting in more maintenance and earlier renewal.	• Inspections after an extreme weather events • Review of materials used in various open space assets that perform well in heat.

Additionally, the way in which we construct new assets should recognise that there is an opportunity to build resilience to climate change impacts. Building resilience can have the following benefits:

- Assets will withstand the impacts of climate change.
- Services can be sustained; and
- Assets that can endure may potentially lower the lifecycle cost and reduce their carbon footprint

Table 4.5.2 summarises some asset climate change resilience opportunities.

Table 4.5.2 Building Asset Resilience to Climate Change

New Asset Description	Climate Change Impact	Build Resilience in New Works
Parks	Increase the rate of asset deterioration	Adapt new building materials with comparable lifecycle costs that can endure harsh weather
	Drying Climate	Require water-sensitive design in any new / upgrade works
	Fire	Using fire-resistant or non-flammable materials for Parks and surrounding infrastructure is critical in bushfire-prone areas.

The impact of climate change on assets is a new and complex discussion and further opportunities will be developed in future revisions of this AM Plan.

5. LIFECYCLE MANAGEMENT PLAN

The Lifecycle Management Plan details how the City plans to manage and operate the assets at the agreed levels of service while managing life cycle costs. The lifecycle of an asset includes; creation, operation, maintenance, renewal and disposal. A lifecycle approach is taken to ensure that the City understands all costs relating to meeting our service levels.

Figure 5.0.1: Asset Life Cycle (IPWEA)

5.1. Background Data

5.1.1. Physical parameters

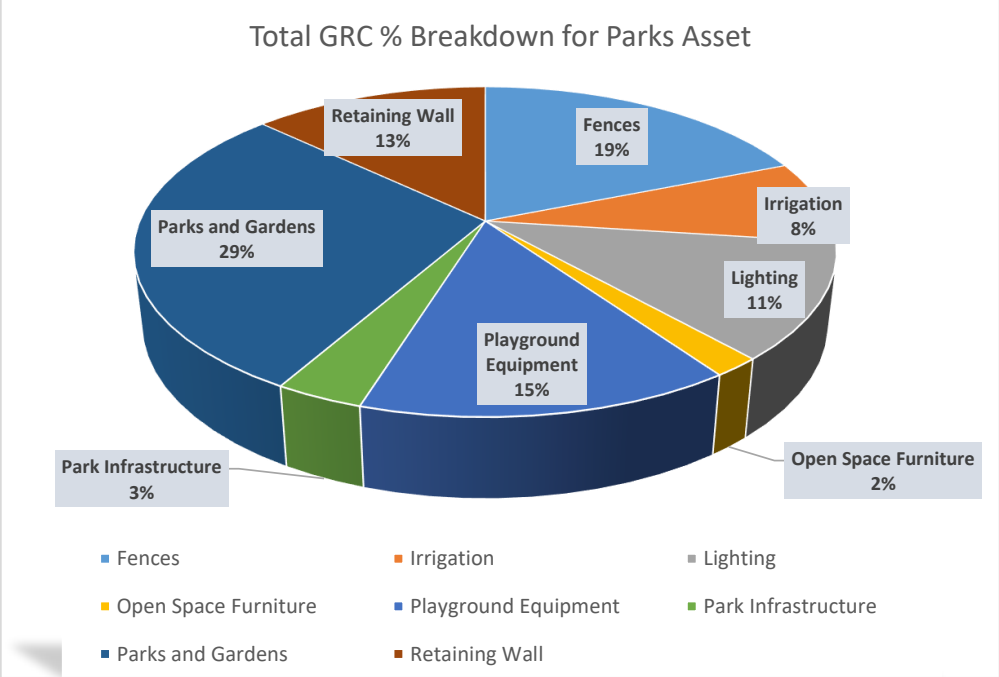
The assets covered by this AMP are shown in Table 5.1.1.

Table 5.1.1: Assets covered by this Plan

SN	Asset Category	Nos of assets	Gross Replacement cost	Percentage to the park Portfolio
1	Fences	605	$12,622,758	18.93%
2	Irrigation	500	$5,424,496	8.13%
3	Lighting	595	$7,547,052	11.32%
4	Open Space Furniture	402	$1,251,347	1.88%
5	Playground Equipment	615	$9,718,536	14.57%
6	Park Infrastructure	324	$2,299,606	3.45%
7	Parks and Gardens	328	$19,187,846	28.77%
8	Retaining Wall	294	$8,640,987	12.96%
	Total	**3663**	**$66,692,628**	**100%**

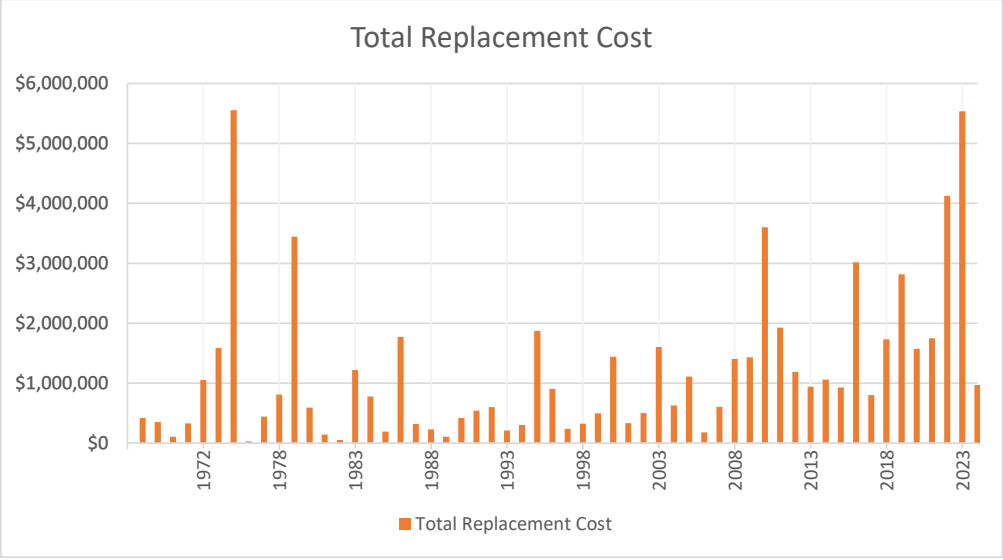
The breakdown of the parks assets based on gross replacement cost percentage breakdown is shown in Figure 5.1.1 below.

Figure 5.1.1: Total GRC percentage breakdown



The age profile of the assets included in this AM Plan is shown in Figure 5.1.1.

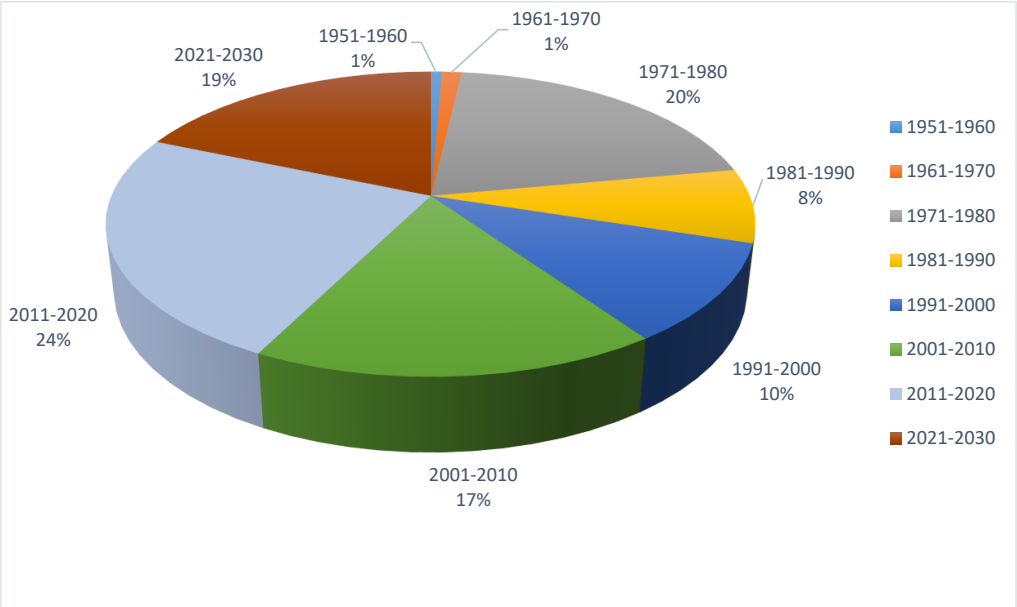
Figure 5.1.1: Asset Age Profile



All figure values are shown in current-day dollars.

It should be noted that in reviewing an asset age profile it is helpful to review past peaks of investment that may require peaks in renewals in the future.

Figure 5.1.2: Asset Age Profile (Grouped in 10 years period)



5.1.2. Asset capacity and performance

Assets are generally provided to meet design standards where these are available. However, there are insufficient resources to address all known deficiencies. Locations where deficiencies in service performance are known are detailed in Table 5.1.2.

Table 5.1.2: Known Service Performance Deficiencies

Location	Service Deficiency
Various	Some assets in master plan areas may deteriorate beyond the technical level of service due to the timing of implementation.

The above service deficiencies were identified from our various staff's expertise and knowledge.

5.1.3. Asset condition

Condition is currently monitored through ongoing asset inspections in accordance with the city's asset management plan by our qualified asset inspectors every 5 years. Assessment of parks assets defects is based on the Practice notes prepared by IPWEA.

The City's current approach to asset renewal is to renew components in Condition 4 or 5. Currently, funds for renewals are allocated within capital budgets.

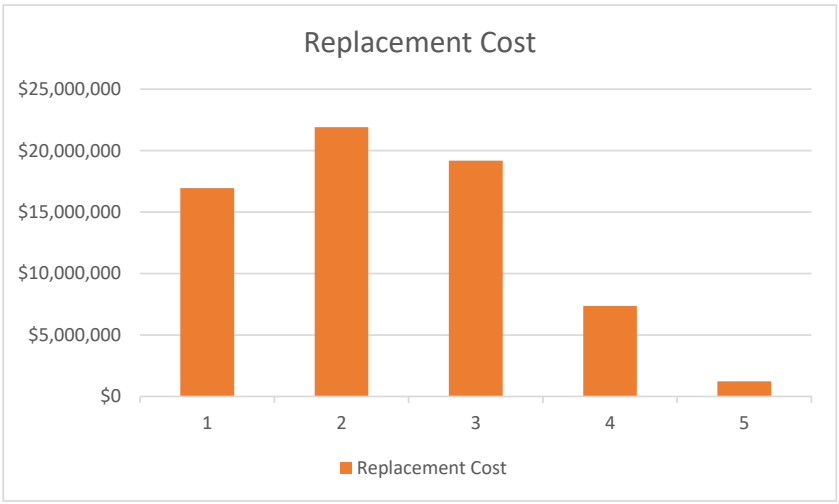
The condition profile for parks is based on condition rating surveys carried out by the City. Condition is measured using a 1 – 5 grading system[3] as detailed in Table 5.1.3. A consistent approach is used in reporting asset performance enabling effective decision support. A finer grading system may be used at a more specific level, however, for reporting in the AM plan results are translated to a 1 – 5 grading scale for ease of communication.

Table 5.1.3: Condition Grading System

Condition Grading	Description of Condition
1	**Very Good**: free of defects, only planned and/or routine maintenance required
2	**Good**: minor defects, increasing maintenance required plus planned maintenance
3	**Fair**: defects requiring regular and/or significant maintenance to reinstate service
4	**Poor**: significant defects, higher order cost intervention likely
5	**Very Poor**: physically unsound and/or beyond rehabilitation, immediate action required

The condition profile of our assets is shown in Figure 5.1.3. The majority of assets are in condition 3 or better.

Figure 5.1.3: Asset Condition Profile



All figure values are shown in current-day dollars.

5.2. Operations and Maintenance Plan

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

[3] IPWEA, 2015, IIMM, Sec 2.5.4, p 2|80.

Maintenance includes all actions necessary for retaining an asset as near as practicable to an appropriate service condition including regular ongoing day-to-day work necessary to keep assets operating. Examples of typical maintenance activities include pipe repairs, asphalt patching, and equipment repairs.

The trend in maintenance budgets is shown in Table 5.2.1.

Table 5.2.1: Maintenance Budget Trends

Year	Maintenance Budget $
Actual 2024	$ 2,200,539
Budgeted 2025	$ 1,822,368
Forecasted 2026	$ 1,908,893

The above maintenance budgets reflect the cost to continue operating at less than or equal to current service levels. Where maintenance budget allocations are such that they will result in a lesser level of service, the service consequences and service risks have been identified and are highlighted in this AM Plan and service risks are considered in the Infrastructure Risk Management Plan.

Assessment and priority of reactive maintenance is undertaken by staff using experience and judgement.

Asset hierarchy

An asset hierarchy provides a framework for structuring data in an information system to assist in the collection of data, reporting information and making decisions. The hierarchy includes the asset class and component used for asset planning and financial reporting and the service level hierarchy used for service planning and delivery.

The Classification of POS is shown in Table 5.3.1.

Table 5.3.1: Public Open Space Classification

Classification	Size, Catchment and Definitions
Regional Park	Size and catchment variable – Major Road access and public transport. Large to very large spaces to accommodate recreation and sport, plus significant conservation or environmental features, serving residents and visitors from outside the local government area. May include substantial facilities for organised sport, play, social interaction, and enjoyment of nature. Can include facilities for recreation and organised sports spaces, recreational spaces, and significant conservation/environmental features such as bushland, foreshore, wetlands and natural areas.
District Park	5 Ha to 15 Ha+ – 2 km / 5-minute drive Large parkland principally designed for organised formal sport serving several neighbourhoods and attracting visitors from surrounding districts. May include substantial recreation space, may be co-located with high schools, and can include areas of environmental conservation.
Neighbourhood Park A	3 Ha to 5 Ha – 800m to 2km / 10-minute walk or 5-minute drive

	Strategically located and highly utilised space to serve the recreational and social needs of a community with a high level of amenity and sports functionality. May include passive and active recreational facilities, may be co-located with primary schools, and may include areas of environmental conservation.
Neighbourhood Park B	1 Ha to 3 Ha - 800m / 10-minute walk Moderate sized parklands to serve the recreational and social needs of a community with a basic level of amenity. May include passive recreational facilities, may be co-located with primary schools, and can include areas of environmental conservation.
Local Park	0.4 Ha to 1.0 Ha - 400m / 5-minute walk Small parklands to serve the recreational needs of the immediate residential population. May include small playground or recreation facilities and may include small areas of environmental conservation space. Unlikely to be used for formal or informal sports.
Small Park	Less than 0.4 Ha - 200m /3-minute walk Pocket or micro parklands to serve a limited recreational or open space need of nearby residents. Minimal recreational facilities or small areas of environmental conservation space.
Biodiversity Park	Size and Catchment Variable Local natural areas worthy of protection and enhancement due to environmental values and predominantly vegetated green spaces with managed public access for recreation. May be co-located with sports and recreation areas, and primary areas and buffers to bushland, watercourse, foreshore or wetland areas with significant conservation values.
Civic Park	Size and Catchment Variable Multi-functional area for passive use, events and civic/community facilities and spaces for community meetings and activities.
Other	Does not have a public open space function and may include supporting infrastructure such as road reserves, Pedestrian Access Ways, drainage basins.

The City also has a hierarchy as per functionality:

Table 5.3.2: Public Open Space Function

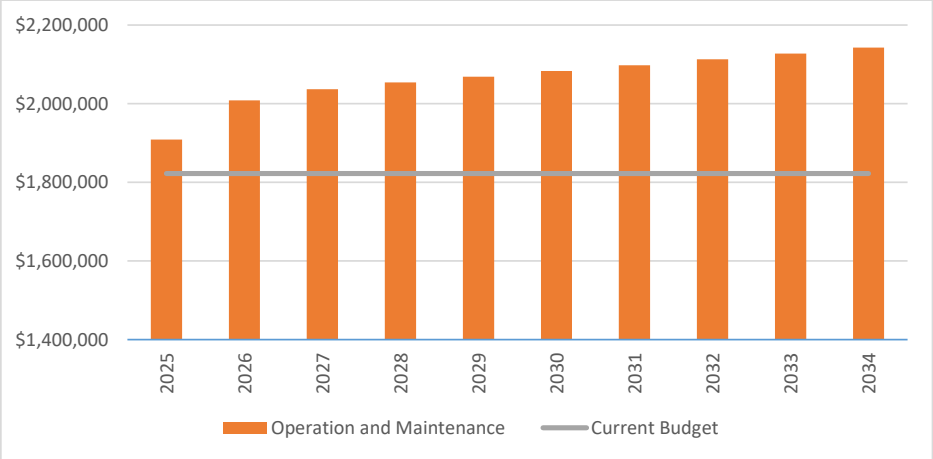
Function	Size, Catchment and Definitions
Recreation Space	Recreation spaces provide a setting for informal play and passive physical activity, relaxation and social interaction, including landscaped areas and activity nodes/respite points connected via pathways. Not for organised sporting facilities however may include open turf areas, play spaces and infrastructure to support social gathering such as skateparks, playgrounds, outdoor fitness equipment.
Sport Space	Outdoor and indoor infrastructure to accommodate active/competitive sport and recreation such as ovals, pitches, courts and supporting facilities such as gyms, pools, etc.
Nature Space	Provide a setting for people to enjoy nature and protect local biodiversity and natural areas.
Community Space	Multifunctional area for passive use such as events, celebrating heritage and culture, and for community facilities and spaces for meetings and activities.

Undeveloped	Does not provide any of the above functions or not yet developed for any purpose. Possibly superfluous to local open space needs and may serve another function such as drainage.

Summary of forecast operations and maintenance costs

Forecast operations and maintenance costs are expected to vary in relation to the total value of the asset stock. If additional assets are acquired, future operations and maintenance costs are forecast to increase. If assets are disposed of the forecast operation and maintenance costs are expected to decrease. Figure 5.2 shows the forecast operations and maintenance costs relative to the proposed operations and maintenance Planned Budget.

Figure 5.2: Operations and Maintenance Summary



All figure values are shown in current day dollars.

The need to manage the newly developed assets and the increased demands resulting from the aging assets are the key drivers of the projected growth in operations and maintenance.

Operation and maintenance costs for this document are based on the most current estimate of needs, the 2024-25 budget.

- Combined total Operation and Maintenance budget for 2025-26 is $1,822,368.

5.3. Renewal Plan

Renewal is major capital work that 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 its original service potential is considered to be an acquisition resulting in additional future operations and maintenance costs.

Approaches in the Lifecycle Model

- Used NAMS Plus Modelling Tool for Life Cycle Cost Forecast.

- To forecast the Renewals, we used the Asset Register Data Method which projects the renewal costs (replacement cost) and renewal timing (acquisition year plus updated useful life to determine the renewal year),
- Choose to intervene before the end of useful life (e.g., replacing condition 4 assets) and the useful life was updated to reflect that choice based on the condition rating data.

The typical useful lives of assets used to develop projected asset renewal forecasts are shown in Table 5.3. Asset useful lives were last reviewed on 30 June 2023.[4]

Table 5.3: Useful Lives of Assets

Asset (Sub)Category	Useful life
Fences	30 Yrs
Irrigation	10-30 Yrs
Lighting	30 Yrs
Open space furniture	20 Yrs
Park Infrastructure	20-75 yrs
Park and Garden	10-80 yrs
Playground Equipment	10-30 Yrs
Retaining wall	75 Yrs

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 (e.g. replacing a bridge that has a 5-t load limit), or
- To ensure the infrastructure is of sufficient quality to meet the service requirements (e.g. condition of a playground).[5]

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

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

The ranking criteria used to determine the priority of identified renewal proposals is detailed in Table 5.3.1.

[4] JLL revaluation report 30 June 2023.

[5] IPWEA, 2015, IIMM, Sec 3.4.4, p 3|91.

[6] Based on IPWEA, 2015, IIMM, Sec 3.4.5, p 3|97.

Table 5.3.1: Renewal Priority Ranking Criteria

Criteria	Weighting
Condition/Risk	Extreme, High, Moderate, and Low
Justification- Project needs	High, Moderate, and low

The City renews parks assets with an emphasis on those in poor condition and those that present the biggest risks to asset users. The City and the community can be at risk when the parks assets are in poor condition.

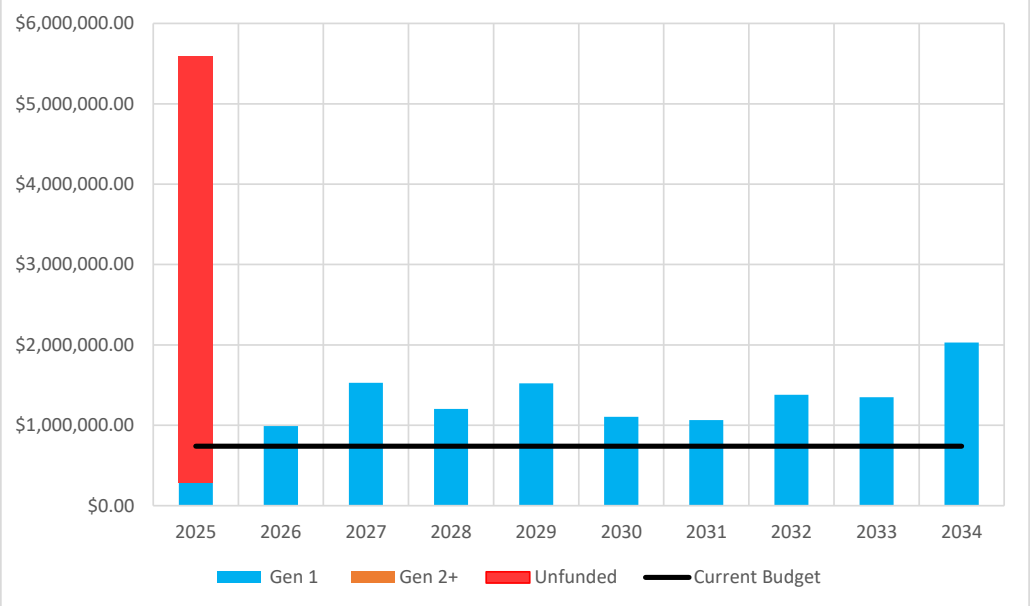
To prioritise assets with comparable risk factors and conditions, secondary criteria such as parks hierarchy, corporate/strategic objectives, and functionality have been employed.

5.4. Summary of Future Renewal Costs

Forecast renewal costs are projected to increase over time if the asset stock increases. The forecast costs associated with renewals are shown relative to the proposed renewal budget in Figure 5.4.1. A detailed summary of the forecast renewal costs is shown in Appendix C.

It is noted that the renewal modelling only considers built infrastructure in parks, and doesn't include the costs to replace natural assets. Natural assets cannot be modelled using Asset Management software as they do not depreciate like built infrastructure. Renewal/replacement of natural assets is typically undertaken as a maintenance activity.

Figure 5.4.1: Forecast Renewal Costs



All figure values are shown in current-day dollars.

- Gen 1 refers to the first renewal figure shown on a particular asset or group of assets within the planning period.
- Gen 2 refers to the next generations of an asset within the planning period, for example, an asset with 5 years of useful life would show up multiple times in a 10 or 20 year planning period.
- Unfunded refers to the value of expired assets. These are the renewal activities that fell due in the past, and it rolls into this red bar and is shown in the first year of the planning period.

The projected renewal requirement over a 10-year planning period for park assets is $17.76M, which equates to $1.77M, on average, per annum. The total requirement to address the park's backlog (unfunded assets at end of useful life) is $5.3M in 2025.

The renewal requirement for parks asset based on the proposed allocation within the LTFP over the 10-year planning period is $7.4M, which equates to $0.74M per annum. This leaves a funding shortfall of $1.03M on average per year. Projected future renewal expenditure requirements are forecast to increase over time as the asset stock increases from growth. The expenditure is summarised in Figure 5.4.1 for parks assets.

The deficit of funding in the model is triggered by the useful life of the assets when they reach the end of their life. In the graph, the triggered peaks are due to the assets reaching the end of the useful life, however, this backlog will be cleared over the period, with the funds allocated equally over the 10 years.

The difference between the amount of money currently available and what is needed to deliver the expected levels of service is the "funding gap". The modelling indicates that the levels of funding allocated are insufficient. The overall funding gap over the next 10 years is $1,278,308 per year (Table 5.4.1).

Table 5.4.1: Renewal recommended funding scenario

Asset Category	Selected Modelling Scenario	10 years predicted cost	Current Annual Renewal Allocation	Annual predicted funding gap
Parks	Renewal of the asset at the end of useful life/Condition 4	$46,390,391	$3,352,631	$1,278,308

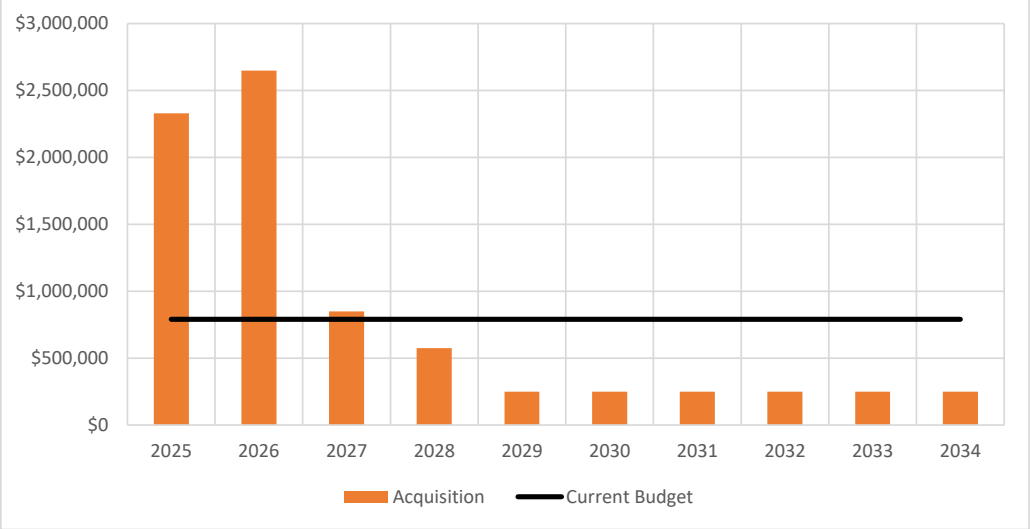
5.5. Acquisition Plan

The 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, and social or environmental needs. Assets may also be gifted to the City of Kalamunda.

Summary of future asset acquisition costs

Forecast acquisition asset costs are summarized in Figure 5.5.1 and shown relative to the proposed acquisition budget. The forecast acquisition capital works program is shown in Appendix A.

Figure 5.5.1: Acquisition (Constructed) Summary



All figure values are shown in current-day dollars.

The average acquisition cost identified is $790,262 and which matches the financial forecast model.

The City accepts the assets from the developers at no cost, and future maintenance, replacement, and ownership are transferred to the City. There are also Developer Contribution Plans (DCP) in some development areas to facilitate the equitable provision for the construction of common infrastructure and open spaces. This infrastructure is categorised as gifted assets. The future expected developers and DCP handover scenarios are shown below in Table 5.5.2

Table 5.5.2: Acquisition Lifecycle Activity

Asset Category	Budget estimated
Development contribution plan (DCP) Estimated	$150,000
Subdivision contribution- Estimated	$100,000
Total	$250,000

These assets are estimated from data collected following asset handover from the development in the past. The Development Contribution Plan acquisition was estimated at a very high level from the information given by the Strategic Planning team.

This AMP acknowledges that the City has adopted Master Plans for some parks and reserves as outlined in Table 5.5.3. The total anticipated cost to implement the master plans is $69.5M over a 20-year timeline. This AMP has incorporated some of the costs related to park assets.

Table 5.5.3: Major Master Plans

Major Master plans	Council adopted
Scott Reserve	June 2020 and Dec 2024
Maida Vale	Adopted Dec 2018
Hartfield Park stage 2	Adopted 2021
Ray Owen	Adopted Feb 2015
Stirk Park	Adopted July 2018

The following costs has been incorporated from the above Master Plan in the acquisition of park-related assets.

Strategy/Project	The budget is included on AMP*
Maida Vale Reserve Master Plan	$132,265
Scott Reserve Master Plan	$300,000
Ray Owen Master Plan	$69,197
Hartfield Park Master Plan Stage 2A	$250,000
Hartfield Park Master Plan Stage 2A	$3,000
Hartfield Park Master Plan Stage 2A	$300,000
Hartfield Park Master Plan Stage 2A	$125,368
Hartfield Park Master Plan Stage 2A	$79,524
Hartfield Master Plan	$241,871
Ray Owen Master Plan	$3,060,000
Stirk Park Masterplan	$30,000
High Wycombe community hub	$1,000,000

* Out of the particular strategy/projects, the amount considered in the AMP was just related to the park infrastructure.

Note, the project costs are indicative based on current designs and estimates, however are subject to change.

When the City commits to new assets, it must be prepared to fund future operations, maintenance and renewal costs. They must also account for future depreciation when reviewing long-term sustainability. When reviewing the long-term impacts of asset acquisition, it is useful to consider the cumulative value of the acquired assets being taken on by the Entity.

Expenditure on new assets and services in the Capital Works Program will be accommodated in the Long-Term Financial Plan, but only to the extent that there is available funding.

5.6. Disposal Plan

Disposal includes any activity associated with the disposal of a decommissioned asset including sale, demolition or relocation. Assets identified for possible decommissioning and disposal are shown in Table 5.6. A summary of the disposal costs and estimated reductions in annual operations and maintenance of disposing of the assets are also outlined in Table 5.6. Any costs or revenue gained from asset disposals is included in the long-term financial plan.

Table 5.6: Assets Identified for Disposal

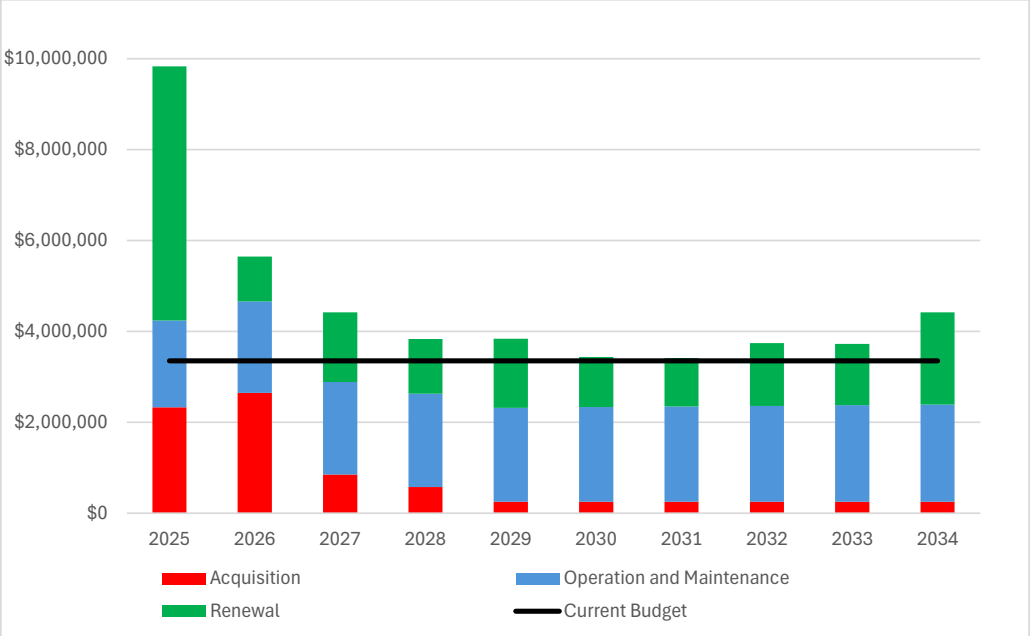
Asset	Reason for Disposal	Timing	Disposal Costs	Operations & Maintenance Annual Savings
No disposals identified in this plan				

5.7. Summary of asset forecast costs

The financial projections from this asset plan are shown in Figure 5.7.1. These projections include forecast costs for acquisition, operation, maintenance, renewal, and disposal. These forecast costs are shown relative to the proposed budget.

The bars in the graphs represent the forecast costs needed to minimise the life cycle costs associated with the service provision. The proposed budget line indicates the estimate of available funding. The gap between the forecast work and the proposed budget is the basis of the discussion on achieving the balance between costs, levels of service and risk to achieve the best value outcome.

Figure 5.7.1: Lifecycle Summary



All figure values are shown in current-day dollars.

The planned budget is not sufficient to meet the anticipated lifecycle cost related to this asset. Funding at current Long-Term Financial Plan levels will likely cause further deterioration in overall parks network condition and increase the number of Parks with poor and very poor condition scores. This will reduce the level of service provided by the Parks and increase the risk exposure to the City.

6. RISK MANAGEMENT PLANNING

The purpose of infrastructure risk management 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[8] 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. Failure modes may include physical failure, collapse or essential service interruption.

Table 6.1 Critical Assets

Critical Asset(s)	Failure Mode	Impact
Irrigation Assets	Bore and Mainline Failure	Loss of green turf and gardens. High cost to renovate and replace.

By identifying critical assets and failure modes an organisation can ensure that investigative activities, condition inspection programs, 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.

[7] ISO 31000:2009, p 2

[8] REPLACE with Reference to the Corporate or Infrastructure Risk Management Plan as the footnote

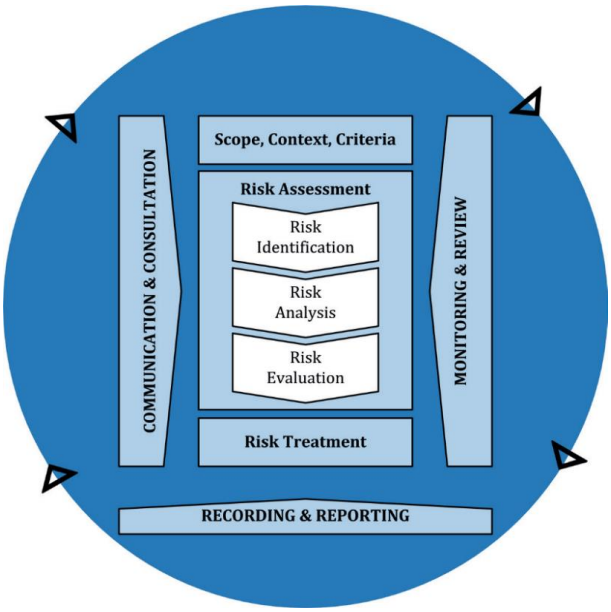


Fig 6.2 Risk Management Process – Abridged
Source: ISO 31000:2018, Figure 1, p9

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

An assessment of risks[9] 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.

Critical risks are those assessed with 'Very High' (requiring immediate corrective action) and 'High' (requiring corrective action) risk ratings identified in the Infrastructure Risk Management Plan. The residual risk and treatment costs of implementing the selected treatment plan are shown in Table 6.2. These critical risks and costs must be reported to management and the City.

[9] REPLACE with Reference to the Corporate or Infrastructure Risk Management Plan as the footnote

Table 6.2: Risks and Treatment Plans

Service or Asset at Risk	What can happen	Risk Rating (VH, H)	Risk Treatment Plan	Residual Risk *
Parks- General	Injury to the public arising from park asset defects like equipment failure	H	Routine inspection and treatment	M
Parks- general	Deterioration in general parks conditions (ageing)	H	Maintain adequate funding for maintenance and renewal work programs	M
Parks-Playground	Injury to children due to unsafe play equipment	H	Annual playground condition audit and maintenance	L
Parks-Lighting	Vandalism, electrical faults, inadequate visibility	H	Regular maintenance, vandal-resistant fixtures, LED upgrade	L
Parks- Irrigation	Lack of irrigation, and poor quality of water, causing damage to turf surfaces and an increase in sporting injuries.	VH	Regular auditing/testing of the system Monitoring of distribution uniformity and water quality testing Regular soil treatment	H
Parks	Major natural events (e.g. bush fire, flood, extreme weather) leading to severe damage or failure of the assets	H	Respond to major events as per the City's Emergency Management Plan. It covers the whole spectrum of emergency needs, including prevention, preparedness, response and recovery.	M

*The residual risk is the risk remaining after the selected risk treatment plan is implemented.

6.3. Infrastructure Resilience Approach

The resilience of our critical infrastructure is vital to the ongoing provision of services to customers. To adapt to changing conditions we need to understand our capacity to 'withstand a given level of stress or demand', and to respond to possible disruptions to ensure continuity of service.

Resilience recovery planning, financial capacity, climate change risk assessment and crisis leadership.

We do not currently measure our resilience in service delivery. This will be included in future iterations of the Plan.

6.4. Service and Risk Trade-Offs

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

6.4.1. What we cannot do

There are some operations and maintenance activities and capital projects that are unable to be undertaken within the next 10 years. These include:

- Proactive inspection of the assets
- Renew all assets in average to poor condition that fail to deliver service or the required level of service before they reach the end of their lives
- Upgrade assets to meet the level of service desired by the community.

6.4.2. Service trade-off

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

- Reduction in parks service levels due to shortfall of funding
- Likelihood of asset failure resulting in service disruptions
- Compromised in the safety of asset user

6.4.3. Risk trade-off

The operations and maintenance activities and capital projects that cannot be undertaken may sustain or create risk consequences. These risk consequences include:

- As the condition of assets deteriorates, they may become unsafe.
- Failed assets can pose a danger to the community.
- If assets are in dangerous condition, the City could be at risk of litigation should an incident occur.
- Reduction in use by the community
- Impact on the City's reputation
- With no new assets or asset improvements, to demonstrate prosperity, new residents may not be attracted to the area.

These actions and expenditures are considered and included in the forecast costs, and where developed, the Risk Management Plan.

7. FINANCIAL SUMMARY

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

7.1. Financial Sustainability and Projections

7.1.1. Sustainability of service delivery

There are two key indicators of sustainable service delivery that are considered in the AM Plan for this service area. The two indicators are the:

- Asset Renewal Funding Ratio (proposed renewal budget for the next 10 years / proposed renewal costs for next 10 years), and
- Lifecycle Funding Ratio (proposed lifecycle budget for the next 10 years / proposed lifecycle outlays for the next 10 years shown in the AM Plan).

Asset Renewal Funding Ratio

Asset Renewal Funding Ratio[10] 41.65%

This ratio is a measure of the ability of a local government to fund its projected asset renewal/replacements in the future and can continue to provide existing levels of services in future. Standard is met if the ratio is between 0.75 and 0.95.

The Asset Renewal Funding Ratio is an important indicator and illustrates that over the next 10 years we expect to have 41.65% of the funds required for the optimal renewal of assets.

The forecast renewal works along with the proposed renewal budget, and the cumulative shortfall where one exists, is illustrated in Appendix C.

Lifecycle Funding Ratio – 10-year financial planning period

This AM Plan identifies the forecast operations, maintenance and renewal costs required to provide an agreed, and affordable level of service to the community over a 10-year period. This provides input into the 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 first 10 years of the planning period to identify any funding shortfall.

The forecast operations, maintenance and renewal costs over the 10-year planning period is $3,840,677 average per year.

The proposed (budget) operations, maintenance, and renewal funding is $2,562,368 on average per year, giving a 10-year funding shortfall of $-1,278,308 per year. This indicates that 66.72% of the forecast costs needed to provide the services documented in this AM Plan are accommodated in the proposed budget. Note, that these calculations exclude acquired assets.

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 AM Plan and ideally over the 10 year life of the Long-Term Financial Plan.

[10] AIFMM, 2015, Version 1.0, Financial Sustainability Indicator 3, Sec 2.6, p 9.

7.1.2. Forecast Costs (outlays) for the Long-Term Financial Plan

Table 7.1.3 shows the forecast costs (outlays) required for consideration in the 10-year long-term financial plan.

Providing services in a financially sustainable manner requires a balance between the forecast outlays required to deliver the agreed service levels with the planned budget allocations in the long-term financial plan.

A gap (Figure 7.1) between the forecast outlays and the amounts allocated in the financial plan indicates further work is required on reviewing service levels in the AM Plan and/or financial projections in the LTFP.

The gap between the forecast work and the proposed budget is the basis of the discussion on balancing costs, level of service, and risk to achieve the best value outcome.

Forecast costs are shown in 2025/26-dollar values.

Table 7.1.2: Forecast Costs (Outlays) for the Long-Term Financial Plan

Year	Acquisition	Operation and Maintenance	Renewal	Disposal
2025	$2,329,667	$1,908,893	$5,593,025	$0
2026	$2,647,958	$2,008,583	$989,057	$0
2027	$850,000	$2,036,853	$1,529,854	$0
2028	$575,000	$2,054,264	$1,204,292	$0
2029	$250,000	$2,068,762	$1,521,877	$0
2030	$250,000	$2,083,332	$1,104,252	$0
2031	$250,000	$2,097,975	$1,065,451	$0
2032	$250,000	$2,112,692	$1,380,527	$0
2033	$250,000	$2,127,482	$1,348,684	$0
2034	$250,000	$2,142,346	$2,028,565	$0

Fig 7.1 Gap Analysis and predicted budget

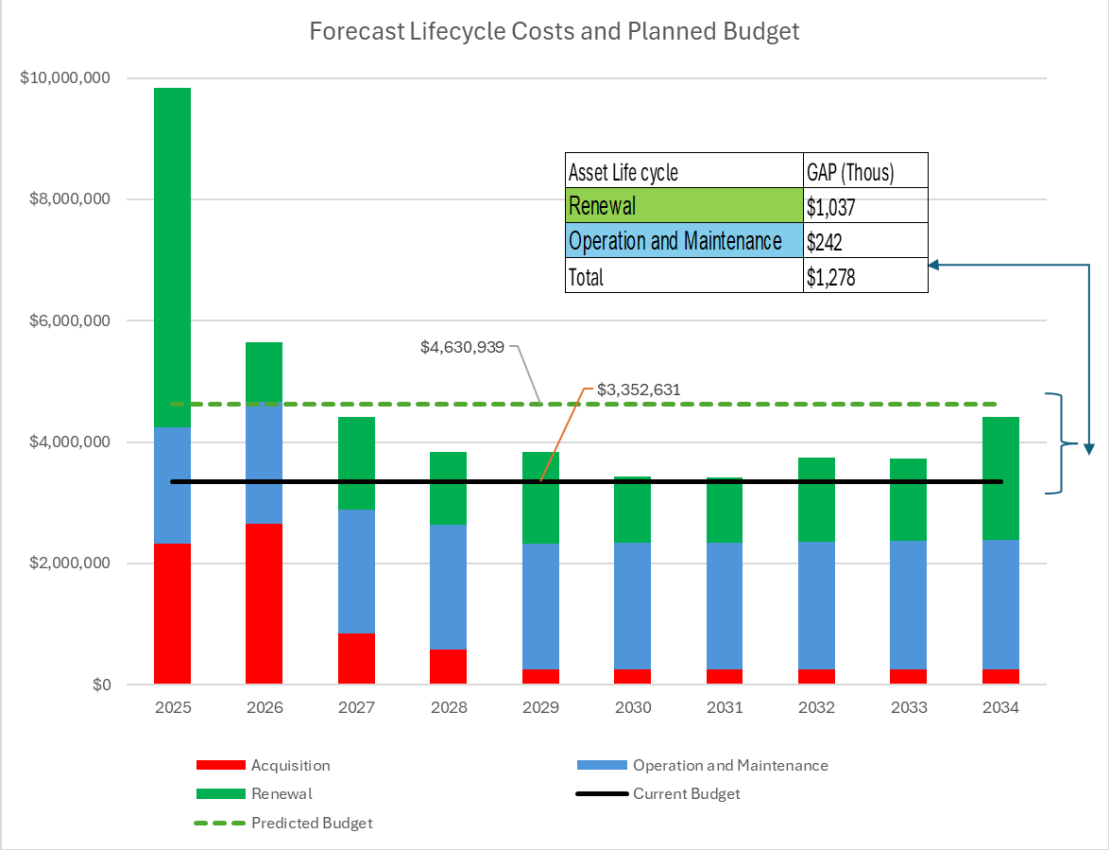


Table 7.1.3 The Predicted Budget (Each Year)

Life cycle	$ (Each Year)
Renewal	$1,776,558
Operation and Maintenance	$2,064,118
Acquisition	$790,262
Total	$4,630,939

7.2. Funding Strategy

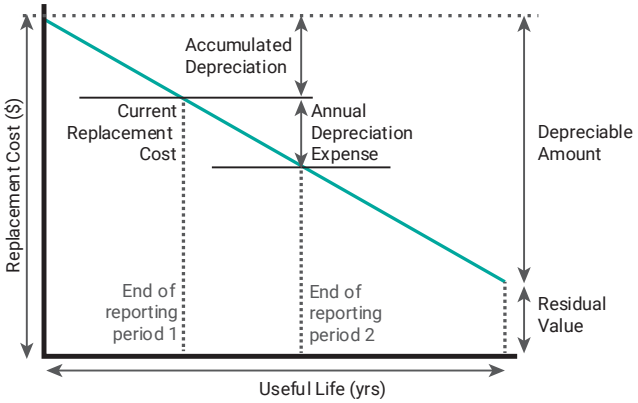
The proposed funding for assets is outlined in the City's budget and Long-Term Financial Plan.

The financial strategy of the City determines how funding will be provided, whereas the AM Plan communicates how and when this will be spent, along with the service and risk consequences of various service alternatives.

7.3. Valuation Forecasts

7.3.1. Asset valuations

The best available estimate of the value of assets included in this AM Plan is shown below. The assets are valued at Fair Value for accounting compliance purposes on 30 June 2023.



7.3.2. Valuation forecast

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

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

7.4. Key Assumptions Made in Financial Forecasts

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

Key assumptions made in this AM Plan are:

- Asset age and remaining life were based on useful lives from the last revaluation of 2023 and asset conditions, which were determined based on visual inspection.
- Asset revaluation performed in 2023 provides an accurate estimation of the asset's value.
- The current operations and maintenance budgets have been used and only increased in the forecast relative to the acquisition of new assets.
- All financial forecasts and budgets are in current-day dollars.
- All assets within the City's assets will remain in the City's ownership throughout the planning period.

7.5. Forecast Reliability and Confidence

The forecast costs, proposed budgets, and valuation projections in this AM Plan are based on the best available data. For effective asset and financial management, the information must be current and accurate. Data confidence is classified on a A - E level scale[11] in accordance with Table 7.5.1.

Table 7.5.1: Data Confidence Grading System

Confidence Grade	Description
A. Very High	Data based on sound records, procedures, investigations, and analysis, documented properly and agreed as the best method of assessment. Dataset is complete and estimated to be accurate ± 2%
B. High	Data based on sound records, procedures, investigations, and analysis, is 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. The dataset is complete and estimated to be accurate ± 10%
C. Medium	Data based on sound records, procedures, investigations, and analysis which is incomplete unsupported, or extrapolated from a limited sample for which grade A or B data are available. The dataset is substantially complete but up to 50% is extrapolated data and accuracy estimated ± 25%
D. Low	Data is based on unconfirmed verbal reports and/or cursory inspections and analysis. The dataset may not be fully complete, and most data is estimated or extrapolated. Accuracy ± 40%
E. Very Low	None or very little data held.

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

Table 7.5.2: Data Confidence Assessment for Data used in AM Plan

Data	Confidence Assessment	Comment
Demand drivers	B	Professional Judgment/Forecast ID
Growth projections	B	Projected Population growth- ABS/Forecast id
Acquisition forecast	C	Information based on LTFP, different plans and policies.
Operation forecast	C	Based on the Previous year's trend
Maintenance forecast	C	Based on the Previous year's trend
Renewal forecast- Asset values	B	Asset Last Revaluation 2023
Asset useful lives	B	Asset Last Revaluation 2023
Condition modelling	B	Professional Judgment
Disposal forecast	NA	No reliable data on proposed asset disposals.

The estimated confidence level for and reliability of data used in this AM Plan is considered to be medium.

[11] IPWEA, 2015, IIMM, Table 2.4.6, p 2|71.

8. PLAN IMPROVEMENT AND MONITORING

8.1. Data and Information Sources

8.1.1. Accounting and financial data sources

This AM Plan utilises accounting and financial data. The sources of the data are

- Valuation report prepared for financial reporting purposes, City of Kalamunda
- MyData Assetic
- Long-Term Financial Plan
- Annual Budget

8.1.2. Asset management data sources

This AM Plan also utilises asset management data. The source of the data is Brightly MyData Assetic.

8.2. Improvement Plan

An entity must recognise areas of its AM Plan and planning process that require future improvements to ensure effective asset management and informed decision-making. The improvement plan generated from this AM Plan is shown in Table 8.2.

Table 8.2: Improvement Plan

Task	Task	Responsibility	Resources Required	Timeline
1	Review the Parks Asset Management Plan every 5 yearly cycles	Asset Planning	Asset Team	5 years
2	Develop a Maintenance Management Plan.	Asset Maintenance	Asset Team	3 years
3	Implement an Enterprise Resource Planning (ERP) system with a Maintenance Management System including a mobile device for field data collection.	Asset Planning	Asset Team	3 Years
4	Continue organisational education about the importance of asset management systems, asset management plans, and link to the Long-Term Financial Plan.	Senior Management, Asset Planning	Asset Team	Ongoing
5	Ensure future needs are reflected in this Asset Management Plan and considered in the development of the Long-Term Financial Plan.	CEO and Senior Management	Asset and Finance Teams	2 Years
7	Continue to monitor and improve the accuracy and validity of the Parks asset data to improve confidence levels.	Asset Planning	Asset Team	Ongoing
8	Update the Public Open Space Strategy with consideration of diversifying play offerings.	Strategic Planning	Asset and Finance	4 years

9	Consider analysis of green assets in future iterations of the Plan.	Asset Planning and Parks	Asset and Finance	5 years

8.3. Monitoring and Review Procedures

The AM Plan will be reviewed and updated 5-year cycle to ensure it represents the current service level, asset values, forecast operations, maintenance, renewals, acquisition and asset disposal costs and planned budgets. These forecast costs and proposed budget are incorporated into the Long-Term Financial Plan or will be incorporated into the Long-Term Financial Plan once completed.

The AM Plan has a maximum life of 5 years.

8.4. Performance Measures

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

- The degree to which the required forecast costs identified in this AM Plan are incorporated into the long-term financial plan,
- The degree to which the 1–5-year detailed works programs, budgets, business plans, and corporate structures consider the 'global' work program trends provided by the AM Plan,
- The degree to which the existing and projected service levels and service consequences, risks, and residual risks are incorporated into the Strategic Planning documents and associated plans,
- The Asset Renewal Funding Ratio achieves the Organisational target (this target is often 90 – 100%).

9. REFERENCES

- IPWEA, 2006, 'International Infrastructure Management Manual', Institute of Public Works Engineering Australasia, Sydney, www.ipwea.org/IIMM
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- ISO, 2024, ISO 55000:2024 Asset Management – Vocabulary, overview, and principles
- ISO, 2018, ISO 31000:2018, Risk management – Guidelines
- Kalamunda Advancing 2031-Strategic Community Plan
- Annual Plan and Budget

10. APPENDICES

Appendix A Acquisition Forecast

A.1 – Acquisition Forecast Assumptions and Source

An asset may also be acquired at no upfront capital cost directly to the Council from the major land developments, development contribution plan (DCP), and other stakeholder projects (Main Roads, Western Power, Public Transport Authority).

The accepted **DCP-contributed Parks Assets Projects** are:

- Yule Brook Stage 1
- Yule Brook Stage 2
- Yule Brook Stage 3
- Willow Lake
- Woodlupine Undeveloped Reserve

These developments will also result in a significant amount of gifted assets to the City requiring an increase in the operational and maintenance activities.

Asset Category	Budget estimated
Development contribution plan (DCP) Estimated	$150,000
Subdivision contribution- Estimated	$100,000
Total	$250,000

A.2 – Acquisition Forecast Summary

Table A2 - Acquisition Forecast Summary

Year	Constructed	Donated	Growth
2025	$2,329,667	$0	$333,463
2026	$2,647,958	$0	$344,279
2027	$850,000	$0	$356,740
2028	$575,000	$0	$360,274
2029	$250,000	$0	$362,450
2030	$250,000	$0	$364,262
2031	$250,000	$0	$366,084
2032	$250,000	$0	$367,914
2033	$250,000	$0	$369,754
2034	$250,000	$0	$371,602

Appendix B - Operation and Maintenance Forecast

B.1 – Operation Forecast Assumptions and Source

As labour and material costs are rising, it is projected that the operational forecast will increase annually. The increase in acquisition forecast is the reason for the additional increase in the operation and maintenance projection.

B.2 – Operation and maintenance Forecast Summary

Table B2 – Operation and maintenance Forecast Summary

Year	O & M Forecast	Additional O & M Forecast	Total O & M Forecast
2025	$1,822,368	$86,525	$1,908,893
2026	$1,822,368	$99,689	$2,008,583
2027	$1,822,368	$28,270	$2,036,853
2028	$1,822,368	$17,411	$2,054,264
2029	$1,822,368	$14,498	$2,068,762
2030	$1,822,368	$14,570	$2,083,332
2031	$1,822,368	$14,643	$2,097,975
2032	$1,822,368	$14,717	$2,112,692
2033	$1,822,368	$14,790	$2,127,482
2034	$1,822,368	$14,864	$2,142,346

Appendix C Renewal Forecast Summary

C.1 – Renewal Forecast Assumptions and Source
Renewal forecast is based on the asset register method. The acquisition date, condition and useful life of the assets are assessed correctly.

C.2 – Renewal Forecast Summary

Table C2 - Renewal Forecast Summary

Year	Renewal Forecast	Renewal Budget
2025	$5,593,025	$740,000
2026	$989,057	$740,000
2027	$1,529,854	$740,000
2028	$1,204,292	$740,000
2029	$1,521,877	$740,000
2030	$1,104,252	$740,000
2031	$1,065,451	$740,000
2032	$1,380,527	$740,000
2033	$1,348,684	$740,000
2034	$2,028,565	$740,000

Appendix D Disposal Summary

D.1 – Disposal Forecast Assumptions and Source
At this stage, there are no significant asset disposal plans in the city.

D.2 – Disposal Forecast Summary

Table D2 – Disposal Activity Summary

Year	Disposal Forecast	Disposal Budget
2025	$0	$0
2026	$0	$0
2027	$0	$0
2028	$0	$0
2029	$0	$0
2030	$0	$0
2031	$0	$0
2032	$0	$0
2033	$0	$0
2034	$0	$0

Appendix E Budget Summary by Lifecycle Activity

The following budget summary is based on the City's Long-Term Financial Plan.

It is shown in current dollars.

This information is the basis of the planned budget used in the lifecycle model for this Asset Management Plan.

Table E1 – Budget Summary by Lifecycle Activity

Year	Acquisition	Operation and Maintenance	Renewal	Disposal	Total
2025	$790,262	$1,822,368	$740,000	$0	$2,562,368
2026	$790,262	$1,822,368	$740,000	$0	$2,562,368
2027	$790,262	$1,822,368	$740,000	$0	$2,562,368
2028	$790,262	$1,822,368	$740,000	$0	$2,562,368
2029	$790,262	$1,822,368	$740,000	$0	$2,562,368
2030	$790,262	$1,822,368	$740,000	$0	$2,562,368
2031	$790,262	$1,822,368	$740,000	$0	$2,562,368
2032	$790,262	$1,822,368	$740,000	$0	$2,562,368
2033	$790,262	$1,822,368	$740,000	$0	$2,562,368
2034	$790,262	$1,822,368	$740,000	$0	$2,562,368

Appendix F Condition Rating Matrix

The condition of the parks has been rated as shown in G1 below. Example photos for each Condition Rating are also provided.

Table F1. Condition Rating Matrix

Condition Rating Score	Condition	Description
1	Very Good	The asset is in near perfect condition. Only routine maintenance is required.
2	Good	The asset has deteriorated slightly but only routine maintenance is required to maintain the rating.
3	Fair	The asset is in satisfactory condition but is showing signs of wear and tear. Moderate levels of periodic maintenance are required to maintain the asset in this condition.
4	Poor	The asset is in below-average condition with significant signs of wear and tear. High levels of periodic maintenance are required to maintain the rating of this asset. Regular safety inspections are required as part of a risk management strategy. Partial replacement (minor renewal) is required to improve the rating of this asset.
5	Very Poor	The asset is in very poor condition and needs full replacement (major renewal). Access restrictions and/or warning signs may needed until replacement. Regular safety inspections are required as part of a risk management strategy.

Appendix G Glossary

All the definitions below apply in the context of Local Government Infrastructure Assets.

Asset Management	Applying management practices to Infrastructure Assets to provide the required Levels of Service in the most cost-effective manner.
Asset Management Plan	A documented plan for managing one or more classes of Infrastructure Assets over their Useful Lives to provide the required Levels of Service in the most cost-effective manner.
Condition	An assessment of the progress of an Infrastructure Asset from new to end of life. The Condition determines the Level of Service provided by the asset and the Maintenance actions required. The Condition also provides an estimate of the Remaining Useful Life.
Condition Rating	A number, typically from 1 (new) to 5 (end of Useful Life), as a measure of the assessed Condition.
Depreciable Amount	The proportion of an asset's Gross Replacement Cost which loses value over time due to Depreciation. The proportion which does not lose value is the Non-depreciating Value.
Depreciation	The loss of financial value of an Infrastructure Asset as it progresses from new to end of Useful Life. Accumulated Depreciation is the total depreciation of the asset to the date of assessment. Annual Depreciation is the loss of financial value in one financial year.
Fair Value	The best estimate of the financial value of Infrastructure Assets in their condition at a point in time. It includes loss of value due to depreciation, and depends on an appraisal of active markets, or in the absence of active markets, the cost of constructing the asset. See also Written Down Value, which is an alternative name for Fair Value.
Gross Replacement Cost	The cost of building a new Infrastructure Asset in the place of the current one, including the disposal cost of the current one.
Infrastructure Asset	A physically constructed asset with a life of longer than 12 months, which has a financial value, and which provides services to the community.
Level of Service	The quality of experience that the Infrastructure Asset provides to the community. Community Levels of Service describe the quality from the perspective of the users, in terms of subjective measures, such as of how safe, how clean, how new, etc.

	Technical Levels of Service describe the quality from the perspective of the providing organisation in terms of objective measures, such as how frequently, what metrics, what response time, etc. The organisation chooses the objective Technical Levels of Service to provide the users' required Community Levels of Service.
Maintenance	Corrective actions on the Infrastructure Asset which improve its Condition to allow it to achieve its intended Useful Life and to provide its required Level of Service. An example is repair of defects. See also Operations, which are necessary actions to provide the required Level of Service but do not affect the Condition.
New Works	The creation of an Infrastructure Asset which did not exist before. This increases the Gross Replacement Cost of the organisation's assets. See also Renewal, which replaces an existing asset and does not increase the Gross Replacement Cost of the organisation's assets.
Non-depreciating Value	The portion of the Gross Replacement Cost of an Infrastructure Asset which does not lose value over time. An example is land, which does not wear out over time and cannot be replaced.
Operations	Expense or actions on the Infrastructure Asset which are necessary to provide the required Level of Service, but which do not affect its Condition. An example is electricity supply to provide lighting. See also Maintenance, which covers actions necessary to provide the required Level of Service and that do affect Condition.
Renewal	The replacement of an existing Infrastructure Asset with an asset providing the same Level of Service or capacity. This does not increase the Gross Replacement Cost of the organisation's assets. See also New Works, which creates a new asset and does increase the Gross Replacement Cost of the organisation's assets.
Upgrade	Modifications or replacement of an existing Infrastructure Asset which increase the Level of Service or capacity. This increases the Gross Replacement Cost of the organisation's assets.
Useful Life	The total length of time during which an Infrastructure Asset is expected to be usable and to provide the required Level of Service. The Remaining Useful Life is the length of time until an Infrastructure Asset is expected to require Renewal.

Sustainability Ratios	Metrics required by the WA State Government to indicate whether a Local Governments Asset Management practices and budgeting are sustainable in the long term.
Valuation	The regular determination by qualified inspectors and assessors of the Gross Replacement Cost of a collection of Infrastructure Assets, as well as their Accumulated Depreciation, to report on their current Fair Value.
Written Down Value	An alternative name for Fair Value, which is Gross Replacement Cost less Accumulated Depreciation.