

IPSWICH CITY COUNCIL



BUILDING AND FACILITIES

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.

Revision History

Document Version	Date	Comments	Author	Reviewer	Approver
1.0	19 July 2019	Final	LGordon BAuYeung	Helen Coles	

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Executive Summary

Purpose

The purpose of this Buildings and Facilities Asset Management Plan (BFAMP) is to consolidate Councils understanding of its buildings and facilities 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 (LTFF), budget requirements and provide a path to further improve the accuracy and confidence in future iterations of this Plan.

Scope

This Asset Management Plan (AMP) covers the Buildings and Facilities 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 and New Zealand.

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 Building and Facilities assets are valued at ~\$280m and are apportioned into asset categories as detailed in below:

Table 1 - Building and Facilities Asset Class – Category Summary

Asset Type	Quantity	Replacement Value (\$'000)
Amenity Buildings	91	\$10,926
Commercial Buildings	49	\$59,086
Community Buildings	154	\$149,849
Operational Buildings	144	\$53,432
Sheds	138	\$7,049
Total		\$280,343

Their Condition

Table 2 - Current Condition Summary

Asset Type	Condition Rating (% of asset base by replacement value)					Total
	As New	Good	Fair	Poor	Very Poor	
Amenity Buildings	0.1	0.6	2.9	0.2	0.1	3.9
Commercial Buildings	0.6	1.0	9.4	7.3	2.8	21.1
Community Buildings	3.1	20.4	24.9	5.1	0.0	53.5
Operational Buildings	0.7	6.2	9.0	3.1	0.0	19.4
Sheds	0.0	0.1	1.8	0.7	0.0	2.5
Totals	4.5	28.3	47.9	16.5	2.9	100.0

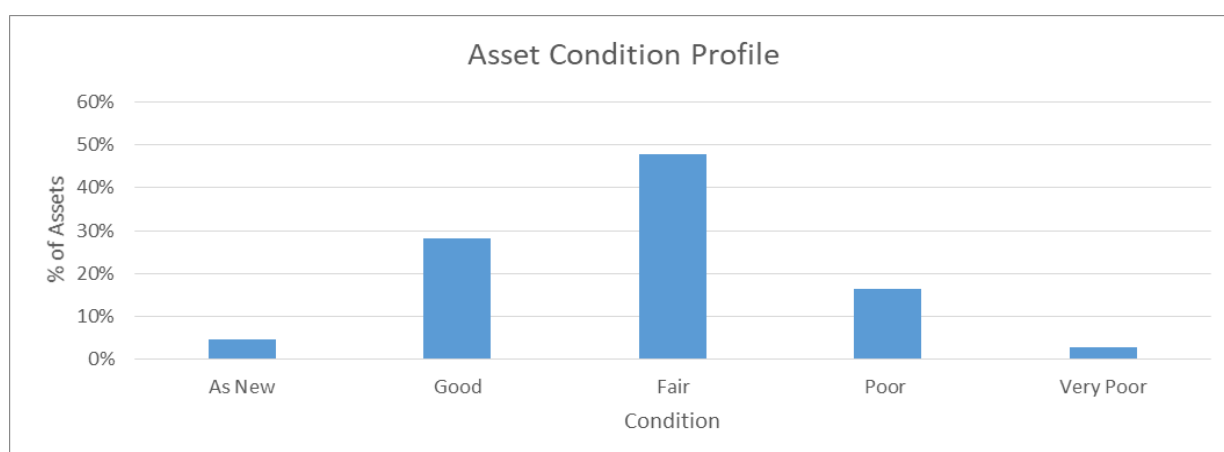


Figure 1 - Asset Condition Profile

General Asset Condition

Assets with Very Poor Condition	2.87%	\$8m
Assets with Poor Condition	16.46%	\$46.1m
Total	19.32%	\$54.16m

The condition assessments indicate that 19.32% of the Buildings and Facilities assets valued at ~\$54.16m are in poor or very poor condition. These assets are inspected frequently for maintenance and incorporated into future rehabilitation programs.

The remaining assets are in good to fair condition requiring standard maintenance activities only.

These condition profiles are based on the 2016/17 Revaluation which has incorporated detailed componentised condition assessment that includes the assessment of age, condition, material types, location, levels of use, consequence of failure, redundancy, and criticality to functioning of the service.

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?

This AMP uses council's forecast growth from the development industry and historic records in forecasting future maintenance and operation expenditure.

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 mitigate risks associated with asset management (AM) practices and reliance on this AMP.

The Financials

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 3* below. This gives a 10-year total of ~\$366.518m.

Table 3 - 10-Year Forecast Expenditure

Financial Year Ending	Expenditure (\$'000)				
	New/Upgrade	Operations	Maintenance	Renewals	Total
2020	\$87,530	\$4,483	\$9,527	\$2,261	\$103,801
2021	\$46,271	\$4,754	\$10,103	\$1,499	\$62,627
2022	\$8,320	\$5,042	\$10,715	\$1,093	\$25,170
2023	\$3,180	\$5,349	\$11,366	\$1,850	\$21,745
2024	\$2,671	\$5,674	\$12,058	\$1,703	\$22,107
2025	\$4,218	\$6,020	\$12,794	\$1,438	\$24,470
2026	\$1,413	\$6,388	\$13,575	\$2,387	\$23,763
2027	\$3,480	\$6,779	\$14,406	\$1,961	\$26,626
2028	\$1,488	\$7,195	\$15,288	\$2,447	\$26,418
2029	\$3,660	\$7,636	\$16,227	\$1,930	\$29,453
Total	\$162,231	\$59,321	\$126,058	\$18,570	\$366,181

The estimated available funding forecast (\$366.18m) is outlined in Table 4 - Available Funding in .

Table 4 - Available Funding in LTFF

Financial Year Ending	Available Funding (\$'000)			
	New/Upgrade	Ops & Maint	Renewals	Total
2020	\$87,530	\$14,010	\$811	\$102,351
2021	\$46,271	\$14,857	\$2,570	\$63,698
2022	\$8,320	\$15,758	\$884	\$24,962
2023	\$3,180	\$16,715	\$1,845	\$21,740
2024	\$2,671	\$17,733	\$1,712	\$22,116
2025	\$4,218	\$18,814	\$1,439	\$24,471
2026	\$1,413	\$19,963	\$2,379	\$23,755
2027	\$3,480	\$21,185	\$1,960	\$26,625
2028	\$1,488	\$22,483	\$2,453	\$26,424
2029	\$3,660	\$23,863	\$1,936	\$29,459
Total	\$162,231	\$185,379	\$17,989	\$365,599

The comparison of the projected 10-year expenditure and the funding included in the LTFF can be seen in Figure 2

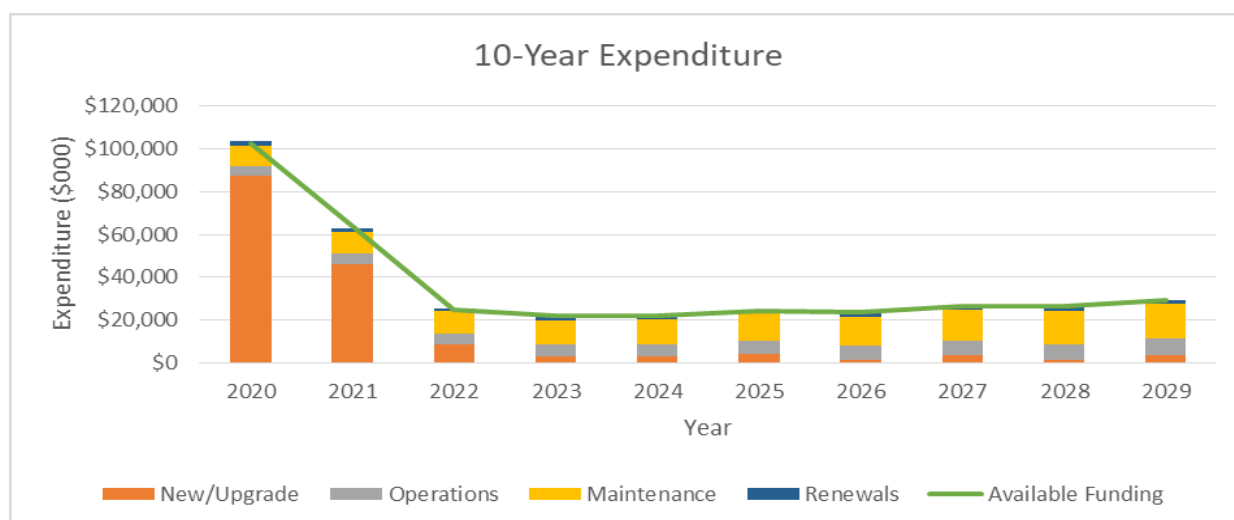


Figure 2 - 10-year Expenditure Forecast

Can We Financially Sustain our Current Levels of Service?

Based on the analysis of council's expenditure requirements for asset renewal, operations and maintenance, there is sufficient funding in the LTFF to sustain current service levels.

Operations and Maintenance	Fully Funded
Asset Renewals	97% Funded
New/upgrade CAPEX	Fully Funded

What Are Our Options?

Currently the focus of future expenditure is on the building of the new administration centre. Council has the following options:

- Re-allocate additional funding to another asset class where the AMP indicates there is a shortfall of funding.
- Increase the service levels and associated operations and maintenance expenditure.

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 BFAMP. 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 valuations 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 Buildings and Facilities 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 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.

Other Considerations

The renewals requirements are based on valuation data which uses a 'straight line' deterioration or consumption model. Although the assets are approaching the end of their theoretical lives this has not generally been verified through observation. Decisions made using this AMP should consider appropriate reliance on this data. The data is considered 70% accurate. A significant amount of data is based on best estimation.

The financial reporting of operations, maintenance and capital expenditure is not adequate to support detailed asset management activities and planning. This AMP includes assumptions for the allocation of spending to this asset class.

This AMP does not include funding required to support the improvement initiatives identified necessary to improve accuracy and reliance.

There is sufficient funding in the 10-year LTFF to sustainably maintain the current levels of buildings and facilities services.

Actions

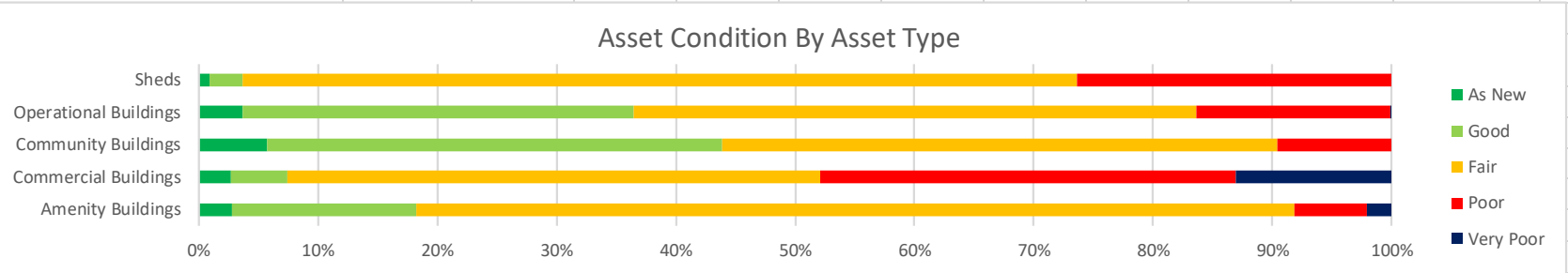
- Council confirm the condition, standard asset lives, and remaining life estimates of its buildings and facilities.
- The LTFF be reviewed to reflect the CAPEX allocation requirements.
- Consideration be given to annualising (levelling) the buildings and facilities funding allocation in the Long-Term Financial Plan at with the works programs being adjusted to comply with this funding level.
- Prior to the adoption of the attached renewal plan, individual projects and the data held in the register be validated by inspection and where discrepancies exist the Plan and the recorded data be amended.
- The initiatives identified in the AMP improvement plan be implemented.

Ipswich City Council
State of the Assets - Buildings and Facilities
22-Jul-19

Asset Value

Asset Class	Value (\$'000)			
	Replacement Cost	Accumulated Depreciation	Current Value	Average Annual Asset Consumption
Amenity Buildings	\$10,926	\$5,204	\$5,721	\$274
Commercial Buildings	\$59,086	\$36,777	\$22,309	\$1,968
Community Buildings	\$149,849	\$63,265	\$86,585	\$3,481
Operational Buildings	\$53,432	\$24,358	\$29,074	\$1,158
Sheds	\$7,049	\$4,193	\$2,857	\$1,158
Total	\$280,343	\$133,797	\$146,546	\$8,039

Asset Condition



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).

A proactive inspection program is in used by the Asset Management Team to ensure long-term sustainable management of all council's buildings and facilities. A long-term plan for all Council's leased and rented facilities is being developed.

Current Levels of Service

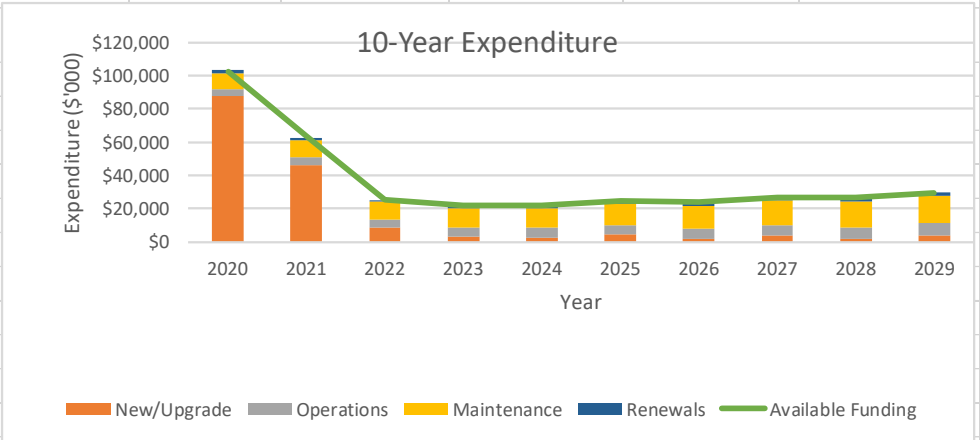
The current levels of service that Buildings and Facilities assets deliver, have been defined, and based upon council's goals and objectives as per the Corporate Plan. They are detailed in the Services Catalogue. Council is currently reviewing the current Services Catalogue, any amendments to it will 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 ~\$366m. The available funding in the LTFF is ~\$365m, a shortfall of ~\$581k. The shortfall will be managed via revisiting prioritisation of the projects. All buildings and facilities are inspected regularly in accordance to their criticality and risks. There will be significant change within the asset class over the coming years with the CBD redevelopment and the proposed sale of a number of council's operation buildings. The management of Council building assets will continually be reviewed to meet council's operation requirements.

Financial Forecasts

	Expenditure (\$'000)										
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Renewal	\$2,261	\$1,499	\$1,093	\$1,850	\$1,703	\$1,438	\$2,387	\$1,961	\$2,447	\$1,930	\$18,570
New/Upgrade	\$87,530	\$46,271	\$8,320	\$3,180	\$2,671	\$4,218	\$1,413	\$3,480	\$1,488	\$3,660	\$162,231
Maint. & Ops	\$14,010	\$14,857	\$15,758	\$16,715	\$17,733	\$18,814	\$19,963	\$21,185	\$22,483	\$23,863	\$185,379
Total	\$103,801	\$62,627	\$25,170	\$21,745	\$22,107	\$24,470	\$23,763	\$26,626	\$26,418	\$29,453	\$366,181
	Long Term Financial Forecast (\$'000)										
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Renewal	\$811	\$2,570	\$884	\$1,845	\$1,712	\$1,439	\$2,379	\$1,960	\$2,453	\$1,936	\$17,989
New/Upgrade	\$87,530	\$46,271	\$8,320	\$3,180	\$2,671	\$4,218	\$1,413	\$3,480	\$1,488	\$3,660	\$162,231
Maint. & Ops	\$14,010	\$14,857	\$15,758	\$16,715	\$17,733	\$18,814	\$19,963	\$21,185	\$22,483	\$23,863	\$185,379
Total	\$102,351	\$63,698	\$24,962	\$21,740	\$22,116	\$24,471	\$23,755	\$26,625	\$26,424	\$29,459	\$365,599
Surplus	-\$1,450	\$1,071	-\$209	-\$5	\$9	\$1	-\$8	-\$1	\$6	\$6	-\$581
Cumulative Surplus	-\$1,450	-\$379	-\$588	-\$594	-\$585	-\$584	-\$592	-\$593	-\$587	-\$581	-\$581



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%	52%
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%	96%
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%	97%
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 relates to the management of buildings and facilities assets which are recognised as assets owned by Council. Typical buildings and facilities assets and their current replacement values have been listed in Table 5 - Buildings and facilities assets summary.

Table 5 - Buildings and facilities assets summary

Asset Group	Quantity	Replacement Value (\$'000)
Amenity Buildings	91	\$10,926
Commercial Buildings	49	\$59,086
Community Buildings	154	\$149,849
Operational Buildings	144	\$53,432
Sheds	138	\$7,049
Total		\$280,343

Quantities and replacement values in this AMP are derived from physical asset registers (PAR), council's financial asset register (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 the community. Some of these services are provided by infrastructure assets. Council has acquired infrastructure assets through a range of processes, including:

- purchase
- by contract
- construction by council staff
- donation of assets constructed by developers and others to meet increased levels of service.

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*.

This AMP is prepared under the direction of Council's mission, values, goals and objectives as follows:

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 transport.

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.

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* below:

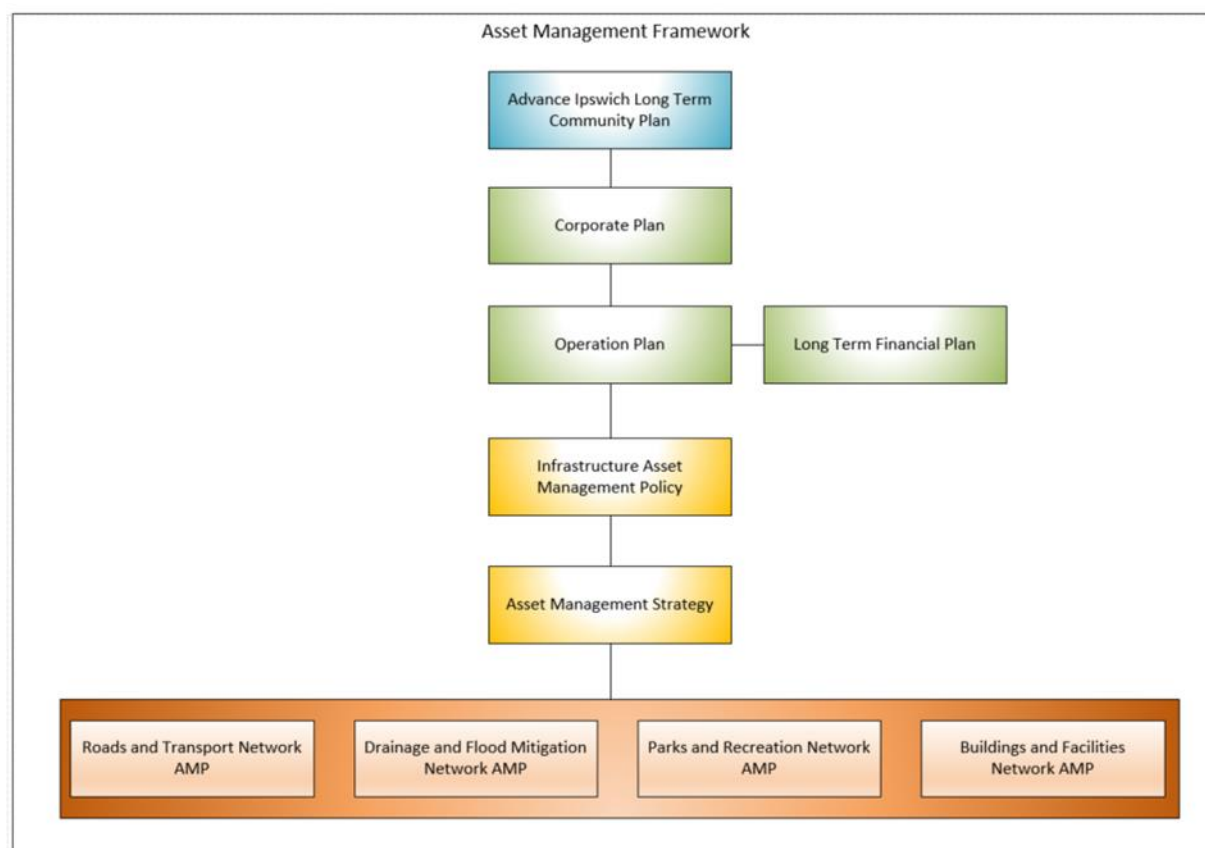


Figure 3 - Asset Management Document Hierarchy

The table below shows the key documents that support this AMP:

Table 5 - 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
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,	Council website

Document	How Related	Reference
	planning documents, operational procedures and standards of how council manage and operate infrastructure assets.	
Maintenance Specifications	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 storage system
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.	Council storage system
Other Related Documents		
Priority 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
Land Development Guidelines	Contains design and construction details for new assets	Council website
Condition Assessment Plan	Contains the methodologies, defect assessment procedures, and the condition rating system used to formally assess the structural integrity and appearance of assets.	Council storage system
Hand Over Documents	Captures all of the details of the FM service-delivery model, from asset registers, maintenance schedules and team structure through to roles, responsibilities, term of reference and service provider's details.	Council storage system
Operation and maintenance Manuals	Contains all relevant information to allow practitioners to operate and maintain facilities.	Council storage system
External/Specialist Reports	Building condition/analysis, etc.	Council storage system

Stakeholder Input

Key stakeholders in the asset management process for buildings and facilities are listed in Table 6 below:

Table 6 - Key Stakeholders

Key Stakeholder	Role
Councillors	Represent needs of community; Allocate resources to meet Council's objectives in providing services while managing risks; Ensure organisation is financially sustainable; and Custodians of the assets and services, providing the interface with the community regarding the levels of service and good governance and management practices.
CEO – Chief Executive Officer	Manage organisation operational activities and future planning strategic direction.
General Manager, Infrastructure and Environment Department	Department Head and nominal asset owner
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.
Principal Officer (Facilities and Asset Maintenance)	Responsible for the maintenance of assets. Contribution to the AMP preparation and advice on level of services and maintenance issues.
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.
Senior Spatial Officer	Responsible for advice on asset and spatial information management issues.
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.
Infrastructure Strategy and Planning Manager	Manager responsible for infrastructure.
Asset Management Manager	Responsible for department budget preparation, asset management issues and review of the AMP.
Planning Officer (Asset Management)	Responsible for the building refurbishment program, asset management issues and review of the AMP.
Senior Planning Office (Asset Management)	Responsible for developing and maintaining strategies, policies and procedures in Asset Management

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 is required to meet many legislative requirements including Federal and State legislation and regulations. Key relevant legislation is outlined in *Table 7* below:

Table 7 - Legislative Requirements

Legislation / Regulation	Requirement
<i>Anti-Discrimination Act 1991</i>	The Act sets out to promote equality of opportunity for everyone by protecting them from unfair discrimination in certain areas of activity and from sexual harassment and certain associated objectionable conduct.
<i>Building Act 1975</i>	Purpose of the Act is to regulate building development approvals, building work, building classification and building certifiers, other purposes
<i>Building Code of Australia, 2010</i>	Relevant Code of Practice for all building design and construction.
<i>Building and Construction Industry Payments Act 2004</i>	An Act to imply terms in construction contracts, to provide for adjudication of payment disputes under construction contracts, and for other purposes.
<i>Building Fire Safety Regulations 2008</i>	The main objects of this regulation are - (a) to ensure persons can evacuate buildings safely and quickly if a fire or hazardous materials emergency happens; and (b) to ensure prescribed fire safety installations for buildings are maintained
<i>Disability Services Act 2006</i>	Objects of Act The objects of this Act are - (a) to acknowledge the rights of people with a disability including by promoting their inclusion in the life of the community generally; and (b) to ensure that disability services funded by the department are safe, accountable and respond to the needs of people with a disability; and (c) to safeguard the rights of adults with an intellectual or cognitive disability including by regulating the use of restrictive practices by funded service providers in relation to those adults - (i) only where it is necessary to protect a person from harm; and, (ii) with the aim of reducing or eliminating the need for use of the restrictive practices
<i>Disaster Management Act 2003</i>	The main objectives of this Act are as follows: <ul style="list-style-type: none"> • to help communities • mitigate the potential adverse effects of an event; • prepare for managing the effects of an event; and

Legislation / Regulation	Requirement
	<ul style="list-style-type: none"> 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>Electrical Safety Act 2002</i>	<p>This Act is –</p> <p>(1) directed at eliminating the human cost to individuals, families and the community of death, injury and destruction that can be caused by electricity</p> <p>(2) Accordingly, the purpose of this Act is to establish a legislative framework for –</p> <p>(a) preventing persons from being killed or injured by electricity; and</p> <p>(b) preventing property from being destroyed or damaged by electricity</p>
<i>Environmental Protection Act 1994</i>	The object 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>Local Government Act 2009</i>	Sets out role, purpose, responsibilities and powers of local governments including the preparation of a long term financial plan supported by asset management plans for sustainable service delivery.
<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.
<i>Local Government (Finance, Plans and Reporting) Regulation 2012</i>	<p>This regulation is about community planning and financial management for local governments, including:</p> <ul style="list-style-type: none"> 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 (Finance, Plans and Reporting) Regulation 2012</i>	<p>This regulation is about community planning and financial management for local governments, including:</p> <ul style="list-style-type: none"> 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>Nature Conservation Act 2014</i>	An Act to provide for the conservation of nature.
<i>Plumbing and Drainage Act 2018</i>	An Act about plumbing and drainage, the licensing of plumbers and drainers, on-site sewerage facilities, and for other purposes.

Legislation / Regulation	Requirement
<i>Queensland Heritage Act 1992</i>	An Act to provide for the conservation of Queensland's cultural heritage.
<i>Recreation Areas Management Act 2006</i>	An Act for the establishment, management and use of recreation areas, and for other purposes
Relevant Australian Standards	Sets out standards for all building works including building, plumbing, design and access requirements, electrical all elements of building and construction works.
<i>Residential Services (Accommodation) Act 2002</i>	<p>The object of this Act is to –</p> <p>(1) balance the rights and responsibilities of residents and service providers relating to the provision of accommodation in the course of a residential service</p> <p>(2) The object is to be achieved mainly by -</p> <p>(a) regulating the making, content, operation and ending of residential service agreements; and</p> <p>(b) providing for the resolution of disputes about residential service agreements</p>
<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

This AMP contributes to supporting council's legislative and Australian Standards requirements.

Appendix 1 - shows the Australian Standards council shall follow for the management of buildings and facilities.

Plan Framework

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

Levels of Service – specifies the services and levels of service 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.

Life cycle management – outlines how Council proposes to manage its existing and future buildings and facilities 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 buildings and facilities assets.

Risk Management – describes how risks associated with building and facilities assets and service delivery have been identified and managed.

Plan Improvement and Monitoring – describes the asset management improvement strategies proposed by the BFAMP, as well as how the BFAMP 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 preparation of the BFAMP.

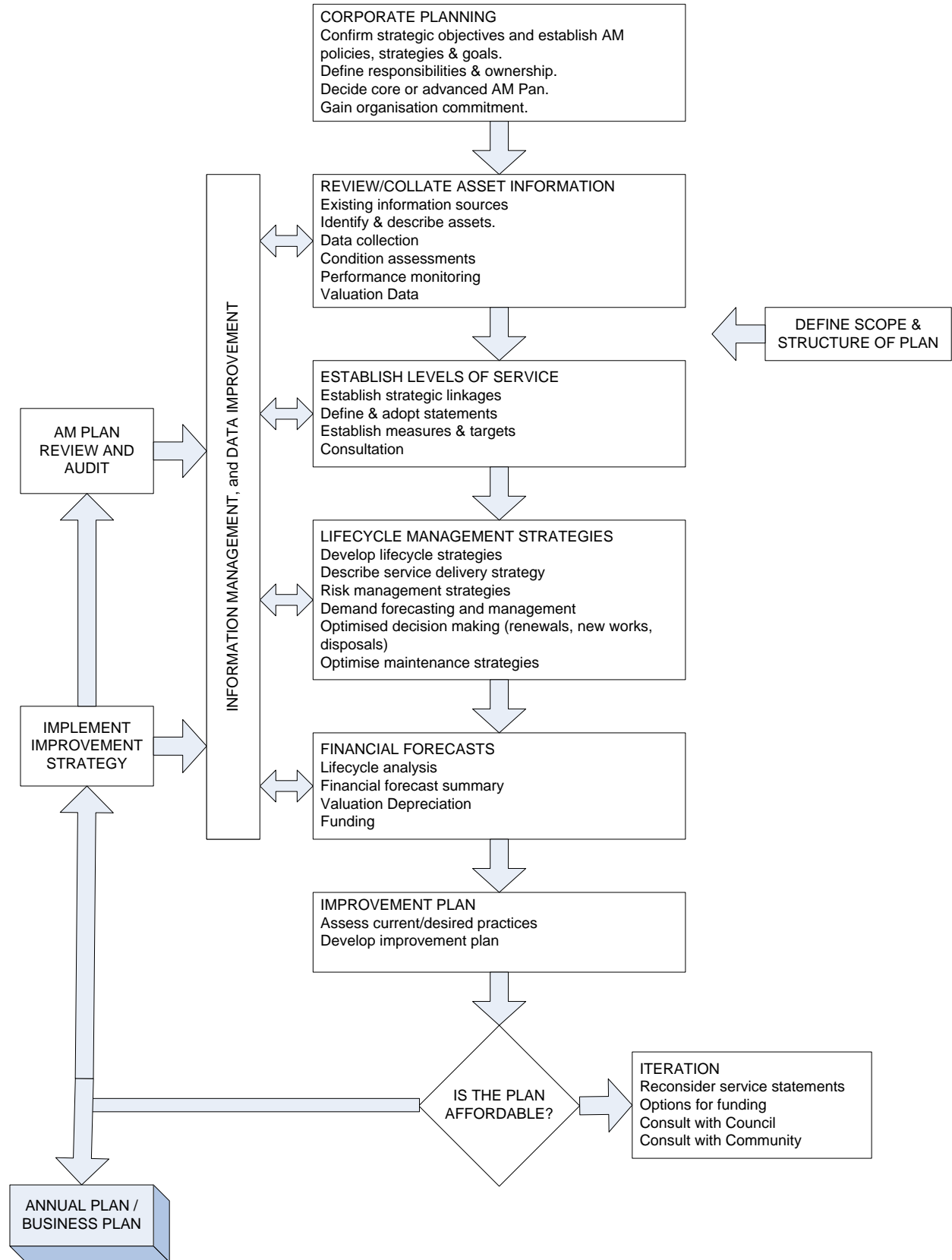


Figure 4 - AMP Preparation RoadMap

Core and Advanced Asset Management

This Asset Management Plan (AMP) is prepared as a 'core' asset management plan in accordance with the *International Infrastructure Management Manual (IIMM)*. It is 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 this AMP will move towards 'advanced' asset management using a 'bottom up' approach for gathering asset information for individual assets to support the optimisation of activities and programs to meet agreed service levels.

Progress toward the advanced AMP 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 transport 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. The details for buildings and facilities management are attached as Appendix A

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

Council's goal in managing infrastructure assets is to meet the required level of service in the most cost-effective manner for present and future consumers. 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.

Not all goals set in the Corporate Plan rely on infrastructure assets for their delivery, however a significant number of Actions do involve assets, and robust asset management practices are essential to ensure the achievement of these goals. Relevant council goals and objectives as formulated in council's *Corporate Plan 2017-2022* and how these are generally addressed in this AMP are set out in *Table 8* below:

Table 8 - Corporate Goals and Objectives

Goals	Strategy	How Goals and Objectives are addressed in this AMP
Goal 2 – (Managing Growth and Delivering Key Infrastructure)– 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.	This AMP facilitates infrastructure planning and delivery arrangements with developers, government agencies and utility providers to ensure infrastructure is delivered in a timely and efficient manner to support both community and economic development. The AMP ensures infrastructure assets are managed and maintained to conserve city's heritage.
	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 – (Caring for the Community) 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. Enhance the capacity of the city's community facilities to link community needs with appropriate services.	The AMP facilitate 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. The AMP requires council to identify levels of service associated with specific asset classes and requires council to identify what it costs to deliver that level of service. Review of designs of three (3) new community facilities being Redbank Plains South Local Community Centre, Springfield Central Hub Library and Rosewood Library (ensuring maintenance service standards can be met).
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 requires council to identify 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.	The AMP requires council to identify future rehabilitation and new capital funding to ensure financial sustainability to continue delivery the agreed levels of service and infrastructure.
	Strategy 6 – Maintain a consistent and efficient approach to laws and compliance activities across the city.	

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

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 AMP are:

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

Table 9 - Community Levels of Service

Service Level Outcome	Principle Activity	Strategic Elements	Performance Outcome	Assessed by
Capacity and Utilisation	Provide buildings that can be accessed/shared by multiple community groups to ensure high utilisation levels	Managed through bookings or management agreements	Building capacities at higher level	Management agreements/leases/ internal booking systems
Condition	Functional buildings	Regular condition inspections	Condition audits conducted every 3 years	Inspections processes and records supplied by the Lessee
Function	Consider buildings that meet the needs of the community users. (fit for purpose)	Building inspections and condition assessment	Buildings inspected on annually and three yearly	Inspection reports and records
Quality	Provide buildings that meet building regulations & appropriate standards (fit for purpose)	Internal assessments annual and three yearly	Responsiveness to inspection results and requests	Inspection program
Safety	Provide healthy and safe building to community users	Regular servicing of fire & emergency lighting and security systems (critical systems)	All servicing carried out to building standards and regulations	Monthly and annual service reports
	Provide buildings that meet regulations for asbestos	Asbestos registers provided per site and reviewed five yearly along with any new inspections required.	Reviews and inspections carried out to regulations	Legislated

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 Levels of Service are outlined in the *Table 10 - Technical Levels of Service* by asset classification:

Table 10 - Technical Levels of Service

Service Statement	Cost effective improvement of Buildings and Facilities		
Service Factors	Community Levels of Service	Technical Levels of Service	Performance Measures
Capacity/Utilisation			
Buildings	Building compliance	New/upgraded Ensure new/upgraded infrastructure is designed and constructed in accordance with Council's Guidelines.	Buildings and Facilities meet compliance standards
Function			
Buildings	Buildings and Facilities meet the needs of the community. (Fit for Purpose)	New/Upgrade <ul style="list-style-type: none"> Provide new/upgraded building and facilities infrastructure to cater for community growth in accordance with the Priority Infrastructure Plan, and existing community demand Provide new/upgraded building and facilities infrastructure as required to comply with industry standards or statutory requirements Ensure new/upgraded building and facilities infrastructure is designed and constructed in accordance with Council's Guidelines. 	Not currently measured
	Heritage listed Council buildings and facilities maintain their relevance to their original design and construction context.		
Quality			
Buildings	Building refurbishments/renewals are undertaken in accordance with the condition-based intervention levels and maintenance regimes.	Operations & Maintenance <ul style="list-style-type: none"> Inspect assets on a routine basis to identify their condition Inspect assets routinely to identify & address defect and safety concerns Maintain assets in a tidy, safe, and functional condition Maintain assets to compliance and Council's guidelines 	Major buildings are inspected annually.
		Renewal <ul style="list-style-type: none"> Renew/replace building components when they no longer function. Renew/replace building when structure degrades to a dangerous level. 	Remaining buildings are inspected over 3 year period.

Growth

Demand Forecast

Factors affecting demand on the Building and Facilities services can include, but are not necessarily limited to, population / demographic changes, modes of transport, vehicle ownership, location of employment / commercial areas and environmental awareness. Of particular significance to the City of Ipswich is the extent of future growth forecast for the area.

Table 11 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 11 - 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 the Buildings and Facilities Network service delivery is provided in Table 12.

Table 12 - Demand Impact

Demand factor	Current (2019-2020)	Projected (2028-2029)	Possible Impact on Services
Population growth	~224,589	~314,499	Establishment of new community and sporting facilities to meet the increase of population. Expansion of operation assets to meet increase in service levels.
Dwelling growth	~83,181	~116,481	Considerable increase in physical asset stock and related increase in network lifecycle costs.
Employment growth and containment	~5,055,478 sqm	~8,502,929 sqm	Increased journey-to-work demand, possibly offset by greater employment containment and / or modal shifts.
Climate change	Changes in weather event frequency and intensity		Change in network design and construction standards

Changes in Technology

Technology changes are forecast to affect the delivery of services covered by this plan in Table 13 below.

Table 13 - 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.
The average life of critical systems and components has been reduced to 10 years due to the standard of manufacture and innovations in technology. Some systems that you would normally get 15 – 25 years are now obsolete after 10 – 15 years due to innovation in technology and unavailability of parts. Examples of assets that fall into this category are fire indicator panels, lift controllers and air conditioning chillers and condenser units.	Increased capital expenditure due to replacement of an asset before its reached its useful life
Due to legislative requirements alternate energy sources, including energy efficient systems and devices must be incorporated into Council facilities. (solar power and heating, LED lighting)	Decreased demand on peak energy loading and thus lower energy services costs to Council.
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.
Asset Management systems, lifecycle costing models and asset optimisation models	Asset Management systems facilitate an understanding of assets managed and operated by Work 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.
Electrical Charging Stations	Enable the way forward for introduction of electric vehicle charging within Council carparks within buildings.

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 14*. Further opportunities will be developed in future revisions of this asset management plan.

Table 14 - Demand Management Plan Summary

Service Activity	Demand Management Plan
Public Toilets	Encourage the installation of developer contributed public toilets in line with council's Desired Standards of Service for Park embellishments.
Procurement	Ensure new buildings are designed for multi-purpose use and varying user groups. (fit for purpose)
	Ensure designs include energy initiatives, i.e. solar power and water systems, LED lighting systems and other sustainable technological solutions.
Use of Facilities (Fit for Purpose)	<p>Educate and encourage sharing of facilities. Audit existing facilities to ascertain utilisation rates.</p> <p>Investigate as part of master planning the development of single central hubs instead of individual facilities, i.e. community buildings, club houses, libraries and halls.</p>

New Assets from Growth

The new assets required to meet growth demands will be acquired from land developments and constructed by council. The value of building and facilities assets contributed by the development industry is not considered material therefore it is not included in this AMP. The growth assets constructed by Council have been included in the capital expenditure forecasts for new assets.

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

Relevant corporate and directorate risks related to the building and facility assets and services covered within this AMP are outlined in *Table 15*.

Table 15 - Corporate and Directorate Risks

Risk No	Risk Description
1	Health outbreak at Council-owned swim centre (i.e. crypto virus)
2	Failure of critical assets/ systems
3	Loss or damage to property/infrastructure/life

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 buildings and facilities have been identified and assessed in accordance with the Institute of Public Works Engineering Australia (IPWEA) NAMS.PLUS Asset Management Guidelines and Council's risk impact framework. The risk assessment and impact factor matrices utilised are outlined in *Table 16* and *Table 17*.

Table 16 - Risk Assessment Matrix

	Consequences				
Likelihood	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 17 - 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

An assessment of risks associated with service delivery from infrastructure assets has identified critical risks to Council. The risk assessment process identifies credible risks, the likely hood of the risk event occurring, the consequences should the event occur, develops a risk rating, evaluates the risk and develops a risk treatment plan for non-acceptable risks.

Critical risks, being those assessed as 'Very High' - requiring immediate corrective action and 'High' – requiring prioritised corrective action are identified in the infrastructure risk management plan.

Identified risks, ratings and planned responses by asset type are outlined in *Table 18*.

Table 18 - Risk Management Plan – Buildings and Facilities

Risk ID	Risk Description	Residual Risk Result	Proposed treatment option
BD1	Aquatic Facilities, pool structural and equipment failure	High	Annual inspection and repairs of the fabric, water inlet and outlet pumps and filters
BD2	Chemical spillage, chlorine gas leakage, environmental hazard, public health issues	High	Ensure maintenance of plant occurs and that plant is maintained in good condition
BD3	Buildings, structure & critical component failure	High	Ensure maintenance for building and facilities programmed annually and serviced at identified frequencies
BD4	Buildings not utilised to full potential	High	Ensure buildings are tenanted after purchase and up to eventual removal or demolition for proposed works
BD5	Not undertaking renewal of buildings at the optimal time	High	Policing of new leases – by parties who drew up the lease
BD6	Building maintenance cost increasing due to inadequate renewal program	High	Ensure newly purchased buildings are leased (comply with insurance policies)
BD7	Projects not being delivered	High	Develop detailed asset management plan and provide adequate funding
BD8	Property destruction (fire)	High	Ensure fire systems are fully functional. Ensure fire standards are met and contracts are enforced for all buildings. Ensure lease conditions are policed and fire alarms installed in residential building.
BD9	Non-compliance with legislation	High	Complete compliance risk analysis and develop appropriate risk treatment plans
BD10	Buildings not suiting the needs of end users. (Fit for Purpose)	Medium	Continue to monitor the condition of buildings and how well they meet the needs of the end user.

These risks are controlled through business as usual activities and therefore no addition budget allocation is required.

Lifecycle Management Plan

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

Existing Infrastructure Base

Asset Summary

The physical parameters of assets covered by the BFAMP are outlined in further detail in Table 19.

Table 19 - Buildings and Facilities Assets

Asset Group	Quantity	Replacement Value (\$'000)
Amenity Buildings	91	\$10,926
Commercial Buildings	49	\$59,086
Community Buildings	154	\$149,849
Operational Buildings	144	\$53,432
Sheds	138	\$7,049
Total		\$280,343

Currently council has a good understanding of property and facility assets within the City. The Master Facility strategy sets the framework for the long-term vision on Councils Administration buildings and Operational depots and this document is currently planned for review in the 2019-2020 financial year. However, council owns a number of properties or facilities that are currently being rented or leased. There has been a gap identified within the data to clearly define the long-term plan for these properties.

These rented or lease assets have been identified and included in this AMP. The management and long-term plan for some of these assets will need to be treated differently to the standard building and facility assets that council would own.

It is planned that these specific properties are identified and a long-term plan is developed for the individual site. The level of the plan per properties or facilities will be dependent upon the value of the asset and the risk to council.

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 standard buildings and facilities are provided in the *Table 20* below:

Table 20 - Buildings and Facilities Asset Lives and Hierarchy

Asset Class	Asset Group	Components	Standard Life (yrs)
Buildings	Amenity Buildings		40
	Commercial Buildings Community Buildings Operational Buildings	Structures	60
		Finishes Services Fittings	30
		Electricals Awnings	25
	Sheds		40

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.

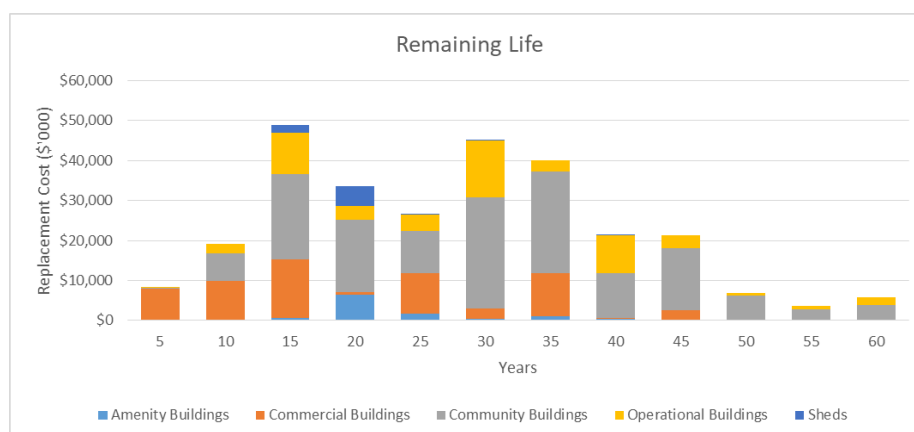


Figure 5 - Asset Remaining Life Profile

From *Figure 5*, there is no backlog of buildings and facilities renewals, with \$8.22m requiring attention within the next 5 years.

Age Profile

The age profile of the assets can be seen in *Figure 6*.

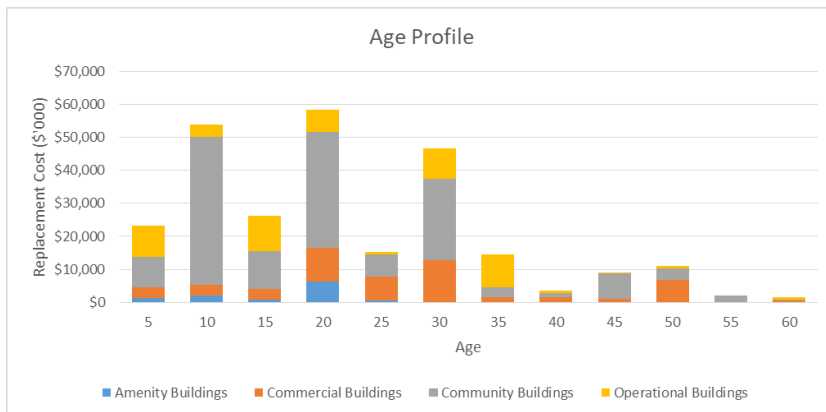


Figure 6 - Asset Age Profile

Asset Condition

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

Table 21 – 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 to be programmed.
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.

Table 22 - Current Condition Summary

Asset Type	Condition Rating (% of asset base by replacement value)					Total
	As New	Good	Fair	Poor	Very Poor	
Amenity Buildings	0.1	0.6	2.9	0.2	0.1	3.9
Commercial Buildings	0.6	1.0	9.4	7.3	2.8	21.1
Community Buildings	3.1	20.4	24.9	5.1	0.0	53.5
Operational Buildings	0.7	6.2	9.0	3.1	0.0	19.4
Sheds	0.0	0.1	1.8	0.7	0.0	2.5
Totals	4.5	28.3	47.9	16.5	2.9	100.0

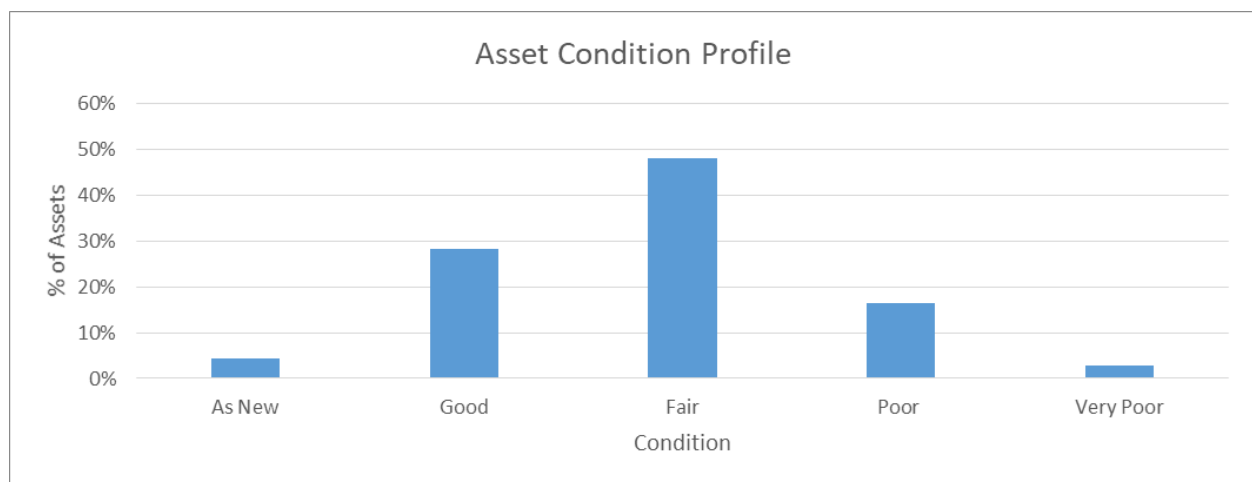


Figure 7 - Asset Condition Profile

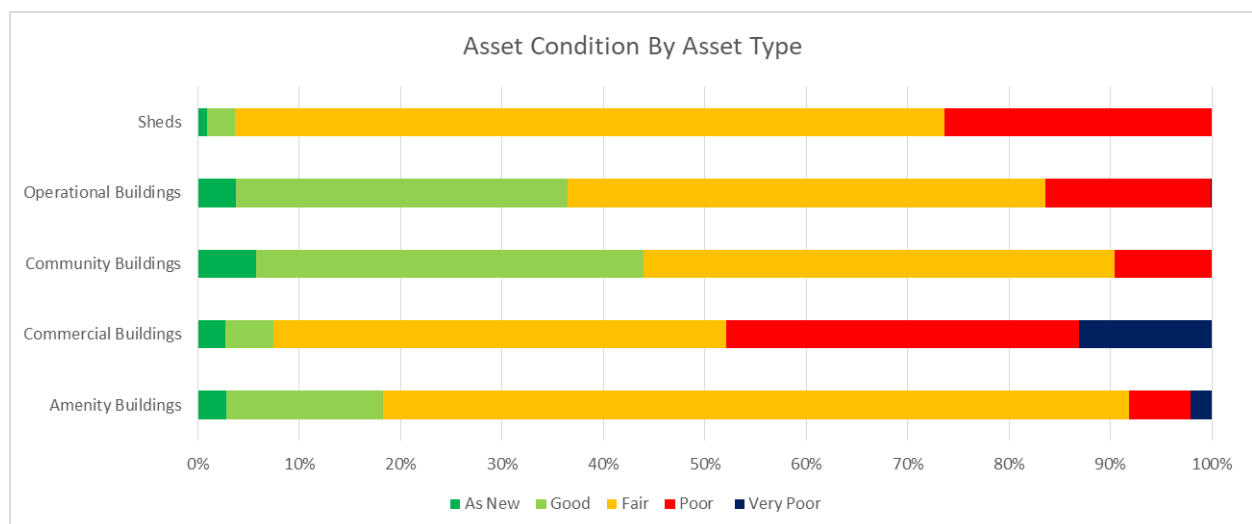


Figure 8 - Asset Condition Profile by Asset Type

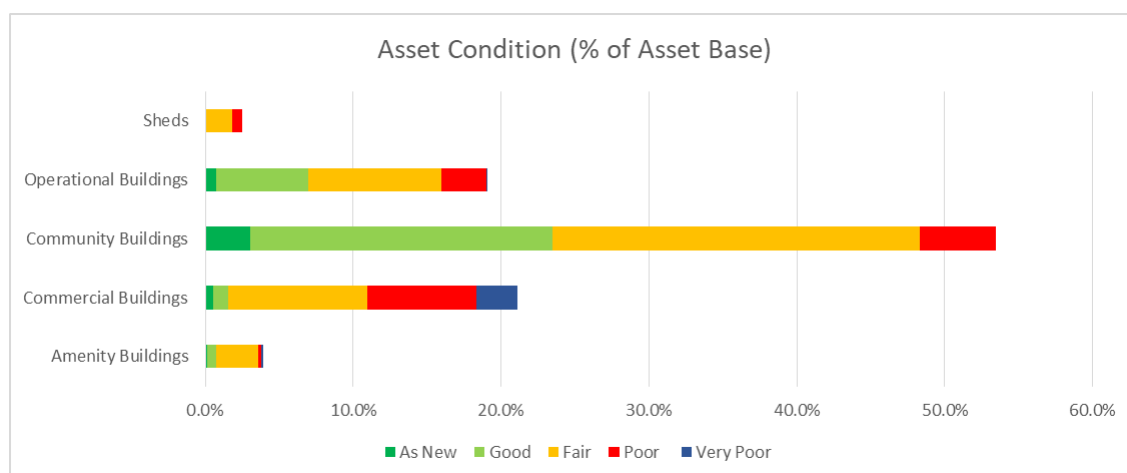


Figure 9 - Asset Condition Profile (% of Asset Base)

General Asset Condition

Assets with Very Poor Condition	2.87%	~\$8m
Assets with Poor Condition	16.46%	~\$46.1m
Total	19.32%	~\$54.16m

The condition assessments indicate that 19.32% of the buildings and facilities assets valued at ~\$54.16m. This figure can be compared to the remaining life assessment of ~\$8.22m building assets have 5 or less remaining useful life. There is a misalignment between the financial and technical data relating to buildings and infrastructure assets. As such, the planned capital program is based on a more detail componentised condition assessment which determines the detail renewal projects and scope of works.

Asset Criticality

After assessing the age, condition, material types, location, levels of use, consequence of failure, redundancy, and criticality to functioning of the service, commercial and operational buildings in this AMP are determined to have high asset criticality (rating 3), community and amenity buildings are determined to have medium asset criticality (rating 2), and storage sheds has low asset criticality rating (rating 1).

Data Confidence

The review of the existing asset data has indicated a misalignment between the condition or the asset and its life parameters. This data includes, revaluation data of the assets, financial data and asset register details.

Table 23 - 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)

Based on concerns with the existing data and the associated data management procedures and processes it is difficult to rate the data confidence higher than 4.

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 24* and *Figure 10*. The total allocation over the term of the LTFF is ~\$365.59mm, with an average of ~\$36.56m per annum.

Table 24 - Long Term Financial Forecast

Financial Year Ending	Available Funding (\$'000)			
	New/Upgrade	Ops & Maint	Renewals	Total
2020	\$87,530	\$14,010	\$811	\$102,351
2021	\$46,271	\$14,857	\$2,570	\$63,698
2022	\$8,320	\$15,758	\$884	\$24,962
2023	\$3,180	\$16,715	\$1,845	\$21,740
2024	\$2,671	\$17,733	\$1,712	\$22,116
2025	\$4,218	\$18,814	\$1,439	\$24,471
2026	\$1,413	\$19,963	\$2,379	\$23,755
2027	\$3,480	\$21,185	\$1,960	\$26,625
2028	\$1,488	\$22,483	\$2,453	\$26,424
2029	\$3,660	\$23,863	\$1,936	\$29,459
Total	\$162,231	\$185,379	\$17,989	\$365,599

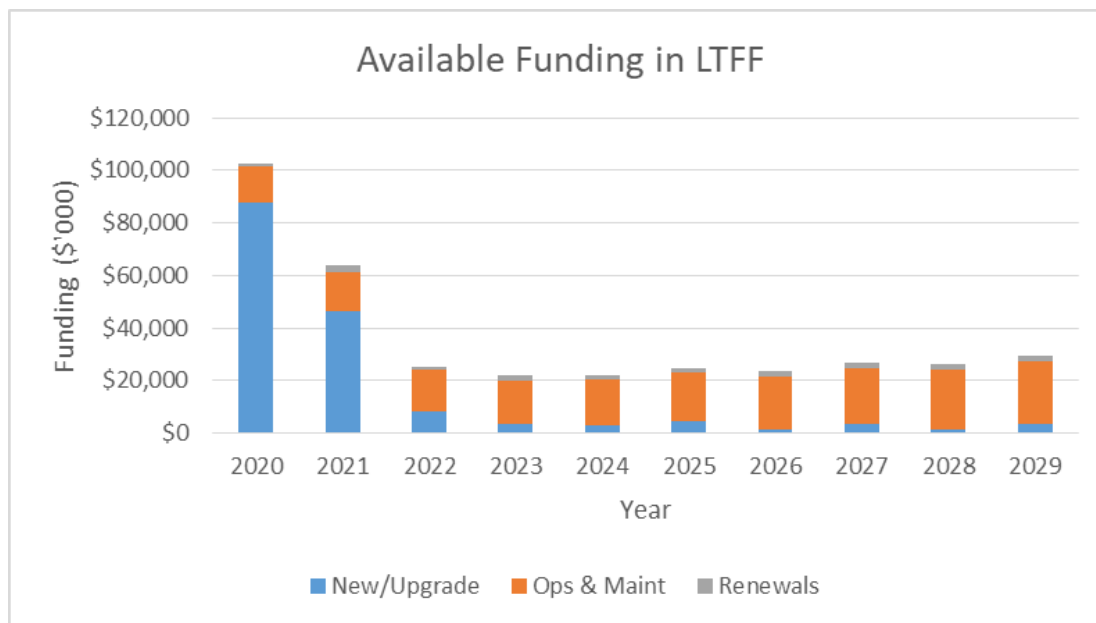


Figure 10 - Buildings and Facilities funding in the Long-Term Financial Plan

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;
- To 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"; and
- 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 covered	Status		Document Reference
Maintenance Service Standards (Building and Facilities)	Up to Date	100%	A5477397
Building and Facilities Maintenance Service Standard (Leased Properties)	Up to Date	100%	A5477463
Failure Cause Remedies (Buildings and Facilities)	Up to Date	100%	A5477874

Operations & Maintenance Forecast

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- To 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"; and
- Ensure the provision of a high standard of customer service and that customer requests are responded to quickly and efficiently.

The projected operations and maintenance expenditure can be seen in *Figure 11* below.

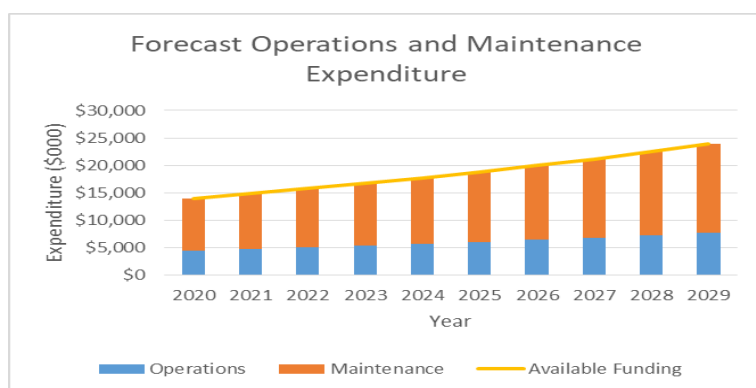


Figure 11 - Operations and Maintenance Expenditure Forecasts

Table 25 - Forecast Operations and Maintenance Expenditure

Financial Year Ending	Expenditure (\$'000)			
	Operations	Maintenance	Non-Recurrent	Total
2020	\$4,483	\$9,527	\$0	\$14,012
2021	\$4,754	\$10,103	\$0	\$14,859
2022	\$5,042	\$10,715	\$0	\$15,760
2023	\$5,349	\$11,366	\$0	\$16,717
2024	\$5,674	\$12,058	\$0	\$17,735
2025	\$6,020	\$12,794	\$0	\$18,816
2026	\$6,388	\$13,575	\$0	\$19,965
2027	\$6,779	\$14,406	\$0	\$21,187
2028	\$7,195	\$15,288	\$0	\$22,485
2029	\$7,636	\$16,227	\$0	\$23,865
Totals	\$59,321	\$126,058	\$0	\$185,379

The maintenance ratio is the current maintenance expenditure as a percentage of the current replacement cost of the asset base.

Maintenance Funding Ratio

100%

There is enough funding in the LTFF to maintain the current operations and maintenance activity levels. Additional work in the form of an activity based budget review is required to determine if the current activities meet councils desired service levels.

Operations and Maintenance Conclusion

In recent times, annual maintenance budgets have been increasing in line with estimated growth and price indices, however, it is anticipated that future budgets will be determined on the basis of physical asset stock, defined service levels and calculated unit rates.

Experience to date would suggest that the current level of maintenance expenditure has been sufficient to respond to all identified (through inspections and service requests) maintenance works.

Renewals Planning

Significant refurbishment / rehabilitation / replacement of an asset or component to restore the asset to its required conditional and functional performance, through the identification of an optimal long-term solution.

Approach to Renewals Planning

Include information about the methodology and if relevant, the systems used (i.e. the Moloney Model, IPWEA SRM etc.)

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 visual amenity 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.
- Asset condition information was analysed, with higher priority given to projects that involved assets in condition 4 and 5 (poor condition), over those that were 1 to 3 (good/reasonable condition).
- Project dependency was investigated. Projects that required other projects to be completed before others gave rise to re-prioritising some.

Renewal expenditure does not increase the asset's design capacity but restores, rehabilitates, replaces or renews an existing asset to its original or lesser required service potential. Work over and above restoring an asset to original service potential is upgrade or new works expenditure.

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 26*. The ranked proposals and projects are then included into the Capital Works Program as part of Council's budget preparation for consideration.

Table 26 - Renewal Priority Ranking Criteria – Buildings and 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

The renewals forecasting includes 3 different approaches as follows:

Depreciation (Depreciation Based) 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 (Condition Based) 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 (Program Based) Renewals

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

The results of the comparative renewal programs is shown in *Table 27* and *Figure 12* below.

Table 27 - Comparison of forecast Renewal Expenditures

Financial Year Ending	Condition (\$'000)	Annualised Condition Renewals (\$'000)	Planned (\$'000)	Depreciation Renewals (\$'000)
2020	\$0	\$2,740	\$2,261	\$8,348
2021	\$7,919	\$2,740	\$1,499	\$9,398
2022	\$0	\$2,740	\$1,093	\$9,587
2023	\$0	\$2,740	\$1,850	\$9,659
2024	\$304	\$2,740	\$1,703	\$9,719
2025	\$3,372	\$2,740	\$1,438	\$9,815
2026	\$0	\$2,740	\$2,387	\$9,847
2027	\$9,000	\$2,740	\$1,961	\$9,926
2028	\$572	\$2,740	\$2,447	\$9,960
2029	\$6,237	\$2,740.32	\$1,930	\$10,043
Total	\$27,403	\$27,403	\$18,570	\$96,301

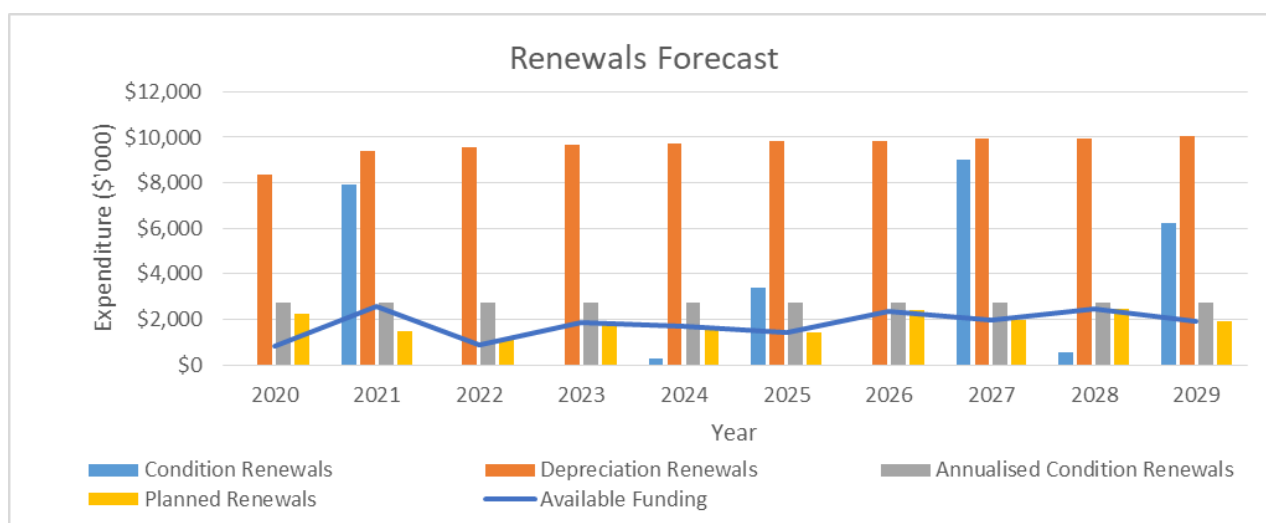


Figure 12 - Comparative Renewal Forecast

Total available funding in the LTFF is ~\$17.99m. The planned renewal program is ~\$18.57m. There is ~\$581k shortfall over the 10 years period, therefore there is sufficient funding to deliver the renewal program. The actual funding requirements will be refined during annual budget review and closer to the delivery of renewal projects.

A ratio of the available renewal funding to the forecast expenditure is prepared for the three different assessment methods and is listed in *Table 28*.

Table 28 - Renewal Funding Ratios

Expenditure Type	Depreciation Based	Program Based
Asset Renewal Funding Ratio	0.19	0.97

A ratio of 1 or above indicates that council has fully funded its renewals. The depreciation method is impacted by the fact that a third of the asset base is the proposed new administrative centre, therefore there will be high depreciation with little or no renewal expenditure. The available funding reflects the condition based (End of Life) model. A renewal plan based on the condition of the assets is then prepared and is attached in Appendix B.

New and Upgrade

Provision of, or improvement to, an asset where the outlay can reasonably be expected to provide benefits beyond the year of outlay, including a value management approach that aims to produce the most economic and creative solutions. Council will attempt to identify opportunities for capital expenditure on the asset that will improve efficiencies with the use and functionality of the asset and effectively reduce operational expenses over the life of the asset.

New/Upgrade Prioritisation Approach

New/upgrade projects that involved legislative drivers were prioritised over others that did not, this ensures compliance with statutory requirements.

Once the legislation assessment was completed, projects were assessed against alignment with approved Council plans, policies, and strategies. This was essential to ensure projects were not being developed outside the scope of strategic council documents.

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.

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 29*. The ranked proposals and projects are then included into the Capital Works Program as part of Council's budget preparation for consideration.

Table 29 - New / Upgrade Assets Priority Ranking Criteria

Strategic Driver Criteria	Proposed weighting	Rationale
Current level of service within existing catchment	30%	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.
Project Catchment (District - Citywide)	20%	Council provides various forms of community facilities which service the community at a "District" to a "Citywide" Level. Potential projects which have a "Citywide" community service catchment will receive a higher weighting, as opposed to projects servicing a "District" community catchment.
Meeting growth demand	20%	Investment is required to meet adopted service levels associated with population growth and participation growth trends.
Compliance / Replacement	20%	<u>Compliance</u> Investment is required to meet legislative compliance and statutory building standards. <u>Replacement</u> Investment is required as the asset has reached the end its whole of life cycle.
External Funding	10%	Projects are assessed for their "eligibility" for external grant funding opportunities and the "confidence" of securing grant funding, based on available knowledge and precedence.
	100%	

New / Upgrade Forecast

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

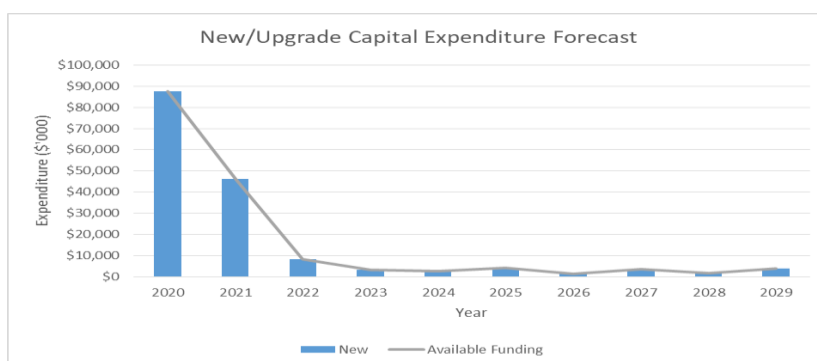


Figure 13 - New/Upgrade Expenditure Forecast

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.

New and Upgrade Conclusion

The LTFF includes funding in 2019-2020 and 2020-2021 financial years for the delivery of council's new administration centre. The LTFF averages for new and upgrade building and facilities is ~\$16.2m per annum.

Total funding required to deliver the planned New/upgrade works is \$162.23m.

Total available funding in the LTFF is \$162.23m therefore there is sufficient funding to deliver the New/upgrade program.

Disposal / Rationalisation

Review of the configuration, type and location of assets and the service delivery process relevant to the activity, when an asset becomes uneconomical to maintain or rehabilitate, or is no longer required.

Disposals and Transfers

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 30*. 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 30 - Assets identified for Disposal

Asset	Reason for Disposal	Timing	Cash flow from disposal
1A Norman Street	End of useful life	2018-2019	Not Available
One Mile – House	In way of Sport Rec development	2011-2012	Not Available
Toilets at Cricket Oval (Lot 2 Redbank Plains Road – L2 RP209604)	End of useful life	2010-2011	-\$15,000
Ebbw Vale custom Car Club Building	End of useful life	2018-2019	Not Available
40 School Road - House	Damaged by vandals	2019-2020	Not Available

Where cash flow projections from asset disposals are not available, these will be developed in future revisions of this asset management plan.

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 31 - 10-Year Forecast Expenditure* below. This gives a 10-year total of ~\$366.18m.

Table 31 - 10-Year Forecast Expenditure

Financial Year Ending	New/Upgrade (\$'000)	Operations (\$'000)	Maintenance (\$'000)	Renewals (\$'000)	Total (\$'000)
2020	\$87,530	\$4,483	\$9,527	\$2,261	\$103,801
2021	\$46,271	\$4,754	\$10,103	\$1,499	\$62,627
2022	\$8,320	\$5,042	\$10,715	\$1,093	\$25,170
2023	\$3,180	\$5,349	\$11,366	\$1,850	\$21,745
2024	\$2,671	\$5,674	\$12,058	\$1,703	\$22,107
2025	\$4,218	\$6,020	\$12,794	\$1,438	\$24,470
2026	\$1,413	\$6,388	\$13,575	\$2,387	\$23,763
2027	\$3,480	\$6,779	\$14,406	\$1,961	\$26,626
2028	\$1,488	\$7,195	\$15,288	\$2,447	\$26,418
2029	\$3,660	\$7,636	\$16,227	\$1,930	\$29,453
Total	\$162,231	\$59,321	\$126,058	\$18,570	\$366,181

The estimated available funding forecast (\$354.9m) is outlined in *Table 24*.

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

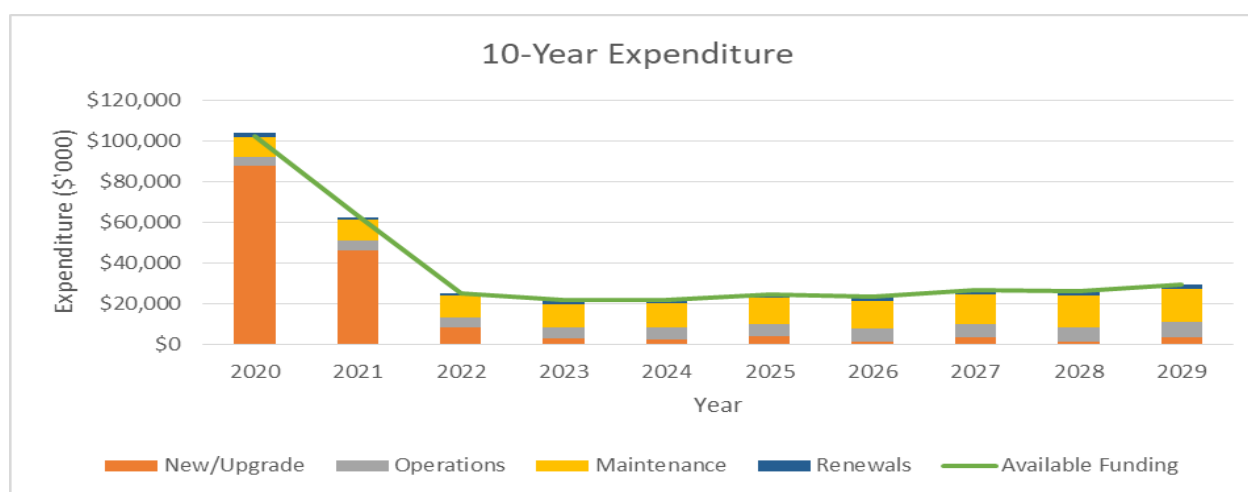


Figure 14 - 10-year Expenditure Forecast

The cumulative gap between the funding and expenditure results in a financial gap of ~\$581k at the end of the 10-year period. This can be seen in *Figure 15*.

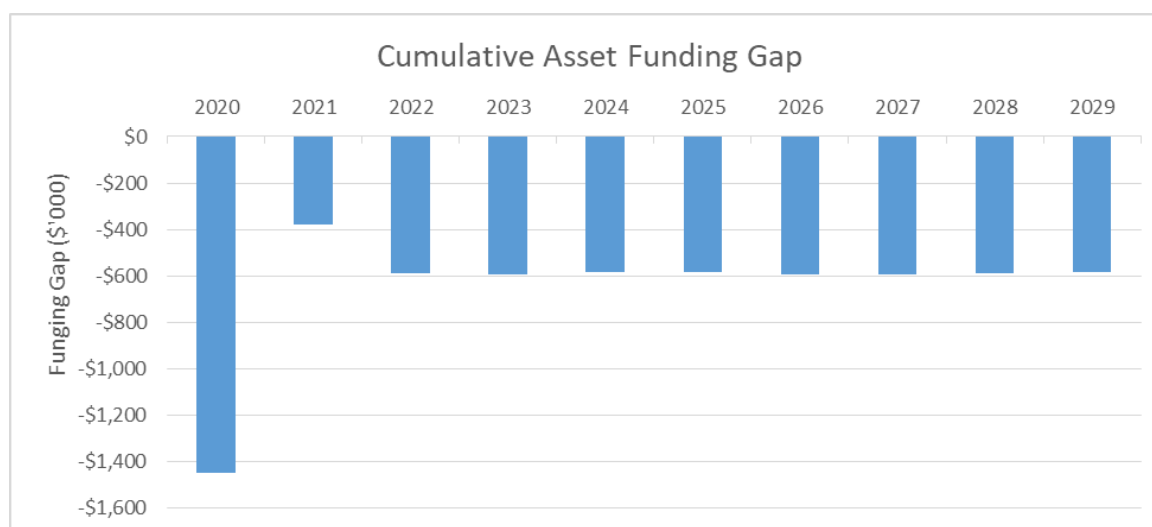


Figure 15 – Funding Gap

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 assumptions made in this AMP are outlined below:

Key elements of the financial forecasts (asset values, depreciable amounts, useful lives, asset condition and consumption) have been derived from recent asset valuations and the FAR as at 3 July 2019. For building assets, componentised condition results are used to formulate the annual capital program.

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 buildings and facilities 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 and dwelling projections and related sequencing. 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 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 32*. The valuation is based on:

- A review of the asset register;
- Unit rates based on Council's construction costs and published rates; and
- Condition assessments to determine remaining useful life.

Table 32 - Asset Valuations

	Replacement Cost (\$000)	Accumulated Depreciation (\$000)	Fair Value (\$000)	Annual Depreciation (\$000)
Buildings and Facilities Assets	\$280,343	\$133,797	\$146,546	\$8,039

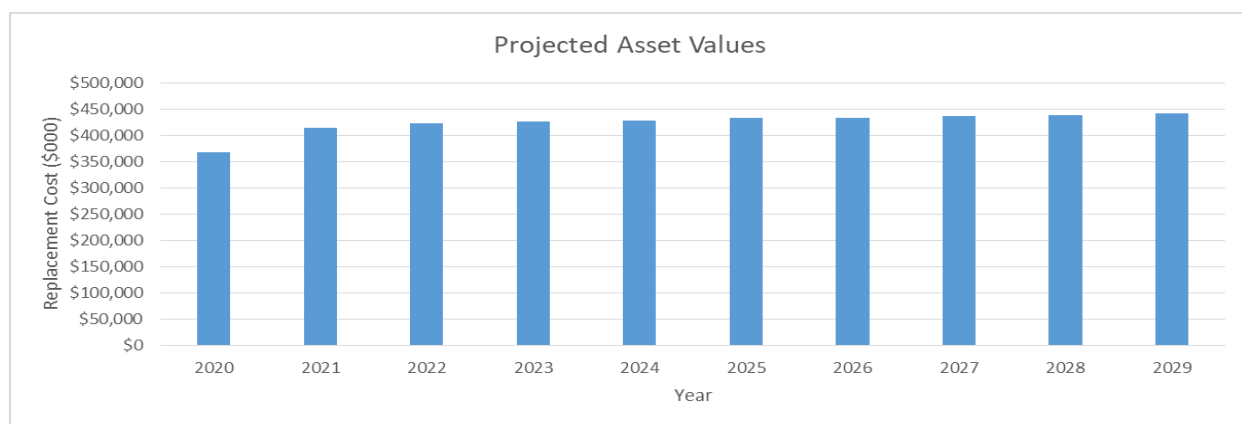


Figure 16 - Asset Valuation Forecast

Asset values are forecast to remain the same no major upgrade capital works are planned at this stage beyond 2022. The significant increase of asset value is a result of the Springfield Field Sporting Clubhouses and new administration building. *Figure 16 - Asset Valuation Forecast* shows the projected asset values over the planning period.

The depreciation expense can be seen in *Figure 17 - Projected Depreciation Expense*. It is anticipated that ~55m of the office buildings within the administration precinct will be disposed or sold.

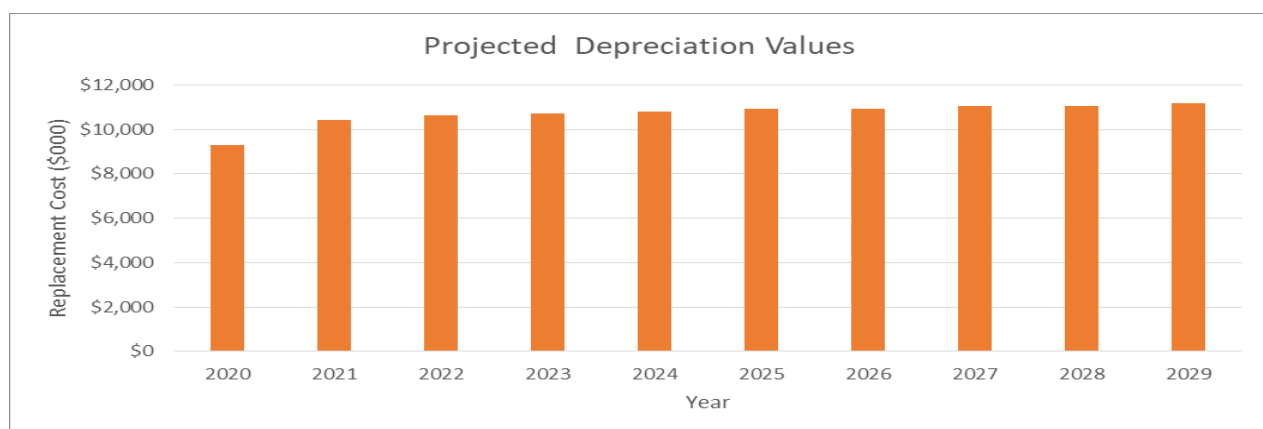


Figure 17 - Projected Depreciation Expense

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*.

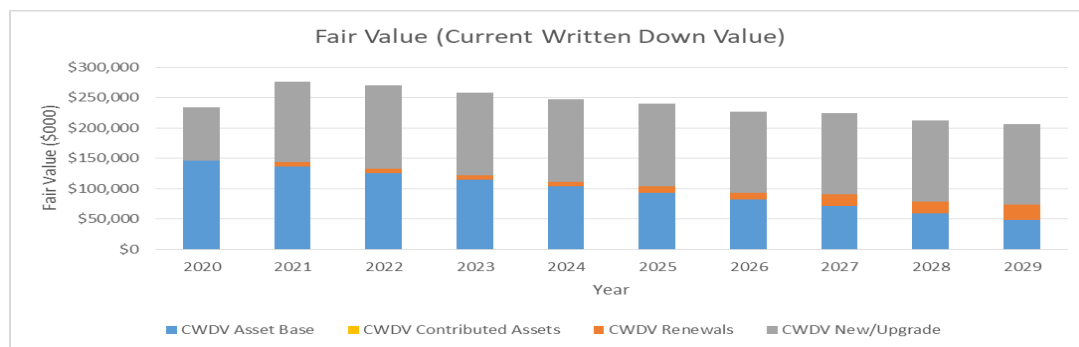


Figure 18 - Projected Value of Depreciated Assets

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 33.

Table 33 - Capital expenditure for 2018-2019 financial year

Year	Capital Renewal Expenditure (\$'000)	Capital New/Upgrade Expenditure (\$'000)	Total Capital Expenditure (\$'000)
2018 -2019	*\$695	*\$77,220	*\$77,915

*Please note. This is based on the 2018-2019 financial year approved budget which has included the CBD revitalisation funding for admin and civic space.

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 = 52.33%

Table 34 -Annual Asset Consumption

Annual Asset Consumption (Depreciation/Depreciable Amount)	2.52%
---	-------

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 35 - Annual Asset Renewal

Annual Asset Renewal (Capital Renewal Expenditure/Depreciable Amount)	0.25%
--	-------

The Annual New & Upgrade ratio provides an indication of the rate of growth of the asset base.

Table 36 - Annual New & Upgrade Ratio

Annual New/Upgrade (Capital New & Upgrade / Depreciable Amount)	38.02%
--	--------

Service Levels Sustainability Ratio

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.

This AMP identifies the estimated maintenance and capital renewals 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 AMP, a gap is generally due to increasing asset renewals.

There are three key indicators for service delivery sustainability that have been considered in the analysis of the services provided by this asset class. These indicators are:

Medium term ratios 5 and 10 year

This ratio compares the projected operations, maintenance and capital renewal expenditures to the available funding. The capital renewal estimate is based on 90% of the depreciation of the asset base. This includes the depreciation on planned new and upgraded assets. It is an indication of the expenditure required to deliver current levels of service to existing customers and cater for growth.

Whole of life ratio

This ratio compares the projected operations, maintenance and capital renewal expenditures to the available funding. The Capital renewal estimate is based on the average renewal costs modelled over 100 years. This does not include the depreciation on planned new and upgrade assets. It is an indication of the expenditure required to deliver current levels of service to the current customer base over the life of the current asset base.

These forecast expenditures have been compared to budgeted allocations for the same expenditure types in the 10-year period to identify any funding discrepancies.

FORMULA

Life Cycle Costs (Ops, Maint, Renewal)/
Funding Allocation

IN OTHER WORDS

Average annual ops, maint, and
renewal costs
Average allocated funding

TARGET

A percentage greater than 90%

Council

5-year = 100%
10-year = 96%
Whole of Life = 79%

Table 37 - Sustainability

	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	\$87,293	\$212,782	\$24,614
Forecast Budget	\$86,893	\$203,368	\$20,336
Funding Surplus	-\$400	-\$9,414.25	-\$5,277
Funding Ratio	~1.0	0.96	0.79
	Planned Works 5 Year Financial Planning Period (\$'000)	Planned Works 10 Year Financial Planning Period (\$'000)	
Forecast Expenditure	\$87,293	\$203,950	
Forecast Budget	\$86,893	\$203,368	
Funding Surplus	-\$584	-\$581	
Funding Ratio	0.99	1.0	

The funding ratios seen in Table 37 indicate that based on the target funding ratio of 0.9 or 90% of the depreciation amount, council's service levels are considered sustainable over the next 10-years, however as the buildings and facilities asset age the increased level of renewal, maintenance and operating expenditure will exceed LTFF expenditure allocations. Therefore, council levels of service are not sustainable over the whole of life of the current assets.

Plan Improvement

Performance Measures

The effectiveness of the AMP can be measured in various ways including:

- The degree to which the required cash flows identified in the development of the final plan are incorporated into Council's long-term financial plan and Community/Strategic Planning processes and documents,
- The degree to which 1-5 year detailed works programs, budgets, business plans and organisational structures take into account the 'global' works program trends provided by the asset management plan;
- 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 the BFAMP, a range of opportunities for improvement to asset management information, systems and processes have been identified and are outlined in *Table 38*.

This plan has a life of three years and is due for major review in 2022.

Table 38 – Improvement Plan

Category	Improvements	Importance	Responsibilities	Resource Requirements	Achieved By
Asset Management Information System and Knowledge	Review the accuracy and completeness of Buildings and Facilities asset registers. Include componentised condition for all buildings and facilities.	Very High	Asset Management	In-house resources	30 June 2020
	Review and record asset condition for all building and facilities 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 that will facilitate optimisation of investment in council assets.	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.	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	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 growth resulting from the construction of new building and clubhouses over the 10-year period of this plan 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 FAR is current as at 3 July 2019.

The physical asset information is derived from recent asset valuation data and current PAR.

The accuracy of the BFAMP 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.

Current condition of the buildings and facilities 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 componentised 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.

Maintenance

The maintenance works, and planned renewal program has been developed through regular inspection of the buildings and facilities assets.

The annual maintenance budgets have been increasing in line with estimated growth and price indices, however, it is anticipated that future budgets will be determined on the basis of physical asset stock, defined service levels and calculated unit rates. Experience to date would suggest that the current level of maintenance expenditure has been sufficient to respond to all identified (through inspections and service requests) maintenance works.

There is enough funding in the LTFF to maintain the current operations and maintenance activity levels. Additional work in the form of an activity based budget review is required to determine if the current activities meet Councils desired service levels.

Renewals

The planned renewal is 97% funded over the 10 year period.

The renewals requirements are based on valuation data which uses a 'straight line' deterioration or consumption model. Although the assets are approaching the end of their theoretical lives, the actual conditions of the assets are in better stance in parison to their age. However, the componentised condition data is not yet available for buildings and facilities. On this basis the planned renewal program which is prepared based on componentised condition assessment data has been adopted as the appropriate model until such time as the componentised condition assessments undertaken by council staff are fully recorded in the asset register. Decisions made using this AMP should consider appropriate reliance on this data.

Financials

The financial reporting of operations, maintenance and capital expenditure is not adequate to support detailed asset management activities and planning. This AMP includes assumptions for the allocation of spending to this asset class.

This AMP does not include funding required to support the improvement initiatives identified necessary to improve accuracy and reliance.

There is sufficient funding in the 10-year LTFF to sustainably maintain the current levels of buildings and facilities services.

Plan Improvements

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 the Improvement Plan.

References

Institute of Public Works Engineering Australia, 2015, International Infrastructure Management Manual

Institute of Public Works Engineering Australia, 2015, IPWEA Condition Assessment & Asset Performance Guidelines – Practice Note 5 v2

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

Ipswich City Council, 2015, Advance Ipswich,

[https://wire.ipswich.qld.gov.au/Documents/CS/Advance Ipswich Community%20Plan.pdf](https://wire.ipswich.qld.gov.au/Documents/CS/Advance_Ipswich_Community%20Plan.pdf)

Ipswich City Council, 2019, Service Catalogue,

<https://wire.ipswich.qld.gov.au/Documents/CS/Services%20Catalogue.pdf>

Ipswich City Council, Corporate Plan 2017-2022,

<https://wire.ipswich.qld.gov.au/Documents/CS/Corporate%20Plan%202017-2022.pdf>

Ipswich City Council, Operational Plan 2018/2019,

<https://wire.ipswich.qld.gov.au/Documents/CS/Operational%20Plan%202018-2019.pdf>

Ipswich City Council, Strategic and Service Delivery Framework,

http://intranet/documents/f&cs/delivery_framework.pdf

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

Ipswich City Council - Building Maintenance Policy

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

National Construction Code of Australia

Disability and Discrimination Act

Appendix B – 10 Year Planned Capital Program

Please note. Below is a high level summary of the 2019-2020 financial year adopted capital program. Please refers to the adopted program for more details and project breakdown.

Project Number	Project Name	Details	Expenditure Type	Expenditure (\$'000)										
				2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
1	Facility Rehabilitation	Repair and replacement of buildings and structures	Renewal	2,011	-	-	-	-	-	-	-	-	-	2,011
2	Facility Rehabilitation	Repair and replacement of buildings and structures	Renewal	-	1,244	-	-	-	-	-	-	-	-	1,244
3	Facility Rehabilitation	Repair and replacement of buildings and structures	Renewal	-	-	833	-	-	-	-	-	-	-	833
4	Facility Rehabilitation	Repair and replacement of buildings and structures	Renewal	-	-	-	1,585	-	-	-	-	-	-	1,585
5	Facility Rehabilitation	Repair and replacement of buildings and structures	Renewal	-	-	-	-	1,432	-	-	-	-	-	1,432
6	Facility Rehabilitation	Repair and replacement of buildings and structures	Renewal	-	-	-	-	-	1,161	-	-	-	-	1,161
7	Facility Rehabilitation	Repair and replacement of buildings and structures	Renewal	-	-	-	-	-	-	2,103	-	-	-	2,103
8	Facility Rehabilitation	Repair and replacement of buildings and structures	Renewal	-	-	-	-	-	-	-	1,671	-	-	1,671
9	Facility Rehabilitation	Repair and replacement of buildings and structures	Renewal	-	-	-	-	-	-	-	-	2,150	-	2,150
10	Facility Rehabilitation	Repair and replacement of buildings and structures	Renewal	-	-	-	-	-	-	-	-	-	1,626	1,626
11	Corporate Facilities	New facilities	New	7,555	-	-	-	-	-	-	-	-	-	7,555
12	Corporate Facilities	New facilities	New	-	561	-	-	-	-	-	-	-	-	561
13	Corporate Facilities	New facilities	New	-	-	7,176	-	-	-	-	-	-	-	7,176
14	Corporate Facilities	New facilities	New	-	-	-	2,120	-	-	-	-	-	-	2,120
15	Corporate Facilities	New facilities	New	-	-	-	-	273	-	-	-	-	-	273
16	Corporate Facilities	New facilities	New	-	-	-	-	-	2,220	-	-	-	-	2,220
17	Corporate Facilities	New facilities	New	-	-	-	-	-	-	283	-	-	-	283
18	Corporate Facilities	New facilities	New	-	-	-	-	-	-	-	2,320	-	-	2,320

Project Number	Project Name	Details	Expenditure Type	Expenditure (\$'000)										
				2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
19	Corporate Facilities	New facilities	New	-	-	-	-	-	-	-	-	298	-	298
20	Corporate Facilities	New facilities	New	-	-	-	-	-	-	-	-	-	2,440	2,440
21	Corporate Facilities	Facilities upgrade	New	900	-	-	-	-	-	-	-	-	-	900
22	Corporate Facilities	Facilities upgrade	New	-	1,989	-	-	-	-	-	-	-	-	1,989
23	Corporate Facilities	Facilities upgrade	New	-	-	1,144	-	-	-	-	-	-	-	1,144
24	Corporate Facilities	Facilities upgrade	New	-	-	-	1,060	-	-	-	-	-	-	1,060
25	Corporate Facilities	Facilities upgrade	New	-	-	-	-	2,398	-	-	-	-	-	2,398
26	Corporate Facilities	Facilities upgrade	New	-	-	-	-	-	1,998	-	-	-	-	1,998
27	Corporate Facilities	Facilities upgrade	New	-	-	-	-	-	-	1,130	-	-	-	1,130
28	Corporate Facilities	Facilities upgrade	New	-	-	-	-	-	-	-	1,160	-	-	1,160
29	Corporate Facilities	Facilities upgrade	New	-	-	-	-	-	-	-	-	1,190	-	1,190
30	Corporate Facilities	Facilities upgrade	New	-	-	-	-	-	-	-	-	-	1,220	1,220
31	Local Amenity - Divisional Allocation - Ipswich Cycle Park	Toilet block (18/19) carry over	New	215	-	-	-	-	-	-	-	-	-	215
32	Other - FCS - CBD Revitalisation	Admin building - construction and other	New	59,610	-	-	-	-	-	-	-	-	-	59,610
33	Other - FCS - CBD Revitalisation	Admin building - construction and other	New	-	43,721	-	-	-	-	-	-	-	-	43,721
34	Other - FCS - CBD Revitalisation	Carpark upgrade	New	6,010	-	-	-	-	-	-	-	-	-	6,010
35	Other - FCS - CBD Revitalisation	Library	New	13,240	-	-	-	-	-	-	-	-	-	13,240
36	Waste - Waste Capital	Refuse centre capital works	Renewal	250	-	-	-	-	-	-	-	-	-	250
37	Waste - Waste Capital	Refuse centre capital works	Renewal	-	255	-	-	-	-	-	-	-	-	255

Project Number	Project Name	Details	Expenditure Type	Expenditure (\$'000)										
				2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
38	Waste - Waste Capital	Refuse centre capital works	Renewal	-	-	260	-	-	-	-	-	-	-	260
39	Waste - Waste Capital	Refuse centre capital works	Renewal	-	-	-	266	-	-	-	-	-	-	266
40	Waste - Waste Capital	Refuse centre capital works	Renewal	-	-	-	-	271	-	-	-	-	-	271
41	Waste - Waste Capital	Refuse centre capital works	Renewal	-	-	-	-	-	277	-	-	-	-	277
42	Waste - Waste Capital	Refuse centre capital works	Renewal	-	-	-	-	-	-	284	-	-	-	284
43	Waste - Waste Capital	Refuse centre capital works	Renewal	-	-	-	-	-	-	-	290	-	-	290
44	Waste - Waste Capital	Refuse centre capital works	Renewal	-	-	-	-	-	-	-	-	297	-	297
45	Waste - Waste Capital	Refuse centre capital works	Renewal	-	-	-	-	-	-	-	-	-	304	304

Appendix C - Acronyms

BFAMP	Building and Facilities Asset Management Plan
AAAC	Average annual asset consumption
AMP	Asset Management Plan
ARI	Average Recurrence Interval
CRC	Current Replacement Cost
DA	Depreciable Amount
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
Vph	Vehicles per hour

Appendix D – 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 E – Legislative Requirements and Standards

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

This AMP contributes to supporting Council's legislative requirements.