

IPSWICH CITY COUNCIL



PARKS AND RECREATION ASSET MANAGEMENT PLAN 2020-2029



Version 1

July 2019

How to use this Plan

This Asset Management Plan (AMP) is a tactical document to support the purpose defined above. The AMP is set out in the following format to support easy navigation of its contents such that specific information can be readily identified to suit the readers need.

- Executive summary – This provides an overview suitable for obtaining a high-level understanding of the key issues and outcomes of the AMP. This is intended for senior decision makers and is supported by the detail in the following sections that make up the body of the AMP.
- Introduction – This section is the introduction that defines the plans purpose, its scope and how the AMP aligns with corporate objectives and goals. It ‘sets the scene’ for the AMP and how it relates to the wider organisational plan framework.
- Levels of Service, Growth and Risk - Focus on the definition of service levels, current risks and demand considerations that have been used in developing this AMP. This is the basis on which the following sections have been developed.
- Life Cycle Management Plan – This is the detailed ‘output’ of the AMP development process. It provides forecasts over a 10-year horizon, of the works required to maintain the current service levels, mitigate identified risks and cater for service growth and increased demand. Data details for this AMP – Defines the AMP’s Data inputs and assumptions. It includes Asset Summary, Prior Year Infrastructure Delivery, Asset Age, Asset Condition Assessment criteria and results summary, Asset profiling, Hierarchy, Useful Life and Data Confidence ratings
- Forecast Expenditure and Performance Ration and Sustainability - Focus on the financial aspects of delivering these service levels including anticipated ‘financial sustainability’ performance. This section is particularly relevant to inform decision making and guide continual improvement in both the AMP and meeting corporate goals.
- Improvement Plan – Provides an action plan to improve future iterations of the AMP, particularly the improvement of the plan’s accuracy and reliance as a decision-making tool.
- Findings – Provides a summary of the key issues and actions to be considered by Council. It includes a statement on the reliability and confidence of information to also be considered.
- Appendices – Information which is required in the AMP as reference is in the appendices. It also includes detailed works programs for new and renewal capital works that align with funding requirements and are to be aligned with short to medium term detailed operational planning.

Document Control

Revision History

Rev No	Date	Revision Details	Author	Reviewer	Approver
1.0	17 July 2019	Final	BAu-Yeung GHealy	Helen Coles	

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Executive Summary

Purpose

The purpose of this Parks and Recreation Asset Management Plan (PRAMP) is to consolidate council's understanding of its parks and recreation assets, service levels, risks, and to provide operational and capital expenditure forecasts that will deliver the community outcomes detailed in the Corporate Plan.

The plan will support informed decision making, guide long-term financial forecast, budget requirements and provide a path to further improve the accuracy and confidence in future iterations of this AMP.

Scope

This Asset Management Plan (AMP) covers the parks and recreation assets (the Assets) that support the delivery of services to the Ipswich's community. It has been prepared based on the *International Infrastructure Management Manual (IIMM)* the recognised guideline for asset management in Australia.

This AMP uses data available within council including council's physical asset registers, audited financial asset register and recent asset revaluations information. Where possible, the financial forecast has been supplemented by historical condition data.

The Assets

The parks and recreation assets are valued at ~\$272.8m and are apportioned into asset categories as detailed in Table 1.

Table 1 - Parks and Recreation Infrastructure Asset Classes

Asset Class	Financial Asset Register Current Replacement Cost as at 3 July 2019 (\$'000)	Physical Asset Register Current Replacement Cost (\$'000)
Land Improvements	*\$103,663	^\$41,202
Other Structures	\$104,487	\$93,139
Park and Street Furniture	\$4,412	\$3,723
Playing Surfaces	\$36,825	\$33,124
Equipment	\$23,460	\$22,345
Total	\$272,847	**\$193,533

*Includes landscape and streetscape assets which are non-depreciable.

^Does not include soft assets.

**Replacement cost from 2016-2017 asset valuation of the physical asset register.

The financial asset register (FAR) is current as at 3 July 2019 and includes contributed assets from the development industry for which no "as-constructed" details have been received, therefore these assets have not been included in the physical asset register (PAR). In addition, landscaping has been recognised in the FAR but not in the PAR. The PAR has been updated as the "as-constructed" details become available.

General Asset Condition

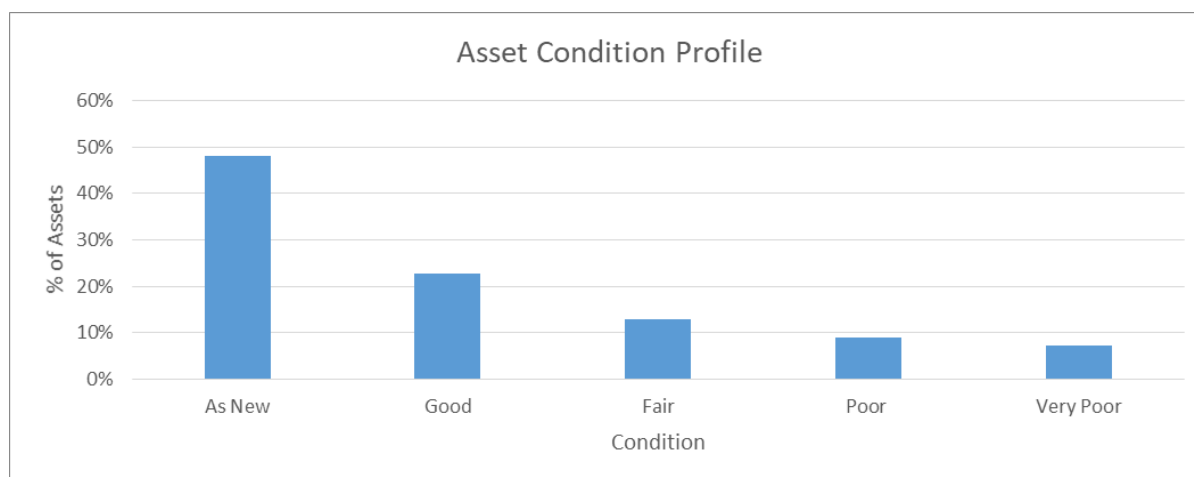


Figure 1 - Assets Condition Profile

Percentage of parks and recreation assets in very poor condition	7.27%	~\$14m
Percentage of parks and recreation assets in poor condition	9.02%	~\$17.46m

This data is calculated on age based profiles, these assets are proactively inspected on regular intervals based on the asset hierarchy. These assets will continue to be monitored and included in any programed maintenance or rehabilitation programs. Through the implementation of an integrated asset management system the condition profile will improve based on the combination of age based and condition based modelling.

Are We Meeting Our Adopted Service Levels?

The maintenance and operations expenditure projections in this AMP are based on historical spending to achieve the current adopted service levels, and therefore it may be assumed that similar future funding and if supported with appropriate investment in renewals will continue to provide current service levels. Council have adopted Service Levels, the objectives and performance indicators of clearly outlined in Corporate Goals and Objectives Table 8, Community Levels of Service Table 9, and Technical Levels of Service Table 10. This level of planned investment will continue to improve with the introduction of a new asset management system.

Are We Managing Growth?

The growth generated through developer contributed assets has been included in the operations, maintenance and financial forecasts. The contributed assets estimates are based on council's *Local Government Infrastructure Plan (LGIP)* population forecasts and the long-term financial forecast (LTFF).

Are We Managing Our Risks?

Council has a 'duty of care' to the community, its customers, in relation to the management of the assets. There are numerous types of risks council is concerned about, including financial, service and safety. The risks were assessed by council based on their likelihood and consequences to generate solutions to mitigate or eliminate them. It is expected that the current maintenance activities will continue to assist in mitigating the service risks to an acceptable level. Additional funding is required to address the improvement activities required to mitigate data quality and confidence risks associated with current asset management (AM) practices.

The Financials

Based on renewing current assets at the end of their useful lives, meeting current levels of service and to meet growth over the next 10 years, the projected asset expenditure requirements are as shown in Table 2 and Figure 2.

Table 2 - 10 Year Forecast Expenditure

Financial Year Ending	Risk Treatment	New or Upgrade (\$'000)	Operations (\$'000)	Maintenance (\$'000)	Planned Renewals (\$'000)	Total (\$'000)
2020	\$0	\$47,653	\$3,287	\$29,581	\$5,780	\$86,301
2021	\$0	\$11,144	\$3,486	\$31,370	\$4,372	\$50,371
2022	\$0	\$15,474	\$3,697	\$33,271	\$2,865	\$55,307
2023	\$0	\$20,479	\$3,921	\$35,293	\$4,940	\$64,633
2024	\$0	\$24,594	\$4,160	\$37,441	\$3,648	\$69,843
2025	\$0	\$27,942	\$4,414	\$39,725	\$5,360	\$77,441
2026	\$0	\$15,251	\$4,684	\$42,152	\$3,877	\$65,964
2027	\$0	\$15,109	\$4,970	\$44,731	\$12,212	\$77,022
2028	\$0	\$22,414	\$5,275	\$47,472	\$3,881	\$79,042
2029	\$0	\$16,562	\$5,598	\$50,385	\$6,308	\$78,853
Total	\$0	\$216,622	\$43,491	\$391,420	\$53,243	\$704,777

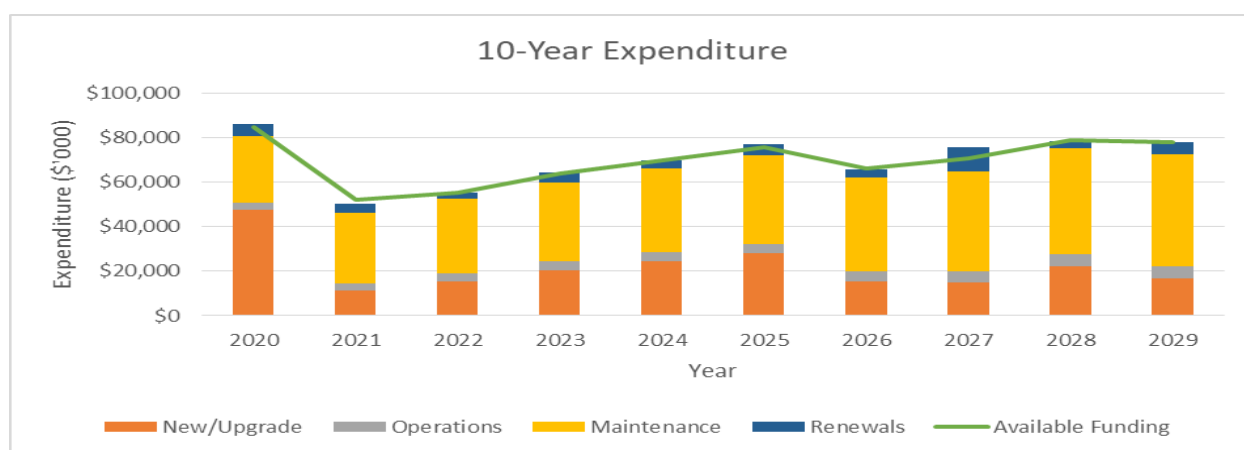


Figure 2 - 10 Year Expenditure Forecasts

What Funding is available in the LTFF?

Council's LTFF has allocated funding for parks and recreation asset expenditure as shown in Table 3.

Table 3 - Long Term Financial Forecast

Financial Year Ending	New/Upgrade (\$'000)	Operations & Maintenance (\$'000)	Renewals (\$'000)	Total (\$'000)
2020	\$47,653	\$32,868	\$4,154	\$84,675
2021	\$11,144	\$34,855	\$5,881	\$51,880
2022	\$15,474	\$36,968	\$2,862	\$55,304
2023	\$20,479	\$39,214	\$4,291	\$63,984
2024	\$24,594	\$41,602	\$3,554	\$69,750
2025	\$27,942	\$44,139	\$3,499	\$75,580
2026	\$15,251	\$46,835	\$4,154	\$66,240
2027	\$15,109	\$49,701	\$5,852	\$70,662
2028	\$22,414	\$52,746	\$3,769	\$78,929
2029	\$16,562	\$55,983	\$5,595	\$78,140
Total	\$216,622	\$434,911	\$43,611	\$695,144

Can We Financially Sustain our Current Levels of Service?

The 10-year expenditure forecast for the delivery of services is ~\$704.7m. The available funding in the LTFF is ~\$695.1m, a shortfall of ~\$9.6m. Shortfall will be managed by proactive inspection of parks and recreation assets at time of forecast replacement based on condition, it is envisaged that this will result in some asset replacements being pushed out. The renewal profile will be revisited when improvements are made to the asset system.

What Are Our Options?

Current options for council are:

- improve council's parks and recreation data prior to making changes to the current planned activities
- reduce current service levels
- do not undertake new/upgrade works
- allocate more funding to this service.

Other Considerations and Critical Assumptions

This section details the key assumptions made in preparing and presenting the forecasts of required operating and capital expenditure, asset values, depreciation expense and carrying amounts contained in the PRAMP. It is presented to provide an understanding of the levels of confidence in the information behind the financial forecasts.

Key elements of the financial forecasts (asset values, depreciable amounts, useful lives, asset condition and consumption) have been derived from recent asset valuation and the fixed asset register (FAR) as at 3 July 2019.

The valuation report described above utilised available condition assessment information (verified by sample visual condition assessments) with a corresponding assessment of both the phase and rate of asset consumption. It is anticipated that future enhancements in the determination and utilisation of asset condition information may result in revisions to depreciable amounts and estimated remaining useful lives. Such revisions would alter the scale and timing of projected renewal expenditure.

Planned maintenance and renewal expenditures are based on assumed / inferred levels of service for the park and recreation network resulting from experience to date in providing these services to the community. Future anticipated community engagement may result in adjustments to the desired levels of service and thus impact upon future financial forecasts.

The growth and demand of physical assets are based on currently available assumptions which have been derived from the 2019-2020 financial year LTFF assumptions and the capital works program. The future forecast used in this AMP has been refined to reflect the actual growth rates and realistic infrastructure growth from development applications and activities, hence the forecast may not align completely with the published LGIP projections. As such, any future revisions to these assumptions and underlying projections or sequencing will impact the financial forecasts of this AMP.

It is anticipated that the accuracy of financial forecasts may be improved in future revisions of the AMP by ongoing and refinement of the following areas:

- depreciable amounts and depreciation methodologies
- asset useful lives and consumption
- annual capital and operational budget
- condition assessment methodologies and ratings
- desired levels of service
- growth factors and estimates.

Ipswich City Council

State of the Assets - Parks and Recreation

22-Jul-19

Asset Value

Asset Class	Value (\$'000)			
	Replacement Cost	Accumulated Depreciation	Current Value	Average Annual Asset Consumption
Land	\$103,663	\$20,373	\$83,290	\$1,613
Other Structures	\$104,487	\$32,548	\$71,939	\$3,145
Park and Street Furniture	\$4,412	\$2,094	\$2,318	\$156
Playing Surfaces	\$36,825	\$20,849	\$15,976	\$2,171
Equipment	\$23,460	\$10,521	\$12,939	\$1,456
Total	\$272,847	\$86,385	\$186,462	\$8,542

Critical Assumptions

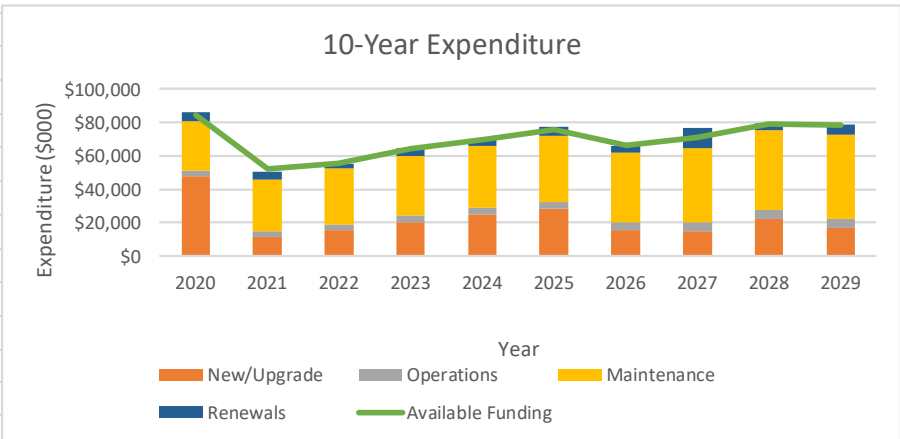
Financial details are based on current asset valuations, information from the Fixed Asset Register (FAR) as at 3 July 2019 and assumptions from the 2019-2020 financial year long-term financial forecast (LTFF).

Current Levels of Service

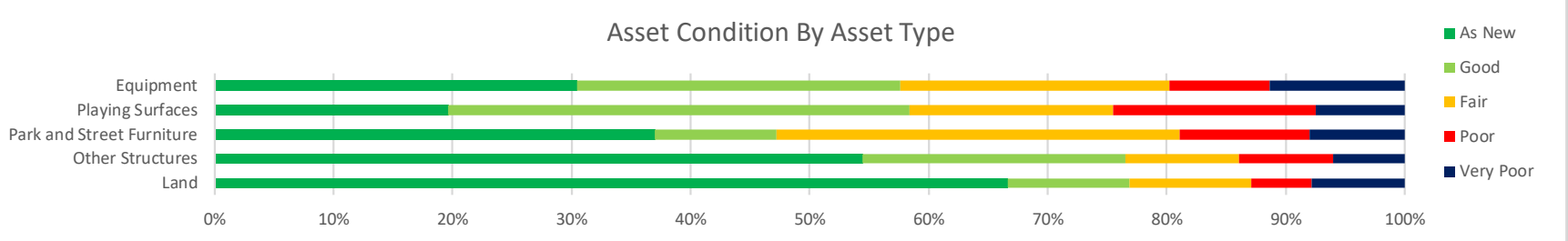
The current levels of service that transport assets deliver have been defined and are based on council's goals and objectives in the Corporate Plan, Asset Landscape Maintenance Specifications and detailed in the Services Catalogue. Council is currently reviewing the current Services Catalogue, any amendments to it will be communicated and updated in the next version of the Asset Management Plan (AMP).

Conclusion

The 10-year expenditure forecast for the delivery of services is ~\$704.7m. The available funding in the LTFF is ~\$695.1m, a shortfall of ~\$9.6m. Shortfall will be managed by proactive inspection of parks and recreation assets at time of forecast replacement based on condition, it is envisaged that this will result in some asset replacements being pushed out. The renewal profile will be revisited when improvements are made to the asset system.



Asset Condition



Parks and recreation assets are proactively inspected in accordance to their hierarchy and risk. Due to system constraints, the condition data is based on age profile only. The improvement of real condition data will be incorporated and included in the next version of the AMP.

Financial Forecasts

	Expenditure (\$'000)										
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Renewal	\$5,780	\$4,372	\$2,865	\$4,940	\$3,648	\$5,360	\$3,877	\$12,212	\$3,881	\$6,308	\$53,243
New/Upgrade	\$47,653	\$11,144	\$15,474	\$20,479	\$24,594	\$27,942	\$15,251	\$15,109	\$22,414	\$16,562	\$216,622
Maint. & Ops	\$32,868	\$34,855	\$36,968	\$39,214	\$41,602	\$44,139	\$46,835	\$49,701	\$52,746	\$55,983	\$434,911
Total	\$86,301	\$50,371	\$55,307	\$64,633	\$69,843	\$77,441	\$65,964	\$77,022	\$79,042	\$78,853	\$704,777
	Long Term Financial Forecast (\$'000)										
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Renewal	\$4,154	\$5,881	\$2,862	\$4,291	\$3,554	\$3,499	\$4,154	\$5,852	\$3,769	\$5,595	\$43,611
New/Upgrade	\$47,653	\$11,144	\$15,474	\$20,479	\$24,594	\$27,942	\$15,251	\$15,109	\$22,414	\$16,562	\$216,622
Maint. & Ops	\$32,868	\$34,855	\$36,968	\$39,214	\$41,602	\$44,139	\$46,835	\$49,701	\$52,746	\$55,983	\$434,911
Total	\$84,675	\$51,880	\$55,304	\$63,984	\$69,750	\$75,580	\$66,240	\$70,662	\$78,929	\$78,140	\$695,144
Surplus	-\$1,626	\$1,509	-\$3	-\$649	-\$94	-\$1,861	\$277	-\$6,360	-\$112	-\$713	-\$9,632
Cumulative Surplus	-\$1,626	-\$117	-\$119	-\$768	-\$862	-\$2,724	-\$2,447	-\$8,807	-\$8,919	-\$9,632	

Sustainability

		Target	Value
Consumption Ratio	Indicates the Written Down Value of Council's Depreciable assets relative to their 'as new' value in up to date prices (highlights aged condition)	40%-80%	64%
10-year Service level Sustainability Ratio	Indicates whether Council's funding for Infrastructure asset class is sufficient for the long-term delivery of current service levels	>90%	100%
New/Upgrade Funding Ratio	Indicates the extent to which the planned new/upgrade projects are funded in the long-term budget allocation.	100%	100%
Renewal Funding Ratio	Indicates the extent to which the proposed condition renewal works are funded in the long-term budget allocation.	>90%	82%
Operations & Maintenance	Assumed that current expenditure levels for operations and maintenance activities will be maintained for the 10-year planning period.	100%	100%

Introduction

Purpose

The purpose of this Asset Management Plan (AMP) is to:

- consolidate Councils understanding of its assets within this asset class
- document levels of service and risk
- provide short and medium-term capital works plans
- support informed decision making and guide long-term financial forecast (LTFF) and budget requirements
- provide a plan to work towards improved accuracy and confidence in future iterations of this AMP.

Scope

This AMP incorporates the infrastructure asset classes, groups and types outlined in Table 4 and Table 5.

Table 4 - Parks and Recreation Infrastructure Asset Classes

Asset Class	Financial Asset register Current Replacement Cost (\$'000)	Physical Asset Register Current Replacement Cost (\$'000)
Land Improvements	*\$103,663	^\$41,202
Other Structures	\$104,487	\$93,139
Park and Street Furniture	\$4,412	\$3,723
Playing Surfaces	\$36,825	\$33,124
Equipment	\$23,460	\$22,345
Total	\$272,847	**\$193,533

*Includes landscape and streetscape assets which are non-depreciable.

^Does not includes soft assets.

**Replacement cost from 2016-2017 asset valuation of the physical asset register.

The financial asset register (FAR) is current as at 3 July 2019 and includes contributed assets from the development industry for which no “as-constructed” details have been received, therefore these assets have not been included in the physical asset register (PAR). In addition, landscaping has been recognised in the FAR but not in the PAR. The PAR has been updated as the “as-constructed” details become available.

Table 5 - Park and Recreation Assets

Asset Class	Asset Group	Asset Type
Equipment	Aquatic Equipment	Aquatic Equipment
	Irrigation System and Equipment	Irrigation System and Equipment
	Landfill Monitoring Equipment	Landfill Monitoring Well, Bore or Vent
	Playground and Exercise Equipment	Playground Equipment
		Exercise Equipment
	Water Quality and Soil Moisture Monitoring Equipment	Water Quality and Soil Moisture Monitoring Equipment
	<i>Flood Monitoring Equipment</i>	<i>Flood Alert Station (This is included in Drainage and Mitigation AMP)</i>
Land Improvements	Landscape Gardens and Street Scape*	Landscape Gardens and Street Scape
	Boundary Elements	Fence, Gate, Chicane, Handrail, Bollard, Edging, Retaining Wall
	Track	BMX, Walking Tack (Unsealed), Service Track (Unsealed) and Fire Trails
Other Structures	Archway / Arbour	Archway / Arbour
	Barbecue	Barbecue
	Bike Rack	Bike Rack
	Bin Enclosure	Bin Enclosure
	Driveway / Carpark	Driveway / Carpark
	Platform	Deck, Viewing Platform, Stage
	Drinking Fountain	Drinking Fountain
	Feature Object	Sandstone Block, Statute, Sculpture, Feature Wall, Water Feature
	Flag Pole	Flag Pole
	Goal Post	Goal Post
	Grandstand / Spector Seating	Grandstand / Spector Seating
	Hardstand	Hardstand
	Memorials / Monuments	Memorials / Monuments
	Public and Sport Field Lighting	Park Lighting and Fittings, Street Lightings and Fittings, Sportfield Lightings and Fittings
	Scoreboard	Scoreboard
	Shading Structures	Shade Sail, Shelter
	Swimming Pool and Lagoon	Swimming Pool, Lagoon
	Water Tank	Water Tank
	Water Tap	Water Tap
	Wheel Stop	Wheel Stop
	Windmill	Windmill
Park and Street Furniture	Seat	Seat
	Table	Table
Playing Surfaces	Softfall	Softfall
	Ground Cover	Ground Cover
	Sport Court / Fields	Skate Bowl, Basketball Court, Netball Court, Tennis Court, Combination Court, Bocce Court, Sport Field, Athletics Oval, Baseball Diamond, Bowling Green, Cricket Wicket, Croquet Lawn

*Non-depreciable assets

Quantities and replacement values in this AMP are derived from PAR, FAR and infrastructure asset valuation reports. The asset types are presented in accordance with their functional and operational management characteristics.

Corporate Context

Council exists to provide services to its community. Some of these services are provided by infrastructure assets. Council has acquired infrastructure assets through a range of processes, including:

- purchase
- contract
- construction by council staff
- donation of assets constructed by developers and others.

The basis of council's ownership of infrastructure assets is to deliver services outlined in council's vision, mission, goals and objectives as set out in *Advance Ipswich* and the *Corporate Plan 2017-2022*.

Council's vision:

Our vision, looking forward 20 years, is that people are emotionally connected with a strong sense of belonging and pride in the City. Jobs growth keeps pace with population growth. The City's rate of employment is higher than the Queensland average. Urban development has maximised the opportunities to use public and active Parks and Recreation.

Council's mission:

Ipswich City Council will:

- use the competitive advantages of the Ipswich economy to provide jobs for the growing population and prosperity for the city through business diversification, adapting and responding to technological advances and creating an attractive economic environment for business investment
- plan and develop a vibrant and sustainable city that accommodates the needs of a diverse and growing population and economy
- create a city that values its past and embraces opportunities to work together for the betterment of the community
- important areas of native habitat are conserved, the city's important waterways are protected and their water quality enhanced, and the city responds appropriately to climate change and uses resources prudently.
- visionary and accessible leadership is provided that consults and communicates on key decisions and delivers sound financial management and good governance outcomes.

Source: Ipswich City Council Advance Ipswich and Corporate Plan 2017-2022

Relationship to Other Council Documents and Objectives

This AMP aligns with and should be read in conjunction with the Asset Management Framework as shown in Figure 3 and key documents outlined in Table 6 below:

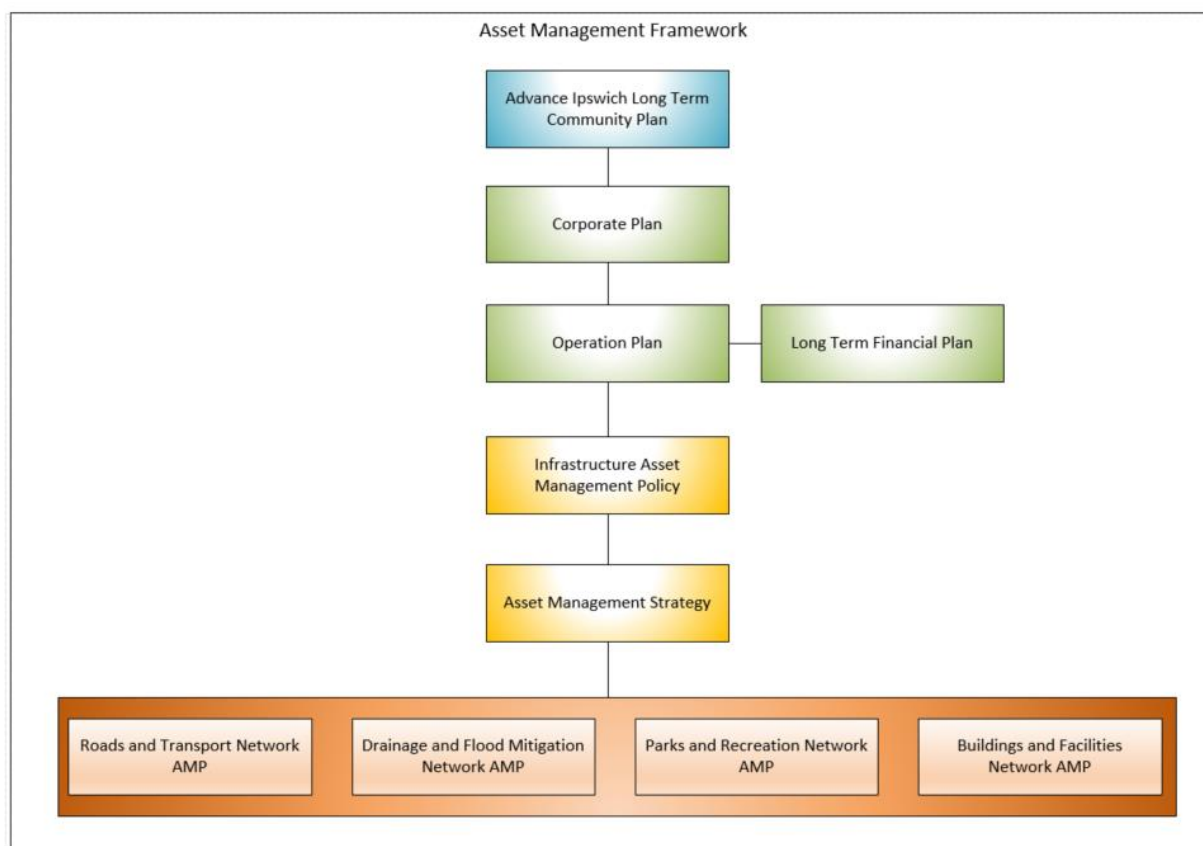


Figure 3 - Asset Management Document Hierarchy

Table 6 - Key Documents

Document	How Related	Reference
AMP Related Documents		
Asset Management Policy	The Asset Management Policy defines council's overall intentions and guiding principles in relation to infrastructure asset management. It provides a formal policy position for council to operate and manage infrastructure assets in accordance with defined levels of service, whilst minimising lifecycle costs.	Council website
Asset Management Strategy	The Asset Management Strategy includes specific strategies and implantation plan to ensure the asset management objectives are delivered and achieved.	Council website

Document	How Related	Reference
Asset Management Framework	The Asset Management Framework is to assist council in defining and improving the way it delivers services from infrastructure. It is to establish a framework off governance documents, planning documents, operational procedures and standards of how council manage and operate infrastructure assets.	Council website
Maintenance Specifications Asset and Landscape Maintenance Standards	Contains all maintenance and operational specification requirements for assets under this AMP. Details within this document are used to inform inspection and maintenance schedule.	Council System Objective) (A5502903)
Enterprise Risk Management Framework	The fundamental risk framework used evaluate the risks applicable to this AMP.	Council website
Risk Register	Contains all identified asset related risks applicable to this AMP.	Identified Risks Section in this AMP
Services Catalogue and Standards	The Ipswich City Council Services Catalogue and Standards details all services provided by council, including service levels and targets.	Council website
Other Related Documents		
Local Government Infrastructure Plan	Contains details regarding areas of growth within the council area and guides technical Levels of Service regarding the provision of assets.	Council website
Standard Drawings	Contains design and construction details for new assets.	Council website
Ipswich Streetscape Design Guide	The Ipswich Streetscape Design guide includes information on the soft elements and hard elements to be provided within streets. Streetscape works associated with development are required to be consistent with the guide.	Council website
Ipswich Regional Centre Strategy Streetscape Materials Specification	Contains specifications for materials and design set out for the streetscape works associated with development within the Ipswich City Centre.	Council website
Electrical Requirements for Park & Facility Embellishments	Contains technical electrical requirements for parks and facility embellishment.	Council website

Stakeholder Input

Key stakeholders in the asset management process for parks and recreation infrastructure assets are listed in Table 7 below.

Table 7 - Key Stakeholders

Position Title	Principal Involvement in Parks and Recreation Network AMP
Councillors	Represent needs of community. Allocate resources to meet council's objectives in providing services while managing risks. Ensure organisation is financially sustainable. Custodians of the assets and services, providing the interface with the community regarding the levels of service and good governance and management practices.
CEO	Manage organisation operational activities and future planning strategic direction.
General Manager, Infrastructure and Environment Department	Department Head and nominal asset owner.
Treasury Accounting Manager	Responsible for Council's budget preparation and advice on financial assumptions.
Infrastructure Strategy and Planning Manager	Manager responsible for the design and delivery of new parks and recreation assets.
Asset Management Manager	Responsible for departmental budget preparation, asset management issues and review of the AMP.
City Maintenance Manager	Responsible for the overall maintenance of the assets.
Principal Officer (Asset Management)	Responsible for the management of all assets and Contribution to Parks and Recreation Network AMP preparation.
Senior Spatial Officer	Responsible for advice on asset and spatial information of asset management issues.
Planning Officer (Asset Management)	Contribution to the AMP preparation.
Spatial Officer	Responsible for the preparation of asset and financial data for the AMP.
Principal Officers, City Maintenance Section	Responsible for the maintenance of assets. Contribution to the AMP preparation and advice on level of services and maintenance issues.
Senior Planning Officer (Asset Management)	Responsible for developing and maintaining strategies, policies and procedures in Asset Management
Senior Property Officer	Responsible for offering tenure over Council land and facilities and managing the tenure agreement. Responsible for the acquisition and disposal of Council property.

Legislative Requirements

The Queensland Government recently passed the Local Government (Dissolution of Ipswich City Council) Act 2018, enabling government to dismiss Ipswich City Council's mayor and ten divisional councillors immediately and appoint an Interim Administrator to manage Council until the next scheduled local government elections on Saturday, 28 March 2020.

Newly appointed Interim Administrator and the part-time Interim Management Committee (IMC) are now working collaboratively with council's chief executive officer, executive leadership team and staff to bring positive, ethical change to Ipswich City Council.

Council services will continue to operate efficiently and on time, with its internal administration from the chief executive officer down remaining in place. Reports on all facets of council operations continue to be presented to committees, with the Interim Administrator making decisions in a similar monthly forum as previously, with advice from the IMC.

Council must meet many legislative requirements including, but not limited to, Federal and State legislation and regulations as outlined in Table 8 below.

Table 8 - Legislative Requirements

Legislation / Regulation	Requirement
<i>Local Government Act 2009</i>	The purpose of this Act is to provide for: the way in which a local government is constituted and the nature and extent of its responsibilities and powers; and a system of local government in Queensland that is accountable, effective, efficient and sustainable.
<i>Local Government Regulation 2012</i>	This regulation is about community planning and financial management for local governments, including: names of local government areas; classifications of local government areas; boundaries of local government areas and divisions; engaging the community; planning community growth and development; local government rates and charges; the financial accounts, documents, policies, records and reports of a local government; local government contracts; and allocating funds received by the State from the Commonwealth for local government purposes.
<i>Local Government (Dissolution of Ipswich City Council) Act 2018</i>	This Act enables government to dismiss Ipswich City Council's mayor and ten divisional councillors immediately and appoint an Interim Administrator to manage Council until the next scheduled local government elections on Saturday, 28 March 2020.

Legislation / Regulation	Requirement
<i>Planning Act 2016</i>	The purpose of this Act is to establish an efficient, effective, transparent, integrated, coordinated, and accountable system of land use planning (planning), development assessment and related matters that facilitates the achievement of ecological sustainability; protecting ecological processes and natural systems; achieving economic development includes achieving diverse, efficient, resilient and strong economies, including local, regional and State economies, that allow communities to meet their needs but do not compromise the ability of future generations to meet their needs; and to maintain the cultural, economic, physical and social wellbeing of people and communities.
<i>Environmental Protection Act 1994</i>	The objective of this Act is to protect Queensland's environment while allowing for development that improves the total quality of life, both now and in the future, in a way that maintains the ecological processes on which life depends (ecologically sustainable development).
<i>Native Title Act 1993</i>	The objective of this Act are to provide for the recognition and protection of native title; and to establish ways in which future dealings affecting native title may proceed and to set standards for those dealings; and to establish a mechanism for determining claims to native title; and to provide for, or permit, the validation of past acts, and intermediate period acts, invalidated because of the existence of native title.
<i>Nature Conservation Act 1992</i>	The objective of this Act is the conservation of nature while allowing for the involvement of indigenous people in the management of protected areas in which they have an interest under Aboriginal tradition or Island custom.
<i>Disaster Management Act 2003</i>	The main objectives of this Act are to help communities mitigate the potential adverse effects of an event; prepare for managing the effects of an event; and effectively respond to, and recover from, a disaster or an emergency situation; to provide for effective disaster management for the State; and to establish a framework for the management of the State Emergency Service and emergency service units to ensure the effective performance of their functions.
<i>Workplace Health and Safety Act 2011</i>	The main object of this Act is to provide for a balanced and nationally consistent framework to secure the health and safety of workers and workplaces
State Planning Policies	The purpose of the Planning Policy is to ensure that development is planned, designed, constructed and operated to manage water quality, cultural heritage, biodiversity, etc.

Plan Framework

The PRAMP is structured in accordance with the key elements outlined below:

Levels of Service – specifies the range and level of services to be provided by council.

Future Demand – describes the anticipated future demand for, and related impact upon, service delivery and how this is proposed to be addressed.

Lifecycle Management Plan – outlines how Council proposes to manage its existing and future roads and Parks and Recreation infrastructure assets to provide the defined levels of service.

Financial Summary – specifies the level of funding required to provide the defined levels of service.

Asset Management Practices – describes the systems and processes council applies to the management of its roads and Parks and Recreation infrastructure assets.

Risk Management – describes how risks associated with parks and recreation infrastructure assets and service delivery have been identified and managed.

Plan Improvement and Monitoring – describes the asset management improvement strategies proposed by the PRAMP, as well as how the PRAMP will be monitored over time to ensure it is continuing to meet council's objectives.

Figure 4 provides an overview of the general steps undertaken in the preparation of the PRAMP:

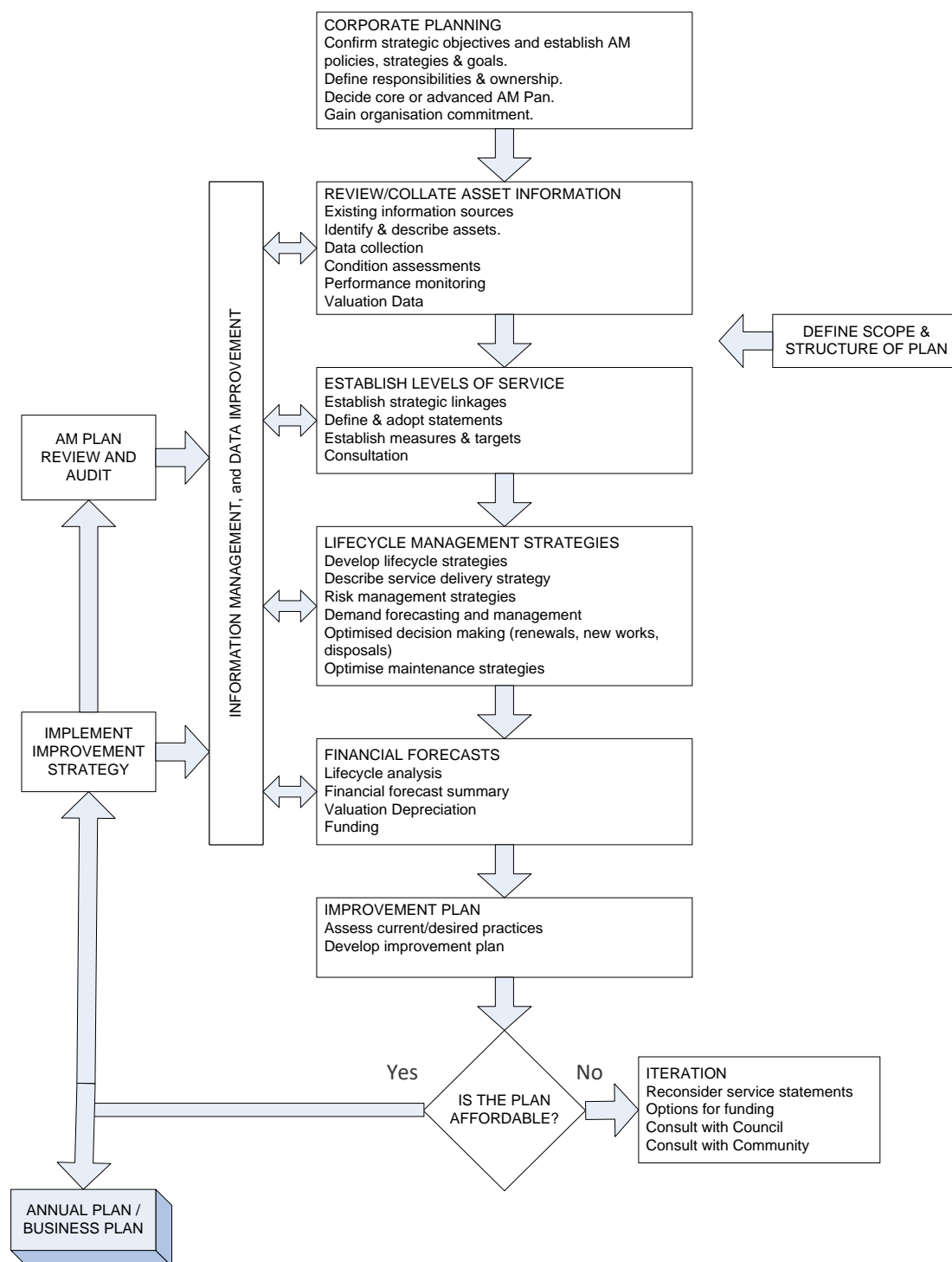


Figure 4 - Road Map for Preparing an Asset Management Plan

Core and Advanced Asset Management

The current PRAMP can be defined as a 'core' Asset Management Plan in accordance with the *International Infrastructure Management Manual (IIMM)*. It has been prepared to meet minimum legislative and organisational requirements for sustainable service delivery and long term financial planning and reporting. Core asset management is a 'top down' approach where analysis is applied at the 'system' or 'network' level.

The IIMM (p. xiii) defines Core Asset Management as:

'Asset management which relies primarily on the use of an asset register, maintenance management systems, job/resource management, inventory control, condition assessment, simple risk assessment and defined levels of service, in order to establish alternative treatment options and long-term cashflow predictions.'

Future revisions of the PRAMP will move towards 'advanced' asset management. Using a 'bottom up' approach for gathering asset information on individual assets, such an approach will support the optimisation of activities and programs in meeting defined service levels. Progress toward the advanced PRAMP will include actioning of the items identified in the improvement plan.

The IIMM (p. xii) defines Advanced Asset Management as:

'Asset management which employs predictive modelling, risk management and optimised decision-making techniques to establish asset lifecycle treatment options and related long-term cashflow predictions.'

Levels of Service

Service levels are the link between satisfying community needs and the cost of providing the service. Generally, a higher level of service (LOS) costs more to deliver than a lower LOS, although there may be economies of scale. A decision to provide an increased LOS will generally require additional funding to provide the service, while a decision to reduce funding will generally result in lower service levels. Appropriate service levels are defined on the basis of:

- customer expectations
- legislative requirements
- strategic organisational mission and objectives
- availability of resources and financial constraints.

Levels of Service and Performance measurement Documents

Community Plan/Corporate Plan

The Community Plan informs the Corporate Plan and establishes, through community consultation, Council's aspirational goals and objectives for the delivery of parks and recreation services.

Asset Management Plan

This Asset Management Plan (AMP) develops technical measures against which the aspirational goals and objectives can be measured (Technical Levels of Service).

Service Level Agreement

The service level agreement (SLA) is a formal agreement between those responsible for the assets and the services they deliver, and the operational areas of council charged with maintaining, operating, and upgrading existing assets or constructing new infrastructure.

Activity Specification

The activity specification defines the target performance measures for maintenance, operations, or construction activities. It sets routine inspection and maintenance frequencies and for reactive maintenance sets intervention levels, response times, and activity duration targets.

Maintenance Management Plan

The Maintenance Management Plan (MMP) details how each activity is to be completed and may include the following:

- standard operating procedures
- work instructions
- hazard risk assessment
- references to maintenance manuals (particularly fleet, plant, mechanical and electrical assets).

Corporate Goals and Objectives

Relevant council goals and objectives and how these are addressed in this asset management plan are outlined in Table 9:

Table 9 - Council Goals and how these are addressed in this Plan

Goals	Strategy	How Goal and Objectives are addressed in AMP
Goal 2 - Plan and develop a vibrant and sustainable city that accommodates the needs of a diverse and growing population and economy.	Strategy 2 - Provide adequate land and infrastructure to support community development and economic activity.	<p>The AMP facilitates infrastructure planning and delivery arrangements with key stakeholders to ensure infrastructure is delivered in a timely and efficient manner to meet the levels of services and demand from community.</p> <p>The AMP supports council's parks and recreation plan and other strategies to facilitate infrastructure planning and delivery to promote sustainable travel and active Parks and Recreation.</p> <p>The AMP ensures infrastructure assets are managed and maintained to conserve city's heritage.</p> <p>Accessibility for the open space network is considered during any rehabilitation and renewal works.</p>
	Strategy 3 - Provide a Parks and Recreation system that supports the safe, reliable and sustainable movement of people and goods for all travel modes.	
	Strategy 4 – The city's heritage is conserved.	
	Strategy 5 - Provide an integrated open space network that is accessible and meets the recreational needs of residents and visitors.	
Goal 3 - Create a city that values its past and embraces opportunities to work together for the betterment of the community.	Strategy 7 - Invest in social infrastructure to build a distinctive Ipswich identity and to maximise economic and social outcomes.	<p>The AMP facilitates infrastructure planning and delivery arrangements with key stakeholders to ensure social infrastructure is delivered in a timely and efficient manner to support the demand of the community.</p> <p>The AMP identifies levels of service associated with specific asset classes and requires council to identify what it costs to deliver that level of service.</p>
Goal 4 - Important areas of native habitat are conserved, the city's important waterways are protected and their water quality enhanced, and their water quality enhanced, and the city responds appropriately to climate change and uses resources.	Strategy 1 – Secure and protect areas of native habitat and vegetation.	<p>The AMP ensures infrastructure assets are managed and maintained to protect area of native habitat, vegetation, waterways, and enhanced environmental, ecological and water quality outcomes.</p> <p>The AMP provides a transparent process of how council manage and maintain assets to ensure more effective utilisation of assets.</p>
	Strategy 2 – Develop and implement an integrated approach to planning and management of nature conservation matters in partnership with the community, private land owners and government agencies.	
	Strategy 3 – Protected and manage waterways to achieve enhanced environmental, ecological and water quality outcomes.	
	Strategy 4 – Enhance urban greening.	
	Strategy 5 – Use resources effectively and sustainably.	

Goal 5 - Visionary and accessible leadership is provided that consults and communicates on key decisions and delivers sound financial management and good governance outcomes.	Strategy 2 – Provide comprehensive and meaningful community engagement to inform council decision making.	The AMP identifies the levels of service associated with specific asset classes. Council must then ascertain what level of service it can sustainably provide to customers.
	Strategy 4 – Maintain a financially sustainable and resilient approach to budgeting.	
	Strategy 6 – Maintain a consistent and efficient approach to laws and compliance activities across the city.	The AMP identifies future rehabilitation and new capital funding to ensure financial sustainability to continue delivery the agreed levels of service and infrastructure.

Source: Ipswich City Council Advance Ipswich and Corporate Plan 2017-2022

Management of council's parks and recreation assets is targeted at meeting defined levels of service in the most cost-effective manner for present and future generations. The key elements of infrastructure asset management are:

- taking a life cycle approach
- developing cost-effective management strategies for the long term
- providing a defined level of service and monitoring performance
- understanding and meeting the demands of growth through demand management and infrastructure investment
- managing risks associated with asset failures
- sustainable use of physical resources
- continuous improvement in asset management practices.

Community Levels of Service

Community Levels of Service relate to subjective service delivery outcomes that the community wants in terms of safety, quality, quantity, reliability, responsiveness, value and legislative compliance. Community levels of service measures used in the service management plan are:

- Quality - How good is the service?
- Function - Does it meet users' needs?
- Capacity/Utilisation - Is the service over or under used?

These community levels of service promised by council are outlined in Table 10 - Community Levels of Service.

Table 10 - Community Levels of Service

Service Factors	Service Objective	Performance Measure
Quality		
Parks, Open Space and Natural Areas	Parks, Open Space and Natural Areas are attractive places for the community.	Facilities and areas are maintained appropriately for usage. (e.g. grass length, etc.). Associated assets are in functional condition and inspected in accordance to agreed frequency.
Sporting Areas	Sporting areas are suitable for recreation and sporting usage.	Sporting areas playing surfaces and facilities are appropriate for usage (grass type, grass length, linemarking, etc.). Associated assets are in functional condition and inspected in accordance to agreed frequency.
Playgrounds and Equipment	Playgrounds and equipment are safe and attractive.	Playgrounds provide a safe and attractive play activity for children and community. Equipment is safe and constructed in accordance to standards. Assets are in functional condition and inspected in accordance to agreed frequency.
Function		
Parks, Open Space and Natural Areas	Parks, Open Space and Natural Areas hierarchy meet community's needs for passive recreation.	Parks, Open Space and Natural Areas are in convenient locations with easy access with appropriate size and supporting assets for usage.
Sporting Areas	Sporting areas hierarchy is appropriate for recreation and sporting competition requirements.	Sporting areas are appropriate located and designed with sufficient playing surface area and supporting assets for usage.
Playgrounds and Equipment	Playground and equipment are designed and provided appropriately for park hierarchy and demographic.	Playgrounds are located within community travel distance with appropriate size for usage. Play equipment meets standard and requirements.
Capacity/Utilisation		
Parks, Open Space and Natural Areas	Parks, Open Space and Natural Areas usage are appropriate to hierarchy.	Congestion and overuse of Parks, Open Space and Natural Areas are minimal. 80% of parks, open space and natural areas are fully utilised and provided in an efficient manner.
Sporting Areas	Sporting Areas usage is appropriate to hierarchy.	Congestion and overuse of Sporting Areas are minimal. Booking waiting list is acceptable. 80% of sporting areas are fully utilised and provided in an efficient manner.
Playgrounds and Equipment	Playgrounds and equipment usage are appropriate to hierarchy.	Playgrounds and equipment are well used and congestion is minimal. 80% of playgrounds are fully utilised and provided in an efficient manner.

Technical Levels of Service

Technical levels of service support the community levels of service by turning subjective requirements into objective assessments. These technical measures aim to quantify the performance of the assets and services they provide. Quantifying performance outcomes gives Council valuable insight into the service delivery of the assets and how to best allocate resources to meet desired service outcomes. These technical Levels of Service are outlined by asset classification in Table 11 - Technical Levels of Service.

Table 11 - Technical Levels of Service

Service Factors	Service Objective	Desired Levels of Service	Target Performance Measures
Operations and Maintenance	Parks, Open Space, Natural Areas, Sporting Areas, Playgrounds and Equipment and associated supporting assets meet user needs and maintained in functional condition.	<p>Proactive park asset inspection is based on park hierarchy¹:</p> <ul style="list-style-type: none"> • Citywide Parks – monthly • District Parks – 2 monthly • Local Parks – 3 monthly <p>Walk Track inspection is based on the adopted Australian track classes.²</p> <ul style="list-style-type: none"> • WT1 – 1 to 3 weekly • WT2, WT3, WT4 – 6 weekly • WT5 & WT6 – yearly <p>Levels of service for firebreak, service tracks, bushland area and amenity zones are currently being reviewed. Updated levels of service will be included in future version of the AMP.</p> <p>Lawn areas are maintained in accordance to adopted grass quality type³.</p> <ul style="list-style-type: none"> • Premium Quality Grass Area (GA1) – 34 cuts per year • High Quality Grass Area (GA2) – 22 cuts per year • Regular Quality Grass Area (GA3) – 16 cuts per year • Low Quality Grass Area (GA4) – 6 cuts per year <p>Landscape gardens are maintained in accordance to adopted landscape garden type:⁴</p> <ul style="list-style-type: none"> • Premium Presentation Garden Area (LG1) – weekly • High/Moderate Presentation Garden Area or Streetscape (LG2) – 3 weekly 	<p>85% of the areas are inspected on time and meet the maintenance specifications and standards.</p> <p>85% of reactive maintenance are completed on time in accordance to Council's Service Catalogue and Standards.</p>

¹ Detail inspection regime for activity breakdown can be viewed in the Asset and Landscape Maintenance Standards.

² Walking track frequency is being reviewed and developed. Please refer to the latest maintenance standards.

³ The number of cuts is indicative measure for the typical quality grass type. The actual number of cuts will depend on seasonal conditions and local environmental factors.

⁴ Maintenance frequency is indicative measure for the typical landscape garden type. The actual number of maintenance may vary and will depend on seasonal and local environmental factors.

Service Factors	Service Objective	Desired Levels of Service	Target Performance Measures
		<ul style="list-style-type: none"> Moderate/Low Presentation Garden Area (LG3) – 6 weekly <p>Routine Park Maintenance is based on park hierarchy.</p> <ul style="list-style-type: none"> Citywide Parks – 34 visits per year or weekly during the growing season District Parks – 22 visits per year or fortnightly during the growing season Local Parks – 16 visits per year or every 3 weeks during growing season <p>Graffiti Hotspot Area Proactive Inspection is based on graffiti reported and frequency of occurrence.</p> <ul style="list-style-type: none"> Very Frequent (1 or more graffiti incidents reported each week) - weekly Frequent - (2 or less graffiti incidents reported every fortnight) – 2 weekly Somewhat Frequent (1 graffiti incident report each month) – monthly <p>Electrical infrastructure assets are inspected and maintained in accordance to the frequency as listed in the Asset and Landscape Maintenance Standards Manual and the relevant Australian Standards.</p> <ul style="list-style-type: none"> Electrical Tag and RCD's Test – annually Electrical Inspection - Community Facilities – annually Electrical Inspection Council Operational Facilities – biannually <p>BBQ visual inspection and cleaning – minimum weekly.</p> <p>Reactive inspection and maintenance are carried out in accordance with Council's Service Catalogue and Standards.</p> <p>All defects / required works are identified based on agreed failures, causes and resolution listed in Appendix C.</p>	
Renewal and Rehabilitation	Infrastructure assets are renewed that suit for the purpose, capacity and design standards.	Assets are inspected and assessed in accordance to the agreed defect intervention levels. Works are scoped in project with key stakeholder consultation and high level cost estimate for budget preparation.	90% of the identified rehabilitation works are funded each year. All softfall renewal works are fully funded each year.
Upgrade / New	Recreation facilities are appropriate for community preferences and needs – facilities provision matches demand	Provision of Parks, Open Space, Natural Areas, Sporting Areas, Playgrounds and Equipment and supporting infrastructure in accordance with desired standard of service.	90% of new infrastructure are funded each year in accordance with strategies/master plans. All new infrastructure are designed and constructed in accordance to current standards and requirements (Appendix F)

Growth

Demand Forecast

Factors affecting demand on parks, open space and recreation network services can include, but are not necessarily limited to, population / demographic changes, location of employment / commercial areas and sport and recreation preferences. Of particular significance to the City of Ipswich is the extent of future growth forecast for the area.

Table 12 below provides an overview of population and dwelling projections through to 2029, as derived from the council's 2019–2020 financial year long-term financial forecast (LTFF) assumptions. The growth projection prepared in this AMP has been refined to reflect the actual growth rates and realistic infrastructure growth from development applications and activities, hence the figures in below tables may not align completely with the Local Government Infrastructure Plan (LGIP) projections.

Table 12 - Population and Dwelling Projections

Projection	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027	2027-2028	2028-2029
Dwellings	83,181	86,481	89,881	93,381	96,981	100,681	104,481	108,381	112,381	116,481
Population	224,589	233,499	242,679	252,129	261,849	271,839	282,099	292,629	303,429	314,499

A brief overview of the anticipated demand factors and possible related impacts on Parks and Recreation Network service delivery is provided in Table 13.

Table 13 - Projected Impact of Future Demand on Service Delivery

Demand factor	Current (2019-2020)	Projected (2028-2029)	Possible Impact on Services
Population growth	~224,589	~314,499	Increased demand on existing network infrastructure and services. New infrastructure and services will be required for the changing population and demographic.
Dwelling growth	~83,181	~116,481	
Employment growth and containment	~5,055,478 sqm	~8,502,929 sqm	
Sport and Recreation Preferences	The public is becoming more aware of the natural environment and demand for access to natural area and open space recreation areas is increasing.	Greater awareness of the benefits of physical activity and its contribution to healthy lifestyle.	Greater demand for parks, open spaces, and natural reserves. In addition, greater demand for nature based recreation areas and associated assets.

Changes in Technology

Technology changes and forecast that affect the delivery of services covered by this plan are listed in Table 14.

Table 14 - Changes in Technology and Forecast effect on Service Delivery

Technology Change	Effect on Service Delivery
Security and CCTV surveillance systems	The advent of cheaper CCTV surveillance options enables councils the opportunity to provide safer facilities around the clock.
Sensing technology	Sensing technology such as moisture sensors enables irrigation systems to provide optimal usage of limited resources such as water
Mobile computing	Mobile computing is enabling field personnel to assess and record asset condition on-site and to relay information back to planning personnel. This information facilitates decision making with respect to rehabilitation and maintenance of council assets.
Increased sophistication and capacity in asset data capture.	More reliable and timely updating of asset attributes, including condition, performance and defects.
Asset management systems, lifecycle costing models and asset optimisation models	Asset management systems facilitate an understanding of assets managed and operated by Health Parks and Recreation. Lifecycle costing models facilitate long term financial planning and optimisation models facilitate allocation of limited funding to assets in need.
LIDAR (Light Detection And Ranging), GPS (Global Positioning Systems)	High technology positioning systems facilitate identification of assets and their location spatially enabling service personnel to locate assets in need of servicing in a short period of time.
Modification and improvements to infrastructure asset construction and rehabilitation techniques.	Reduction / changes in materials usage and cost as a result of more advanced recycling and construction techniques / processes.

Demand Management Plan

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 include non-asset solutions, insuring against risks and managing failures.

Opportunities identified to date for demand management are shown in Table 15. Further opportunities will be developed in future revisions of this asset management plan.

Table 15 - Demand Management Plan Summary

Service Activity	Demand Management Plan
Planning	<p>Undertake open space, sport and park master planning to determine demand (demographics of community, future growth areas). This can be used to prioritise upgrades, rehabilitation and program for new equipment installation to meet the changing population and demographic.</p> <p>Ensure new areas are suitable for a range of activities rather than specific to a particular sport and recreation activity thus encouraging multiple use of a facility and area.</p> <p>Undertake regular review of the open space and recreation study to prioritise areas for upgrade and disposal. Undertake review of the nature based conservation strategy to ensure that areas are set aside to maintain biodiversity of flora and fauna.</p> <p>Consider regional coordination between councils for facility procurement</p>
Species selection	Change plant species to native/indigenous to reduce maintenance costs

New Assets from Growth

The new assets required to meet growth will be acquired from land developments and constructed by council. The new asset values as forecast by the LGIP assumptions from development contributed assets are summarised in Figure 5.

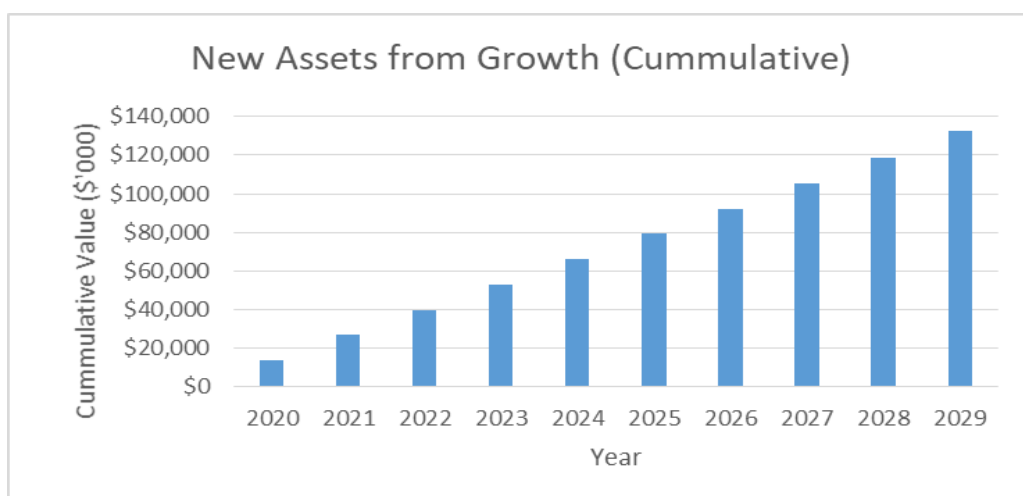


Figure 5 - New Assets from Growth

Acquiring these new assets will commit council to fund ongoing operations and maintenance 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 operating and maintenance costs.

Risk Management

This section of the AMP discloses the corporate approach to asset risk management, which includes a number of phases. Refer to the risk management guidelines for further guidance.

Asset Related Corporate and Directorate Risks

The related corporate and directorate risks related to the assets and services covered within this AMP are listed in Table 16.

Table 16 - Corporate and Directorate Risks

Risk No	Risk Description
1	Injury or death caused by grass mowing activities.
2	Environmental damage from chemical spraying activities.
3	Injury from illegally dumped dangerous items or substances.
4	Injury to members of public on outdoor Sporting Fields.
5	Injury or death caused by operations of mobile plant.
6	Drowning at council-owned swim centre.
7	Health outbreak at council-owned swim centre (e.g. crypto virus).
8	Failure of an infrastructure asset.
9	Exposure to poisonous gas and/or explosion at council-controlled landfill site.
10	Severe injury or death of staff member / member of the public while working remotely in the field.
11	Public exposure to health risks associated with urbanised flying fox roosts.
12	Missing or lost people in a natural area.
13	Fire damage to public and private assets in the Natural Area Estate or adjoining property.

Risk Management Objectives

The objectives to be achieved in managing risks under the AMP are:

- maintain levels of service
- mitigate risks to the public
- reduce the number and magnitude of unplanned asset failures.

Risk Management Approach

Risks associated with service delivery provided by the parks and recreation network have been identified and assessed in accordance with the Ipswich City Council's Enterprise Risk Management Framework dated March 2018. The risk assessment and impact factor matrices utilised are outlined in Table 17 and Table 18.

Table 17 - Risk Assessment Matrix

Likelihood	Consequences				
	Insignificant	Minor	Moderate	Major	Catastrophic
Rare	L	L	L	M	M
Unlikely	L	L	M	M	M
Possible	L	M	M	M	H
Likely	M	M	H	H	E
Almost Certain	M	M	H	E	E

E	Extreme Risk	Immediate corrective action
H	High Risk	Prioritised action required
M	Medium Risk	Planned action required
L	Low Risk	Manage by routine procedures

Table 18 - Risk Impact Matrix

		Minimal (1)	Minor (2)	Moderate (3)	Major (4)	Catastrophic (5)
RISK CATEGORIES	Financial	<ul style="list-style-type: none"> Financial loss (fines, lost revenue/funding, increased cost) ≤\$500,000 	<ul style="list-style-type: none"> Financial loss (fines, lost revenue/funding, increased cost) >\$500,000 - ≤\$2M. 	<ul style="list-style-type: none"> Financial loss (fines, lost revenue/funding, increased cost) >\$2M - ≤\$10M. 	<ul style="list-style-type: none"> Financial cost (fines, lost revenue/funding, increased cost) >\$10M - ≤\$50M. 	<ul style="list-style-type: none"> Financial cost (fines, lost revenue/funding, increased cost) >\$50M.
	Legal & Governance	<ul style="list-style-type: none"> Low level legal issues (such as mediated contractual disputes), negligible failure to meet statutory timeframes, non-compliances and/or breaches of regulation/agreements; or Low level potential for complaints; or Negligible governance failure impacting on the achievement of corporate objectives. 	<ul style="list-style-type: none"> Minor legal issues (such as litigated contractual disputes, minor personal injury/ workers' compensation claims), failure to meet statutory timeframes, non-compliances and/or breaches of regulation/agreements; or Potential for complaints; or Minor short term governance failure impacting on the achievement of corporate objectives. 	<ul style="list-style-type: none"> Serious legal issues (such as serious litigation, major personal injury/workers compensation claims), failure to meet statutory timeframes, non-compliances and/or breach of regulation/agreements; or Complaint or report to applicable authority with investigation pursued; or Moderate / serious governance failure impacting on the achievement of corporate objectives. 	<ul style="list-style-type: none"> Major legal issues, failure to meet statutory timeframes, non-compliances and/or breach of regulation/agreements (such as those resulting in Council decision/action being declared unlawful, requiring significant resources to remediate. (eg widespread impact on Council decisions/actions, or major injunctions/specific performance orders); or Numerous complaints or reports to applicable authority with investigation pursued; or Major governance failure impacting on the achievement of corporate objectives requiring significant resource allocation to resolve. 	<ul style="list-style-type: none"> Extensive legal issues, failure to meet statutory timeframes, non-compliances and/or breach of regulations/agreements (such as those arising from class actions, or with widespread and substantial retrospective impact on Council decisions/actions, or extensive injunctions/specific performance orders); or Extensive governance failure impacting on the achievement of a large number of corporate objectives.
	Political / Reputation	<ul style="list-style-type: none"> Minimal short term adverse local publicity; or Minimal adverse impact on Council partnerships. 	<ul style="list-style-type: none"> Temporary degradation in public image; or Minor adverse local publicity; or Escalation to impacted Councillor; or Minor and temporary adverse impact on Council partnerships, easily rectified. 	<ul style="list-style-type: none"> Degradation of public image requiring effort/resources to regain; or Extended adverse local and state publicity; or Escalation to non-impacted Councillors and Mayor; or Moderate adverse impact on significant Council partnerships requiring moderate effort to rectify. 	<ul style="list-style-type: none"> Degradation of public image requiring major effort/resources to regain; or Significant and longer term adverse local, state and national publicity; or Major adverse impact on strategic Council partnerships requiring significant effort to rectify; or Serious community unrest. 	<ul style="list-style-type: none"> Large scale and permanent degradation of public image; or Sustained adverse local, state, national and international publicity; or Loss of strategic Council partnerships; or Widespread community unrest.
	Community and Environment	<ul style="list-style-type: none"> No lasting detrimental or negligible / isolated impact on the health and wellbeing of the community; or Environmental damage that is contained on-site and is fully recoverable with no permanent effect on the environment. It will take less than 6 months for full recovery. 	<ul style="list-style-type: none"> Minor, short-term isolated impact on the health and wellbeing of the community; or Localised environmental damage that can be mitigated onsite. It will take less than 2 years for full recovery. 	<ul style="list-style-type: none"> Moderate, medium-term, widespread impact on the health and wellbeing of the community; or Significant environmental damage requiring remedial action. It will take up to 10 years for full recovery. 	<ul style="list-style-type: none"> Serious, long-term, widespread impact on the health and wellbeing of the community; or Major environmental damage for a matter of environmental significance (local, state or federal). 	<ul style="list-style-type: none"> Severe / extensive on-going, widespread impact on the health and wellbeing of the community; or Irreversible Catastrophic environmental damage for a matter of environmental significance (state, local or federal). No remediation, mitigation or offset action can undo environmental damage caused and matters of environmental significance may undergo local extinctions.

		Minimal (1)	Minor (2)	Moderate (3)	Major (4)	Catastrophic (5)
	Health & Safety	<ul style="list-style-type: none"> Injuries treatable with first aid, no other medical treatment required; or Incident or compensable injury without time lost 	<ul style="list-style-type: none"> Medical Treatment not requiring hospitalisation; or Compensable injury requiring medical treatment. 	<ul style="list-style-type: none"> Medical Treatment requiring hospitalisation; or Extensive Injuries; or Notifiable to regulatory authority; or Compensable injury resulting in permanent impairment of 5 – 20% and/or damages claim. 	<ul style="list-style-type: none"> Permanent Disabilities; or Single fatality; or Compensable injury resulting in permanent impairment > 20% and/or damages claim. 	<ul style="list-style-type: none"> Multiple permanent disabilities and/or fatalities.
	Service Delivery / Business Continuity	<ul style="list-style-type: none"> Non-essential customer-facing services cannot be delivered for < 1 hour. 	<ul style="list-style-type: none"> Essential customer-facing services cannot be delivered for < 1 hour; or Essential customer-facing service(s) experience 50% degradation for < 1 day; or Non-essential customer-facing services cannot be delivered for 1 hour – 1 day. 	<ul style="list-style-type: none"> Essential customer-facing services cannot be delivered for 1 hour – 1 day; or Essential customer-facing service(s) experience 50% degradation for 1 day-1 week; or Non-essential customer-facing services cannot be delivered for 1 day – 1 week. 	<ul style="list-style-type: none"> Essential customer-facing services cannot be delivered for 1 day – 1 week; or Essential customer-facing service(s) experience 50% degradation for 1 week-4 weeks; or Non-essential customer-facing services cannot be delivered for 1 – 4 weeks. 	<ul style="list-style-type: none"> Essential customer-facing services cannot be delivered for more than 1 week; or Non-essential customer-facing service(s) experience 50% degradation for more than 4 weeks; or Non-essential customer-facing services cannot be delivered for more than 4 weeks.
	Information Confidentiality, Integrity and Accessibility	<ul style="list-style-type: none"> Low-level non-compliance with privacy principles/regulations, (such as localised release or unauthorised access to non-personal confidential information) with no lasting detrimental or negligible impacts; or Low-level permanent compromise of non-business-critical information (data corruption, errors, inaccuracies, inconsistencies) with negligible impacts; or Localised permanent loss of non-business-critical information; or Minimal, short-term disruption of access to information impacting: <ul style="list-style-type: none"> small customer numbers (< 1 hr.); or non-critical internal operations. 	<ul style="list-style-type: none"> Minor non-compliance with privacy principles/regulations, (such as localised release or unauthorised access to sensitive non-personal confidential information) with limited detrimental or negligible impacts; or Localised permanent compromise of non-business-critical information (data corruption, errors, inaccuracies, inconsistencies) with minor impacts; or Semi-localised permanent loss of non-business-critical information; or Minor, short-term disruption of access to information impacting: <ul style="list-style-type: none"> most customers (< 1hr.); or small customer numbers (1 hr. - 1 day); or business-critical internal operations (< 1 day) 	<ul style="list-style-type: none"> Moderate non-compliance with privacy principles/regulations, (such as widespread release or unauthorised access to highly sensitive non-personal information); or Widespread permanent compromise of non-business-critical information (data corruption, errors, inaccuracies, inconsistencies) with moderate impacts; or Permanent and widespread loss of non-business-critical information; or Moderate short-term disruption of access to information impacting: <ul style="list-style-type: none"> most customers (1hr. – 1 day); or small customer numbers (1 day – 1 week); or business-critical internal operations (1 day – 1 week). 	<ul style="list-style-type: none"> Major non-compliance with privacy principles/regulations, (such as localised release or unauthorised access to personal information); or Localised permanent compromise of business-critical information (data corruption, errors, inaccuracies, inconsistencies) with major impacts; or Permanent and localised loss of business-critical information; or Major, medium-term disruption of access to information impacting: <ul style="list-style-type: none"> most customers (1 day - 1 week); or small customer numbers (1 – 4 weeks); or business-critical internal operations (1-6 weeks). 	<ul style="list-style-type: none"> Catastrophic non-compliance with privacy principles/regulations, (such as widespread release or unauthorised access to personal information); or Widespread permanent compromise of business-critical information (data corruption, errors, inaccuracies, inconsistencies) with catastrophic impacts; or Permanent and widespread loss of business-critical information; or Catastrophic long-term disruption of access to information impacting: <ul style="list-style-type: none"> most customers (more than 1 week); or small customer numbers (> 4 weeks); or business-critical internal operations (> 6 weeks).

Identified Risks

The risk report resulting from the risk assessment is included as Table 19.

Table 19 - Risk Report

Asset at Risk	Risk Description	Risk Consequence	Likelihood	Inherent Risk Rating	Risk Treatment Plan	Estimated Cost / Resources
Furniture	Personal injuries: falling, burning, splinter	Catastrophic	Possible	High	Review standards and materials used and placement of item. Proactive asset inspection.	Business as usual. Covered under normal operation.
Shelters	Personal injuries: falling	Catastrophic	Possible	High	Periodic maintenance and proactive asset inspection.	Business as usual. Covered under normal operation.
Shelters	Graffiti/wilful damage	Minor	Almost Certain	Medium	Graffiti hot spots inspection and graffiti removed under service standards.	Business as usual. Covered under normal operation.
Playground Equipment	Personal injuries: sunburn, equipment malfunction, slip trips, burns, pinching	Catastrophic	Possible	High	Proactive asset inspection. Review standards and materials used and placement of item.	Business as usual. Covered under normal operation.
Playground Equipment	Graffiti/wilful damage	Minor	Almost Certain	Medium	Proactive asset inspection. Graffiti hot spots inspection and graffiti removed under service standards.	Business as usual. Covered under normal operation.
Monument & Heritage Structures	Graffiti/wilful damage	Minor	Almost Certain	Medium	Proactive asset inspection and graffiti removed under service standards.	Business as usual. Covered under normal operation.
Swimming Pools and wet play areas	Drowning and injuries	Catastrophic	Possible	High	Proactive asset inspection. Make sure sufficient signage is in place. Review standards and materials used.	Business as usual. Covered under normal operation.
Streetscapes	Street tree failure (branches or actual tree). Vegetation encroachment.	Catastrophic	Possible	High	Proactive inspection and vegetation maintenance under service standards.	Business as usual. Covered under normal operation.
Recreation Grounds & Sporting Grounds & Reserves	Insufficient grass cover / wilful damaged.	Moderate	Possible	Medium	Proactive asset inspection and routine maintenance.	Business as usual. Covered under normal operation.

Asset at Risk	Risk Description	Risk Consequence	Likelihood	Inherent Risk Rating	Risk Treatment Plan	Estimated Cost / Resources
Former Landfill	Health - groundwater contamination	Catastrophic	Possible	High	Ensure regular testing and maintenance of monitoring equipment on site.	Business as usual. Covered under normal operation.
Former Landfill	Health - surface water Contamination	Catastrophic	Possible	High	Ensure that regular testing programs are in place and an effective response is devised upon discovery of an issue	Business as usual. Covered under normal operation.
Barbeques (BBQ)	Gas bottle blowing up, burns, food contamination	Catastrophic	Possible	High	Proactive asset inspection and routine maintenance.	Business as usual. Covered under normal operation.
Boat Ramps	Slippery, poor condition. Personal injuries: falling	Catastrophic	Possible	High	Proactive asset inspection. Review standards and materials used and placement of item.	Business as usual. Covered under normal operation.
Fences	Personal Injuries: falling, children climbing over.	Catastrophic	Possible	High	Proactive asset inspection and ensure all high risk fences are included in inspection regime.	Business as usual. Covered under normal operation.
Landfill	Gas seepage from sites	Catastrophic	Possible	High	Testing of sites for gas seepage and limit the amount of development around former landfill	Business as usual. Covered under normal operation.
Skate Bowls	Injuries, drug overdose and dealing, graffiti	Catastrophic	Possible	High	Proactive asset inspection. Improve surveillance, better design and location when replacing existing asset. More security at high risk sites.	Business as usual. Covered under normal operation.
Playground Softfall	Injuries, needle stick injury, burn, slip trips, health hazard from animal faeces	Catastrophic	Possible	High	Proactive asset inspection and routine maintenance. Review standards and materials used.	Business as usual. Covered under normal operation.
Walking and BMX Tracks	Injury and personal safety	Catastrophic	Possible	High	Routine maintenance of track condition. Signage and identify high risk parks.	Business as usual. Covered under normal operation.
Fire Trail Network	Injury and personal safety	Catastrophic	Possible	High	Routine maintenance of track condition. Signage and identify high risk parks.	Business as usual. Covered under normal operation.

Lifecycle Management Plan

The lifecycle management plan details how Council intends to manage and operate the Parks and Recreation Network assets at the defined service levels (see Levels of Service section) while optimising lifecycle costs.

Existing Infrastructure Base

Asset Summary

The physical parameters of assets covered by the PRAMP are outlined in Table 20 with further detail in Table 21.

Table 20 - Parks and Recreation Asset Classes

Asset Class	Financial Asset register Current Replacement Cost (\$'000)
Land Improvements	*\$103,663
Other Structures	\$104,487
Park and Street Furniture	\$4,412
Playing Surfaces	\$36,825
Equipment	\$23,460
Total	\$272,847

*Includes landscape and streetscape assets which are non-depreciable.

Table 21 - Parks and Recreation Infrastructure Asset Group and Current Replacement Cost

Asset Class	Asset Group	Asset Type	Quantity	UOM	Current Replacement Cost (\$'000)
Equipment	Aquatic Equipment	Aquatic Equipment	Not Available		\$1,071
	Irrigation System and Equipment	Irrigation System and Equipment	Not Available		\$8,155
	Landfill Monitoring Equipment	Landfill Monitoring Well, Bore or Vent	Not Available		\$69
	Playground and Exercise Equipment	Playground Equipment	1469	ea	\$14,055
		Exercise Equipment	190	ea	
	Water Quality and Soil Moisture Monitoring Equipment	Water Quality and Soil Moisture Monitoring Equipment	Not Available		\$111
Land Improvements	Landscape Gardens and Street Scape*	Landscape Gardens and Street Scape	1415.5	ha	\$38,030
	Boundary Elements	Fence, Gate, Chicane, Handrail, Bollard, Edging, Retaining Wall	297	km	\$64,434
	Track	BMX and Walking Tack (Unsealed)	Not Available		\$1,199
	Archway / Arbour	Archway / Arbour	23	ea	\$83
	Barbecue	Barbecue	196	ea	\$1,204

Asset Class	Asset Group	Asset Type	Quantity	UOM	Current Replacement Cost (\$'000)
Other Structures	Bike Rack	Bike Rack	36	ea	\$95
	Bin Enclosure	Bin Enclosure	Not Available		\$187
	Driveway / Carpark	Driveway / Carpark	193,487	sqm	\$15,940
	Platform	Deck, Viewing Platform, Stage	2,790	sqm	\$2,040
	Drinking Fountain	Drinking Fountain	285	ea	\$1,343
	Feature Object	Sandstone Block, Statute, Sculpture, Feature Wall, Water Feature	406	ea	\$3,805
	Flag Pole	Flag Pole	47	ea	\$68
	Goal Post	Goal Post	302	ea	\$1,248
	Grandstand / Spector Seating	Grandstand / Spector Seating	15	ea	\$2,652
	Hardstand	Hardstand	133,179	sqm	\$6,179
	Memorials / Monuments	Memorials / Monuments			\$3,578
	Public and Sport Field Lighting	Park Lighting and Fittings, Street Lightings and Fittings, Sportsfield Lightings and Fittings	Not Available		\$37,629
	Scoreboard	Scoreboard	16	ea	\$370
	Shading Structures	Shade Sail, Shelter	1095	ea	\$15,172
	Swimming Pool and Lagoon	Swimming Pool, Lagoon	7	ea	\$12,100
	Water Tank	Water Tank	36	ea	\$218
	Water Tap	Water Tap	Not Available		\$519
	Wheel Stop	Wheel Stop	261	ea	\$55
	Windmill	Windmill	1	ea	\$3
	Seat	Seat	1773	ea	\$2,010
Park and Street Furniture	Table	Table	804	ea	\$2,402
	Softfall	Softfall	77,486	sqm	\$9,117
Playing Surfaces	Ground Cover	Ground Cover	Not Available		\$35
	Sport Court / Fields	Skate Bowl, Basketball Court, Netball Court, Tennis Court, Combination Court, Bocce Court, Sport Field, Athletics Oval, Baseball Diamond, Bowling Green, Cricket Wicket, Croquet Lawn	443,860	sqm	\$27,673
		Total			\$272,847

*Non-depreciable assets

Due to the incompleteness of key attributes of the park and recreation assets, the quantity of some assets are not readily available in this version of the AMP. It has been identified in the improvement plan as very high priority task to improve the asset data in the physical asset registers.

Asset Hierarchy and Useful Life

An asset's useful life is defined as the period over which a depreciable asset is expected to be fully consumed. This period can be significantly impacted by council's maintenance practices.

The useful life of an asset is initially based on the manufacturer's recommended (expected) life. This is subject to change however based on historical evidence of the impact of the local environment on the expected life.

The hierarchy and useful lives of council's assets are provided in Table 22

Table 22 - Asset Hierarchy and useful lives

Asset Class	Asset Group	Asset Type	Material	Useful Life (Yr)
Plant and Equipment	Aquatic Equipment	Aquatic Equipment 5 Yr	Various	5
		Aquatic Equipment 10 Yr	Various	10
	Playground and Exercise Equipment	Playground and Exercise Equipment	Various	15
	Landfill Monitoring Equipment	Landfill Monitoring Equipment	Metal	30
	Water Quality and Soil Moisture Monitoring Equipment	Water Quality and Soil Moisture Monitoring Equipment	Various	20
	Irrigation System and Equipment	Irrigation System and Equipment	Various	20
Land Improvements	Landscape Gardens and Street Scape	Landscape Gardens and Street Scape	Grass	Non Depreciable
	Boundary Elements	Fence, Gate Chicane, Handrail	Concrete	60
			Metal	30
			Timber	20
		Bollard	Concrete	60
			Metal	30
			Timber	20
		Edging	Concrete	60
			Pavers	50
			Timber	30

Asset Class	Asset Group	Asset Type	Material	Useful Life (Yr)
			Metal	20
			Rubber	20
			Sandstone	60
		Retaining Wall	Concrete / Rock	100
			Timber	20
			Brick	60
	Track	Walking and BMX Track	Earth	Non Depreciable
Other Structures	Archway / Arbour	Archway / Arbour	Metal	30
			Timber	20
	BBQ	BBQ	Metal	20
	Rubbish Bin	Rubbish Bin	Metal	20
	Bin Enclosure	Bin Enclosure	Metal	20
	Drinking Fountain	Drinking Fountain	Metal	20
	Water Tap	Water Tap	Metal	30
	Water Tank	Water Tank	Plastic	30
	Shading Structures	Shelter / Rotunda	Concrete / Stone / Brick / Fibreglass	50
			Metal	40
			Timber	30
		Shade Sail	Metal	15
	Bike Rack	Bike Rack	Metal	30
	Feature Object	Sandstone Block, Statute / Sculpture, Feature Wall, Water Feature	Various	100
	Public and Sport Lighting	Park, Street and Sportsfield Lightings and Fittings	Various	25
	Memorials / Monuments	Memorials / Monuments	Various	100
	Flag Pole	Flag Pole	Metal	25
	Wind Mill	Wind Mill	Metal	30
	Hardstand	Handstand	Concrete / Rock	100
			Other materials	60

Asset Class	Asset Group	Asset Type	Material	Useful Life (Yr)
	Driveway / Carpark	Driveway, Carpark	Concrete	80
			Asphalt	30
			Gravel	10
	Wheel Stop	Wheel Stop	Concrete	60
	Grandstand and Spector Seating	Grandstand and Spector Seating	Concrete	60
			Steel	30
			Timber	20
	Platform	Deck and Viewing Platform	Timber	60
		Stage	Various	50
	Scoreboard	Scoreboard	Various	30
Park and Street Furniture	Table	Table	Concrete	60
			Metal	30
			Timber	20
	Seat	Seat	Concrete	60
			Metal	30
			Timber	20
	Swimming Pool	Swimming Pool and Lagoon	Various	60
Playing Surfaces	Softfall	Softfall	Organic	6
			Polyurethane / Rubber	10
	Athletics Oval	Athletics Oval	Grass	40
	Baseball Diamond / Field	Baseball Diamond / Field	Grass	40
	Basketball Court	Basketball Court	Concrete	60
			Asphalt	30
	Bocce Court	Bocce Court	Clay	40
	Bowling Green	Bowling Green	Grass	40
	Combination Court	Combination Court	Concrete	60
			Asphalt	30
	Cricket Wicket	Cricket Wicket	Concrete	60
			Synthetic	20
			Grass	40
	Croquet Lawn	Croquet Lawn	Grass	40
	Netball Court	Netball Court	Concrete	60

Asset Class	Asset Group	Asset Type	Material	Useful Life (Yr)
			Asphalt	30
			Grass	40
	Skate Bowl	Skate Bowl	Concrete	60
	Sport Fields	Sport Fields	Grass	40
	Tennis Court	Tennis Court	Concrete	60
			Clay	40
			Asphalt	30
			Synthetic	20

Age Profile

The age profile of the assets are based on:

- 2016-2017 financial year formal valuation condition data
- combination of the recent PAR and FAR data.

The age profile of the assets is provided in Figure 6.

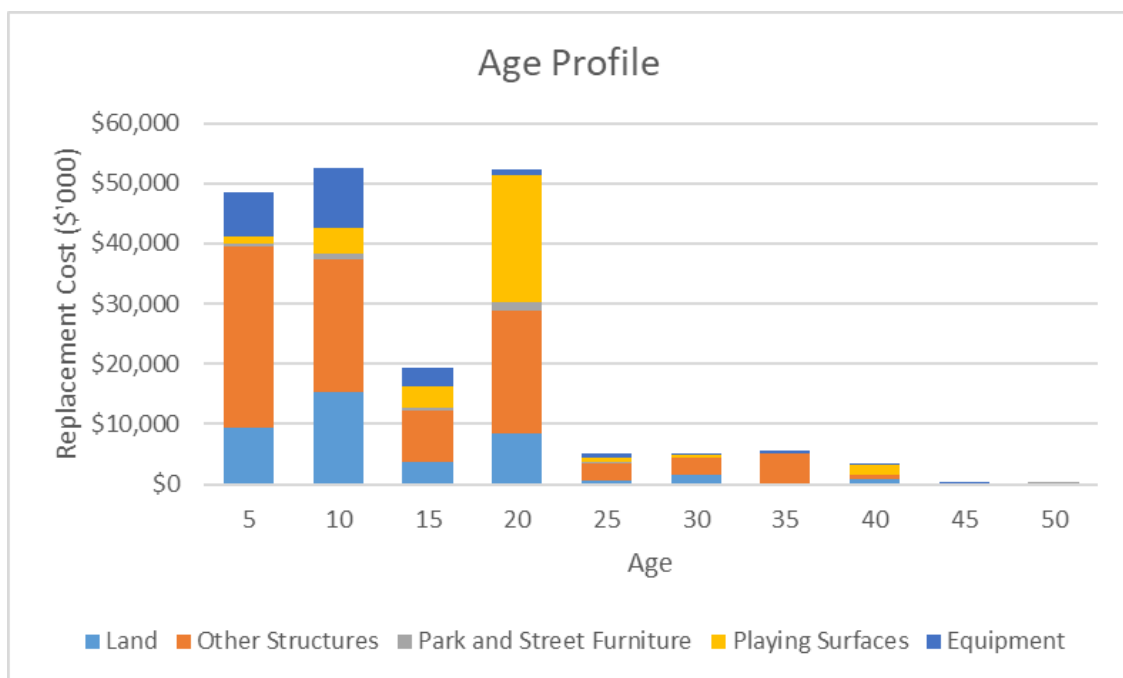


Figure 6 - Asset Age Profile

The above graph indicates that 90% of council's Parks and Recreations Assets are less than 20 years old.

Asset Remaining Useful Life

The remaining useful lives of the assets are based on a combination of the followings:

- 2016-2017 financial year formal valuation condition data
- recent PAR and FAR data
- inspections by a suitable qualified person
- calculated from supplied construction dates and adopted asset lives
- estimated from the condition of the asset as a percentage of the expected life.

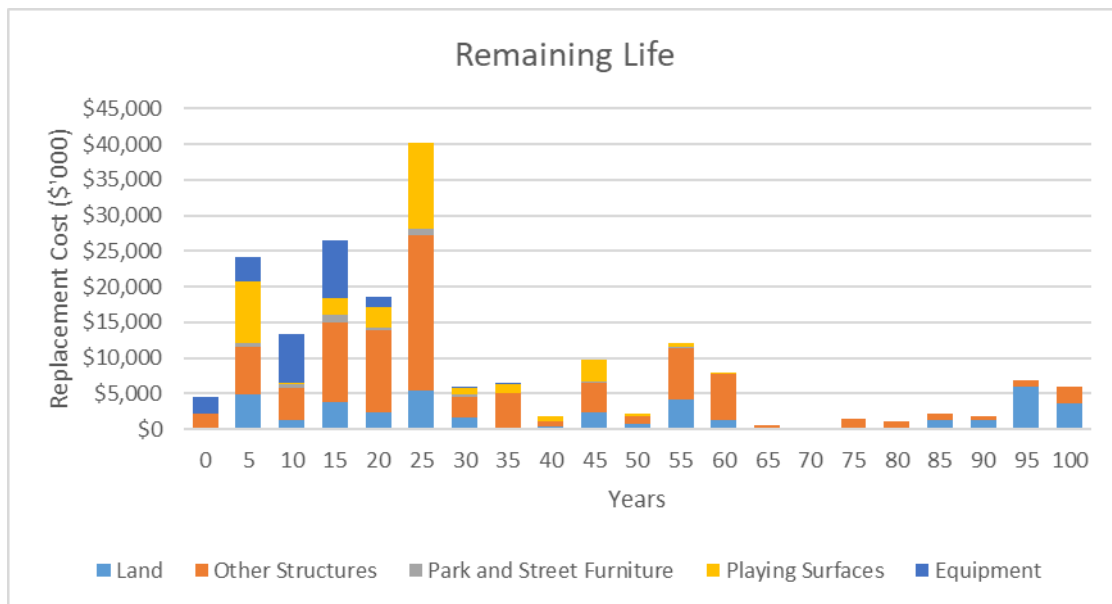


Figure 7 - Asset Remaining Life Profile

From Figure 7, there is a backlog of parks and recreation renewals of \$4.61m, with an additional \$24.24m requiring attention within the next 5 years giving a total value of \$28.76m.

The backlog value of \$4.61m is misleading as 334 (\$2.07m) of the 454 assets are fully depreciated with no fair value. The status of these assets needs to be determined before any remedial action is proposed.

The remaining useful life of the park and recreation is determined by compare the age of the assets with standard life of the asset. In reality, there are a large proportion of the current assets are in fair and function condition which are beyond their end of life. Comprehensive asset condition assessment will be required and has been identified as a major improvement task in the improvement plan for future versions of the AMP.

Asset Condition

Council has adopted a condition assessment using a 5-point scale rating, varying from 'Very Good' to 'Very Poor' condition as can be seen in tables and figures below.

Table 23 - Structural Condition Grading Model

Grade	Condition	%Remaining Useful Life	Description
1	Very Good	>70%	Sound physical condition. No signs of deterioration Only normal maintenance required.
2	Good	70% - >50%	Acceptable physical condition; minor deterioration visible, no short-term failure risk. Minor defects only. Only minor work required, if any.
3	Fair	50% - >10%	Acceptable physical condition; minimal short-term failure risk but potential for deterioration in long-term. Minor defects only. Minor components or isolated sections of the asset may need replacement or repair now but asset functions safely at adequate level of service. Work may be required but asset is serviceable. Maintenance required to restore the asset to an acceptable level of service.
4	Poor	10% - >4%	Significant deterioration evident. Failure likely in short-term. Likely need to replace most or all of the asset. No immediate risk to health or safety but works are required to ensure asset remains safe. Substantial work required in short-term, asset barely serviceable. Asset requires renewal – works included in rehabilitation program.
5	Very Poor	<4%	Failed or failure imminent. Immediate need to replace most or the entire asset. Health and safety hazards exist which present a possible risk to public safety, or asset cannot be serviced/operated without risk to personnel. Asset is effectively unserviceable. Major work or replacement required urgently or works to be included in the rehabilitation program.

Table 24 - Current Condition Summary

Asset Type	Condition Rating (% of asset base by replacement value)					Total
	As New	Good	Fair	Poor	Very Poor	
Land Improvements	14.2	2.2	2.2	1.1	1.7	21.3
Other Structures	26.2	10.6	4.6	3.8	2.9	48.1
Park and Street Furniture	0.7	0.2	0.7	0.2	0.2	1.9
Playing Surfaces	3.4	6.6	2.9	2.9	1.3	17.1
Equipment	3.5	3.1	2.6	1.0	1.3	11.5
Totals	48.0	22.8	12.9	9.0	7.3	100.0

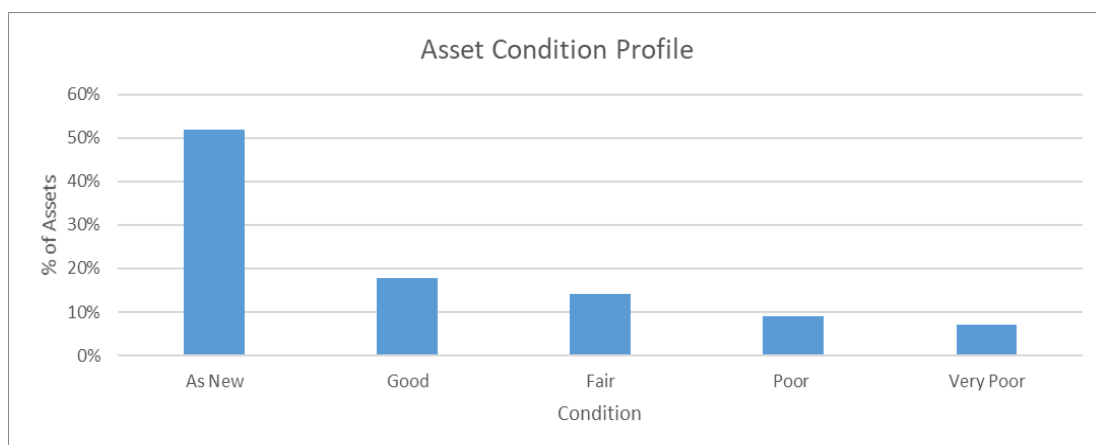


Figure 8 - Asset Condition Profile

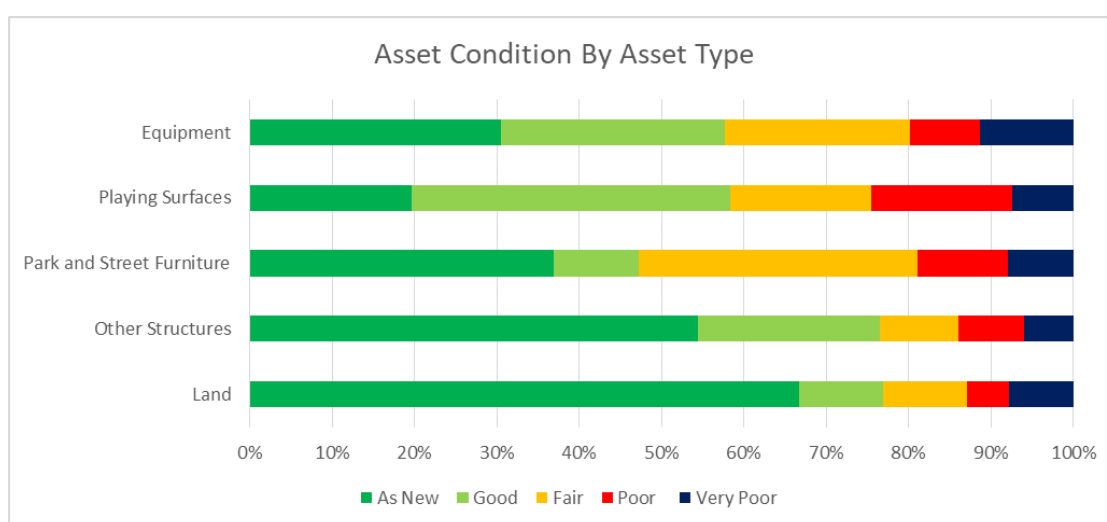


Figure 9 - Asset Condition Profile by Asset Type

General Asset Condition

Assets with Very Poor Condition	7.27%	~\$14m
Assets with Poor Condition	9.02%	~\$17.46m
Total	16.30%	~\$31.53m

The condition assessments indicate that 16.30% of the Parks and Recreation assets valued at ~\$31.5m are in a poor condition or worse. In reality, there are a large proportion of the current assets are in fair and function condition which are beyond their end of life. Comprehensive asset condition assessment will be required and has been identified as a major improvement task in the improvement plan for future versions of the AMP.

Condition Monitoring

This section relates to the physical condition of the assets included within this plan. Monitoring of asset condition is critical to help identify assets that are about to fail, or which may require a maintenance treatment to ensure the asset will continue to deliver its service potential. Current condition of the parks and recreation assets are being monitored via proactive inspections and assets which met intervention levels and rehabilitation threshold are included in the capital program. The inclusion of the asset conditions in the physical asset registers has been highlighted as a very high priority in the improvement plan and a summary of status will be made available in the future version of the AMP.

Asset Criticality

After assessing the age, condition, material types, location, levels of use, consequence of failure, redundancy, and criticality to functioning of the service, the asset criticality of the assets within the RPAMP are determined to be medium.

Data Confidence

The lifecycle assessment is only as precise as the accuracy of the data Council holds. This data includes, revaluation data of the assets, financial data and asset register details.

Table 25 - Data Confidence Rating

Grade	Description	Accuracy
1	Accurate	100%
2	Minor Inaccuracies	95%
3	50% Estimated	80%
4	Significant Data Estimated	70%
5	All Data Estimated	60%

(Section 4.3.7 of the IIMM, Version 3.0, 2006)

The accuracy of the PRAMP data is 70%. In particular the data in the physical asset register has major gaps and incomplete attributes which have impacted the accuracy of the valuation and future renewal forecast. It has been identified as a very high priority task in the improvement plan to review and update the physical asset register.

Available Funding

The available funding was estimated based on the financial model provided by council. The capital expenditure has been extracted from council's financial model. The assumption being that this level of funding is enough to deliver the current service levels.

The forecasts estimated in this AMP should be used as an indication of expenditure levels and distribution required for the LTFF.

The LTFF funding available for operations, maintenance and infrastructure renewals is shown in Table 26 and Figure 10. The total allocation over the term of the LTFF is ~\$695.14m or ~\$69.5m per annum. The also includes portion of the 2018-2019 financial year funding carry over.

Table 26 - Long Term Financial Forecast

Financial Year Ending	New/Upgrade (\$'000)	Operations & Maintenance (\$'000)	Renewals (\$'000)	Total (\$'000)
2020	\$47,653	\$32,868	\$4,154	\$84,675
2021	\$11,144	\$34,855	\$5,881	\$51,880
2022	\$15,474	\$36,968	\$2,862	\$55,304
2023	\$20,479	\$39,214	\$4,291	\$63,984
2024	\$24,594	\$41,602	\$3,554	\$69,750
2025	\$27,942	\$44,139	\$3,499	\$75,580
2026	\$15,251	\$46,835	\$4,154	\$66,240
2027	\$15,109	\$49,701	\$5,852	\$70,662
2028	\$22,414	\$52,746	\$3,769	\$78,929
2029	\$16,562	\$55,983	\$5,595	\$78,140
Total	\$216,622	\$434,911	\$43,611	\$695,144

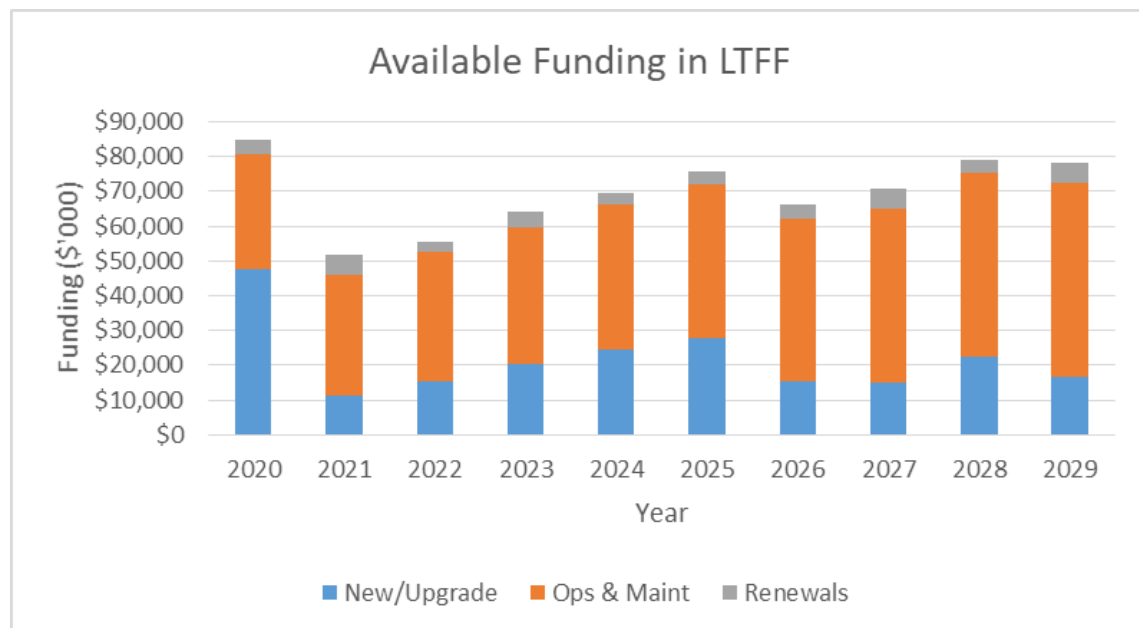


Figure 10 - Parks and Recreation funding in the LTFF

Operations & Maintenance

This section is to be based on operations and maintenance requirements as identified from changes in Levels of Service, Funding Issues identified via Operations and Maintenance and consideration of the growth in the asset portfolio

Currently maintenance is managed based on historical information and trends. The maintenance service objectives are to:

- maintain council's infrastructure in a safe, serviceable and aesthetic condition to the satisfaction of council and the community
- maintain and preserve the functionality and value of the existing assets
- provide and maintain a safe environment for the community within the constraints of council's financial capacity and resource capability, while displaying a reasonable "duty of care"
- ensure the provision of a high standard of customer service and that customer requests are responded to quickly and efficiently.

Functions related to the day-to-day running and upkeep of assets, the costs of which are particularly significant for dynamic/short-lived assets.

Maintenance Specifications

The links below contain the maintenance specification details.

Maintenance Specification Details			
Assets / Areas covered	Status		Document Reference
Parks, Open Space and Sporting Area - Grass/Lawn, Landscape Gardens, Streetscape	Up to Date ⁵		Asset and Landscape Maintenance Standards (A5502903)
Natural Area – Amenity Zone, Buffer Zone, Maintenance Zone, Special Zone, Firebreaks, Service Tracks	Being reviewed and updated.		Asset and Landscape Maintenance Standards (A5502903)
General Assets – Fencing, Furniture, BBQ, etc.	Up to Date		Asset and Landscape Maintenance Standards (A5502903)

⁵ Whilst the maintenance standards and specifications may be up-to-date, the WPR Asset/Landscape Maintenance Standard Manual has been identified for major review.

Routine Maintenance Plan

Routine maintenance is the regular ongoing work that is necessary to keep assets operating, including instances where portions of the asset fail and need immediate repair to make the asset operational again.

Maintenance Plan

Maintenance includes reactive, planned and cyclic work activities.

Reactive maintenance is unplanned repair work carried out in response to service requests and management / supervisory directions.

Planned maintenance is repair work that is identified and managed through a maintenance management system (MMS). MMS activities include inspection, assessing the condition against failure / breakdown experience, prioritising, scheduling, actioning the work and reporting what was done, to develop a maintenance history and improve maintenance and service delivery performance.

Cyclic maintenance is replacement of higher value components / sub-components of assets that is undertaken on a regular (e.g. gravel road re-sheeting). This work generally falls below the capital / maintenance threshold.

Operations & Maintenance Forecast

The projected operations and maintenance expenditure can be seen in Figure 11 and Table 27.

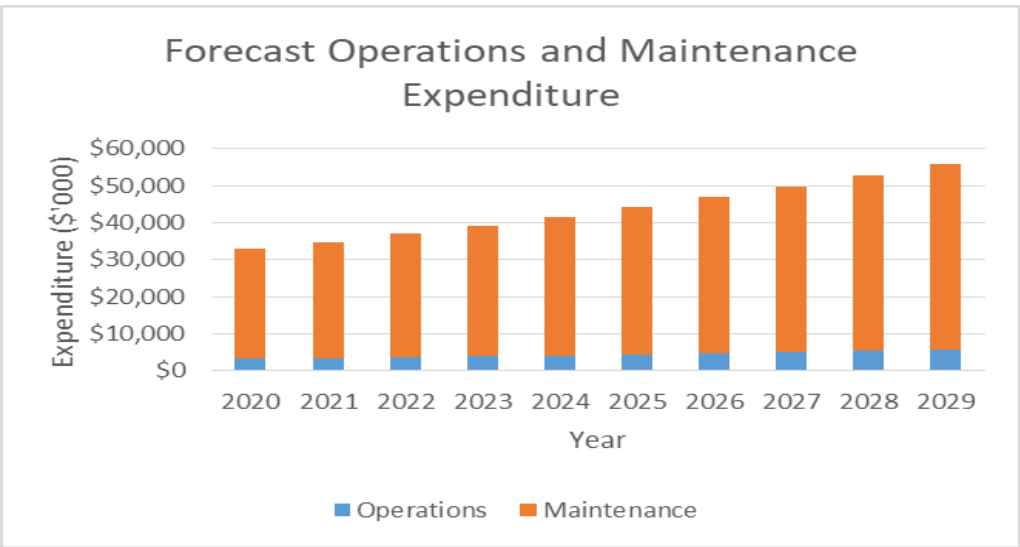


Figure 11 - Operations and Maintenance Expenditure Forecasts

Table 27 - Forecast Operations and Maintenance Expenditure

Financial Year Ending	Operations (\$'000)	Maintenance (\$'000)	Non-Recurrent (\$'000)	Total (\$'000)
2020	\$3,287	\$29,581	\$0	\$32,870
2021	\$3,486	\$31,370	\$0	\$34,857
2022	\$3,697	\$33,271	\$0	\$36,970
2023	\$3,921	\$35,293	\$0	\$39,216
2024	\$4,160	\$37,441	\$0	\$41,604
2025	\$4,414	\$39,725	\$0	\$44,141
2026	\$4,684	\$42,152	\$0	\$46,837
2027	\$4,970	\$44,731	\$0	\$49,703
2028	\$5,275	\$47,472	\$0	\$52,749
2029	\$5,598	\$50,385	\$0	\$55,985
Totals	\$43,491	\$391,420	\$0	\$434,911

Maintenance Funding Ratio	100%
----------------------------------	------

Council is currently fully funding all its required maintenance.

The current maintenance expenditure of \$29.58m is roughly 10 times the\$ \$2.8m benchmark (calculated from the depreciation expense of assets in condition 3, 4 and 5).

The benchmark figure has been reduced due to the number of assets that were expensed on purchase/acquisition or are full depreciated but still in service.

The significant benchmark variation suggests that both the levels of maintenance funding and the asset depreciation parameters (fair value, asset remaining lives and standard lives) for the parks and recreation asset class needs review.

Renewals Planning

Renewal is major work which does not increase the asset's design capacity 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 upgrade, expansion or new works.

Approach to Renewals Planning

Renewal will be undertaken using 'low-cost' renewal methods where practical. The aim of 'low-cost' renewals is to restore the service potential or future economic benefits of the asset by renewing the assets at a cost less than replacement cost. In some instances, the replacement cost may exceed the original replacement cost to meet current design and legislative standards.

A number of factors were considered in order to provide a holistic approach to prioritising End of Life Renewal programs and projects for this AMP. A brief summary of the considerations taken into account are documented below:

- An assessment into legislative and Australian Standard compliance was undertaken, to ensure programs and projects associated with assets not currently meeting statutory or standard requirements were prioritised over programs and projects that already do.
- Asset criticality was undertaken to identify projects with assets that are more critical to ensuring levels of service are maintained. Some projects were identified as being located within high use or service critical areas and warranted prioritisation over other projects in lower profile areas.
- Once Asset Profiling was completed, a risk assessment was undertaken to identify projects with assets that entailed higher risk and criticality than others in accordance to Council's Enterprise Risk Management Framework.
- Asset condition information was analysed, with higher priority given to projects that involved assets in poor condition or end of life asset, over those that were in reasonable condition.
- Project dependency was investigated. Projects that required other projects to be completed before others gave rise to re-prioritising some.

Assets require renewal or rehabilitation are identified from various sources such as councillor or community requests, end of life analysis, proactive and reactive asset inspections. Candidate proposals and projects are inspected to verify need and to develop a preliminary cost estimate. Verified proposals and projects are ranked by priority against the adopted criteria listed in Table 28 and Table 29. The ranked proposals and projects are then included into the capital works program as part of council's budget preparation for consideration.

Table 28 - Renewal Priority Ranking Criteria – Parks, Open Space and Natural Areas

Criteria	Priority
Softfall Renewal / Replacement	1
Citywide (Parks, Open Space and Natural Areas)	2
District (Parks, Open Space and Natural Areas)	3
Local (Parks, Open Space and Natural Areas)	4

Table 29 - Renewal Priority Ranking Criteria – Sporting Areas and Supporting Facilities

Criteria	Priority
Safety - May result in medical treatment requiring hospitalisation.	1
Service Delivery - May result in an inability to deliver necessary services.	2
Security- May result in a breach of security, placing persons, property and/or corporate records at risk.	3
Financial - May result in a financial loss of \$100K or greater.	4
Reputation - May result in a loss of reputation and attract at least local media coverage.	5
Other - All other projects not meeting the above criteria.	6

Renewal Standards

Renewal work is carried out in accordance with Asset/Landscape Maintenance Standards, Council's Standard Drawings and the Standards.

Comparative analysis of renewals program

The planned renewals program generated by the PMS was compared to the asset records using 3 different approaches as follows:

Depreciation Renewals

This is a 'top down' approach that uses the depreciation or 'consumption' rate as a guide to how much Council should be investing in renewals to effectively maintain the assets. This is calculated from the financial register using valuation data. This does not necessarily reflect the technical condition of the assets or the potential impact on the life of the asset due to changes in maintenance and operational practices.

Condition Renewals

This is a more rigorous 'bottom up' approach that uses the condition of each asset and develops a renewal program on timely investment of expenditure to renew the asset at the end of its life. The forecast renewal expenditure is then more representative of when the expenditure is required.

Planned Renewals

Council's planned renewal expenditure included in the 10-year CAPEX program.

The results of the comparative renewal programs are shown in Figure 12 and Table 30 below.

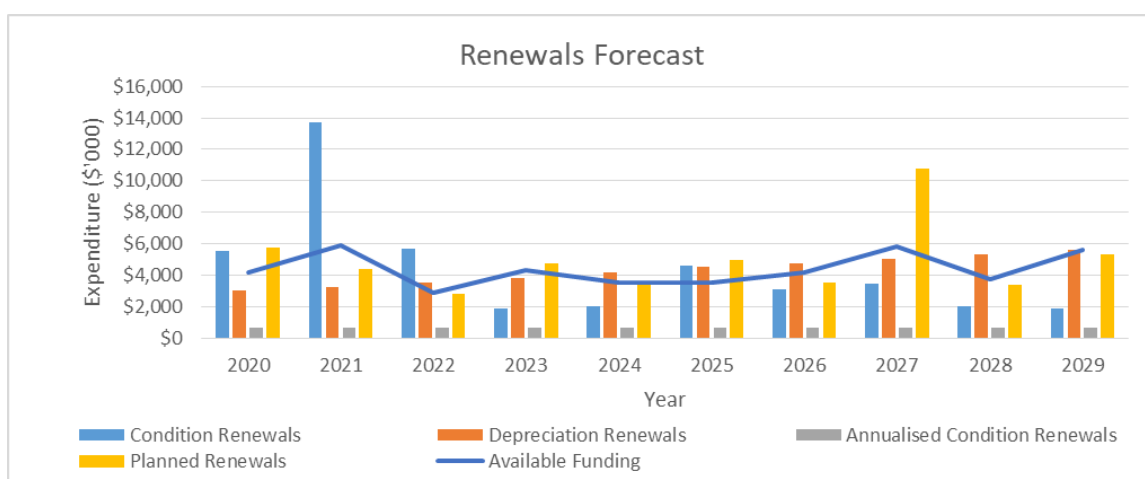


Figure 12 - Comparative Renewal Forecast

Table 30 - Comparison of forecast Renewal Expenditures

Financial Year Ending	Condition Renewals (\$'000)	Annualised Condition Renewals (\$'000)	Planned Renewals (\$'000)	Depreciation Renewals (\$'000)
2020	\$5,505	\$4,378	\$5,780	\$3,015
2021	\$13,736	\$4,378	\$4,372	\$3,233
2022	\$5,672	\$4,378	\$2,865	\$3,490
2023	\$1,899	\$4,378	\$4,940	\$3,793
2024	\$2,027	\$4,378	\$3,648	\$4,132
2025	\$4,576	\$4,378	\$5,360	\$4,502
2026	\$3,080	\$4,378	\$3,877	\$4,758
2027	\$3,415	\$4,378	\$12,212	\$5,013
2028	\$1,992	\$4,378	\$3,881	\$5,335
2029	\$1,878	\$4,378	\$6,308	\$5,607
Total	\$43,779	\$43,779	\$53,243	\$42,878

A ratio of the available renewal funding to the forecast expenditure is prepared for the three different assessment methods and is listed in Table 31 below.

Table 31 - Renewal Funding Ratio

Expenditure Type	Depreciation Based	Condition Based	Program Based
Asset Renewal Funding Ratio	1.02	0.82	0.82

A ratio above 1 indicates that council has fully funded its renewals. The depreciation method is impacted by the level of assets that have reached the end of their useful life but are still in service, therefore there will be reduced depreciation with little or no renewal expenditure.

Total available funding in the LTFF is ~\$43.6m therefore there should be enough funding to deliver any of the modelled renewal assessment programs. Shortfall will be managed by proactive inspection of parks and recreation assets at time of forecast replacement based on condition, it is envisaged that this will result in some asset replacements being pushed out. The renewal profile will be revisited when improvements are made to the asset system.

The assessment of the remaining life and condition rating data indicates that the financial data has been used to determine the asset condition that is recorded in the asset register. Due to technical difficulties, physical age has been used in this AMP for analysis. However, the maintenance works, and planned renewal program has been developed through regular and proactive inspection of the parks and recreation assets. The use of actual condition will be included in future version of the AMP.

On this basis the planned renewal program has been adopted as the appropriate model until such time as the condition assessments undertaken by maintenance staff are recorded in the asset register.

The Planned renewal program is attached in Appendix B.

Creation / Acquisition / Upgrade Plan

New works are those works that create a new asset that did not previously exist, or works which upgrade or improve an existing asset beyond its existing capacity. They may result from growth, social or environmental needs. Assets may also be acquired at no cost to Council from land development. Apart from the assets contributed from developers, Council may also construct new or upgrade assets from various funding sources to meet levels of service, growth demand and other drivers, such as statutory or legislative compliance requirements.

A brief summary of the considerations taken into account are documented below:

- An assessment into legislative and Australian Standard compliance was undertaken, to ensure programs and projects associated with assets not currently meeting statutory or standard requirements were prioritised over programs and projects that already do.
- Asset criticality was undertaken to identify projects with assets that are more critical to ensuring levels of service are maintained. Some projects were identified as being located within high use or service critical areas and warranted prioritisation over other projects in lower profile areas.
- Once Asset Profiling was completed, a risk assessment was undertaken to identify projects with assets that entailed higher risk and criticality than others in accordance to Council's Enterprise Risk Management Framework.
- Asset condition information was analysed, with higher priority given to projects that involved assets in poor condition or end of life asset, over those that were in reasonable condition.
- Project dependency was investigated. Projects that required other projects to be completed before others gave rise to re-prioritising some.

Identified projects are assessed against the criteria listed in Table 32 - New Assets Priority Ranking Criteria below.

Selection Criteria

New assets and upgrade/expansion of existing assets are identified from various sources such as councillor or community requests, various strategic planning documents and LGIP. Candidate proposals and projects are inspected to verify need and to develop a preliminary cost estimate. Verified proposals and projects are ranked by priority against the adopted criteria listed in Table 32 - New Assets Priority Ranking Criteria. The ranked proposals and projects are then included into the Capital Works Program as part of Council's budget preparation for consideration.

Table 32 - New Assets Priority Ranking Criteria

Strategic Driver	Percentage Weighting	Rationale
Compliance / Replacement/ Improvement	25%	<p><u>Compliance</u> Investment is required to meet legislative compliance and statutory building standards.</p> <p><u>Replacement</u> Investment is required as the asset has reached the end its whole of life cycle.</p> <p><u>Improvement</u> Investment is required to increase performance of asset in regards to resource use efficiency.</p>
External Funding/ Rapid Return on Investment	20%	<p><u>External Funding</u> Projects are assessed for their “eligibility” for external grant funding opportunities and the “confidence” of securing grant funding, based on available knowledge and precedence.</p> <p><u>Rapid Return on Investment</u> Projects are assessed based on their predicted Return on Investment (Payback Period)</p>
Optimisation of existing facilities	10%	To ensure maximum return on Council’s investment in community facilities, it is critical to assess the optimisation and sustainability of existing facilities, prior to building new facilities, to responsibly inform Council’s ongoing investment decisions.
Project Catchment (Local - Regional)	10%	Council provides various forms of community facilities which service the community at a “Local” to a “Citywide / Regional” Level. Potential projects which have a “Citywide / Regional” community service catchment will receive a higher weighting, as opposed to projects servicing a “District” community catchment.
Meeting growth demand	10%	Investment is required to meet adopted service levels associated with population growth and participation growth trends.
Current level of service within existing catchment	10%	To ensure maximum return on Council’s investment in community facilities, it is critical to access the current level of service within existing catchments. Catchments with nil level of service based on adopted service standards will be weighted the highest, whilst catchments with an existing significant level of service will be weighted the lowest.
Commemoration value	10%	The community celebrates key commemorative mile stones from a “Local” to a “Regional” catchment Level. Potential projects which are aligned at a “Regional” community level will receive a higher weighting, as opposed to projects which are aligned to a “Local” community level.
Multi-use benefit to community	5%	To ensure maximum return on Council’s investment in community facilities, it is critical to access the multi-use benefit to the community. Potential projects which can demonstrate a significant level of benefit will be weighted the projects, whilst projects with the least benefits will be weighted the lowest.
	100%	

Standards and specifications

Standards and specifications for new assets and for upgrade/expansion of existing assets are constructed in accordance with the specifications and standards listed in the Asset and Landscape Maintenance Standards, Council's standard drawings and other relevant standards.

New / Upgrade Forecast

This section is to be based on new/upgrade planning as detailed in the 10-year CAPEX program.

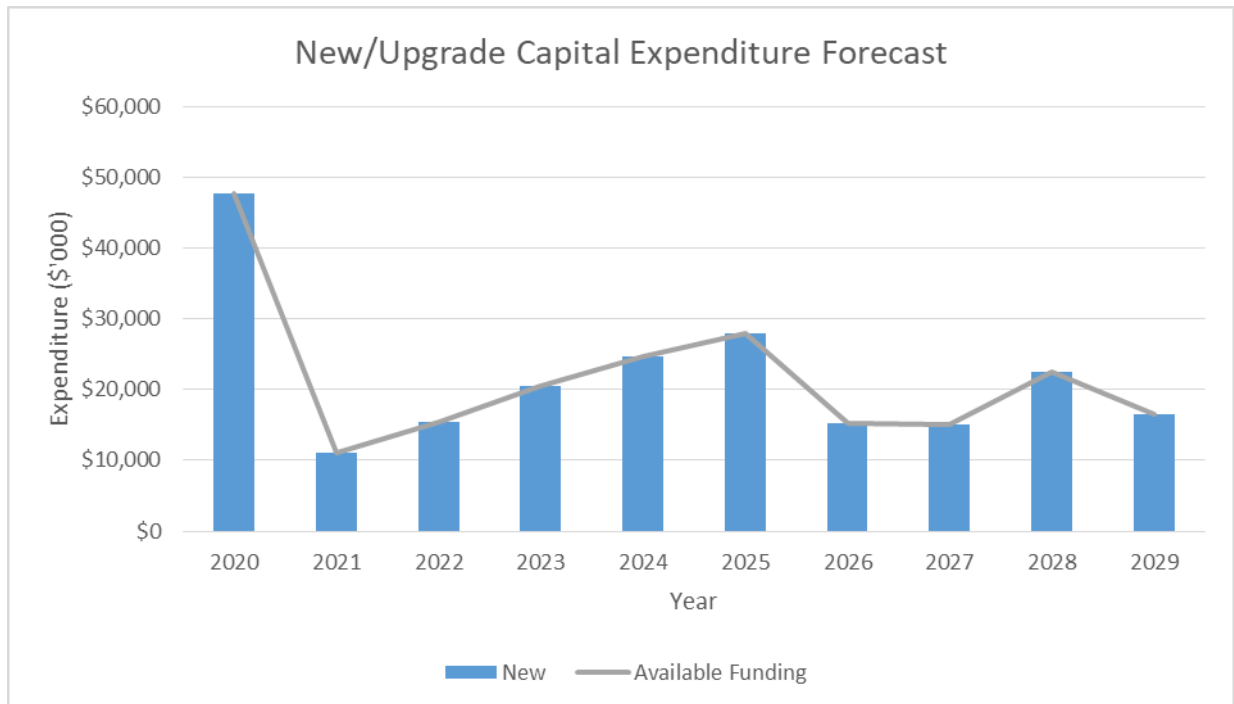


Figure 13 - New/Upgrade Expenditure Forecast

New/Upgrade Capital Works

When planning capital works, council considers:

- the physical capacity of council's works crews and availability of contractors
- the implications that capital works expenditure has on lifecycle and operating costs
- alternative methods to increasing service delivery/capacity or reducing service demand.

Council considers non-asset solutions before asset solutions to providing services in an effort to reduce costs.

The new/upgrade works includes the cost of the CBD civic space redevelopment.

New and Upgrade Conclusion

Total funding required to deliver the planned New/upgrade works is ~\$216.6m.

Total available funding in the LTFF is ~\$216.6m therefore there is sufficient funding to deliver all the New/upgrade program based on current data.

Disposal / Rationalisation

Disposal includes any activity associated with disposal of a decommissioned asset including sale, demolition or relocation. Assets identified for possible decommissioning and disposal are shown in Table 33 - Assets identified for Disposal. These assets will be further reinvestigated to determine the required levels of service and see what options are available for alternate service delivery, if any.

Table 33 - Assets identified for Disposal

Asset	Reason for Disposal	Timing
Organic Softfall	Cyclic replacement	2019-2019
Rubber Softfall	End of useful life	2019-2019

Where cash flow projections from asset disposals are not available, these will be developed in future revisions of this asset management plan. The current disposal costs have been included in the rehabilitation budget for each project.

Forecast Expenditure

This section contains the financial requirements resulting from all the information presented in the previous sections of this asset management plan. The financial projections will be improved as further information becomes available on desired levels of service and current and projected future asset performance.

Financial Summary

The forecast expenditure to deliver the planned New/upgrade program, the planned renewals and sustain the current level of operations and maintenance is outlined in Table 34 below. This gives a 10-year total of ~\$700.5m.

Table 34 - 10-Year Forecast Expenditure

Financial Year Ending	Risk Treatment	New or Upgrade (\$'000)	Operations (\$'000)	Maintenance (\$'000)	Planned Renewals (\$'000)	Total (\$'000)
2020	\$0	\$47,653	\$3,287	\$29,581	\$5,780	\$86,301
2021	\$0	\$11,144	\$3,486	\$31,370	\$4,372	\$50,371
2022	\$0	\$15,474	\$3,697	\$33,271	\$2,865	\$55,307
2023	\$0	\$20,479	\$3,921	\$35,293	\$4,940	\$64,633
2024	\$0	\$24,594	\$4,160	\$37,441	\$3,648	\$69,843
2025	\$0	\$27,942	\$4,414	\$39,725	\$5,360	\$77,441
2026	\$0	\$15,251	\$4,684	\$42,152	\$3,877	\$65,964
2027	\$0	\$15,109	\$4,970	\$44,731	\$12,212	\$77,022
2028	\$0	\$22,414	\$5,275	\$47,472	\$3,881	\$79,042
2029	\$0	\$16,562	\$5,598	\$50,385	\$6,308	\$78,853
Total	\$0	\$216,622	\$43,491	\$391,420	\$53,243	\$704,777

The estimated available funding forecast (~\$695.1m) is outlined in Table 26.

The comparison of the projected 10-year expenditure and the funding included in the LTFF can be seen in Figure 14.

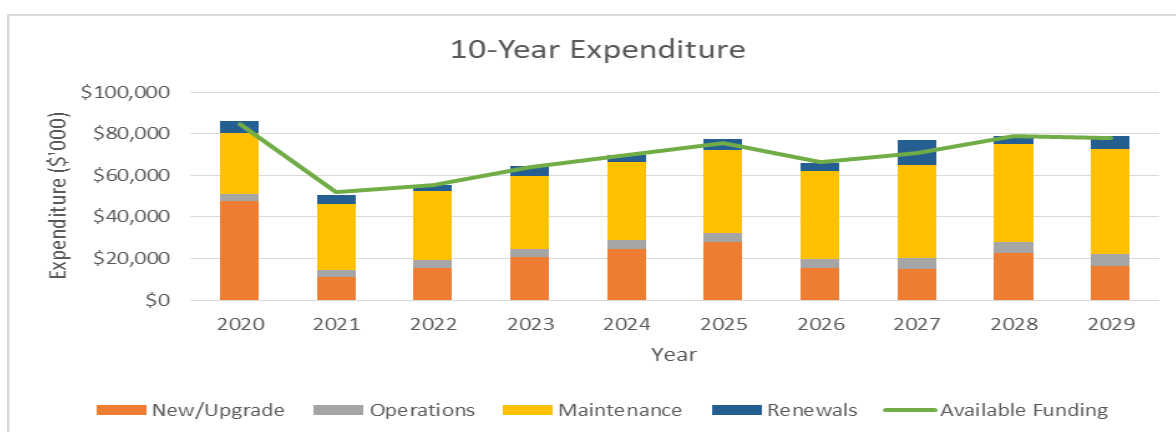


Figure 14 - 10-year Expenditure Forecast

The cumulative gap between the funding and expenditure results in a financial gap of ~\$9.6m at the end of the 10-year period. This can be seen in Figure 15.

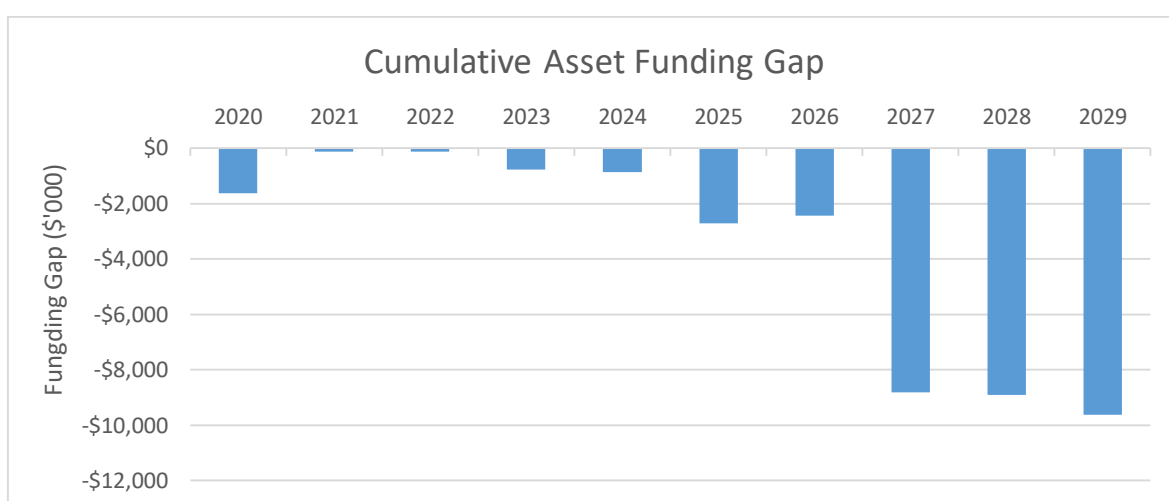


Figure 15 – Funding Gap

Key Assumptions in Financial Forecasts

This section details the key assumptions made in presenting the information contained in this asset management plan and in preparing forecasts of required operating and capital expenditure and asset values, depreciation expense and carrying amount estimates. It is presented to enable readers to gain an understanding of the levels of confidence in the data behind the financial forecasts.

Key elements of the financial forecasts (asset values, depreciable amounts, useful lives, asset condition and consumption) have been derived from the recent asset valuations and the FAR as at 3 July 2019. It is currently assumed that the planned renewal expenditure provides a better indication of requirements, being based on considerable 'on the ground' experience and information.

The valuation report described above utilised available condition assessment information (verified by sample visual condition assessments) with a corresponding assessment of both the phase and rate of asset consumption. It is anticipated that future enhancements in the determination and utilisation of asset condition information may result in revisions to depreciable amounts and estimated remaining useful lives. Such revisions would alter the scale and timing of projected renewal expenditure.

Planned maintenance and renewal expenditures are based on assumed / inferred levels of service for the park and recreation network resulting from experience to date in providing these services

to the community. Future anticipated community engagement may result in adjustments to the desired levels of service and thus impact upon future financial forecasts.

Forecasts of growth in physical assets are based on currently available assumptions in population or dwelling projections and related sequencing. Further, to enhance consistency with existing planning instruments, the forecasts have been derived from the 2019-2020 financial year council's LTFF assumptions and capital works program. The future forecast used in this AMP has been refined to reflect the actual growth rates and realistic infrastructure growth from development applications and activities, hence the forecast may not align completely with the published LGIP projections. As such, any future revisions to these assumptions and underlying projections or sequencing will impact the financial forecasts of this AMP.

It is anticipated that the accuracy of financial forecasts may be improved in future revisions of the AMP by ongoing review and refinement of the following actions:

- depreciable amounts and depreciation methodologies
- asset useful lives and consumption
- annual capital and operational budget
- condition assessment methodologies and ratings
- desired levels of service
- growth factors and estimates.

Asset Values

The asset values are outlined in Table 35. The valuation is based on:

- a review of the asset register
- unit rates from construction costs and published rates
- condition assessments to determine remaining useful life.

Table 35 - Asset Valuations

Asset Class	Value (\$'000)			
	Replacement Cost (\$'000)	Accumulated Depreciation (\$'000)	Fair Value (\$'000)	Annual Depreciation (\$'000)
Parks and Recreation	\$272,847	\$86,385	\$186,462	\$8,542

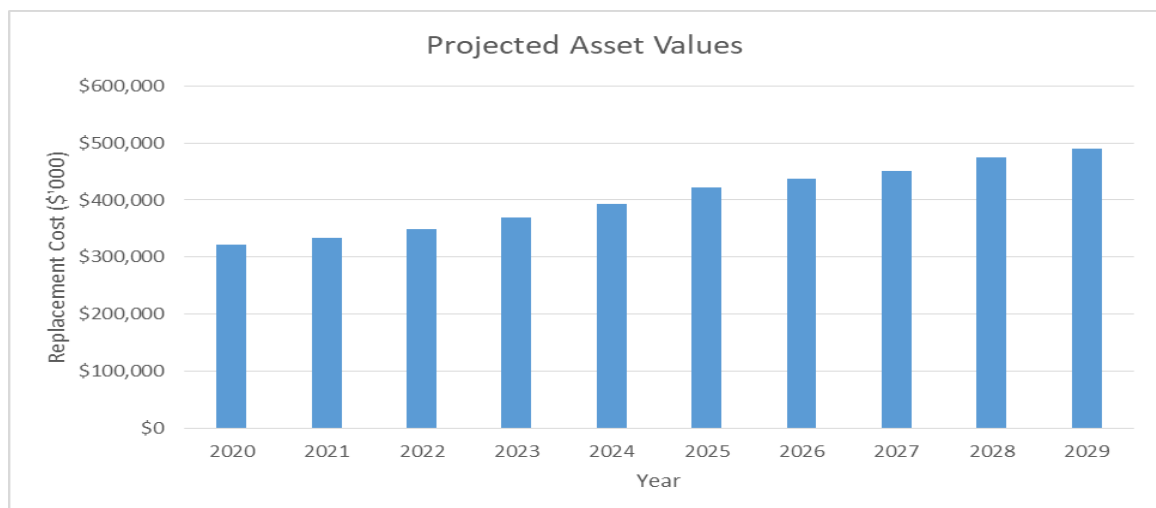


Figure 16 - Asset Valuation Forecast

Asset values are projected based on the new/upgrade capital works are planned at this stage. Figure 16 shows the projected asset values over the planning period which also included the contributed assets from development. The depreciation expense can be seen in Figure 17 below.

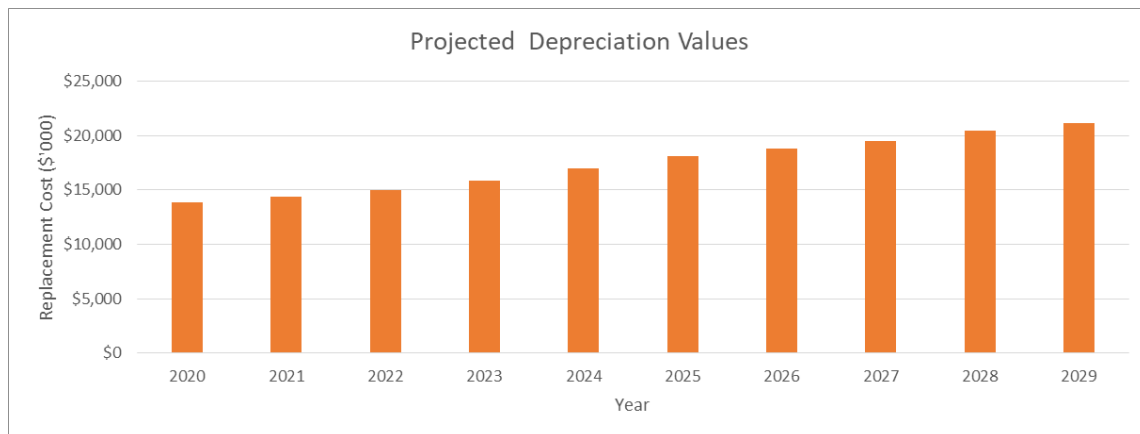


Figure 17 - Projected Depreciation Expense

The value of the depreciated assets will vary over the planning period depending on the rates of addition of new assets, disposal of old assets and consumption and renewal of existing assets. The projected value of the depreciated assets is expected to increase as the expenditure on renewals is more than the depreciation rate, this can be seen in Figure 18.

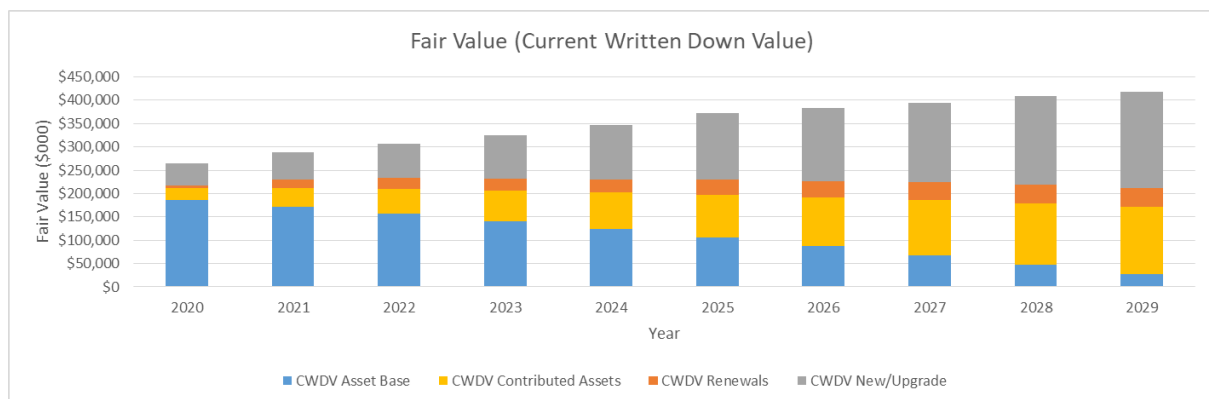


Figure 18 - Projected Value of Depreciated Assets

Performance Ratios and Sustainability

The 'financial sustainability' outputs are provided to demonstrate the trends that the currently anticipated expenditure will have on key measures. Capital expenditure for 2018-2019 financial year is shown in Table 36.

Table 36 - Capital expenditure for 2018-2019 financial year

Year	Capital Renewal Expenditure (\$'000)	Capital New/Upgrade Expenditure (\$'000)	Total Capital Expenditure (\$'000)
2018-2019	*\$4,275	*\$14,240	*\$18,515

*Please note. This is based on the 2018-2019 financial year approved budget.

Consumption Ratio

The consumption ratio provides a measure of the percentage of the asset base consumed to date and an indication of how fast the assets are being consumed each year and whether investment may require adjustment.

FORMULA

Written down value of assets/
Gross current renewal costs

IN OTHER WORDS

The current value of the assets divided
by what it would cost to renew them

TARGET

Improvement over time
(40% - 80%)

Council = 63.65%

Table 37 - Annual Asset Consumption

Annual Asset Consumption (Depreciation/Depreciable Amount)	3.80%
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The Annual Asset Renewal Ratio provides a measure of the rate of investment in renewals and can be an indication of surpluses or shortfalls in expenditure relative to asset age and rates of deterioration.

Table 38 - Annual Asset Renewal

Annual Asset Renewal (Capital Renewal Expenditure/Depreciable Amount)	2.21%
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The Annual New & Upgrade ratio provides an indication of the rate of growth of the asset base.

Table 39 - Annual New & Upgrade Ratio

Annual New/Upgrade (Capital New & Upgrade / Depreciable Amount)	7.94%
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Service Level Sustainability Ratio

There are two key indicators for service level sustainability that have been considered in the analysis of the services provided by this asset category, these being long term life cycle costs and medium-term costs over the 10-year financial planning period.

Long term - Life Cycle Cost

Life cycle costs (or whole of life costs) are the average costs that are required to sustain the service levels over the longest asset life. Life cycle costs include maintenance and asset consumption (depreciation expense).

Life cycle costs can be compared to life cycle expenditure to give an indicator of sustainability in service provision. Life cycle expenditure includes maintenance plus capital renewal expenditure. Life cycle expenditure will vary depending on the timing of asset renewals.

A gap between life cycle costs and life cycle expenditure gives an indication as to whether present consumers are paying their share of the assets they are consuming each year. The purpose of this AMP management plan is to identify levels of service that the community needs and can afford and develop the necessary long-term financial plans to provide the service in a sustainable manner.

Medium term – 5-year and 10-year financial planning period

This asset management plan identifies the estimated maintenance and capital expenditures required to provide an agreed level of service to the community over a 10-year period for input into a 10-year financial plan and funding plan to provide the service in a sustainable manner.

This may be compared to existing or planned expenditures in the 10-year period to identify any gap. In a core asset management plan, a gap is generally due to increasing asset renewals.

Knowing the extent and timing of any required increase in outlays and the service consequences if funding is not available will assist council in providing services to their communities in a financially sustainable manner.

Generally, the condition renewals program is used in the determination of the sustainability ratios, however due to the confidence issues in the quality of the condition data and remaining life estimates the ratios have been based on the planned renewal expenditure estimates.

Future iterations of this plan will use the condition renewals once the data confidence issues are addressed.

The service sustainability indicators are:

FORMULA <u>Life Cycle Costs (ops, maint, renewal)</u> Funding Allocation	IN OTHER WORDS Average annual ops, maint, and renewal costs <hr/> Average allocated funding
TARGET A percentage greater than 90%	Council 5-year = 96% 10-year = 100% Whole of Life = 94%

Table 40 - Financial Basis for Sustainability indicators

	Condition Based 5 Year Financial Planning Period (\$'000)	Condition Based 10 Year Financial Planning Period (\$'000)	Condition Based Annualised Whole of Life Costs (\$'000)
Forecast Expenditure	\$214,345	\$478,691	\$50,841

Forecast Budget	\$206,249	\$478,522	\$47,852
Funding Surplus	-\$8,096	-\$168	-\$2,989
Funding Ratio	0.96	~1.0	0.94
	Planned Works 5 Year Financial Planning Period (\$'000)		Planned Works 10 Year Financial Planning Period (\$'000)
Forecast Expenditure	\$207,110	\$488,154	
Forecast Budget	\$206,248	\$478,522	
Funding Surplus	-\$862	-\$9,632	
Funding Ratio	1.0	0.98	

The funding ratios seen in Table 40 indicate that based on the target funding ratio of 0.9 or 90% of the depreciation amount, council's parks and recreation service levels are considered sustainable.

Plan Improvement

Performance Measures

The effectiveness of the Parks and Recreation Network AMP can be assessed by the following means:

- The degree to which the required operational and maintenance expenditures identified in the Parks and Recreation Network AMP are incorporated into council's LTFF.
- The degree to which the detailed works programs, budgets, business plans and organisational structures take into account the asset management requirements, trends and opportunities identified in the PRAMP.
- The degree to which the existing and projected service levels and service consequences (what we cannot do), risks and residual risks are incorporated into the council's Strategic Plan associated plans.
- The Asset Renewal Funding Ratio achieving the target of 1.0.

Monitoring and Review Procedures

This plan will be reviewed during annual budget preparation and amended to recognise any material changes in service levels and/or resources available to provide those services as a result of the budget decision process.

Improvement Plan

In preparation of this AMP, a range of opportunities for improvement to asset management information, systems and processes have been identified and are outlined in Table 41 below.

Table 41 - Improvement Plan

Category	Improvements	Importance	Responsibilities	Resource Requirements	Achieved By
Asset Management Information System and Knowledge	Review the accuracy and completeness of Parks and Recreation asset registers.	Very High	Asset Management	In-house resources	30 June 2020
	Review and record asset condition for all park and recreation assets.	Very High	Asset Management	In-house resources	30 June 2020
	Review Fixed Asset Register and align amended asset types.	High	Asset Management & Corporate Finance	In-house resources	On-going
	Ongoing review and development of data structure / collection process.	High	Asset Management	In-house resources	On-going
	Review and adopt asset handover process and specifications for internally delivered projects and developer contributed assets.	High	Asset Management, Planning and Development & Corporate Finance	In-house resources	On-going
	Develop and implement an integrated asset management system.	High	Asset Management & Corporate IT	In-house & external resources	2021
Asset Planning Process	Develop process flowcharts and procedures associated with asset data collection, financial valuation, rehabilitation, demand calculation.	Very High	Asset Management, City Maintenance, Planning and Development & Corporate Finance	In-house resources	On-going
	Review as constructed process and ensure asset information is captured promptly in the physical and financial asset registers.	High	Asset Management & Corporate Finance & Planning and Development	In-house resources	On-going
	Develop and implement the asset creation/acquisition process for new assets.	High	Asset Management	In-house resources	On-going
	Develop the asset disposal process and ensure that all stakeholders participate in the process.	High	Asset Management	In-house resources	On-going
	Review long term capital work programs to ensure in line with levels of service and annual budget preparation.	High	Asset Management	In-house resources	On-going

Category	Improvements	Importance	Responsibilities	Resource Requirements	Achieved By
	On-going review of the defect intervention level for infrastructure assets.	Medium	Asset Management & City Maintenance	In-house resources	On-going
	On-going review of the levels of services.	Medium	Asset Management & City Maintenance	In-house resources	On-going
	Review and collect whole of life costing for different asset types.	Medium	Asset Management	In-house resources	On-going
Financial Planning	On-going review and improve on the methodology of long term demand and financial forecast.	Medium	Asset Management & Corporate Finance	In-house resources	On-going
	Identify/develop more accurate long term financial planning models for Operation and Maintenance Costs, Contributed Assets and relativity with population and dwelling growth.	Medium	Asset Management & Corporate Finance & Planning and Development	In-house resources	On-going
	Improve physical asset register and financial asset register to have the ability to store and report contributed assets.	Medium	Asset Management & Corporate Finance	In-house resources	On-going
Review of AMP	Implement a review process for asset management plans and a review of asset management models.	Medium	Asset Management	In-house resources	On-going

Summary of Findings

Growth

The forecast lineal growth resulting from contributed assets is \$144.4m over the 10-year period of this plan. This growth has been reflected in the operations and maintenance forecasts and the financial forecasts.

Risk Identification

Identified service delivery and public safety risks are being mitigated in the current budget submissions and funding. No additional risk funding has been identified, however this may change as the asset data and the AMPs maturity.

Asset Data

The financial asset register (FAR) is current as at 3 July 2019 and may include contributed assets from the development industry for which no “as-constructed” details have been received, therefore these assets have not been included in the physical asset register (PAR) or included in the PAR with incomplete information. In addition, landscaping has been recognised in the FAR but not in the PAR.

The physical asset information is based on the PAR and has been updated as the “as-constructed” details become available.

There is inconsistency in the asset types, components and the details to be held against each. It is clear through the mis-alignment of the asset registers that a corporate asset data specification and associated procedures that meet FAR, Par and GIS needs requires development. This will also ensure consistency in meeting data collection, management, reporting and review requirements.

The condition data based on physical age and inspections has been used to forecast an asset’s life parameters however this does not align with the financial book values for depreciation and fair value.

Assets with Very Poor Condition	7.27%	\$14m
Assets with Poor Condition	9.02%	\$17.5m
Total	16.30%	\$31.5m

The age profile indicates that 90% of council’s parks and recreations Assets are less than 20 years old.

The condition assessments indicate that 16.30% of the parks and recreation assets valued at \$31.5m are significantly deteriorated, failing or have failed.

Current condition of the parks and recreation assets are being monitored via proactive inspections and assets which met intervention levels and rehabilitation threshold are included in the capital program. The inclusion of the asset conditions in the physical asset registers has been highlighted as a very high priority in the improvement plan and a summary of status will be made available in the future version of the AMP.

The accuracy of the PRAMP data is rated at 70%. In particular the data in the physical asset register has major gaps and incomplete attributes which have impacted the accuracy of the valuation and future renewal forecast. It has been identified as a very high priority task in the improvement plan to review and update the physical asset register.

The assessment of the remaining life and condition rating data indicates that the financial data has been used to determine the asset condition that is recorded in the asset register. Further improvement works are required to ensure the condition data is used to determine remaining useful life for the parks and recreation assets.

Maintenance

The maintenance works and program have been developed through regular inspection of the Parks and Recreation assets.

The current maintenance expenditure of \$29.58m is roughly 10 times the \$2.8M benchmark (calculated from the depreciation expense of assets in condition 3, 4 and 5). The benchmark figures have been reduced due to the number of assets that were expensed on purchase/acquisition or are fully depreciated but still in service.

The significant benchmark variation suggests that both the levels of maintenance funding and the asset depreciation parameters (fair value, asset remaining lives and standard lives) for the Parks and recreation asset class need review. The definition of what are operations activities (mowing, gardening, vegetation cutback, cleaning, etc.) and what are maintenance activities needs to be clarified and implemented with operations staff trained to record expenditure appropriately.

Renewals

Based on the current remaining life data there is a backlog of parks and recreation renewals of \$4.61m, with an additional \$24.24m requiring attention within the next 5 years giving a total value of \$28.76m.

The backlog value of \$4.61m is misleading as 334 (\$2.07m) of the 454 assets are fully depreciated with no fair value. The status of these assets needs to be determined before any remedial action is proposed.

Total forecast expenditure is ~\$53.2m and the available funding in the LTFF is ~\$43.6m, a shortfall of ~\$9.6m. Shortfall will be managed by proactive inspection of parks and recreation assets at time of forecast replacement based on condition; it is envisaged that this will result in some asset replacements being pushed out. The renewal profile will be revisited when improvements are made to the asset system.

New/Upgrade

Planned new/upgrade program considered in AMP. The CBD civic space redevelopment project has been included.

Financials

The inclusion of the new/upgrade works in the AMP are in addition to LGIP projects and funding. The planned capital works are fully funded.

Ratios

Sustainability ratio is above target, therefore is sufficient funding in the LTFF to maintain current service levels over the next 10-year period including covering maintenance growth expenditures.

Plan Improvements

In preparation of the Parks and Recreation Network AMP, a range of opportunities for improvement to asset management information, systems and processes have been identified and are outlined in the Improvement Plan.

References

CARDNO, 2018, Valuation of Ipswich City Council Stormwater Drainage Infrastructure Assets

Institute of Public Works Engineering Australia, 2006, International Infrastructure Management Manual

Institute of Public Works Engineering Australia, 2016, International Infrastructure Management Manual

Institute of Public Works Engineering Australia, 2015, Australian Infrastructure Financial Management Guidelines

Ipswich City Council, 2019, Service Catalogue,

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Ipswich City Council, 2015, Advance Ipswich,

https://www.ipswich.qld.gov.au/about_council/corporate_publications/advance-ipswich

Ipswich City Council, 2017, Corporate Plan 2017-2022,

http://www.ipswich.qld.gov.au/about_council/corporate_publications/corporate_plan/

Ipswich City Council, 2018, Operational Plan 2018-2019,

http://www.ipswich.qld.gov.au/about_council/corporate_publications/operational_plan/

Ipswich City Council, 2014, Open Space and Recreation Strategy,

https://www.ipswich.qld.gov.au/about_council/corporate_publications/open-space-and-recreation-strategy

Appendix A - Asset Management Practices

Accounting/Financial Systems

Council utilises the Oracle eBusiness suite of financial systems in support of its accounting and financial reporting requirements. Council maintains a general ledger and project accounting ledger within Oracle.

General Ledger

The General Ledger (GL) is Council's key financial register of transactions for operational and capital activities. Its main function is to capture sufficient detail in order for Council to build a Statement of Comprehensive Income (i.e. Profit or Loss) and Statement of Financial Position (i.e. Balance Sheet of assets and liabilities). It also allows for budgeting for key expenses and revenues for a period.

Project Accounting Ledger

The Project Accounting (PA) module of Oracle allows Council to dissect financial transactions in greater detail across different functions and organisations within Council. Project Accounting allows estimates of pieces of work to be captured by project and tasks associated with the project.

Asset Management Systems

Council utilises a range of systems in support of the asset management process, a brief overview of which is provided below.

- The **Fixed Asset Register (FAR)** is Council's financial record of the current valuations and depreciation characteristics for its infrastructure assets (see also Section 7.1. Accounting / Financial Systems).
- **Oracle Spatial** is a database containing the registers of all infrastructure assets, their location and their physical attributes (e.g., size, age, material, composition, etc.).
- **Mobile Form Manager and Mobile Form** is the asset / works management system which supports the issuing work activities, scheduling and assignment of resources to work, recording of work metrics / quality information, and recording of asset condition data. It also provides a range of asset-based reporting functions and is linked by asset number to the physical asset register in Oracle Spatial.
- **MapInfo** is the Geographic Information System (GIS) interface to the physical asset registers in Oracle Spatial for asset data maintenance and updates.
- **iKnow** is the Corporate Geographic Information System (GIS) interface to the physical asset registers in Oracle Spatial for accessing asset information.
- **Delta** is a job management system for asset data management and update of the physical asset registers.

Links to Financial Systems

The Fixed Asset Register (FAR) does not have a one-to-one relationship with the Oracle Spatial physical asset registers. The physical asset registers hold all the detailed attributes and can be readily aligned to a smaller number of aggregated records within the financial asset register, while still retaining all necessary financial reporting capabilities. Financial recognition of new assets is done independently but in coordination with the 'as constructed' process and is processed at a higher level (generally asset group). The assets of the drainage and flood mitigation network are formally valued by qualified asset valuer every 5 year. It is understood that the intervening revaluations will be achieved by the indexation of values by asset group in the FAR.

Accountabilities and Responsibilities for Systems

The Information and Communications Technology Branch of Council's Finance and Corporate Services Department is currently responsible for the maintenance and support of all corporate systems, under Service Level Agreements with the relevant departments. Further, the Spatial Team of WPR is currently responsible for the maintenance and update of physical asset registers in Oracle Spatial.

Information Flow Requirements and Processes

The key information flows into this asset management plan are:

- The asset register data on size, age, value, remaining life of the network
- Financial parameters from the FAR
- The unit rates for categories of work/material
- The adopted service levels
- Projections of various factors affecting future demand for services
- Correlations between maintenance and renewal, including decay models and assumptions
- Legislative and regulatory requirements from associated instruments
- Data on new assets acquired by council.

The key information flows from this asset management plan are:

- The assumed Works Program and trends
- The resulting budget, valuation and depreciation projections
- The useful life analysis.

Standards and Guidelines

- Australian Accounting Standards
- IPWEA, 2016, 'International Infrastructure Management Manual', Institute of Public Works Engineering Australia, Sydney, www.ipwea.org.au
- Queensland Local Government Act 2009
- Strategic Asset Management Framework for Ipswich City Council – 2019
- Strategy Asset Management Strategy for Ipswich City Council - 2019

Appendix B – 10 Year Planned Capital Program

Please refer to the adopted 2019-2020 financial year capital program for project breakdown and details.

Project No	Project Name	Details	Expenditure Type	Expenditure (\$'000)										
				2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
1	Parks Rehabilitation	Repair and replacement of park assets including softfall top-up and replacement.	Renewal	4,031	-	-	-	-	-	-	-	-	-	4,031
2	Parks Rehabilitation	Repair and replacement of park assets including softfall top-up and replacement.	Renewal	-	1,954	-	-	-	-	-	-	-	-	1,954
3	Parks Rehabilitation	Repair and replacement of park assets including softfall top-up and replacement.	Renewal	-	-	1,945	-	-	-	-	-	-	-	1,945
4	Parks Rehabilitation	Repair and replacement of park assets including softfall top-up and replacement.	Renewal	-	-	-	3,107	-	-	-	-	-	-	3,107
5	Parks Rehabilitation	Repair and replacement of park assets including softfall top-up and replacement.	Renewal	-	-	-	-	2,903	-	-	-	-	-	2,903
6	Parks Rehabilitation	Repair and replacement of park assets including softfall top-up and replacement.	Renewal	-	-	-	-	-	1,833	-	-	-	-	1,833
7	Parks Rehabilitation	Repair and replacement of park assets including softfall top-up and replacement.	Renewal	-	-	-	-	-	-	2,468	-	-	-	2,468
8	Parks Rehabilitation	Repair and replacement of park assets including softfall top-up and replacement.	Renewal	-	-	-	-	-	-	-	11,078	-	-	11,078
9	Parks Rehabilitation	Repair and replacement of park assets including softfall top-up and replacement.	Renewal	-	-	-	-	-	-	-	-	3,153	-	3,153
10	Parks Rehabilitation	Repair and replacement of park assets including softfall top-up and replacement.	Renewal	-	-	-	-	-	-	-	-	-	4,769	4,769

Project No	Project Name	Details	Expenditure Type	Expenditure (\$'000)										
				2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
11	Sport Facility Rehabilitation	Repair and replacement of sport facilities and assets including sportfield.	Renewal	1,508	-	-	-	-	-	-	-	-	-	1,508
12	Sport Facility Rehabilitation	Repair and replacement of sport facilities and assets including sportfield.	Renewal	-	2,142	-	-	-	-	-	-	-	-	2,142
13	Sport Facility Rehabilitation	Repair and replacement of sport facilities and assets including sportfield.	Renewal	-	-	529	-	-	-	-	-	-	-	529
14	Sport Facility Rehabilitation	Repair and replacement of sport facilities and assets including sportfield.	Renewal	-	-	-	1,089	-	-	-	-	-	-	1,089
15	Sport Facility Rehabilitation	Repair and replacement of sport facilities and assets including sportfield.	Renewal	-	-	-	-	528	-	-	-	-	-	528
16	Sport Facility Rehabilitation	Repair and replacement of sport facilities and assets including sportfield.	Renewal	-	-	-	-	-	3,305	-	-	-	-	3,305
17	Sport Facility Rehabilitation	Repair and replacement of sport facilities and assets including sportfield.	Renewal	-	-	-	-	-	-	615	-	-	-	615
18	Sport Facility Rehabilitation	Repair and replacement of sport facilities and assets including sportfield.	Renewal	-	-	-	-	-	-	-	902	-	-	902
19	Sport Facility Rehabilitation	Repair and replacement of sport facilities and assets including sportfield.	Renewal	-	-	-	-	-	-	-	-	491	-	491
20	Sport Facility Rehabilitation	Repair and replacement of sport facilities and assets including sportfield.	Renewal	-	-	-	-	-	-	-	-	-	687	687
21	Landfill Rehabilitation	Repair and replacement of monitoring equipment and land rehabilitation	Renewal	241	-	-	-	-	-	-	-	-	-	241
22	Landfill Rehabilitation	Repair and replacement of monitoring equipment and land rehabilitation	Renewal	-	275	-	-	-	-	-	-	-	-	275
23	Landfill Rehabilitation	Repair and replacement of monitoring equipment and land rehabilitation	Renewal	-	-	390	-	-	-	-	-	-	-	390
24	Landfill Rehabilitation	Repair and replacement of monitoring equipment and land rehabilitation	Renewal	-	-	-	744	-	-	-	-	-	-	744

Project No	Project Name	Details	Expenditure Type	Expenditure (\$'000)										
				2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
25	Landfill Rehabilitation	Repair and replacement of monitoring equipment and land rehabilitation	Renewal	-	-	-	-	217	-	-	-	-	-	217
26	Landfill Rehabilitation	Repair and replacement of monitoring equipment and land rehabilitation	Renewal	-	-	-	-	-	222	-	-	-	-	222
27	Landfill Rehabilitation	Repair and replacement of monitoring equipment and land rehabilitation	Renewal	-	-	-	-	-	-	794	-	-	-	794
28	Landfill Rehabilitation	Repair and replacement of monitoring equipment and land rehabilitation	Renewal	-	-	-	-	-	-	-	232	-	-	232
29	Landfill Rehabilitation	Repair and replacement of monitoring equipment and land rehabilitation	Renewal	-	-	-	-	-	-	-	-	238	-	238
30	Landfill Rehabilitation	Repair and replacement of monitoring equipment and land rehabilitation	Renewal	-	-	-	-	-	-	-	-	-	851	851
31	Local Amenity- Divisional Allocation - Colleges Crossing Recreation Reserve	Shade Sail Upgrade	New	87										87
32	Local Amenity- Divisional Allocation - Limestone Park Lighting	Carpark lighting	New	25										25
33	Local Amenity- Divisional Allocation - Old Logan Road Sculptures	Sculptures	New	75										75
34	Local Amenity- Divisional Allocation - Paddington Park Playground	Playground upgrade	New	130										130
35	Local Amenity- Divisional Allocation - Riverside Park	Boat ramp	New	40										40
36	Local Amenity- Divisional Allocation - Redbank Plains Recreation Reserve	Shade Sail	New	135										135
37	Local Amenity- Divisional Allocation - Tivoli Sporting Complex	Batting cages	New	31										31
38	Other - FCS - CBD Redevelopment	CBD Redevelopment - Civic space - construction and other costs	New	25,709										25,709
39	Strategic Parks and Sports	New parks and improvements	New	14,490										14,490
40	Strategic Parks and Sports	New parks and improvements	New		1,807									1,807
41	Strategic Parks and Sports	New parks and improvements	New			2,038								2,038
42	Strategic Parks and Sports	New parks and improvements	New				1,505							1,505

Project No	Project Name	Details	Expenditure Type	Expenditure (\$'000)										
				2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
43	Strategic Parks and Sports	New parks and improvements	New					1,363						1,363
44	Strategic Parks and Sports	New parks and improvements	New						2,720					2,720
45	Strategic Parks and Sports	New parks and improvements	New							1,696				1,696
46	Strategic Parks and Sports	New parks and improvements	New								870			870
47	Strategic Parks and Sports	New parks and improvements	New									2,083		2,083
48	Strategic Parks and Sports	New parks and improvements	New										915	915
49	Local Parks and Sports	New parks and improvements	New	397										397
50	Local Parks and Sports	New parks and improvements	New		1,118									1,118
51	Local Parks and Sports	New parks and improvements	New			2,854								2,854
52	Local Parks and Sports	New parks and improvements	New				2,788							2,788
53	Local Parks and Sports	New parks and improvements	New					1,363						1,363
54	Local Parks and Sports	New parks and improvements	New						1,832					1,832
55	Local Parks and Sports	New parks and improvements	New							1,413				1,413
56	Local Parks and Sports	New parks and improvements	New								1,914			1,914
57	Local Parks and Sports	New parks and improvements	New									1,488		1,488
58	Local Parks and Sports	New parks and improvements	New										2,013	2,013
59	Developer Funded Parks	New parks and improvements	New	897										897
60	Developer Funded Parks	New parks and improvements	New		5,190									5,190
61	Developer Funded Parks	New parks and improvements	New			6,802								6,802
62	Developer Funded Parks	New parks and improvements	New				12,826							12,826

Project No	Project Name	Details	Expenditure Type	Expenditure (\$'000)										
				2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
63	Developer Funded Parks	New parks and improvements	New					9,483						9,483
64	Developer Funded Parks	New parks and improvements	New						12,646					12,646
65	Developer Funded Parks	New parks and improvements	New							8,701				8,701
66	Developer Funded Parks	New parks and improvements	New								8,700			8,700
67	Developer Funded Parks	New parks and improvements	New									15,065		15,065
68	Developer Funded Parks	New parks and improvements	New										9,760	9,760
69	Natural Environment/Stormwater	New improvements and infrastructure	New	1,685										1,685
70	Natural Environment/Stormwater	New improvements and infrastructure	New		1,938									1,938
71	Natural Environment/Stormwater	New improvements and infrastructure	New			2,486								2,486
72	Natural Environment/Stormwater	New improvements and infrastructure	New				2,061							2,061
73	Natural Environment/Stormwater	New improvements and infrastructure	New					3,706						3,706
74	Natural Environment/Stormwater	New improvements and infrastructure	New						3,108					3,108
75	Natural Environment/Stormwater	New improvements and infrastructure	New							2,452				2,452
76	Natural Environment/Stormwater	New improvements and infrastructure	New								2,610			2,610
77	Natural Environment/Stormwater	New improvements and infrastructure	New									2,737		2,737
78	Natural Environment/Stormwater	New improvements and infrastructure	New										2,806	2,806
79	Enviroplan	New improvements and infrastructure	New	2,852										2,852
80	Enviroplan	New improvements and infrastructure	New		311									311
81	Enviroplan	New improvements and infrastructure	New			483								483
82	Enviroplan	New improvements and infrastructure	New				769							769

Project No	Project Name	Details	Expenditure Type	Expenditure (\$'000)										
				2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
83	Enviroplan	New improvements and infrastructure	New					8,134						8,134
84	Enviroplan	New improvements and infrastructure	New						7,081					7,081
85	Enviroplan	New improvements and infrastructure	New							424				424
86	Enviroplan	New improvements and infrastructure	New								435			435
87	Enviroplan	New improvements and infrastructure	New									446		446
88	Enviroplan	New improvements and infrastructure	New										458	458
89	Streetscape Improvements	New improvements and infrastructure	New	1,100										1,100
90	Streetscape Improvements	New improvements and infrastructure	New		780									780
91	Streetscape Improvements	New improvements and infrastructure	New			811								811
92	Streetscape Improvements	New improvements and infrastructure	New				530							530
93	Streetscape Improvements	New improvements and infrastructure	New					545						545
94	Streetscape Improvements	New improvements and infrastructure	New						555					555
95	Streetscape Improvements	New improvements and infrastructure	New							565				565
96	Streetscape Improvements	New improvements and infrastructure	New								580			580
97	Streetscape Improvements	New improvements and infrastructure	New									595		595
98	Streetscape Improvements	New improvements and infrastructure	New										610	610

Appendix C – Defect Intervention Levels

Asset Class	Asset Group	Asset Type	Defect	Intervention Level	Resolution
Equipment	Aquatic Equipment	Aquatic Equipment	Aquatic Equipment Not Working / Damaged	Any	Repair / Replace
					Refer to Rehab Program
	Playground and Exercise Equipment	Balance Toy	Footing Damaged	Any	Repair / Replace
			Balance Toy Damaged	Any	Repair / Replace
			Paint peeling	> 25%	Paint / Treat
			Graffiti	Any	Remove / Paint Over
		Climbing Structures and Nets	Chains / Ropes Damaged / Worn	Any	Repair / Replace
			Fall Zone Dimension	Any	Undertake Full Compliance Inspection
			Frame Damaged	Any	Repair / Replace
					Refer to Rehab Program
			Paint peeling	> 25%	Paint / Treat
			Vegetation Encroachment	Any	Trim / Remove Vegetation
			Graffiti	Any	Remove / Paint Over
		Combination Unit	Bushes Damaged / Worn	Any	Repair / Replace
			Component Damaged / Missing	Any	Repair / Replace
			Dangerous Insect Infestation	Any	Clean / Spray
			Paint peeling	> 25%	Paint / Treat
			Panel Damaged	Any	Repair / Replace
					Refer to Rehab Program
			Platform Damaged	Any	Repair / Replace

Asset Class	Asset Group	Asset Type	Defect	Intervention Level	Resolution
					Refer to Rehab Program
			Post Caps Missing	Any	Replace missing caps to posts
			Post damaged	Any	Repair / Replace
					Refer to Rehab Program
			Unit non-standard / modified	Any	Repair / Replace
					Refer to Rehab Program
			Vegetation Encroachment	Any	Trim / Remove Vegetation
			Graffiti	Any	Remove / Paint Over
		Slide	Bedway Damaged	Any	Repair / Replace
			Entrapment - Finger	Any	Plug entrapment hole
					Undertake Full Compliance Inspection
			Entrapment - General	Any	Undertake Full Compliance Inspection
			Exit Height	> 300 mm	Add new softfall
					Rake / churn softfall
					Undertake Full Compliance Inspection
			Fall Zone Dimension	Any	Undertake Full Compliance Inspection
			Frame Damaged	Any	Repair / Replace
					Refer to Rehab Program
			Platform Damaged	Any	Repair / Replace
					Refer to Rehab Program

Asset Class	Asset Group	Asset Type	Defect	Intervention Level	Resolution
			Post damaged	Any	Repair / Replace
					Refer to Rehab Program
			Step Damaged / Missing	Any	Repair / Replace
			Vegetation Encroachment	Any	Trim / Remove Vegetation
			Graffiti	Any	Remove / Paint Over
		Spin Toy / Carousel	Chains / Ropes Damaged / Worn	Any	Repair / Replace
			Entrapment - Finger	Any	Plug entrapment hole
					Undertake Full Compliance Inspection
			Entrapment - General	Any	Undertake Full Compliance Inspection
			Fall Zone Dimension	Any	Undertake Full Compliance Inspection
			Paint peeling	> 25%	Paint / Treat
			Platform Damaged	Any	Repair / Replace
					Refer to Rehab Program
			Post damaged	Any	Repair / Replace
					Refer to Rehab Program
			Vegetation Encroachment	Any	Trim / Remove Vegetation
			Graffiti	Any	Remove / Paint Over
		Spring Toy	Footing Damaged	Any	Repair / Replace
			Out-of-Service / Repair History Excessive	Any	Refer to Rehab Program
			Paint peeling	> 25%	Paint / Treat

Asset Class	Asset Group	Asset Type	Defect	Intervention Level	Resolution
			Seat Missing / Damaged	Any	Repair / Replace
			Spring Damaged	Any	Repair / Replace
			Spring Deflection Excessive	Any	Repair / Replace
					Refer to Rehab Program
			Spring Loose	Any	Tighten bolts / screws
			Vegetation Encroachment	Any	Trim / Remove Vegetation
			Graffiti	Any	Remove / Paint Over
		Swing - Traditional	Bushes Damaged / Worn	Any	Repair / Replace
		Swing - Liberty	Chains / Ropes Damaged / Worn	Any	Repair / Replace
		Swing - Pendulum	Entrapment - Finger	Any	Plug entrapment hole
					Undertake Full Compliance Inspection
			Entrapment - General	Any	Undertake Full Compliance Inspection
			Fall Zone Dimension	Any	Undertake Full Compliance Inspection
			Paint peeling	> 25%	Paint / Treat
			Post damaged	Any	Repair / Replace
					Refer to Rehab Program
			Safety Chain Cover Missing / Damaged	Any	Replace plastic cover for safety chain
			Safety Chain Missing / Damaged	Any	Replace safety chain
			Seat Missing / Damaged	Any	Repair / Replace
			Shackle Damaged / Worn	Any	Repair / Replace

Asset Class	Asset Group	Asset Type	Defect	Intervention Level	Resolution
			Vegetation Encroachment	Any	Trim / Remove Vegetation
			Graffiti	Any	Remove / Paint Over
		Playhouse and Playtoy	Playhouse / Playtoy Missing / Damaged	Any	Repair / Replace
					Refer to Rehab Program
			Component Damaged / Missing	Any	Repair / Replace
			Dangerous Insect Infestation	Any	Clean / Spray
			Paint peeling	> 25%	Paint / Treat
			Graffiti	Any	Remove / Paint Over
		Cableway	Cable Damaged / Worn	Any	Repair / Replace Cable
					Refer to Rehab Program
			Cable Rollers Damaged / Worn	Any	Repair / Replace Rollers
			Cable Traveller Damaged / Worn	Any	Repair Traveller
			Cable Traveller Limiter Stops Damaged / Worn	Any	Repair Traveller Limited Stops
			Frame Damaged	Any	Repair
					Refer to Rehab Program
			Paint peeling	> 25%	Paint / Treat
			Vegetation Encroachment	Any	Trim / Remove Vegetation
			Graffiti	Any	Remove / Paint Over
		Water Play Equipment	Water Play Equipment Not Working / Damaged	Any	Repair / Replace
					Refer to Rehab Program
			Graffiti	Any	Remove / Paint Over
		Exercise Equipment	Loose bolts / nuts / screws	Any	Tighten bolts / screws

Asset Class	Asset Group	Asset Type	Defect	Intervention Level	Resolution
			Paint peeling	> 25%	Paint / Treat
			Structural Cracking / Movement	Any	Repair / Replace
					Refer to Rehab Program
			Graffiti	Any	Remove / Paint Over
	Landfill Monitoring Equipment	Landfill Monitoring Well	Landfill Monitoring Equipment Missing / Damaged	Any	Repair / Replace
		Landfill Monitoring Bore			Refer to Rehab Program
		Landfill Monitoring Vent	Graffiti	Any	Remove / Paint Over
	Water Quality and Soil Moisture Monitoring Equipment	Water Quality and Soil Moisture Monitoring Equipment	Water Quality and Soil Moisture Monitoring Equipment Missing / Damaged	Any	Repair / Replace
					Refer to Rehab Program
			Graffiti	Any	Remove / Paint Over
	Irrigation System and Equipment	Irrigation - Controller	Controller Damaged / Not Operational	Any	Repair / Replace
		Irrigation - Pipe / Valve	Water Supply Not Operational	Any	Repair / Replace
		Soil Moisture Sensor	Soil Moisture Sensor Damaged / Not Operational	Any	Repair / Replace
			Sprinkler Damaged / Not Operational	> 10%	Repair / Replace
		Sprinkler	Graffiti	Any	Remove / Paint Over
Land Improvements	Land Improvement	Landscape Gardens	Plantings Damaged / Missing	> 25%	Renew / replenish plantings
		Streetscape			Refer to Rehab Program
		Open Space	Undersurfacing	Any	Remove and Replace
			Debris / Rubbish Build Up	Any	Remove Material
			Graffiti	Any	Remove / Paint Over
		Fence	Paint peeling	> 2 sq m	Paint / Treat

Asset Class	Asset Group	Asset Type	Defect	Intervention Level	Resolution
	Boundary Elements		Section Damaged / Missing	Any	Repair / Replace
					Repair / Replace metal
					Repair / Replace timber
					Refer to Rehab Program
		Gate	Graffiti	Any	Remove / Paint Over
			Chain Missing	Any	Repair / Replace
			Gate Damaged / Missing	Any	Repair / Replace
					Repair / Replace metal
					Repair / Replace timber
			Lock Damaged / Missing	Any	Replace
			Paint peeling	> 25%	Paint / Treat
			Graffiti	Any	Remove / Paint Over
		Chicane	Paint peeling	> 2 sq m	Paint / Treat
			Section Damaged / Missing	Any	Repair / Replace
					Repair / Replace metal
					Repair / Replace timber
					Refer to Rehab Program
			Graffiti	Any	Remove / Paint Over
		Handrail	Paint peeling	> 5 m	Paint / Treat
			Rail / Post - Damaged / Missing	Any	Repair / Replace
					Repair / Replace metal
					Repair / Replace timber

Asset Class	Asset Group	Asset Type	Defect	Intervention Level	Resolution
			Railing / Barriers Rusting (Loss of Material)	Any	Remove Rust and Treat
					Refer to Rehab Program
			Railing / Barriers Rusting (Surface Rust)	Any	Remove Rust and Treat
			Rail / Post non-compliant with disability regulations		Refer to Rehab Program
			Graffiti	Any	Remove / Paint Over
		Bollard	Bollard Damaged / Missing	Any	Repair / Replace
					Repair / Replace metal
					Repair / Replace timber
			Graffiti	Any	Remove / Paint Over
			Locking Mechanism Damaged / Missing	Any	Repair / Replace
		Edging	Edging Damaged / Missing	> 2m	Repair / Replace
					Refer to Rehab Program
			Graffiti	Any	Remove / Paint Over
		Retaining Wall	Distortion in Wall (Horizontal or Vertical Displacement)	Pass Vertical	Repair / Replace
					Refer to Rehab Program
			Misaligned joints between facial units (blocks, sleepers, boulders ,etc)	Any	Repair / Replace
					Refer to Rehab Program
				≥ 20%	Repair / Replace

Asset Class	Asset Group	Asset Type	Defect	Intervention Level	Resolution
			Structural Disintegration – Timber rot, cracks , white ants or spalls in concrete or stone masonry		Refer to Rehab Program
			Missing blocks, sleepers, boulders ,etc	Any	Repair / Replace
			Roots penetration of wall	Any	Repair / Replace
					Remove and Replace incorporating root
			Drainage outlets not operating properly (aggi pipes , weepholes, etc)	Any	Repair / Replace
					Clean
			Ponding of water over backfill adjacent to wall (Top and Bottom)	Any	Repair / Replace
					Refer to Rehab Program
			Erosion/Loss of Fill (Scours and Washouts)	Any	Fill with suitable material
					Sweeping
					Refer to Rehab Program
			Graffiti	Any	Remove / Paint Over
Other Structures	Track	Walking Track	Walking Track Damaged	> 1 sq m	Repair / Replace
		BMX Track	BMX Track Damaged	> 1 sq m	Repair / Replace
	Archway / Arbour	Archway / Arbor	Archway / Arbor Damaged	Any	Repair / Replace
			Paint peeling	> 25%	Paint / Treat

Asset Class	Asset Group	Asset Type	Defect	Intervention Level	Resolution
	BBQ	BBQ - Electric BBQ - Gas BBQ - Woodfire	Fuel Source Not Operational	Any	Inspect Elec BBQ not working & Repair
					Repair solar panels
					Replace gas bottle(s)
			Hotplate Damaged	Any	Repair / Replace
			Out-of-Service / Repair History Excessive	Any	Refer to Rehab Program
			Paint peeling	> 25%	Paint / Treat
			Structure Damaged	Any	Repair / Replace
					Refer to Rehab Program
			Graffiti	Any	Remove / Paint Over
	Rubbish Bin	Rubbish Bin - Metal	Base slab damaged	> 2 sq m	Repair / Replace
			Bin Damaged (Not useable)	Not useable	Repair / Replace
			Bin Missing	Any	Replace
			Locking device damaged	Any	Repair / Replace
			Post damaged	Any	Repair / Replace
			Graffiti	Any	Remove / Paint Over
	Bin Enclosure	Bin Enclosure	Bin Enclosure Damaged	Any	Repair / Replace
			Base slab damaged	> 2 sq m	Repair / Replace
			Locking device damaged	Any	Repair / Replace
			Graffiti	Any	Remove / Paint Over
	Drinking Fountain	Drinking Fountain	Bubbler / Tap damaged	Any	Repair / Replace

Asset Class	Asset Group	Asset Type	Defect	Intervention Level	Resolution
	Water Tap	Water Tap	Bubbler / Tap leaking	Any	Inspect & Repair
			Drainage Pit Blocked	Any	Clean out drainage pit
			Low water pressure in bubbler / tap	Any	Inspect & Repair
			Tap stand concrete base damaged	Any	Repair / Replace
			Tap Stand Damaged	Any	Repair / Replace
			Graffiti	Any	Remove / Paint Over
	Water Tank	Water Tank	Water Tank Damaged / Leaking	Any	Repair / Replace
			Base slab damaged	> 2 sq m	Repair / Replace
			Pump Damaged /Not working	Any	Inspect & Repair
			Graffiti	Any	Remove / Paint Over
	Shading Structures	Shelter / Rotunda	Base slab damaged	> 2 sq m	Repair / Replace
			Gutters / Downpipe Damaged	Any	Repair / Replace
			Paint peeling	> 25%	Paint / Treat
			Post damaged	Any	Repair / Replace
			Roof Trusses / Fascias Damaged	Any	Repair / Replace
					Repair / Replace metal
					Repair / Replace timber
			Roofing Damaged	Any	Repair / Replace
			Graffiti	Any	Remove / Paint Over
		Shade Sail	Anti-climb caps Damaged / Missing	Any	Repair / Replace
			Out-of-Service / Repair History Excessive	Any	Refer to Rehab Program
			Paint peeling	> 25%	Paint / Treat

Asset Class	Asset Group	Asset Type	Defect	Intervention Level	Resolution
			Post damaged	Any	Repair / Replace
			Shade Cloth Torn	Any	Remove and Replace
					Repair
			Graffiti	Any	Remove / Paint Over
	Bike Rack	Bike Rack	Bike Rack Damaged / Missing	Any	Repair / Replace
			Graffiti	Any	Remove / Paint Over
	Feature Object	Sandstone Block	Faeature Object / Statute / Sculpture Damaged	Any	Repair / Replace
		Statute / Sculpture			Refer to Rehab Program
		Feature Wall	Base slab damaged	> 2 sq m	Repair / Replace
		Water Feature	Graffiti	Any	Remove / Paint Over
	Lighting	Park Lighting and Fittings	Access Door Corroded	Any	Repair / Replace
			Access Door Damaged	Any	Repair / Replace
		Sportfield Lighting and Fittings	Access Door Missing	Any	Repair / Replace
			Access Door Not Secured	Any	Repair / Replace
			Electrical Cable Damaged	Any	Repair / Replace
			Electrical Component Damaged	Any	Repair / Replace
			Switchboard Corroded	Any	Repair / Replace
			Switchboard Damaged	Any	Repair / Replace
			Bracket Corroded	Any	Repair / Replace
			Bracket Damaged	Any	Repair / Replace
			Bracket Loose	Any	Repair / Replace

Asset Class	Asset Group	Asset Type	Defect	Intervention Level	Resolution
			Bracket Missing	Any	Repair / Replace
			Bracket Out of Alignment	Any	Repair / Replace
			Gasket Damaged	Any	Repair / Replace
			Gasket Missing	Any	Repair / Replace
			Lamp Damaged	Any	Repair / Replace
			Lamp Missing	Any	Repair / Replace
			Lamp Not Functioning	Any	Repair / Replace
			Luminaire Corroded	Any	Repair / Replace
			Luminaire Damaged	Any	Repair / Replace
			Luminaire Out of Alignment	Any	Repair / Replace
			Reflector Damaged	Any	Repair / Replace
			Spigot Entry Damaged	Any	Repair / Replace
			Visor / Cover Corroded	Any	Repair / Replace
			Visor / Cover Discoloured	Any	Repair / Replace
			Visor / Cover Loose	Any	Repair / Replace
			Visor / Cover Missing	Any	Repair / Replace
			Base Plate Corroded	Any	Repair / Replace
			Base Plate Damaged	Any	Repair / Replace
			Bolts Corroded	Any	Repair / Replace
			Footings Damaged	Any	Repair / Replace
			Footings Eroded	Any	Repair / Replace
			Pole Damaged	Any	Repair / Replace

Asset Class	Asset Group	Asset Type	Defect	Intervention Level	Resolution
	Memorials / Monuments	Memorials / Monuments	Spigot Damaged	Any	Repair / Replace
			Memorials / Monuments Damaged	Any	Repair / Replace
					Refer to Rehab Program
			Inscription Faded	> 25%	Repair / Replace
			Structural Cracking / Movement	Any	Repair / Replace
					Refer to Rehab Program
			Paint peeling	> 2 sq m	Paint / Treat
			Pointing / Mortar Missing	> 25%	Repair / Replace
			Graffiti	Any	Remove / Paint Over
	Flag Pole	Flag Pole	Flag Pole Damaged	Any	Repair / Replace
			Graffiti	Any	Remove / Paint Over
	Wind Mill	Wind Mill	Wind Mill Damaged	Any	Repair / Replace
			Graffiti	Any	Remove / Paint Over
	Dais	Dais	Dais Damaged	Any	Repair / Replace
			Graffiti	Any	Remove / Paint Over
	Hardstand	Handstand	Asphalt or Bitumen Potholed	> 15 mm	Asphalt Infill
					Refer to Rehab Program
			Crossfall Excessive	> 20%	Remove and Replace
					Refer to Rehab Program
			Edge Drop-off	> 50 mm	Asphalt Infill
					Fill with Loam

Asset Class	Asset Group	Asset Type	Defect	Intervention Level	Resolution
					Fill with suitable material
			Vertical Displacement	> 15 mm	Asphalt Infill
					Grinding
					Minor repairs
					Refer to Rehab Program
			Water Ponding	> 15 mm	Asphalt Infill
					Drain Low Spot
					Refer to Rehab Program
			Loose Material	Any	Sweeping
			Section Disintegration with Loss of Material	> 1 sq m	Repair / Replace
					Refer to Rehab Program
			Structural Cracking / Movement	Any	Repair / Replace
					Refer to Rehab Program
			Graffiti	Any	Remove / Paint Over
	Driveway / Carpark	Driveway Carpark	Linemarking Faded		Re-mark lines
			Surface Potholed	> 100 mm	Repair Potholes
			Surface Disintegration with Loss of Material	> 1 sq m	Repair Pavement
					Refer to Rehab Program
			Graffiti	Any	Remove / Paint Over
	Wheel Stop	Wheel Stop	Wheel Damaged	Any	Repair / Replace
		Grandstand	Structural Cracking / Movement	Any	Repair / Replace

Asset Class	Asset Group	Asset Type	Defect	Intervention Level	Resolution
	Grandstand and Spector Seating	Spector Seating			Refer to Rehab Program
			Paint peeling	> 2 sq m	Paint / Treat
			Footing / Base slab damaged	> 2 sq m	Repair / Replace
			Seat Missing / Damaged	Any	Repair / Replace
			Graffiti	Any	Remove / Paint Over
	Platform	Deck Viewing Platform Stage	Paint peeling	> 2 sq m	Paint / Treat
			Structural Cracking / Movement	Any	Repair / Replace
					Refer to Rehab Program
			Timber Rot	Any	Repair / Replace timber
			Graffiti	Any	Remove / Paint Over
	Scoreboard	Scoreboard	Scoreboard Not working / Damaged	Any	Inspect & Repair
					Refer to Rehab Program
	Goal Post	Goal Post / Tennis Posts, Netball / Basketball Hoop	Structural Cracking / Movement	Any	Repair / Replace
					Refer to Rehab Program
			Paint peeling	> 2 sq m	Paint / Treat
			Netball / Basketball Hoop Missing / Damaged	Any	Repair / Replace
			Net Missing / Damaged	Any	Repair / Replace
			Graffiti	Any	Remove / Paint Over
		Swimming Pool	Tiles Cracked / Loose / Missing	Any	Repair / Replace

Asset Class	Asset Group	Asset Type	Defect	Intervention Level	Resolution
	Swimming Pool	Lagoon			Refer to Rehab Program
			Starting Block Damaged	Any	Repair / Replace
					Refer to Rehab Program
			Structural Cracking / Movement	Any	Repair / Replace
					Refer to Rehab Program
			Pool Drainage Blocked / Not working	Any	Inspect & Repair
					Refer to Rehab Program
Park and Street Furniture	Table	Seat / Table / Bench	Footing / Base slab damaged	> 2 sq m	Repair
	Seat		Paint peeling	> 25%	Paint / Treat
			Seat / Table / Bench damaged	Any	Repair
			Graffiti	Any	Remove / Paint Over
	Playing Surfaces	Softfall	Softfall / Undersurfacing	Softfall Depth	< 300 mm
Rake / churn softfall					
Softfall Drainage Blocked				Any	Reinstate Drainage
					Refer to Rehab Program
Softfall over-compacted				Any	Rake / churn softfall
					Refer to Rehab Program
Undersurfacing Damaged / Missing				Any	Repair / Replace
					Refer to Rehab Program

Asset Class	Asset Group	Asset Type	Defect	Intervention Level	Resolution
			Undersurfacing Fall Attenuation	Any	Undertake Full Compliance Inspection
					Refer to Rehab Program
			Vegetation Encroachment	Any	Trim / Remove Vegetation
			Graffiti	Any	Remove / Paint Over
	Ground Cover	Syntheric Grass	Syntheric Grass Damaged	> 0.5 sqm	Repair / Replace
			Graffiti	Any	Remove / Paint Over
	Sport Court	Skate Bowl Basketball Court Netball Court Tennis Court Combination Court Bocce Court	Court Marking Faded	> 20%	Re-mark lines
			Debris / Rubbish Build Up	Any	Remove Material
			Surfacing Damaged	> 10%	Repair
					Refer to Rehab Program
			Vertical Displacement	> 5 mm	Repair / Replace
					Refer to Rehab Program
			Graffiti	Any	Remove / Paint Over
	Sport Field	Sports Field Athletics Oval Baseball Diamond Bowling Green Cricket Wicket Croquet Lawn	Field Marking Faded	> 20%	Re-mark lines
			Debris / Rubbish Build Up	Any	Remove Material
			Surfacing Damaged	> 10%	Repair
					Refer to Rehab Program
			Cricket Wicket Missing / Damaged	Any	Repair / Replace
			Cricket Batting Cage Damaged	Any	Repair / Replace
			Graffiti	Any	Remove / Paint Over

Appendix D - Acronyms

AAAC	Average annual asset consumption
AMP	Asset Management Plan
ARI	Average Recurrence Interval
CRC	Current Replacement Cost
DA	Depreciable Amount
EF	Earthworks/Formation
IRMP	Infrastructure Risk Management Plan
LCC	Life Cycle Cost
LCE	Life Cycle Expenditure
LGIS	Local Government Infrastructure Services
MMS	Maintenance Management System
PCI	Pavement Condition Index
RV	Residual Value

Appendix E – Glossary

Annual Service Cost (ASC)

Reporting actual cost. The annual (accrual Cost of providing a service including operations, maintenance, depreciation, finance/opportunity and disposal costs less revenue.

For investment analysis and budgeting. An estimate of the cost that would be tendered, per annum, if tenders were called for the supply of a service to a performance specification for a fixed term. The Annual Service Cost includes operations, maintenance, depreciation, finance/opportunity and disposal costs, less revenue.

Asset

A resource controlled by an entity as a result of past events and from which future economic benefits are expected to flow to the entity. Infrastructure assets are a sub-class of property, plant and equipment which are non-current assets with a life greater than 12 months and enable services to be provided.

Asset class

A group of assets having a similar nature or function in the operations of an entity, and which, for purposes of disclosure, is shown as a single item without supplementary disclosure.

Asset condition assessment

The process of continuous or periodic inspection, assessment, measurement and interpretation of the resultant data to indicate the condition of a specific asset so as to determine the need for some preventative or remedial action.

Asset management (AM)

The combination of management, financial, economic, engineering and other practices applied to physical assets with the objective of providing the required level of service in the most cost effective manner.

Average annual asset consumption (AAAC)*

The amount of a council's asset base consumed during a reporting period (generally a year). This may be calculated by dividing the depreciable amount by the useful life (or total future economic benefits/service potential)

and totalled for each and every asset OR by dividing the carrying amount (depreciated replacement cost) by the remaining useful life (or remaining future economic benefits/service potential) and totalled for each and every asset in an asset category or class.

Borrowings

A borrowing or loan is a contractual obligation of the borrowing entity to deliver cash or another financial asset to the lending entity over a specified period of time or at a specified point in time, to cover both the initial capital provided and the cost of the interest incurred for providing this capital. A borrowing or loan provides the means for the borrowing entity to finance outlays (typically physical assets) when it has insufficient funds of its own to do so, and for the lending entity to make a financial return, normally in the form of interest revenue, on the funding provided.

Capital expenditure

Relatively large (material) expenditure, which has benefits, expected to last for more than 12 months. Capital expenditure includes renewal, expansion and upgrade. Where capital projects involve a combination of renewal, expansion and/or upgrade expenditures, the total project cost needs to be allocated accordingly.

Capital expenditure - expansion

Expenditure that extends the capacity of an existing asset to provide benefits, at the same standard as is currently enjoyed by existing beneficiaries, to a new group of users. It is discretionary expenditure, which increases future operations and maintenance costs, because it increases the Council's asset base, but may be associated with additional revenue from the new user group, e.g. extending a drainage or road network, the provision of an oval or park in a new suburb for new residents.

Capital expenditure - new

Expenditure which creates a new asset providing a new service/output that did not exist beforehand. As it increases service potential it may impact revenue and will increase future operations and maintenance expenditure.

Capital expenditure - renewal

Expenditure on an existing asset or on replacing an existing asset, which returns the service capability of the asset up to that which it had originally. It is periodically required expenditure, relatively large (material) in value compared with the value of the components or sub-components of the asset being renewed. As it reinstates existing service potential, it generally has no impact on revenue, but may reduce future operations and maintenance expenditure if completed at the optimum time, e.g. resurfacing or resheeting a material part of a road network, replacing a material section of a drainage network with pipes of the same capacity, resurfacing an oval.

Capital expenditure - upgrade

Expenditure, which enhances an existing asset to provide a higher level of service or expenditure that will increase the life of the asset beyond that which it had originally. Upgrade expenditure is discretionary and often does not result in additional revenue unless direct user charges apply. It will increase operations and maintenance expenditure in the future because of the increase in the Council's asset base, e.g. widening the sealed area of an existing road, replacing drainage pipes with pipes of a greater capacity, enlarging a grandstand at a sporting facility.

Capital funding

Funding to pay for capital expenditure.

Capital grants

Monies received generally tied to the specific projects for which they are granted, which are often upgrade and/or expansion or new investment proposals.

Capital investment expenditure

See capital expenditure definition

Capitalisation threshold

The value of expenditure on non-current assets above which the expenditure is recognised as capital expenditure and below which the expenditure is charged as an expense in the year of acquisition.

Carrying amount

The amount at which an asset is recognised after deducting any accumulated depreciation / amortisation and accumulated impairment losses thereon.

Component

Specific parts of an asset having independent physical or functional identity and having specific attributes such as different life expectancy, maintenance regimes, risk or criticality.

Cost of an asset

The amount of cash or cash equivalents paid or the fair value of the consideration given to acquire an asset at the time of its acquisition or construction, including any costs necessary to place the asset into service. This includes one-off design and project management costs.

Current replacement cost (CRC)

The cost the entity would incur to acquire the asset on the reporting date. The cost is measured by reference to the lowest cost at which the gross future economic benefits could be obtained in the normal course of business or the minimum it would cost, to replace the existing asset with a technologically modern equivalent new asset (not a second hand one) with the same economic benefits (gross service potential) allowing for any differences in the quantity and quality of output and in operating costs.

Depreciable amount

The cost of an asset, or other amount substituted for its cost, less its residual value.

Depreciated replacement cost (DRC)

The current replacement cost (CRC) of an asset less, where applicable, accumulated depreciation calculated on the basis of such cost to reflect the already consumed or expired future economic benefits of the asset.

Depreciation / amortisation

The systematic allocation of the depreciable amount (service potential) of an asset over its useful life.

Economic life

See useful life definition.

Expenditure

The spending of money on goods and services. Expenditure includes recurrent and capital.

Fair value

The amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties, in an arm's length transaction.

Funding gap

A funding gap exists whenever an entity has insufficient capacity to fund asset renewal and other expenditure necessary to be able to appropriately maintain the range and level of services its existing asset stock was originally designed and intended to deliver. The service capability of the existing asset stock should be determined assuming no additional operating revenue, productivity improvements, or net financial liabilities above levels currently planned or projected. A current funding gap means service levels have already or are currently falling. A projected funding gap if not addressed will result in a future diminution of existing service levels.

Heritage asset

An asset with historic, artistic, scientific, technological, geographical or environmental qualities that is held and maintained principally for its contribution to knowledge and culture and this purpose is central to the objectives of the entity holding it.

Impairment Loss

The amount by which the carrying amount of an asset exceeds its recoverable amount.

Investment Property

Property held to earn rentals or for capital appreciation or both, rather than for:

- a) Use in the production or supply of goods or services or for administrative purposes; or
- b) Sale in the ordinary course of business.

Key performance indicator

A qualitative or quantitative measure of a service or activity used to compare actual

performance against a standard or other target. Performance indicators commonly relate to statutory limits, safety, responsiveness, cost, comfort, asset performance, reliability, efficiency, environmental protection and customer satisfaction.

Levels of service

The defined service quality for a particular service/activity against which service performance may be measured. Service levels usually relate to quality, quantity, reliability, responsiveness, environmental impact, acceptability and cost.

Life Cycle Cost

Total LCC. The total cost of an asset throughout its life including planning, design, construction, acquisition, operation, maintenance, rehabilitation and disposal costs.

Average LCC. The life cycle cost (LCC) is average cost to provide the service over the longest asset life cycle. It comprises annual operations, maintenance and asset consumption expense, represented by depreciation expense. The Life Cycle Cost does not indicate the funds required to provide the service in a particular year.

Life Cycle Expenditure

The Life Cycle Expenditure (LCE) is the actual or planned annual operations, maintenance and capital renewal expenditure incurred in providing the service in a particular year. Life Cycle Expenditure may be compared to average Life Cycle Cost to give an initial indicator of life cycle sustainability.

Maintenance

All actions necessary for retaining an asset as near as practicable to its original condition, including regular ongoing day-to-day work necessary to keep assets operating, e.g. road patching but excluding rehabilitation or renewal. It is operating expenditure required to ensure that the asset reaches its expected useful life.

Planned maintenance

Repair work that is identified and managed through a maintenance management system (MMS). MMS activities include inspection, assessing the condition against failure/breakdown criteria/experience, prioritising scheduling, actioning the work and reporting what was done to develop a maintenance history and improve maintenance and service delivery performance.

Reactive maintenance

Unplanned repair work that is carried out in response to service requests and management/supervisory directions.

Significant maintenance

Maintenance work to repair components or replace sub-components that needs to be identified as a specific maintenance item in the maintenance budget.

Unplanned maintenance

Corrective work required in the short-term to restore an asset to working condition so it can continue to deliver the required service or to maintain its level of security and integrity.

Maintenance and renewal gap

Difference between estimated budgets and projected required expenditures for maintenance and renewal of assets to achieve/maintain specified service levels, totalled over a defined time (e.g. 5, 10 and 15 years).

Maintenance and renewal sustainability index

Ratio of estimated budget to projected expenditure for maintenance and renewal of assets over a defined time (e.g. 5, 10 and 15 years).

Maintenance expenditure

Recurrent expenditure, which is periodically or regularly required as part of the anticipated schedule of works required to ensure that the asset achieves its useful life and provides the required level of service. It is expenditure, which was anticipated in determining the asset's useful life.

Materiality

The notion of materiality guides the margin of error acceptable, the degree of precision required and the extent of the disclosure required when preparing general purpose financial reports. Information is material if its omission, misstatement or non-disclosure has the potential, individually or collectively, to influence the economic decisions of users taken on the basis of the financial report or affect the discharge of accountability by the management or governing body of the entity.

Modern equivalent asset

Assets that replicate what is in existence with the most cost-effective asset performing the same level of service. It is the most cost efficient, currently available asset which will provide the same stream of services as the existing asset is capable of producing. It allows for technology changes and, improvements and efficiencies in production and installation techniques

Net present value (NPV)

The value to the Council of the cash flows associated with an asset, liability, activity or event calculated using a discount rate to reflect the time value of money. It is the net amount of discounted total cash inflows after deducting the value of the discounted total cash outflows arising from e.g. the continued use and subsequent disposal of the asset after deducting the value of the discounted total cash outflows.

Non-revenue generating investments

Investments for the provision of goods and services to sustain or improve services to the community that are not expected to generate any savings or revenue to Council, e.g. parks and playgrounds, footpaths, roads and bridges, libraries, etc.

Operations expenditure

Recurrent expenditure, which is continuously required to provide a service. In common use the term typically includes, e.g. power, fuel, staff, plant equipment, on-costs and overheads but excludes maintenance and depreciation. Maintenance and depreciation is on the other hand included in operating expenses.

Operating expense

The gross outflow of economic benefits, being cash and non-cash items, during the period arising in the course of ordinary activities of an entity when those outflows result in decreases in equity, other than decreases relating to distributions to equity participants.

Pavement management system

A systematic process for measuring and predicting the condition of road pavements and wearing surfaces over time and recommending corrective actions.

PMS Score

A measure of condition of a road segment determined from a Pavement Management System.

Rate of annual asset consumption

A measure of average annual consumption of assets (AAAC) expressed as a percentage of the depreciable amount (AAAC/DA). Depreciation may be used for AAAC.

Rate of annual asset renewal

A measure of the rate at which assets are being renewed per annum expressed as a percentage of depreciable amount (capital renewal expenditure/DA).

Rate of annual asset upgrade

A measure of the rate at which assets are being upgraded and expanded per annum expressed as a percentage of depreciable amount (capital upgrade/expansion expenditure/DA).

Recoverable amount

The higher of an asset's fair value, less costs to sell and its value in use.

Recurrent expenditure

Relatively small (immaterial) expenditure or that which has benefits expected to last less than 12 months. Recurrent expenditure includes operations and maintenance expenditure.

Recurrent funding

Funding to pay for recurrent expenditure.

Remaining useful life

The time remaining until an asset ceases to provide the required service level or economic usefulness. Age plus remaining useful life is useful life.

Residual value

The estimated amount that an entity would currently obtain from disposal of the asset, after deducting the estimated costs of disposal, if the asset were already of the age and in the condition expected at the end of its useful life.

Revenue generating investments

Investments for the provision of goods and services to sustain or improve services to the community that are expected to generate some savings or revenue to offset operating costs, e.g. public halls and theatres, childcare centres, sporting and recreation facilities, tourist information centres, etc.

Risk management

The application of a formal process to the range of possible values relating to key factors associated with a risk in order to determine the resultant ranges of outcomes and their probability of occurrence.

Section or segment

A self-contained part or piece of an infrastructure asset.

Service potential

The total future service capacity of an asset. It is normally determined by reference to the operating capacity and economic life of an asset. A measure of service potential is used in the not-for-profit sector/public sector to value assets, particularly those not producing a cash flow.

Service potential remaining

A measure of the future economic benefits remaining in assets. It may be expressed in dollar values (Fair Value) or as a percentage of total anticipated future economic benefits. It is also a measure of the percentage of the asset's potential to provide services that is still available for use in providing services (Depreciated Replacement Cost/Depreciable Amount).

Strategic Longer-Term Plan

A plan covering the term of office of councillors (4 years minimum) reflecting the needs of the community for the foreseeable future. It brings together the detailed requirements in Council's longer-term plans such as the service management plan and the long-term financial plan. The plan is prepared in consultation with the community and details where Council is at that point in time, where it wants to go, how it is going to get there, mechanisms for monitoring the achievement of the outcomes and how the plan will be resourced.

Specific Maintenance

Replacement of higher value components/sub-components of assets that is undertaken on a regular cycle including pothole repairs, replacement of pump equipment, etc. This work generally falls below the capital/maintenance threshold and needs to be identified in a specific maintenance budget allocation.

Sub-component

Smaller individual parts that make up a component part.

Useful life

Either:

- a) the period over which an asset is expected to be available for use by an entity, or
- b) the number of production or similar units expected to be obtained from the asset by the entity.

It is estimated or expected time between placing the asset into service and removing it from service, or the estimated period of time over which the future economic benefits embodied in a depreciable asset, are expected to be consumed by council.

Value in Use

The present value of future cash flows expected to be derived from an asset or cash generating unit. It is deemed to be depreciated replacement cost (DRC) for those assets whose future economic benefits are not primarily dependent on the asset's ability to generate net cash inflows, where the entity would, if deprived of the asset, replace its remaining future economic benefits.

Source: IPWEA, 2009, Glossary

Appendix F – Legislative Requirements and Standards

Council is required to meet many legislative requirements including Federal and State legislation and regulations. Below tables include key relevant standards, but not limited to:

Standards	Requirements
Air conditioning, Ventilation & Refrigeration	
AS/NZ3666.1:2011	Air handling & water Systems of Buildings - Microbial Control, Design, Installation & Commissioning
AS/NZS3666.2:2011	Air handling & Water systems of Buildings - Microbial Control - Operation & Maintenance. This Standard sets out the minimum requirements for routine regular maintenance.
AS/NZS3666.3:2011	Air handling & Water Systems of Buildings - Microbial Control - Performance-Based Maintenance of Cooling Water Systems
AS4254.1-2012	Ductwork for Air-handling Systems in Buildings – Flexible Duct
AS4254.2-2012	Ductwork for Air-handling Systems in Buildings – Rigid Duct
AS1668.2-2012	The Use of Ventilation and Air-Conditioning in Buildings - Ventilation Design and Indoor Air Contaminant Control (excluding requirements for the Health Aspects of Tobacco Smoke Exposure)
AS 1668.2-2012 /Amendment 2-2016	The use of ventilation and air conditioning in buildings - Mechanical ventilation in buildings
AS 1668.2-2012 /Amendment 1-2013	The use of ventilation and air conditioning in buildings - Mechanical ventilation in buildings
AS1668.1-2015	The Use of Ventilation and Air-Conditioning in Buildings - Fire and Smoke Control in Multi-Compartment Buildings
AS/NZS1668.1:2015 /Amendment 1:2018	The use of ventilation and air conditioning in buildings - Fire and smoke control in buildings
AS/NZS 5149.1:2016	Refrigerating Systems & Heat Pumps - Safety & Environmental Requirements – Definitions, classification and selection criteria
AS/NZS 5149.1:2016 /Amendment 1:2018	Refrigerating systems and heat pumps - Safety and environmental requirements - Definitions, classification and selection criteria (ISO 5149-1:2014, MOD)
AS/NZS 5149.2:2016	Refrigerating Systems & Heat Pumps - Safety & Environmental Requirements – Design, construction, testing, marking and documentation
AS/NZS 5149.3:2016	Refrigerating Systems & Heat Pumps – Safety & Environmental requirements - installation site
AS/NZS 5149.4:2016	Refrigerating Systems & Heat Pumps – Safety & Environmental requirements – Operation, maintenance, repair & recovery
Aquatic Centres	
AS1926.1-2012	Swimming Pool Safety - Safety Barriers for Swimming Pools

AS1926.2-2007	Swimming Pool Safety - Location of Safety Barriers for Swimming Pools
AS1926.3-2010	Swimming Pool Safety - Water Recirculation Systems
AS2560.2.5-2007	Guide to Sports' Lighting - Specific Recommendations - Swimming Pools
AS2610.1 - 2007	Spa Pools - Public Spas
AS 2610.1-2007 (R2016)/Amendment 1-2011	Spa Pools - Public Spas
AS/NZS3136:2001	Approval and Tested Specification - Electrical Equipment for Spa and Swimming Pools
AS/NZS 3136:2001 /Amendment 2:2005	Approval and Tested Specification - Electrical Equipment for Spa and Swimming Pools
AS4560-2004	Gas Pool Heaters
AS 4560-2004 (R2016)/Amendment 1-2009	Gas Pool Heaters
AS/NZS60598.2.18:1998	1998 Luminaires - Particular Requirements - Luminaires for Swimming Pools and Similar Applications
Auto Doors	
AS/5007-2007	Powered Doors for pedestrian access and egress
Construction	
AS2047-2014	Windows and Buildings - Selection and Installation
AS 2047-2014 /Amendment 2-2017	Windows and external glazed doors in buildings
AS1657-2018	Fixed Platforms, Walkways, Stairways and Ladders - Design, Construction and Installation
Inspection	
AS4349.3-2010	Inspection of Buildings Part 3: Timber Pest Inspections
Lightning Protection	
AS/NZS1768:2007	Lightning Protection
Cable Systems	
AS/NZS1891.1:2007	Industrial Fall - Arrest Systems and Devices - Harnesses and Ancillary Equipment
AS/NZS 1891.1:2007 /Amendment 2:2008	Industrial Fall - Arrest Systems and Devices - Harnesses and Ancillary Equipment
AS/NZS1891.2:2001	Industrial Fall Arrest Systems and Devices - Horizontal Lifeline and Rail Systems

AS/NZS1891.2: Supplement 1: 2001	Industrial Fall Arrest Systems and Devices - Horizontal Lifeline and Rail Systems - Prescribed Configurations for Horizontal Lifelines
AS/NZS1891.3:1997	Industrial Fall Arrest Systems and Devices - Fall Arrest Devices
AS/NZS1891.4:2009	2000 Industrial Fall Arrest Systems and Devices - Selection Use and Maintenance
AS/NZS4488.1:1997	Industrial Rope Access System - Specifications
AS/NZS 4488.1:1997 (R2017)/Amendment 1:1999	Industrial Rope Access System - Specifications
AS/NZS4488.2:1997	Industrial Rope Access Systems - Selection, Use and Maintenance
Car parks	
AS/NZS2890:2009	Parking Facilities
Plumbing & Drainage	
AS/NZS 3500.1-2018	Plumbing and Drainage Part 1: Water Services
AS/NZS 3500.2:2018	Plumbing and Drainage Part 2: Sanitary Plumbing and Drainage
AS/NZS 3500.3:2018	Plumbing and Drainage - Stormwater Drainage
Fire Systems	
AS1668.1-2015	The Use of Ventilation and Air-Conditioning in Buildings - Fire and Smoke Control in Multi-Compartment Buildings
AS/NZS1668.1:2015 /Amendment 1:2018	The use of ventilation and air conditioning in buildings - Fire and smoke control in buildings
AS1668.3-2001	The Use of Ventilation and Air-Conditioning in Buildings - Smoke Control Systems for Large Single Compartments or Smoke Reservoirs
AS1851:2012(A4)	Routine service of fire protection systems and equipment
AS4428.1-1998	1998 Fire Detection, Warning, Control and Intercom Systems - Control and Indicating Equipment - Fire
AS 4428.1-1998 (R2016)/Amendment 1- 2004	Fire detection, warning, control and intercom systems - System design, installation and commissioning - Fire
AS4428.10-1998	Fire Detection, Warning, Control and Intercom Systems - Control and Indicating Equipment - Alarm Investigation
AS4428.3-2010	Fire Detection, Warning, Control and Intercom Systems - Control and Indicating Equipment - Fire Brigade Panel
AS4428.4-2016	Fire Detection, Warning, Control and Intercom Systems - Control and Indicating Equipment - Intercommunications Systems for Emergency Purposes
AS4428.5-1998	Fire Detection, Warning, Control and Intercom Systems - Control and Indicating Equipment - Power Supply Units

AS 4428.5-1998 (R2016)/Amendment 1-2002	Fire Detection, Warning, Control and Intercom Systems - Control and Indicating Equipment - Power Supply Units
AS4428.6-2018	Fire Detection, Warning, Control and Intercom Systems - Control and Indicating Equipment - Alarm Signalling Equipment
AS4428.7-1999	Fire Detection, Warning, Control and Intercom Systems - Control and Indicating Equipment - Air-Handling, Fire Mode Control Panel
AS4428.9-2006	Fire Detection, Warning, Control and Intercom Systems - Control and Indicating Equipment - Requirements for Wire-Free Alarm Zone Circuits
AS1670.1-2018	Fire Detection, Warning, Control and Intercom Systems - System Design, Installation and Commissioning - Fire
AS1670.3-2018	Fire Detection, Warning, Control and Intercom Systems - System Design, Installation and Commissioning - Fire Alarm Monitoring
AS1670.4-2018	Fire Detection, Warning, Control and Intercom Systems - System Design, Installation and Commissioning - Sound Systems and Intercom Systems for Emergency Purposes
AS1851-2012	Routine service of fire protection systems and equipment
AS1735.11-1986	Lifts, Escalators and Moving Walks - Fire-Rated Landing Doors
AS/NZS2293.2:1995	Emergency Evacuation Lighting for Buildings - Inspection and Maintenance
AS2444-2001	Portable Fire Extinguishers and Fire Blankets - Selection and Location
AS2118.1-2017	Automatic Fire Sprinkler Systems - General Systems
AS2118.2-2010	Automatic Fire Sprinkler Systems - Wall Wetting Sprinklers (Drenchers)
AS1682.2-2015	Fire Dampers - Installation
SAA HB46-1993 Handbook	Guide to Residential blaze Safety
Generator Systems	
AS/NZS 3010.2017	Electrical Installations - Generating Sets
AS 3011.2-1992	Electrical Installations - Secondary Batteries installed in Buildings - Sealed Cells
AS 3011.1-1992	Electrical Installations - Secondary Batteries installed in Buildings - Vented Cells
AS 2676.1-1992	Guide to the Installation, Maintenance, Testing and Replacement of Secondary Batteries in Buildings, Part 1: Vented Cells
AS 2676.2-1992	Guide to the Installation, Maintenance, Testing and Replacement of Secondary Batteries in Buildings, Part 2: Sealed Cells
AS 4086.1-1993	Secondary Batteries for Use with Stand-Alone Power Systems, Part 1: General Requirements

AS 4086.2-1997	Secondary Batteries for Use with Stand-Alone Power Systems, Part 2: Installation and Maintenance
AS 4509.1-2009	Stand-Alone Power Systems, Part 1: Safety Requirements
AS 4509.3-1999	Stand-Alone Power Systems, Part 3: Installation and Maintenance
AS 4509.3-1999/Amendment 1-2000	Stand-Alone Power Systems, Part 3: Installation and Maintenance
Grandstands	
AS2560.1 - 2018	Sports Lighting - General principles
AS 2560.2-1 - 2003	Lighting for Outdoor Tennis
AS 2560.2.3 - 2007	Lighting for Football (all codes)
AS 2560.2.4 - 1986	Lighting for Outdoor Netball and Basketball
AS 2560.2.6 - 1994	Lighting for Baseball and Softball
AS 2560.2.8 - 2007	Lighting for Bowling Greens
AS 2560.2.2 - 1986	Sports Lighting - Specific Recommendations - Lighting of Multi-Purpose Indoor Sport Centres
Hardstand Areas	
AS1160-1996	1996 Bituminous Emulsions for the Construction and Maintenance of Pavements
AS3568-1999	Oils for Reducing the Viscosity of Residual Bitumen for Pavements
AS4049.2-2005	Paints and Related Materials - Pavement Marking Materials - Thermoplastic Pavement Marking Materials - For Use With Surface Applied Glass Beads
AS4049.4-2006	Paints and Related Materials - Pavement Marking Materials - High Performance Pavement Marking Systems
AS 4049.1-2005	Paints and Related Materials - Pavement Marking Materials - Solvent-Borne Paint - For Use For Surface Glass Beads
AS4049.3-2005	Paints and Related Materials - Pavement Marking Materials - Waterborne Paint, For Use For Surface Applied Glass Beads
Hot Water Systems	
HB 253/2004	Heated Water Systems
AS/NZS 3500.4:2018	Plumbing and Drainage - Heated Water Services
AS 3500.1-2018	National Plumbing and Drainage Part 1.1: Heated Supply - Performance Requirements
Pressure Equipment Installation	
AS3892 - 2001	Pressure Equipment - Installation
Appliances	
AS/NZS60335.1:2011	Household and Similar Appliances - Safety - General Requirements

AS/NZS3820:2009	Essential Safety Requirements for Low Voltage Electrical Equipment
Lifts	
AS1735.1-2016	Lifts, Escalators and Moving Walks - General Requirements
AS1735.4-1986	Lifts, Escalators and Moving Walks - Known as SAA Lift Code - Service Lifts - Power-Operated
AS1735.11-1986	Lifts, Escalators and Moving Walks - Fire-Rated Landing Doors
Lighting	
AS1798-2014	Lighting Poles and Bracket Arms - Preferred Dimensions
AS/NZS1158.0:2005	Lighting for Roads and Public Spaces - Introduction
AS/NZS1158.1.1:2005	2005 Lighting for Roads and Other Spaces - Vehicular Traffic (Category V) Lighting - Performance and Design Requirements
AS/NZS1158.1.2:2010	Road Lighting - Vehicular Traffic (Category V) Lighting - Guide to Design, installation, Operation and Maintenance
AS/NZS1158.3.1:2005	Lighting for Roads and Public Spaces - Pedestrian Areas (Category P) Lighting - Performance and Design Requirements
AS/NZS1158.4:2015	1987 The Lighting of Urban Roads and Other Public Thoroughfares - Supplementary Lighting at Pedestrian Crossings
AS/NZS1158.6:2015	Lighting for Roads and Public Spaces - Luminaires
AS/NZS1680.0:2009	Interior Lighting -Safe Movement
AS/NZS1680.1:2006	Interior and Workplace Lighting - General Principles and Recommendations
AS/NZS1680.2.1:2008	Interior Lighting - Circulation Spaces and Other General Areas
AS1680.2.2:2008	Interior Lighting - Office and Screen-Based Tasks
AS1680.2.3:2008	Interior Lighting - Educational and Training Facilities
AS/NZS1680.2.4:2017	Interior Lighting - Industrial Tasks and Processes
AS/NZS1680.4:2017	Interior Lighting - Maintenance of Electric Lighting Systems
AS2293.1:2018	Emergency Escape Lighting and Exit Signs for Buildings - System Design, Installation and Operation
AS/NZS2293.2:1995	Emergency Evacuation Lighting for Buildings - Inspection and Maintenance
AS2293.3:2018	Emergency Escape Lighting and Exit Signs for Buildings - Emergency Escape Luminaires and Exit Signs
Electrical	
AS/NZS3000:2018	Electrical Installations (known as the Australian/New Zealand Wiring Rules)
AS/NZS1768:2007	Lightening Protection

AS/NZS3008.1.1:2017	Electrical Installations - Selection of Cables - Cables with Alternating Voltages up to and including 0.6/kV - Typical Australian Installation Conditions
Security/ Electric Fences	
AS/NZ3016:2002	Electrical Installations - Electric Security Fences
UPS Systems	
AS62040.1.1-2003	Uninterruptible Power Systems (UPS) - General and Safety Requirements for UPS used in Operator Access Areas
AS62040.1.2-2003	Uninterruptible Power Systems (UPS) - General and Safety Requirements for UPS used in Restricted Access Locations
AS62040.2-2008	Uninterruptible Power Systems (UPS) - Electromagnetic Compatibility (EMC) Requirements
Sports Fields and Surfaces	
SAA HB 49.2-1993	Handbook - Sporting Facilities Manual - Sporting Surfaces