BUILDING
ASSET MANAGEMENT PLAN

CONTENTS

1. EXECUTIVE SUMMARY

Context

Adelaide City Council (Council) is the custodian of infrastructure assets held on behalf of the community. Council holds assets to directly or indirectly support delivery of services to the community.

The City of Adelaide Strategic Plan 2016 - 20 contains four key themes which support the delivery of the vision for Adelaide to be a smart, green, liveable, boutique city full of rich experiences. The four themes comprise:

- Smart;
- Green;
- Liveable; and
- Creative.

The targets set the direction and role for Council in the delivery of the Strategic Plan will result in considerable change over the next 10 years in the delivery of building assets.

Adaptation of new technologies, identifying more environmental sustainable solutions and meeting increased community demand through growth will all be factors that will need to be considered to ensure building assets meet community needs.

Council's building assets help to directly or indirectly contribute to the delivery of the objectives and actions to deliver the Strategic Plan. These buildings are provided for the benefit of residents, workers, and visitors to the city.

Effective management of assets enables Council to meet the social, safety, economic, environmental, and recreational needs of the community now and in the future.

Asset planning decisions are based on an evaluation of alternatives which assesses risks and benefits as well as value for money across the asset's lifecycle.

Building assets held provide accommodation for the civic, administrative and operational functions of Council as well as providing community services such as sporting and recreational activities such as libraries, community centres, and public toilets. The building portfolio also includes a number of sites used for commercial (income generating) purposes.

The purpose of this Asset Management Plan (AM Plan) is to review the current and ongoing cost of providing building assets and support the future delivery of building assets that meet the requirements of the community and end users within the available budget.

The Building Asset Class

The Building Asset Class comprises buildings allocated for the following uses:

- Corporate use (including town hall, administration, and depot);
- Community (sporting clubs, community centres, and libraries);
- Commercial assets (leased to third parties for a commercial return); and
- Facilities (including public toilets and pump houses).

These infrastructure assets have a replacement value of $425,232,540.

Whilst the majority of building assets are generally in good condition, their ongoing suitability to meet functional needs has yet to be fully assessed. This will include identifying how well particular assets meet the functional requirements of existing and future users of the buildings.

What does it cost?

The projected financial outlays necessary to provide the services covered by this AM Plan, including operations, maintenance, renewal and upgrade of existing assets over the 10-year planning period is, on average, $13,874,000 per year. This figure includes projections for new assets identified to meet growth in demand. The forecast expenditure comprises, on average, the following:

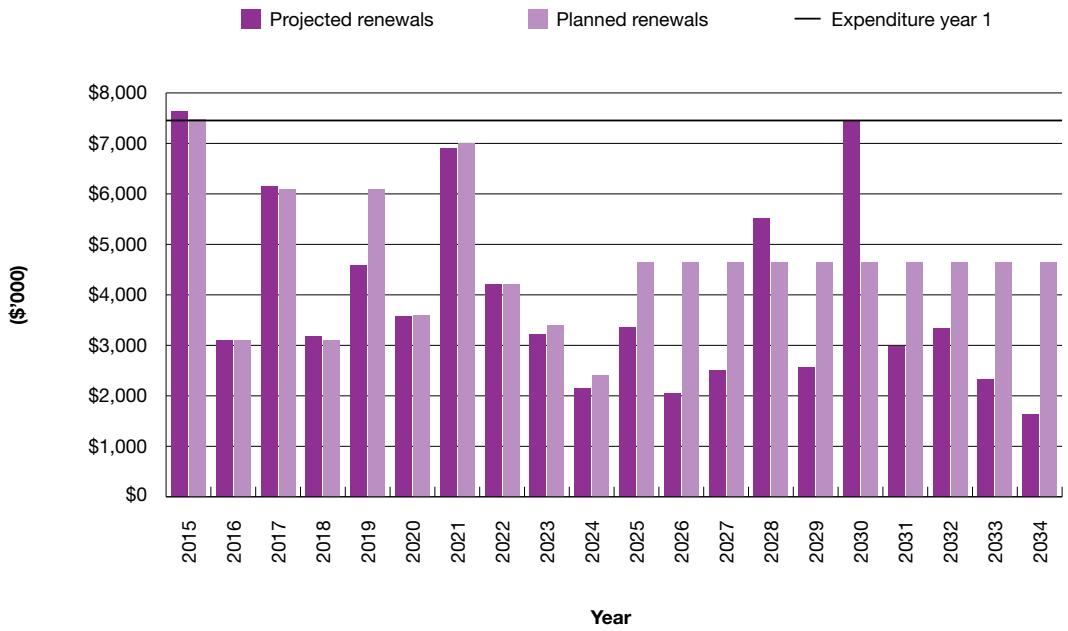
- Operational $4.6 million (33%);
- Maintenance $3.8 million (28%);
- Renewal $4.7 million (34%); and
- Upgrade / new (5%)*.

*Upgrade / new works are included in the AM Plan, but are not included in the *Long Term Financial Plan* (LTFP). Funding for these works will be subject to the annual business plan and budget process.

Estimated available funding for this period is, on average, $13,274,000 per year, which is 95% of the cost to provide the service. This is a funding shortfall of $600,000 on average per year, representing the anticipated expenditure for new or enhanced building assets as identified in the demand section of this AM Plan.

Projected expenditure required to provide services in the AM Plan compared with planned expenditure currently included in the LTFP are shown in the graph below.

Figure 8: Projected and LTFP Budgeted Renewal Expenditure



What we will do

We plan to provide building asset services for the following:

- Subject to additional funding, provide 10 new or upgraded public toilets based on a prioritisation plan over the next 10 years;
- Renewal of carpets and other restoration works identified in the *Asset Maintenance Plan* for the Adelaide Town Hall;
- Operate and maintain all owned and operated buildings to meet legislative requirements and user requirements; and
- Meet owner requirements under the relevant legislative and contractual obligations for all commercial assets leased to third parties.

What we cannot do

The current $600,000 shortfall represents the average expenditure for new building assets as identified in this AM Plan. This shortfall will need to be funded through the annual business planning process.

Managing the risks

There are risks associated with providing the service and not being able to complete all identified activities and projects. We have identified major risks as:

- Unknown structural building conditions;
- Changes to legislation which render buildings non-compliant; and
- Inability to meet changing community demand for new assets.

We will endeavour to manage these risks within available funding by:

- Regular inspection and auditing of buildings including structural audits;
- Prioritising renewal / replacement programs;
- Monitoring customer satisfaction surveys on building condition;
- Reviewing building assets to identify under-utilised or redundant assets for disposal;
- Managing contractual arrangements with building occupiers; and
- Reviewing proactive maintenance programs.

Confidence levels

This AM Plan is based on low level of confidence information as the condition data for all of the building components is incomplete and there has been limited consultation with the community and end users to determine satisfaction with existing levels of service for the buildings.

The next steps

The actions resulting from this AM Plan are:

- Review and align with Council's *Strategic Plan 2016 - 20;*
- Review and align with the updated *Adelaide Park Lands Management Strategy, Adelaide Design Manual,* and other key strategic documents;
- Complete *Public Toilet Action Plan;*
- Complete *Horticultural Hub Action Plan;*
- Improve financial reporting;

- Review and update *Asbestos / Hazardous Material Management Plan;*
- Review performance based on customer satisfaction surveys;
- Review maintenance and operational costs to identify any efficiencies or improvements to proactive maintenance programs;
- Review strategic targets / strategies that relate to building performance that may be developed or revised as part of the strategic planning process; and
- Improve the system for collecting, monitoring and reviewing building condition data, structural condition, and building performance.

Questions you may have

What is this plan about?

This AM Plan covers the infrastructure assets that serve the Council community's building needs. These assets include buildings that support sporting clubs, civic and administration buildings, libraries, community centres, public toilets, public realm depots, and sheds.

What is an AM Plan?

Asset management planning is a comprehensive process to ensure delivery of services from infrastructure is provided in a financially sustainable manner.

An AM Plan details information about infrastructure assets including actions required to provide an agreed level of service in the most cost effective manner. The plan defines the services to be provided, how the services are provided, and what funds are required to provide the services.

What will we do?

We will continue to review and develop options, costs and priorities for future Building services, consult with the community to plan future services to match the community service needs with ability to pay for services and maximise community benefits against costs.

What can you do?

We will be pleased to consider your thoughts on the issues raised in this AM Plan and suggestions on how we may change or reduce the Building mix of services to ensure that the appropriate level of service can be provided to the community within available funding.

2. INTRODUCTION

2.1 Background

Council is the custodian of infrastructure assets held on behalf of the community. Council holds assets to directly or indirectly support delivery of services to the community.

Asset planning decisions are based on an evaluation of alternatives which assesses risks and benefits as well as value for money across the asset's lifecycle.

The purpose of this AM Plan is to demonstrate the responsible management of building assets (and services provided from these assets), compliance with regulatory requirements, and to communicate funding needed to provide the required levels of service over a 20-year planning period.

This plan follows the format for AM plans recommended in Section 4.2.6 of the *International Infrastructure Management Manual*[1].

The AM Plan is to be read with the organisation's *Asset Management Policy* and the following associated planning documents:

- *Draft City of Adelaide Strategic Plan 2016 - 20**
- *Long Term Financial Plan*
- *Community Land Management Plans*
- *Adelaide Park Lands Management Strategy*
- *Adelaide Park Lands Master Plan* and *Building Guidelines*
- *Adelaide Park Lands Sports Infrastructure Master Plan*
- *(and any future strategic plans adopted by Council)

The infrastructure assets covered by this AM Plan are shown in Table 2.1. These assets are used to provide accommodation for civic, corporate, commercial, and community sporting and recreational uses as well as accommodating the public realm operational staff and the provision of public toilets to the community.

Table 2.1: Assets Covered by this Asset Management Plan

Asset category	Quantity	2013 Replacement value
BUILDINGS		
• Corporate	4	$118,279,900
• Community	80	$101,184,630
• Commercial	12	$195,385,440
• Facilities	78	$10,382,900
TOTAL	**174**	**$425,232,540**

Note: Some assets provide multiple sub-categories e.g. a sporting club (community) and public toilet (facilities) located in the same building.

Examples of buildings in these sub categories include:

Corporate buildings: Civic (Council Governance – Chamber / Committee Rooms, Mayor and Elected Members Offices, Civic Reception)
Administrative (administration offices, nursery, depot)

1. IPWEA, 2011, Sec 4.2.6, Example of an AM Plan Structure, pp 4|24 – 27.

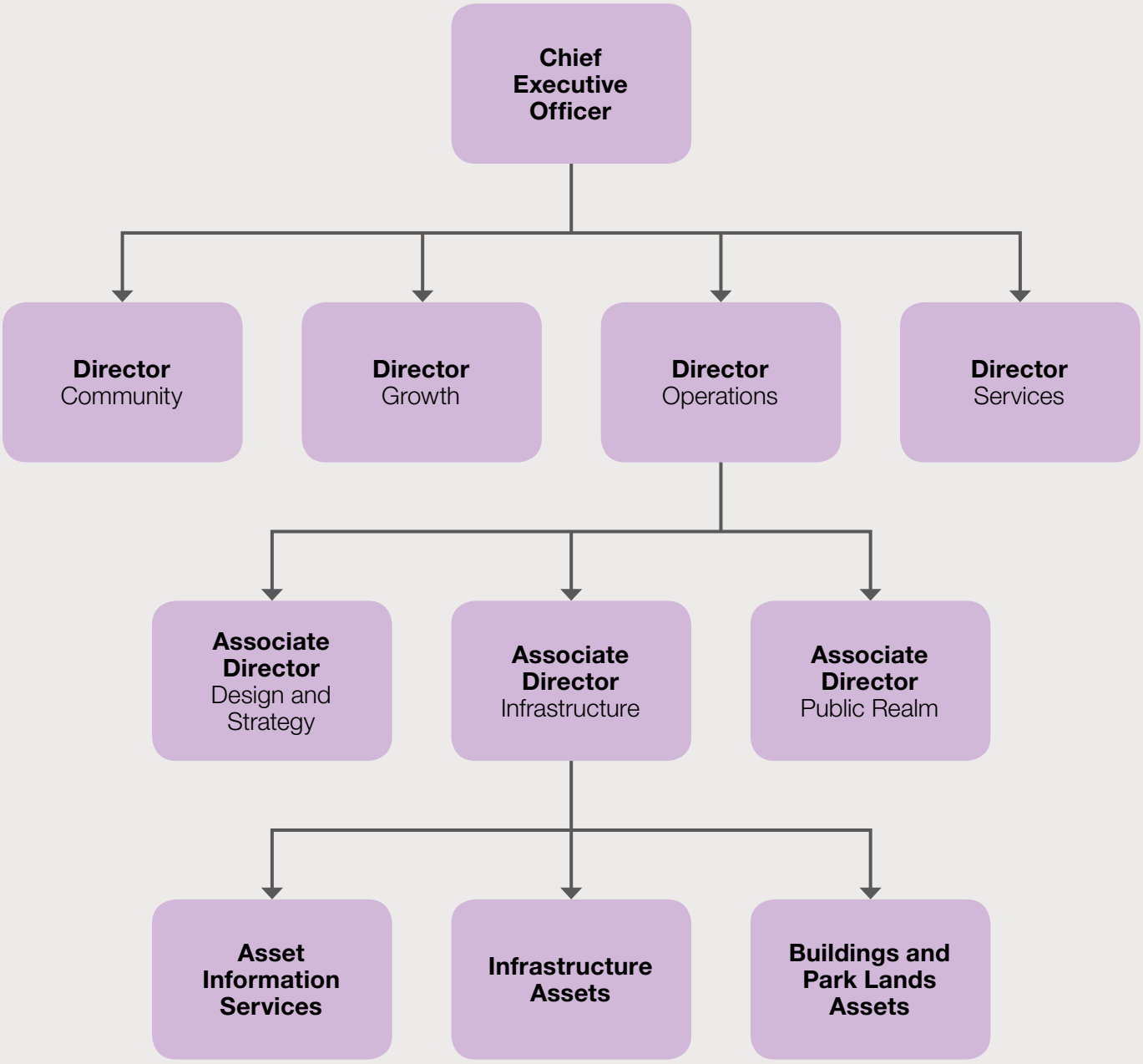
Community buildings:	Sporting and community buildings (leased by third parties) Libraries and community centres, visitor information centres (operated by Council staff) Sporting facilities (operated by Council staff)
Commercial buildings:	Park Lands and non-Park Land buildings leased to commercial operators
Facilities:	Public toilets Public realm facilities (storage sheds, lunchrooms, change facilities) Pump houses and other plant rooms

Key stakeholders in the preparation and implementation of this AM Plan are: Shown in Table 2.1.1.

Table 2.1.1: Key Stakeholders in the Asset Management Plan

Key stakeholder	Role in AM Plan
Elected Members	• Represent needs of community; • Allocate resources to meet the organisation's objectives in providing services while managing risks; and • Ensure organisation is financial sustainable.
CEO / Directors	Allocate staffing resources.
Infrastructure Program	Prioritise and plan for required works to meet required service levels for buildings based on end user requirements. Development of forward budgets to enable works to be funded.
Lessees – commercial and community lessees (sporting and community groups)	Provide feedback on services.
Community and builder users	Provide feedback on services.
Internal users of building assets (e.g. libraries, community centres, administrative staff, depot)	Provide input and advice on future requirements and identify opportunities to maximise end user satisfaction with Building Asset Class.
Council (internal) Strategic Planners	Work with Asset Managers to develop strategies that can be supported through the AM Plans.
Public Realm Program	Provide input and maintain the infrastructure managed under the AM Plan to meet technical levels of service, whether internally or through third party contractors.
Capital Project Management Team	Delivery of the capital works projects.
Design and Strategy	Design, documentation support for delivering capital works projects, and strategic outcomes.
Finance and Businesses	• Funding for LTFP; and • Provide input and advice on future requirements for ongoing operation of commercial car parks.
Property	Provide input on potential acquisitions and disposal of investment assets and / or review of performance of building assets, manage building occupiers.
Governance	Development of annual business plan and budget, Strategic Management Plan, and other key strategic plans.

The organisational structure for service delivery from infrastructure assets is detailed below:



2.2 Goals and Objectives of Asset Management

The organisation exists to provide services to its community. Some of these services are provided by infrastructure assets. We have acquired infrastructure assets by 'purchase', by contract, construction by our staff, and by donation of assets constructed by developers and others to meet increased levels of service.

Effective management of assets enables Council to meet the social, safety, economic, environmental, and recreational needs of the community now and in the future.

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

- Providing a defined level of service and monitoring performance;
- Managing the impact of growth through demand management and infrastructure investment;
- Taking a lifecycle approach to developing cost-effective management strategies for the long term that meet the defined level of service;
- Identifying, assessing, and appropriately controlling risks; and
- Having a LTFP which identifies required, affordable expenditure, and how it will be financed[2].

2.3 Plan Framework

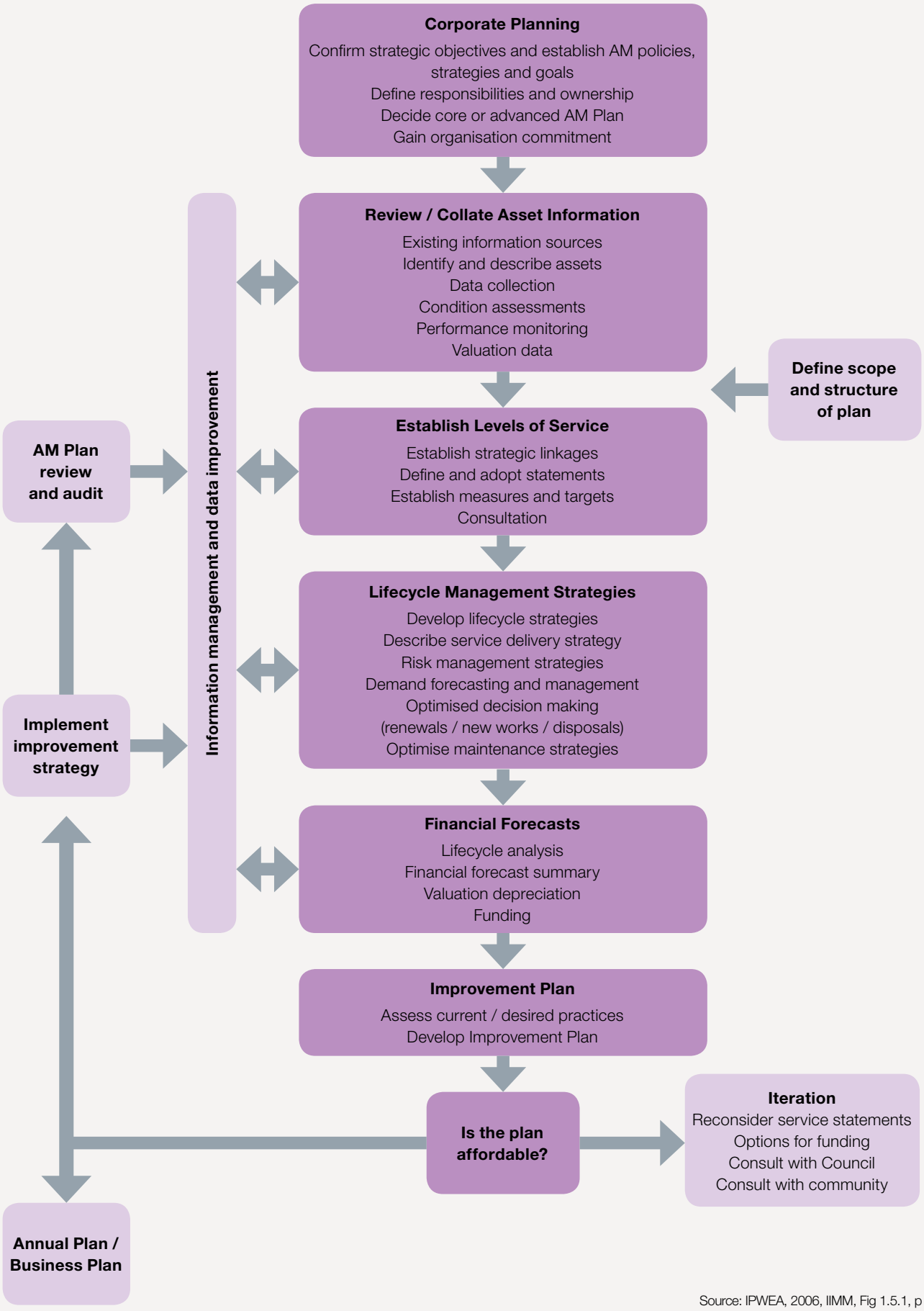
Key elements of the plan are as follows:

- Levels of service – specifies the services and levels of service to be provided by the organisation;
- Future demand – how this will impact on future service delivery and how this is to be met;
- Lifecycle management – how we will manage our existing and future assets to provide defined levels of service;
- Financial summary – what funds are required to provide the defined services;
- Asset management practices;
- Monitoring – how the plan will be monitored to ensure it is meeting the organisation's objectives; and
- Asset Management Improvement Plan.

A road map for preparing an AM Plan is shown on the following page.

2. Based on IPWEA, 2011, IIMM, Sec 1.2 p 1|7.

Road Map for preparing an Asset Management Plan



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

2.4 Core and Advanced Asset Management

This AM Plan is prepared as a 'core' AM Plan over a 20-year planning period in accordance with the *International Infrastructure Management Manual*[3]. 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.

Future revisions of this AM Plan 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.

2.5 Community Consultation

This 'core' plan is prepared to facilitate community consultation initially through feedback on public display of draft AM Plans prior to adoption by the Council. Future revisions of the AM Plan will incorporate community consultation on service levels and costs of providing the service. This will assist the Council and the community in matching the level of service needed by the community, service risks, and consequences with the community's ability and willingness to pay for the service.

3. IPWEA, 2011, IIMM.

3. LEVELS OF SERVICE

3.1 Customer Research and Expectations

In May 2015, Council undertook a customer service survey to measure the satisfaction of customers using Council services delivered by infrastructure assets.

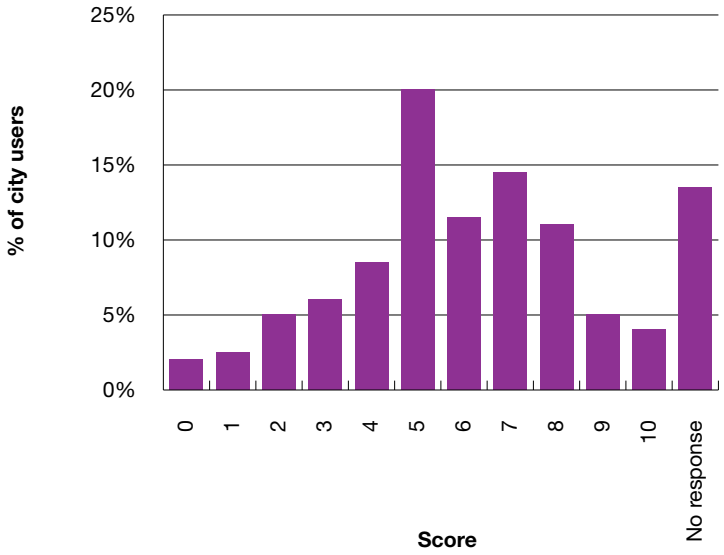
Over 2,000 city users were surveyed via an 'on street intercept' method at various locations across the city. To ensure that information was captured from a broad range of city users, surveys were conducted at various times throughout the day and in the evening as well as on weekdays and weekends.

Users of the city were asked on their perceptions of Council's performance on various aspects of public realm. Respondents were asked to provide a score of zero to 10 where 'zero' meant Council was performing a lot worse than expected and '10' meant that Council was performing a lot better than expected.

For buildings, the survey measured the satisfaction with the provision of adequate public toilets. This survey resulted in an average score of 5.8. This midway point shows that the majority of respondents seemed to feel that the provision of adequate public toilets was neither worse nor better than expected. Only 20% of city users provided a score of eight and above for this category.

Provide Adequate Public Toilets

Source: 2015 Adelaide City Council Customer User Perception (CUP) survey



Between March and July 2015, public engagement on the Adelaide Park Lands was undertaken to identify community expectations to assist in the development of the *Adelaide Park Lands Management Strategy*. Feedback received from this engagement identified support for provision of facilities that will enable people to stay longer and feel more comfortable in the Park Lands. For the building portfolio, this primarily relates to the provision of public toilets, whilst the sporting and recreational buildings support the ongoing activation and vibrancy of the Park Lands.

In November 2015, consultation on the draft AM Plan community levels of service was undertaken. The results of this consultation were consistent with both the earlier customer satisfaction survey and Park Lands consultation with the delivery of public toilets the only area where an increase in the service delivery was identified.

Table 3.1: Levels of Service

Asset	Decrease	Adequate	Increase	Comments
BUILDINGS				
Library		□		The quality of libraries is considered to be very good.
Sporting facilities		□		Sporting facilities are considered to be predominantly well maintained.
Public toilets		□	□	Satisfaction with public toilets varies. Some are considered adequate and others need improved maintenance and signage towards them.
Community centres		□		Community centres are considered to be predominantly well maintained.
Other		□		Other facilities, such as the Aquatic Centre and Town Hall are considered adequate.

Figure 22: Council Buildings Most Regularly Used

Source: 2015 Adelaide City Council survey on AM Plan community levels of service

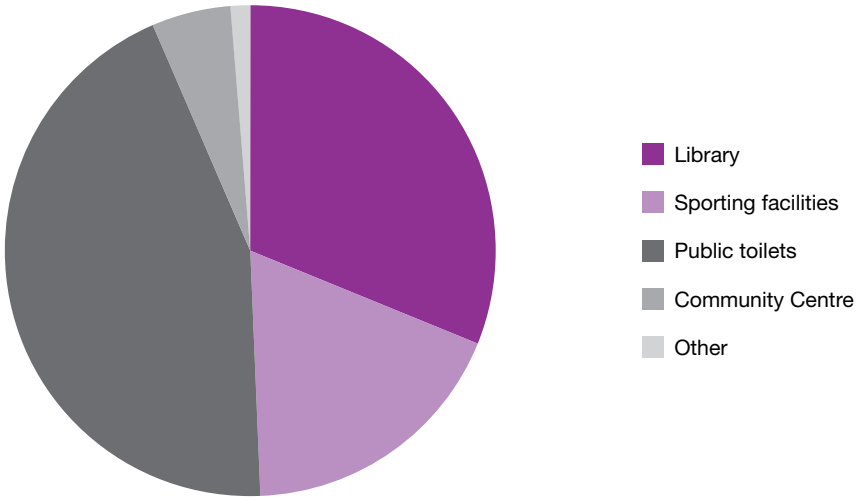
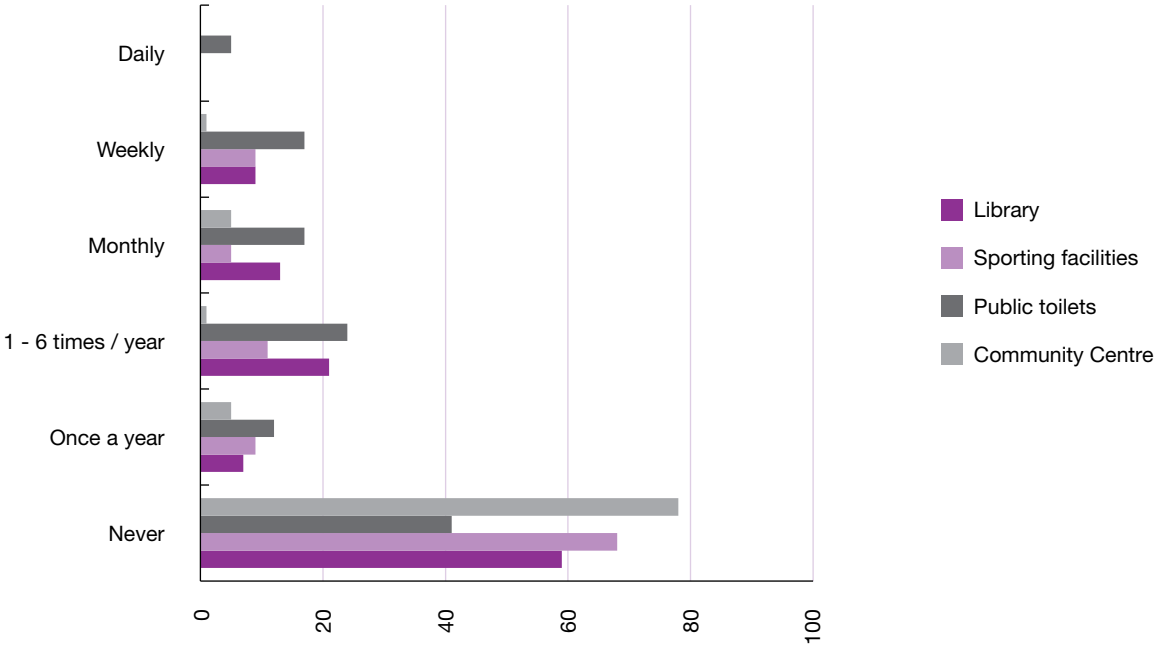


Figure 23: Utilisation of Council Buildings

Source: 2015 Adelaide City Council survey on AM Plan community levels of service



3.2 Strategic and Corporate Goals

The content of this AM Plan was prepared in early 2014 under the direction of *The City of Adelaide Strategic Plan 2012 - 16* and associated *Corporation Plan 2012 - 16* and reflects the goals and aspirations of the previous Council term (November 2010 - October 2014).

With the election of the new Council in October 2014, a new *Council Strategic Plan 2016 - 20* was under development during the finalisation of this AM Plan. Objectives and Actions from the updated plan have been identified in Table 3.2 below.

From the information available, the following vision, objectives and actions in *The City of Adelaide Strategic Plan 2016 - 20* associated with community services provided by building infrastructure assets have been identified.

Our vision is:
Adelaide is a smart, green, liveable, boutique city full of rich experiences

Our primary goal is:
To strengthen the City economy by growing the number of people living, working, playing, visiting and studying in the City every day

As the capital city of South Australia, Adelaide has a vital role to play in shaping the future of our state.

We face unprecedented changes arising from major global, national, and local trends. Reassuringly, our proven record of creativity, innovation, and social transformation sees our city well placed to lead the state in meeting these changes.

Our plan is to enrich Adelaide's lifestyle and boost its growth by becoming one of the world's smartest cities with a globally connected and opportunity rich economy.

We will be one of the world's first carbon neutral cities and a global leader in sustainability and responding to environmental change.

Adelaide will always be a distinctively unique capital city that supports a balanced lifestyle and a strong community. Our authentic and diverse range of experiences will be internationally renowned.

Our mission:

To achieve the vision, Council has adopted four key outcomes which will guide the organisations projects, plans, policies and strategies including this AM Plan. The four outcomes / mission statements are:

- **Smart** – A world smart city with a globally connected and opportunity rich economy;
- **Green** – One of the world's first carbon neutral cities and an international leader in environmental change;
- **Liveable** – A diverse and welcoming capital city with an enviable lifestyle and strong community; and
- **Creative** – A city of authentic and internationally renowned experiences.

Relevant objectives and actions from *The City of Adelaide Strategic Plan 2016 - 20* and how these are addressed in this AM Plan are identified below.

The review of the Strategic Plan has only been undertaken at a high level, with a greater analysis required to identify any budget modification or changes to service delivery.

This review will commence once the new Strategic Plan has been formally adopted by Council.

Table 3.2: Strategic Plan 2016 - 20 Objectives and Actions and how these are addressed in this Asset Management Plan

Aspiration	Objective	Action	How aspirations and objectives are addressed in AM Plan
Smart	By 2020, our city's economy is growing faster than the Australian economy, on the way to an annual growth of 5% by 2040.	Promote opportunities and develop projects to showcase the city's unique heritage and character as a catalyst for sustainable growth and to grow the heritage tourism market.	Regular maintenance and inspection of buildings. Setting appropriate maintenance standards for heritage listed buildings.
	Total businesses in the city will grow from 5,000 to over 5,300 and workers from 89,000 to 94,000 by 2020, on the way to 7,000 businesses and over 102,000 workers by 2040.	By 2017, review Council's commercial operations to determine the best management models.	Work with building occupiers to determine appropriate maintenance standards to support operational requirements.
Green	Reduce city carbon emissions by 35% from the 2006 - 07 baseline, on the way to an 80% real reduction by 2040.	Improve energy performance and use of renewable energy in Council and privately owned buildings, including consideration of high tech wind turbines, solar heating and solar energy generation and battery storage.	Support environmentally sustainable design, construction and management of city buildings.
		By 2020, the energy requirement for all Council buildings will be sourced from renewable energy sources.	Building maintenance to include focus on replacing building components with sustainable and more energy and water efficient solutions.
	Green space and greenery in the built up areas of the city to increase by 100,000 square meters by 2020 on the way to a real reduction in city temperatures by 2040.	Increase public and private city greening with street trees, gardens, community gardens, green walls and roofs, vegetable gardens on street verges, providing incentives where appropriate.	Explore opportunities to include roof gardens, green walls on existing and new buildings.

Table 3.2: Strategic Plan 2016 - 20 Objectives and Actions and how these are addressed in this Asset Management Plan *continued*

Aspiration	Objective	Action	How aspirations and objectives are addressed in AM Plan
Liveable	The number of people living in the city will grow from 23,000 to 28,000 by 2020, on the way to 50,000 by 2040.	Create world-class infrastructure by adopting a three-year rolling capital works program for the city and Park Lands to ensure all new and existing infrastructure are delivered and maintained to high quality standards, incorporating technology, heritage, arts and green elements.	Maintain a three-year rolling capital works program to ensure all new and existing infrastructure are delivered and maintained to high quality standards.
			Regular maintenance and inspection of buildings. Setting appropriate maintenance standards for heritage listed buildings.
	Adelaide is listed in the top three most liveable cities in the world by 2020, on the way to being the most liveable in 2040.	By 2017, endorse a Central Market Arcade Redevelopment Plan and commence works by 2019.	Work with stakeholders to plan for any identified enhancements to buildings that may support the delivery of this objective.
		Work with the State Government to tackle affordability and deliver a range of housing initiatives, such as adaptive building re-use and new building technologies. Explore opportunities in Council's current property holdings or pursue strategic opportunities to lead or partner in future property developments.	Future demand is included in Section 4. *The Lifecycle Management Plan* (Section 5) includes the development of an ongoing asset renewal program.
Creative	The number of people attending events in the city and Park Lands has grown by 5% by 2020, on the way to 15% growth by 2040.	By 2020, develop build and upgrade infrastructure that supports events and is sensitive to the environment within key event spaces in the city and Park Lands.	Future demand is included in Section 4. Ongoing consultation with key stakeholders will identify any changes to the delivery of community assets.

3.3 Legislative Requirements

The organisation has to meet many legislative requirements including Australian and State legislation and State regulations. These include:

Table 3.3: Legislative Requirements

Legislation	Requirement
Local Government Act 1999	Sets out role, purpose, responsibilities, and powers of local governments including the preparation of a LTFP supported by asset management plans for sustainable service delivery.
Building Code of Australia	Meet requirements for occupation under the approved Building Class.
Development Act 1993	Regulates the use and management of buildings including their design and construction, ongoing maintenance, and conservation.
Disability Discrimination Act 1992	To ensure persons with disabilities have access to the building and facilities.
Heritage Act 1993 and Heritage Places Act 1993	The portfolio includes buildings that are State and Locally Heritage listed buildings. These Acts set out the responsibilities of the land owner to maintain and preserve the heritage value of the buildings.
Work Health and Safety Act 2012	Provide a safe work environment for workers on the site.
Environment Protection Act 1993	Responsibility not to cause environmental harm (e.g. noise pollution, contamination of water).
Public Health Act 2011	Maintenance of cooling towers.
Food Act 2001	Sets out standards for food handling.
Liquor Licensing Act 1997	Sets out responsibilities for holders of liquor licence.
Adelaide Park Lands Act 2005	Specific requirement relating to the management and use of the Adelaide Park Lands.
City of Adelaide Act 1998	Sets out to establish mechanisms to enhance the role of the city of Adelaide as the capital city of South Australia; to make special provision in relation to the local governance of the city of Adelaide; and for other purposes.
Retail and Commercial Leases Act 1995	An Act regulating the leasing of certain properties.

The Council will exercise its duty of care to ensure public safety in accordance with the *Infrastructure Risk Management Plan* prepared in conjunction with this AM Plan. Management of infrastructure risks is covered in Section 5.2.

3.4 Community Levels of Service

Levels of service are measures that can identify the service quality of an activity. Levels of service can be classified into different categories. In this AM Plan, two categories have been used: community levels of service and technical levels of service. These levels of service identify what will be provided to the community.

Levels of service are determined from the public consultation process and customer satisfaction surveys. They reflect the strategic objectives of Council and are based on:

- Customer expectations for quality of service and willingness to pay;
- Legislative requirements: environmental standards, regulations, and legislation that impacts the way assets are managed;
- Council's mission and objectives as stated in the Strategic Plan;
- Available resources, particularly financial constraints; and
- Design Standards and Codes of Practice.

Community levels of service measure how the community receives the service and whether the organisation is providing community value.

Community levels of service measures used in the AM Plan are:

Quality How good is the service?

Function Does it meet users' needs?

Capacity / utilisation Is the service over or under used?

The current and expected community service levels are detailed in Tables 3.4 and 3.5. Table 3.4 shows the agreed expected community levels of service based on resource levels in the current LTFP and community consultation / engagement. Current performance is based on the results of the customer satisfaction survey undertaken in 2015 (CUP survey).

Table 3.4: Community Levels of Service

Service attribute	Service objective	Performance measure process	Current performance (2015)	Expected position in 10 years based on current LTFP
COMMUNITY LEVELS OF SERVICE				
Quality (Condition)	Provide buildings of an appropriate standard.	Customer Satisfaction Survey Customer service requests	2% disagree that buildings are of satisfactory standard.	Less than 5% of customers dissatisfied.
Function (Suitability)	Meet user requirements.	Customer Satisfaction Survey Customer service requests	4% disagree that buildings meet their needs.	Less than 5% of customers dissatisfied.
Function (Accessibility)	Buildings accessible and available to meet demand.	Customer Satisfaction Survey Customer service requests	4% disagree that buildings are easily accessible.	Less than 5% of customers dissatisfied.
Capacity (Quantity)	Availability of Council buildings across the city meets demand.	Customer Satisfaction Survey Customer service requests	5% disagree that buildings are easily accessible.	Less than 5% of customers dissatisfied.
Capacity (Quantity)	Provide public toilets at regular intervals across the CBD and Park Lands.	Customer requests / consultation feedback	Undersupply of public toilets across city.	Undersupply of public toilets.

3.5 Technical Levels of Service

Technical levels of service - supporting the community service levels are operational or technical measures of performance. These technical measures relate to the allocation of resources to service activities that the organisation undertakes to best achieve the desired community outcomes and demonstrate effective organisational performance.

Technical service measures are linked to annual budgets covering:

- Operations – the regular activities to provide services such as opening hours, cleansing, and energy;
- Maintenance – the activities necessary to retain an asset as near as practicable to an appropriate service condition (e.g. gutter cleaning, equipment servicing, minor repairs);
- Renewal – the activities that return the service capability of an asset up to that which it had originally (e.g. frequency and cost of painting and building component replacement such as air conditioners); and
- Upgrade – the activities to provide a higher level of service (e.g.) or a new service that did not exist previously (e.g. a new library).

Service and Asset Managers plan, implement, and control technical service levels to influence the customer service levels[4].

Table 3.5 shows the technical level of service expected to be provided under this AM Plan. The agreed sustainable position in the Table documents the position to be agreed by the Council following community consultation and trade-off of service levels performance, costs, and risk within resources available in the LTFP.

4. IPWEA, 2011, IIMM, p 2.22

Table 3.5: Technical Levels of Service

Service attribute	Service objective	Activity measure process	Current performance *	Desired for optimum lifecycle cost **	Agreed sustainable position ***
TECHNICAL LEVELS OF SERVICE					
Operations	Buildings meet needs of occupiers and / or customer level of service.	Annual condition inspection	Planned and unplanned maintenance and maintenance response times (Appendix A) and cleaning and security schedules.	To be reviewed.	To be developed.
		Budget	Cleaning (Internal) $500,000; Cleaning (Contract) $854,000; Rubbish removal $92,000; Security $385,000; Electricity $1,485,000; Gas $88,300; and Water $806,400.		
Maintenance	Buildings meet relevant legislative requirements.	Planned maintenance and inspection program completed	As per planned and unplanned maintenance and maintenance response times (Appendix A) and individual cleaning and security schedules.	To be reviewed.	
	Programmed maintenance to support building functionality.	Response times for reactive maintenance completed within agreed times	90% of all contractors KPIs for planned work and reactive response times are being met.		
		Budget	Essential safety maintenance: • Fire $180,000; • Electrical $349,000; • Lift maintenance $204,000; and • Air conditioning $304,000. Programmed maintenance: • Painting $80,500.		
Renewal	Renew components at end of useful life having regard to strategic alignment.	Audit / inspection End user consultation Strategic direction	Three-year rolling renewal program in place.	To be reviewed.	To be developed.
Upgrade / new	Provide new facilities or upgrade existing to meet end user requirements.	Condition audit / inspection	Town Hall five-year plan adopted and funded.	Upgrade and new assets are planned, prioritised and funded.	To be developed.
		Strategic directions	Other asset are subject to development of business case for upgrade / new assets.		

Note: * Current activities and costs (currently funded). ** Desired activities and costs to sustain current service levels and achieve minimum lifecycle costs (not currently funded).
*** Activities and costs communicated and agreed with the community as being sustainable (funded position following trade-offs, managing risks and delivering agreed service levels).

4. FUTURE DEMAND

4.1 Demand Drivers

Drivers affecting demand include population change, demographic changes, seasonal factors, vehicle ownership rates, consumer preferences and expectations, technological changes, economic factors, and environmental factors.

As a capital city, building assets must serve both the local resident population needs as well as the daily commuter and visitor needs to the city. Demand for the services supported by the building assets will therefore be influenced by factors external to the fixed resident base.

The influence of other tiers of government, particularly the State Government is another driver that can impact on the demand for building assets or the level of service provided through those assets.

Further research to inform the development of plans for the upgrade, renewal or provision of new facilities to meet future demand has been identified in the improvement program (Section 7.2) of this AM Plan.

4.2 Demand Forecast

The present position and projections for demand drivers that may impact future service delivery and utilisation of assets are identified and are documented in Table 4.3. The main drivers (discussed in detail in 4.3) arise from the projected increase in the city population and increased activation and utilisation of the Park Lands.

4.3 Demand Impact on Assets

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

Table 4.3: Demand Drivers, Projections, and Impact on Services

Demand drivers	Present position	Projection	Impact on services
Population growth (as identified in State Strategy)	Estimated population in 2014 – 22,000.	The *30-year Plan for Greater Adelaide* includes a target to increase the city's residential population to 48,000 by 2040. Council research forecast dominant increase in population by 2034 is within the 20 - 24 age group and this group will represent over 20% of total population, with 36% of the population in the 20 - 29 year age group, predominantly in sole person households.	Increased demand for social infrastructure assets such as libraries, recreational, and community facilities.
The City of Adelaide Strategic Plan 2016 - 20	Objectives and actions have yet to be endorsed by Council.	Increase the use of 'green' technology to increase the sustainability of Council owned buildings and reduce carbon emissions.	Additional capital and ongoing maintenance and operational costs to improve sustainability of buildings and installation of green roofs / green walls including additional costs to monitor ongoing performance.
		Redevelopment of the Central Market Arcade.	Redevelopment or enhancement of buildings may increase operational and maintenance costs.
		Enhance historic buildings to encourage tourism.	
		Redevelopment of key Council sites to deliver Strategic Plan objectives.	Additional infrastructure to support events may include additional fixed buildings (such as public toilets) which will increase ongoing maintenance and operational costs.
		Upgrade infrastructure to support events.	
Adelaide City Retail Strategy 2015 - 20	Thirteen Council buildings provide retail accommodation.	Major refurbishment of Central Market Arcade and upgrade to other commercial buildings to align with the guiding principles of the retail strategy.	Improve services (such as free WIFI) and providing flexible retail spaces may increase maintenance and operational costs in Council owned retail buildings.
Park Lands Management Strategy	Consultation undertaken.	Feedback has identified more public toilets for Park Lands are required.	Change in operating and maintenance costs and future replacement costs.

Table 4.3: Demand Drivers, Projections, and Impact on Services *continued*

Demand drivers	Present position	Projection	Impact on services
Community demand for sport and recreational buildings	*Sports Infrastructure Master Plan for West and South Park Lands* identifies 41 buildings within Parks. 17, 18, 19, 20, 21, 23, 24, 25, and 30 are primarily for sporting / recreational club use.	Increased demand for sporting facilities within Park Lands Renewal of major buildings within West and South Park Lands.	Under *Master Plan for West and South Park Lands* – efficiencies are expected through provision of facilities that are multi-functional and shared.
	Adelaide Park Lands Visitor Research Study 2014 notes 20% of the 8.9 million visits to the Park Lands each year are for organised sports and school use, primarily in the Southern and Western Park Lands. The highest visitation (21%) is for informal uses,	Amalgamation of sites. Significant upgrade of buildings with higher overall utilisation. Increased demand for facilities within balance of Park Lands to meet community demand.	Demand in other parts of the Park Lands may require redevelopment of existing facilities.
Public Toilet Operating Guidelines / Good Evening Adelaide	Currently 41 Public Toilet sites across the city. Target to encourage evening activation in the city including smaller entertainment venues / pop up businesses / events.	Additional toilet facilities to meet spatial distribution proposed in guideline. Additional infrastructure may be required to support pop ups / smaller venues.	Additional operating and maintenance costs and future replacement costs.
Workforce Strategy	Currently workforce accommodated across Town Hall, administration centre, depot, nursery, libraries, community and recreational facilities, and public realm sheds.	Potential change in type of accommodation to meet needs of administration and operational staff to support the delivery of services to the community in the future.	Accommodation provided can assist with supporting the delivery of services to the community – any changes must identify the associated impact on service delivery.

4.4 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.

Non-asset solutions focus on providing the required service without the need for the organisation to own the assets and management actions including reducing demand for the service, reducing the level of service (allowing some assets to deteriorate beyond current service levels) or educating customers to accept appropriate asset failures[5]. Examples of non-asset solutions include providing services from existing infrastructure such as Aquatic Centres and libraries that may be in another community area or public toilets provided in commercial premises.

Opportunities identified to date for demand management are shown in Table 4.4. Further opportunities will be developed in future revisions of this AM Plan.

Table 4.4: Demand Management Plan Summary

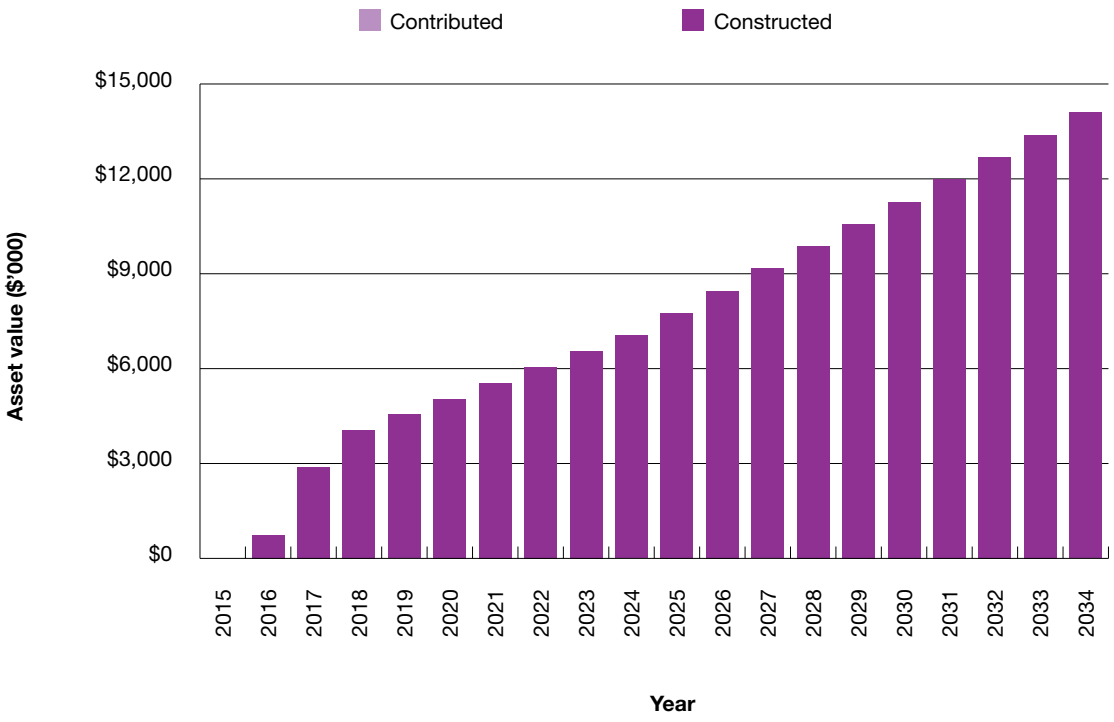
Demand driver	Impact on services	Demand Management Plan
Additional sporting, events, and recreational facilities within the Park Lands.	Increased operational, maintenance, and renewal costs.	*Park Lands Management Strategy.* *Sports Infrastructure Master Plan for West and South Park Lands* identified partnering with sporting organisations or other lessees to co-fund / fully fund new assets. *Victoria Park Master Plan.* *Park Lands Event Plan.* Master plans to be developed for other recreational areas within Park Lands.
Additional public toilets.	Increased operational, maintenance, and renewal costs.	Prioritised Implementation / Action Plan (to be finalised).
Disability Discrimination Act.	Improve accessibility to buildings.	Disability Discrimination Act Management Plan to be developed to prioritise rectification of identified deficiencies through planned schedule of work or management strategies.
The City of Adelaide Strategic Plan 2016 - 20 – redevelopment of key Council sites to deliver Strategic Plan objectives.	Increased operational, maintenance, and renewal costs.	Feasibility assessment of future property development projects will be used to inform decision making and prioritisation.

5. IPWEA, 2011, IIMM, Table 3.4.1, p 3|58.

4.5 Asset Programs to meet Demand

The new assets required to meet growth may be acquired free of cost from land developments or constructed / acquired by the organisation. New assets constructed / acquired by the organisation are discussed in Section 5.5. The cumulative value of new contributed and constructed asset values are summarised in Figure 1.

Figure 1: Upgrade and New Assets to meet Demand



Some of the new assets identified to meet growth include:

Year	Projected capital upgrade and new projects	Estimate
2016	New public toilets	$250,000
2017	Provision of Changing Places facility	$1,400,000
2017	Provision for delivery of *Park Land Building Strategy* / new public toilets	$750,000
2018	Provision for delivery of *Park Land Building Strategy* / new public toilets	$500,000
2019	Provision for delivery of *Park Land Building Strategy* / new public toilets	$500,000
2020	Provision for delivery of *Park Land Building Strategy* / new public toilets	$500,000
2021	Provision for delivery of *Park Land Building Strategy* / new public toilets	$500,000
2022	Provision for delivery of *Park Land Building Strategy* / new public toilets	$500,000
2023	Provision for delivery of *Park Land Building Strategy* / new public toilets	$500,000
2024	Provision for delivery of *Park Land Building Strategy* / new public toilets	$500,000

Funding for these new assets will be subject to the annual business plan and budget process.

Acquiring these new assets will commit the organisation to fund ongoing operations, maintenance, and renewal costs for the period that the service provided from the assets is required. These future costs are identified and considered in developing forecasts of future operations, maintenance, and renewal costs in Section 5.

5. LIFECYCLE MANAGEMENT PLAN

The Lifecycle Management Plan details how the organisation plans to manage and operate the assets at the agreed levels of service (defined in Section 3) while optimising lifecycle costs.

5.1 Background Data

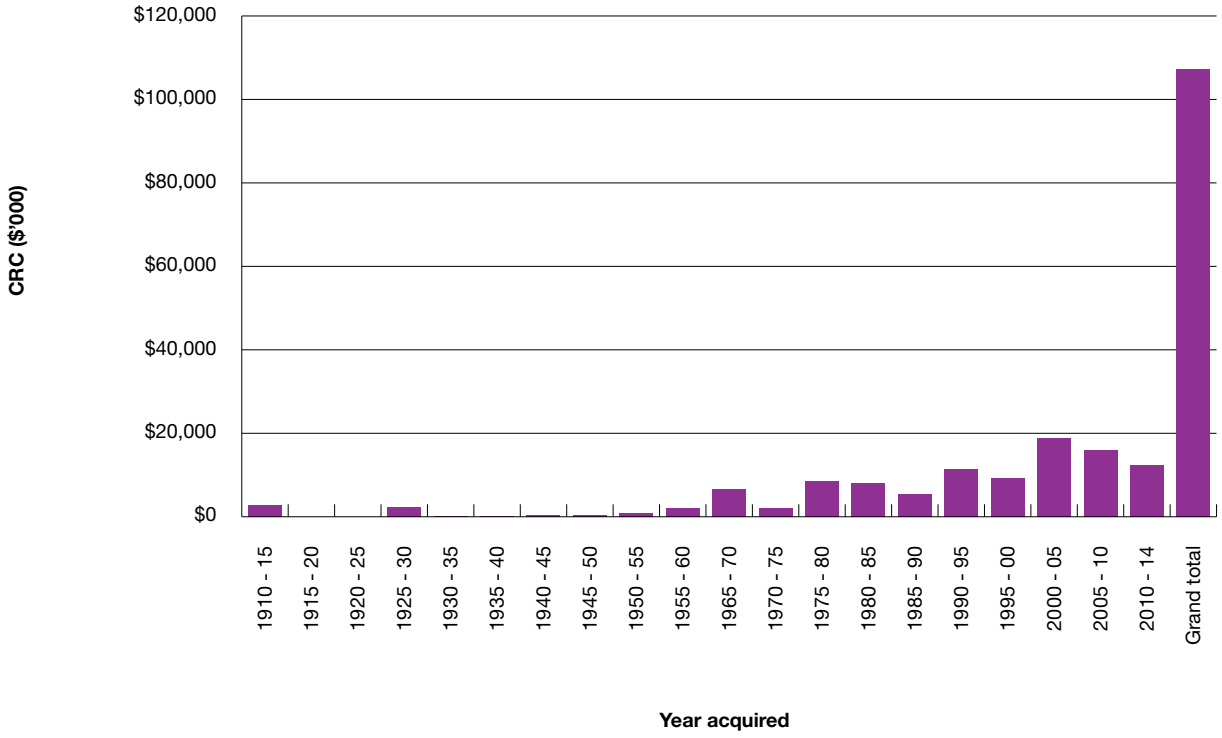
5.1.1 Physical parameters

The assets covered by this AM Plan are shown in Table 2.1.

The building portfolio includes corporate, commercial, community, and infrastructure assets, ranging from State Heritage listed buildings such as the Town Hall to small structures accommodating infrastructure equipment. The majority of buildings are classified as community and most located within the Adelaide Park Lands. The legislative requirement of buildings located within the Adelaide Park Lands provides additional complexities for the management of these sites including requirements included in community land management plans and other Park Land strategies.

The age profile of the assets included in this AM Plan is shown in Figure 2.

Figure 2: Asset Age Profile



The age profile has been determined by taking the estimated remaining life of building components (including mechanical and electrical components, water services, fire services, security, lifts, gas services, interior finishes, and equipment) from the condition captured during audits. The useful life for building assets varies widely based on the type of building, ranging from 25 - 30 years for a horticultural shed to 50 - 75 years for a more substantial building. Whereas, conservation works to historic buildings, such as the Town Hall which was constructed in 1863, has extended the base life for this asset beyond the expected maximum life.

5.1.2 Asset capacity and performance

Council's services are generally provided to meet legislative or design standards where these are available.

Locations where deficiencies in service performance are known are detailed in Table 5.1.2.

Table 5.1.2: Known Service Performance Deficiencies

Location	Service deficiency
Public realm sheds	No regularly scheduled gutter cleaning. No regularly scheduled air conditioning services. No programmed painting schedule.
Public toilets	Undersupply within some areas across the city. No regularly scheduled gutter cleaning. No programmed painting schedule.

Deficiencies in service performance will be reviewed and identified based on community demand and as buildings continue to be assessed against existing and future strategies and operating guidelines.

Technical service performance deficiencies will be further identified following analysis and review of the building condition audit data undertaken in 2014 and outcome of additional structural condition audits.

5.1.3 Asset condition

Condition is monitored through an audit conducted every three to five years to determine the infrastructure assets of each building component to monitor deterioration of the asset stock. Condition is also reviewed prior to an upcoming renewal.

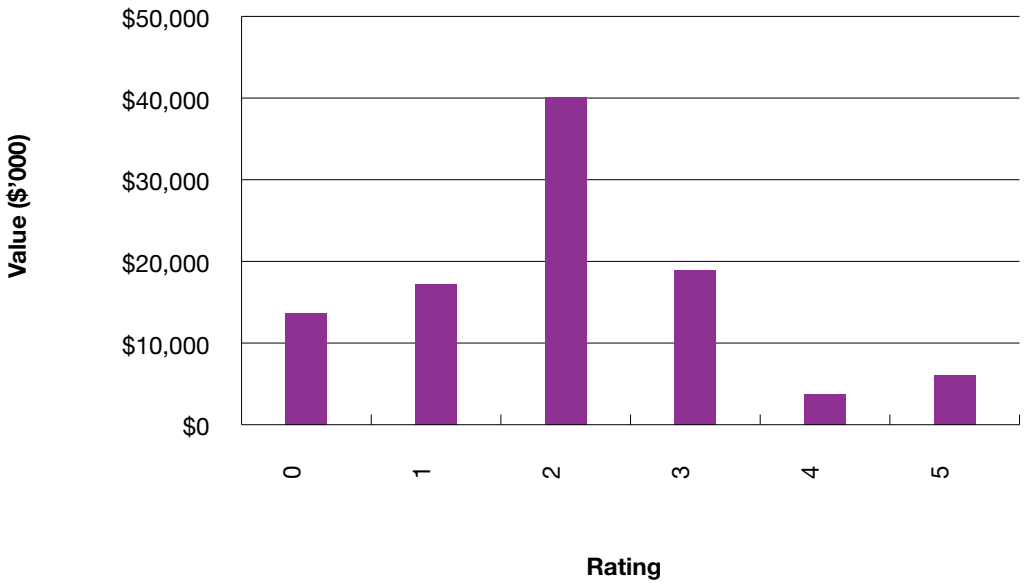
The condition audit undertaken in 2014 captured the majority of building components (internal and external finishes, lifts, mechanical and electrical components, fire services, and structural composition) but did not include a comprehensive review of the mechanical and electrical components of the building nor the structural integrity. Data from an earlier investigation into these components for the larger owned buildings was incorporated into the data prior to the final condition grade being identified for those sites. The condition audit was also deficient in its assessment of the major structural components of the buildings, and this further assessment will be undertaken as part of the improvement program and the condition grades will be adjusted to reflect the outcome of these investigations.

The condition profile of our assets is shown in Figure 3.

Table 5.1.3: Simple Condition Grading Model

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

Figure 3: Asset Condition Profile



The condition rating in the above table (Figure 3) is the replacement value for assessed components (parts of buildings) whereas the asset valuations noted in 5.1.4 below are based on the full property valuation.

Condition is measured using a one to five grading system[6] as detailed in Table 5.1.3.

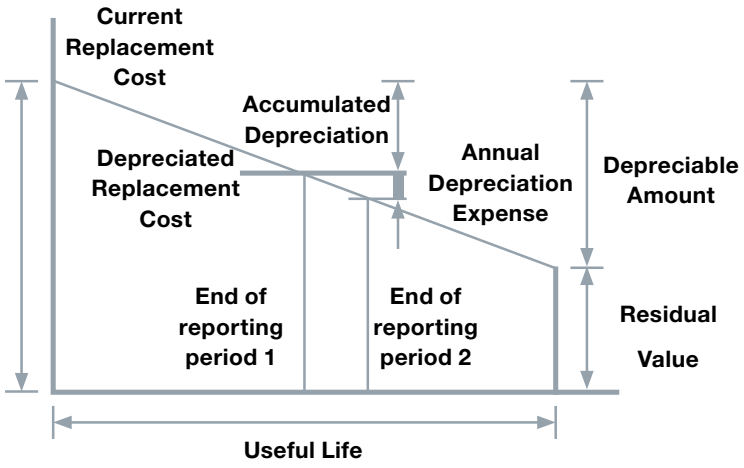
The asset condition profile shown in the table above shows the value of building components that are rated between one and five, rather than a whole of building rating. As part of the improvement program for the AM Plan, buildings will be rated overall, rather than at component level, to more easily identify which buildings are overall in very poor condition.

6. IPWEA, 2011, IIMM, Sec 2.5.4, p 2|79.

5.1.4 Asset valuations

The value of assets recorded in the asset register as at 1 July 2014 covered by this AM Plan is shown below. Assets were last revalued at 1 July 2012 and a small number of properties were revalued as at 1 July 2013. Assets are valued at Market Value to satisfy Fair Value.

Current replacement cost	$425,232,540
Depreciable amount	$425,232,540
Depreciated replacement cost[7]	$243,754,000
Annual depreciation expense	$9,270,000



Useful lives were reviewed in July 2014 using building condition data.

Key assumptions made in preparing the valuations were:

- Asbestos contained within buildings was stable and not delaminating;
- Buildings would continue to be occupied on the same basis in the future;
- Properties were not subject to any Native Title claim; and
- Buildings were assumed to be structurally sound and fit for purpose.

Major changes from previous valuations are due to changes with the composition of the building portfolio (following disposals or renewals) and previous valuations were undertaken at a building level, whilst the current valuations were undertaken at a component level.

Various ratios of asset consumption and expenditure have been prepared to help guide and gauge asset management performance and trends over time. These ratios are based on the 2012 property valuation and 2014 capital renewal expenditure.

Rate of annual asset consumption 2.2%
(Depreciation / depreciable amount)

Rate of annual asset renewal 1.8%
(Capital renewal expenditure / depreciable amount)

Rate of annual asset upgrade / new 0%
(capital upgrade expenditure / depreciable amount)

Rate of annual asset upgrade / new 0%
(including contributed assets)

These ratios indicate that assets are being consumed (2.2%) at a greater rate than currently planned for renewal (1.88%), although not to an overly significant level. These figures will be monitored and reassessed throughout the life of this AM Plan.

In 2015 the organisation plans to renew assets at 80.7% of the rate they are being consumed and will be increasing its asset stock by 0.1% in the year.

7. Also reported as Written Down Current Replacement Cost (WDCRC).

5.1.5 Historical data

Historical data is included in the *Buildings Asset Management Plan 2008*.

5.2 Infrastructure Risk Management Plan

An assessment of risks[8] associated with service delivery from infrastructure assets identified critical risks that could result in loss or reduction in service from building assets or a 'financial shock' to the organisation. The risk assessment process identifies credible risks, the likelihood 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. The risk register is shown at Appendix E.

Critical risks, being those assessed as 'Very High' – requiring immediate corrective action and 'High' – requiring prioritised corrective action identified in the *Infrastructure Risk Management Plan*, together with the estimated residual risk after the selected Treatment Plan is operational are summarised in Table 5.2. These risks are reported to management and Council.

Table 5.2: Critical Risks and Treatment Plans

Service or asset at risk	What can happen	Risk rating (VH, H)	Risk Treatment Plan	Residual risk*	Treatment costs
Building	Total loss	High	Maintain insurances and *Business Continuity Plan*. Preventative maintenance contracts (such as fire).	Low	$765,000 per annum
Buildings	Personal injury	High	Condition of buildings to be regularly audited and necessary works identified and actioned.	Medium	$65,000 per annum
Buildings	Hazardous materials	High	Ensure correct identification, storage, and treatment of hazardous materials. Training and use of standard work practices to minimise disturbance. Planned removal program.	Low	Variable
Buildings	Structural failure	High	Undertake structural audits. Regular inspection.	Low	$200,000
Buildings	Legislative non-compliance	High	Inspection and maintenance contracts for fire and safety provisions and other legislative compliance.	Low	$950,000 per annum

No critical risks were identified from the risk assessment undertaken on the building assets in using the existing Risk Treatment Plan.

*The residual risk is the risk remaining after the selected Risk Treatment Plan is operational.

8. *Adelaide City Council Enterprise Risk Management Framework*

5.3 Routine Operations and Maintenance Plan

Operations include regular activities to provide services such as public health, safety, and amenity, e.g. cleaning, energy consumption.

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

5.3.1 Operations and maintenance plan

Operations activities affect service levels including quality and function through cleaning frequency, intensity and spacing of lights, and opening hours of building and other facilities.

Maintenance includes all actions necessary for retaining an asset as near as practicable to an appropriate service condition including regular ongoing day-to-day work necessary to keep assets operating, e.g. servicing of equipment excluding rehabilitation or renewal. Maintenance may be classified into reactive, planned, and specific maintenance work activities.

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

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

Specific maintenance is replacement of higher value components / sub-components of assets that is undertaken on a regular cycle such as repainting or replacing air conditioning units. This work falls below the capital / maintenance threshold but may require a specific budget allocation.

Actual past maintenance expenditure is shown in Table 5.3.1.

Table 5.3.1: Maintenance Expenditure Trends

Year	Maintenance expenditure	
	Planned and specific	Unplanned
2011 - 12	$757,277	$1,732,105
2012 - 13	$912,013	$1,165,324
2013 - 14	$703,278	$1,029,921

Maintenance expenditure varies from year to year, particularly within the unplanned category. Further investigation on causes of the variation and plans to establish more proactive maintenance schedules is included as part of the improvement program for this plan. Variations may also arise due to alterations to leasing arrangements with third parties where responsibilities vary for undertaking maintenance may change. A review of the historic expenditure identified some maintenance expenditure had been included in capital renewal. A subsequent increase in the maintenance budget can be seen from 2016, with the corresponding reduction in the capital renewal forecast.

Planned maintenance work is currently 41% of total maintenance expenditure.

Maintenance expenditure levels are considered to be adequate to meet current service levels, but may be less than or equal to desired or optimal service levels.

Where maintenance expenditure levels will result in a lesser level of service, the service consequences and service risks have been identified and service consequences highlighted in this AM Plan and service risks considered in the *Infrastructure Risk Management Plan*.

Reactive maintenance is carried out in accordance with response levels of service detailed in Appendix A.

5.3.2 Operations and maintenance strategies

The organisation will operate and maintain assets to provide the defined level of service to approved budgets in the most cost-efficient manner. The operation and maintenance activities include:

- Scheduling operations activities to deliver the defined level of service in the most efficient manner;
- Undertaking maintenance activities through a planned maintenance system to reduce maintenance costs and improve maintenance outcomes. Undertake cost-benefit analysis to determine the most cost-effective split between planned and unplanned maintenance activities (50 – 70% planned desirable as measured by cost);
- Maintain a current Infrastructure Risk Register for assets and present service risks associated with providing services from infrastructure assets and reporting 'Very High' and 'High' risks and residual risks after treatment to management and Council;
- Review current and required skills base and implement workforce training and development to meet required operations and maintenance needs;
- Review asset utilisation to identify under-utilised assets and appropriate remedies, and over-utilised assets and customer demand management options;
- Maintain a current hierarchy of critical assets and required operations and maintenance activities;
- Develop and regularly review appropriate emergency response capability; and
- Review management of operations and maintenance activities to ensure the organisation is obtaining best value for resources used.

Asset hierarchy

An asset hierarchy provides a framework for structuring data in an information system to assist in collection of data, reporting information, and making decisions. This system is currently being refined and developed as part of the overall Asset Management system.

The current organisation's service hierarchy is shown in Table 5.3.2.

Table 5.3.2: Asset Service Hierarchy

Service hierarchy	Service level objective
Adelaide Town Hall Civic Area	Standing Order 27.30 is for the defined civic areas to be laid out, decorated, and furnished in accordance with resolutions of Council made from time to time and to be maintained, repaired, and protected from damage at all times.
General	To be maintained, renewed, and upgraded based on safety and risk considerations. Potential disposal, obsolescence, legal or contractual (such as lease) obligations are overriding constraints for all treatments, classifications, and hierarchies.

Critical assets

Critical assets are those assets which have a high consequence of failure but not necessarily a high likelihood of failure. By identifying critical assets and critical failure modes, organisations can target and refine investigative activities, maintenance plans, and capital expenditure plans at the appropriate time.

Operations and maintenances activities may be targeted to mitigate critical assets failure and maintain service levels. These activities may include increased inspection frequency or higher maintenance intervention levels. Critical assets failure modes and required operations and maintenance activities are detailed in Table 5.3.2.1.

Table 5.3.2.1: Critical Assets and Service Level Objectives

Critical assets	Critical failure mode	Operations and maintenance activities
Fire safety equipment	Failure results in building not being safe for occupation.	Maintenance and repairs in accordance with Australian Standards and Essential Safety Provisions.
Electrical infrastructure	Failure results in building not being safe for occupation.	Maintenance and repairs in accordance with Australian Standards and Essential Safety Provisions.
Air conditioning and hydraulics	Failure results in building not being safe for occupation.	Maintenance and repairs in accordance with Australian Standards and Essential Safety Provisions.
Lifts	Failure results in building not being safe for occupation.	Maintenance and repairs in accordance with Australian Standards and Essential Safety Provisions.

Standards and specifications

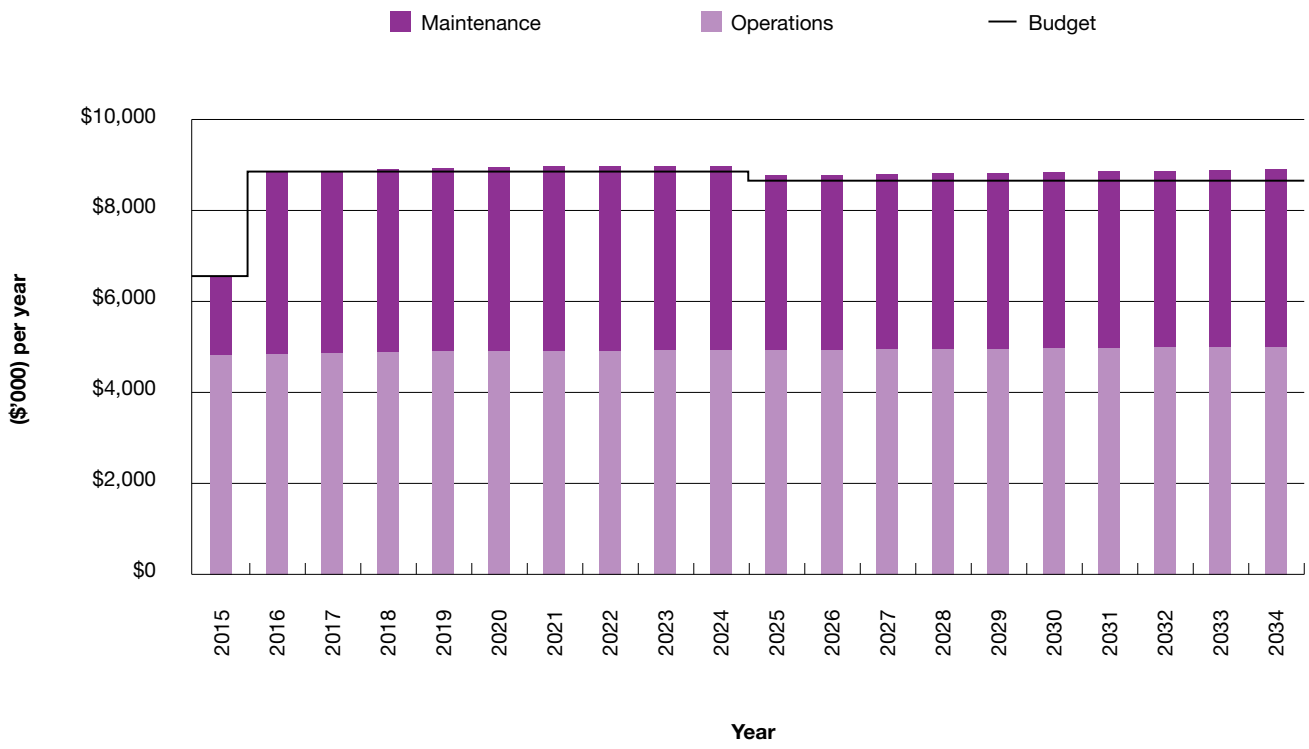
Maintenance work is carried out in accordance with the following Standards and Specifications:

- *Minister's Specification SA 76;*
- Australian Standards (as they relate to building construction or occupation);
- *National Construction Code*; and
- Council developed Standards and Specifications.

5.3.3 Summary of future operations and maintenance expenditures

Future operations and maintenance expenditure is forecast to trend in line with the value of the asset stock as shown in Figure 4. Note that all costs are shown in current 2014 dollar values (i.e. real values). From 2016, planned maintenance expenditure, which was previously included in capital renewal, has been allocated to the maintenance budget.

Figure 4: Projected Operations and Maintenance Expenditure



Deferred maintenance, i.e. works that are identified for maintenance and unable to be funded are to be included in the risk assessment and analysis in the *Infrastructure Risk Management Plan*.

Maintenance is funded from the operating budget where available. This is further discussed in Section 6.2.

5.4 Renewal / Replacement Plan

Renewal and replacement expenditure is major work which 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 / expansion or new works expenditure.

5.4.1 Renewal plan

Assets requiring renewal / replacement are identified from one of three methods provided in the 'Expenditure Template':

- Method 1 uses asset register data to project the renewal costs using acquisition year and useful life to determine the renewal year; or
- Method 2 uses capital renewal expenditure projections from external condition modelling systems (such as Pavement Management Systems); or
- Method 3 uses a combination of average network renewals plus defect repairs in the Renewal Plan and Defect Repair Plan Worksheets on the 'Expenditure Template'.

Method 1 was used for this AM Plan.

The useful lives of assets used to develop projected asset renewal expenditures are shown in Table 5.4.1. Asset useful lives were last reviewed on 2014 as part of the condition audit.

Table 5.4.1: Useful Lives of Assets

Asset subcategory	Useful life
Structure	30, 40, 50, 60 or 80+ years depending on building type.
Roofing	30 or 40 years depending on type of roof.
Building services	30, 40 or 50 years depending on type of equipment.
Fit out	15 or 30 years depending on individual component.

5.4.2 Renewal and replacement strategies

The organisation will plan capital renewal and replacement projects to meet level of service objectives and minimise infrastructure service risks by:

- Ensuring that Council's services and infrastructure are provided in a sustainable manner, with the appropriate levels of service to residents and visitors and having regard to the environmental outcomes;
- Demonstrating transparent and responsible asset management processes that align with demonstrated best practice;
- Planning and scheduling renewal projects to deliver the defined level of service in the most efficient manner;
- Undertaking project scoping for all capital renewal and replacement projects to identify:
  - alignment with Council's strategic direction,
  - the service delivery 'deficiency', present risk, and optimum time for renewal / replacement,
  - the project objectives to rectify the deficiency,
  - the range of options, estimated capital, and lifecycle costs for each options that could address the service deficiency,
  - evaluate the options against evaluation criteria adopted by the organisation,
  - select the best option to be included in capital renewal programs;

- Using 'low cost' renewal methods (cost of renewal is less than replacement) wherever possible;
- Maintain a current Infrastructure Risk Register for assets and service risks associated with providing services from infrastructure assets and reporting 'Very High' and 'High' risks and residual risks after treatment to management and the Council;
- Review current and required skills base and implement workforce training and development to meet required construction and renewal needs;
- Maintain a current hierarchy of critical assets and capital renewal treatments and timings required; and
- Review management of capital renewal and replacement activities to ensure the organisation is obtaining best value for resources used.

Renewal ranking criteria

Asset renewal and replacement is typically undertaken to either:

- Ensure the reliability of the existing infrastructure to deliver the service it was constructed to facilitate (e.g. maintain electrical infrastructure); or
- To ensure the infrastructure is of sufficient quality to meet the service requirements (e.g. air conditioning infrastructure).

It is possible to get some indication of capital renewal and replacement priorities by identifying assets or asset groups that:

- Have a high consequence of failure;
- Have a high utilisation and subsequent impact on users would be greatest;
- The total value represents the greatest net value to the organisation;
- Have the highest average age relative to their expected lives;
- Are identified in the AM Plan as key cost factors;
- Have high operational or maintenance costs; or
- Where replacement with modern equivalent assets would yield material savings[9].

The ranking criteria used to determine priority of identified renewal and replacement proposals is detailed in Table 5.4.2.

Table 5.4.2: Renewal and Replacement Priority Ranking Criteria

Criteria	Weighting
Not applicable	
TOTAL	**100%**

All renewals in this asset Class are prioritised based on safety, risk, and condition. No hierarchy for prioritising renewals currently applies.

Renewal and replacement standards

Renewal work is carried out in accordance with the following Standards and Specifications:

- *Minister's Specification SA 76;*
- Australian Standards;
- *Building Code of Australia*; and
- Council developed Standards and Specifications.

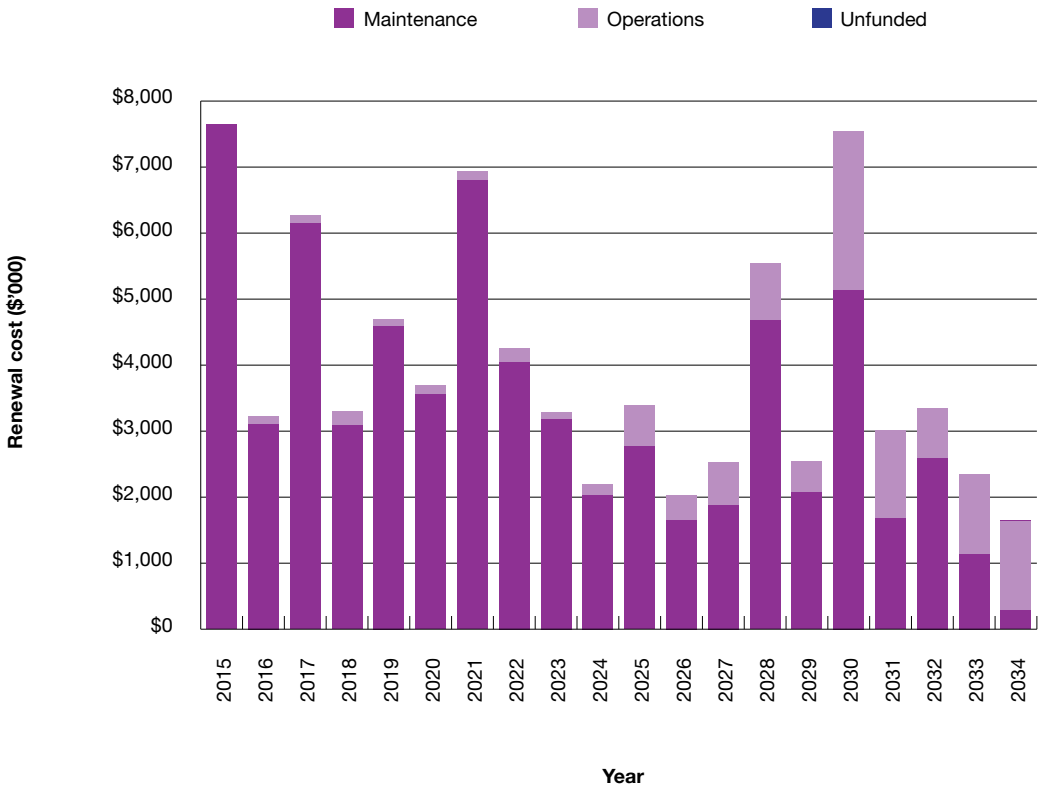
9. Based on IPWEA, 2011, IIMM, Sec 3.4.5, p 3|66.

5.4.3 Summary of future renewal and replacement expenditure

Projected future renewal and replacement expenditures are forecast to increase over time. The expenditure is summarised in Figure 5. Note that all amounts are shown in real values.

The projected capital renewal and replacement program is shown in Appendix B.

Figure 5: Projected Capital Renewal and Replacement Expenditure



The proportion of unfunded shown in 2015 represents capital renewal identified to be undertaken in 2012 - 14 but were deferred.

Deferred renewal and replacement, i.e. those assets identified for renewal and / or replacement and not scheduled in capital works programs are to be included in the risk analysis process in the *Risk Management Plan*.

Renewals and replacement expenditure in the organisation's capital works program will be accommodated in the LTFP. This is further discussed in Section 6.2.

5.5 Creation / Acquisition / Upgrade Plan

New works are those works that create a new asset that did not previously exist, or works which upgrade or improve an existing asset beyond its existing capacity. They may result from growth, social or environmental needs. Assets may also be acquired at no cost to the organisation from land development. These assets from growth are considered in Section 4.4. New building assets will generally require an increase in operational and maintenance expenditure across the useful life of the building. As part of the planning process for the creation / acquisition or upgrade of assets, opportunities to reduce ongoing operational or maintenance costs should be considered.

5.5.1 Selection criteria

New assets and upgrade / expansion of existing assets are identified from various sources, such as councillor or community requests, proposals identified by strategic plans (such as *Place-making Strategy, City Safety*) or partnerships with other organisations (e.g. State Government, Riverside Precinct Authority). Candidate proposals are inspected to verify need and to develop a preliminary renewal estimate. Verified proposals are ranked by priority and available funds, and scheduled in future works programs.

Assets proposed for acquisition (including assets proposed to be gifted) will be assessed in accordance with the principles of the *Acquisition and Disposal of Land and Infrastructure Assets* policy, against the following criteria:

	Criteria
Strategic importance	Strategic relevance (alignment with Strategic Plan or other key strategies – e.g. *Park Lands Master Plan*).
	Benefit / risk analysis (including political drivers, development opportunities / higher use).
Community benefit	Need analysis (is it required / is there an alternate asset that delivers better outcomes than proposed acquisition or 'gift').
	Current utilisation and / or level of existing community ownership of asset.
	Cultural or historical significance (community importance).
Cost	Annual cost of operation / maintenance.
	Whole of life cost analysis.
	Suitability of asset (i.e. does it meet required service level standards).
	Ability to commercialise the asset (positive financial return).
	Covenants or limitations on ownership, use or applicability (e.g. ability to alter or dispose of asset once acquired / gifted).

The following decision matrix will guide the recommendation following the assessment:

Strategic importance	High community benefit	Low cost	Recommendation
☐			Reject
	☐		Review
		☐	Reject
☐	☐		Acquire with conditions
☐		☐	Review
	☐	☐	Acquire with conditions
☐	☐	☐	Acquire
			Reject

Where available funds are not available to meet all verified proposals, a priority ranking is recommended to enable acquisitions to be prioritised against the following criteria:

Criteria	Weighting
Safety / risk	40%
Strategic importance	20%
Community benefit	20%
Cost benefit	20%
TOTAL	**100%**

Table 5.5.1: New Assets Priority Ranking Criteria

Criteria	Weighting
Not applicable	
TOTAL	**100%**

5.5.2 Capital investment strategies

The organisation will plan capital upgrade and new projects to meet level of service objectives by:

- Planning and scheduling capital upgrade and new projects to deliver the defined level of service in the most efficient manner;
- Undertaking project scoping for all capital upgrade / new projects to identify:
  - the service delivery 'deficiency', present risk and required timeline for delivery of the upgrade / new asset,
  - the project objectives to rectify the deficiency including value management for major projects,
  - the range of options, estimated capital and lifecycle costs for each options that could address the service deficiency,
  - management of risks associated with alternative options,
  - and evaluate the options against evaluation criteria adopted by Council,
  - select the best option to be included in capital upgrade / new programs;
- Review current and required skills base and implement training and development to meet required construction and project management needs; and
- Review management of capital project management activities to ensure the organisation is obtaining best value for resources used.

Standards and specifications for new assets and for upgrade / expansion of existing assets are the same as those for renewal shown in Section 5.4.2.

5.5.3 Summary of future upgrade / new assets expenditure

Projected upgrade / new asset expenditures are summarised in Figure 6. The projected upgrade / new capital works program is shown in Appendix C. All amounts are shown in real values. These assets will be subject to securing funding through the annual business plan and budget process.

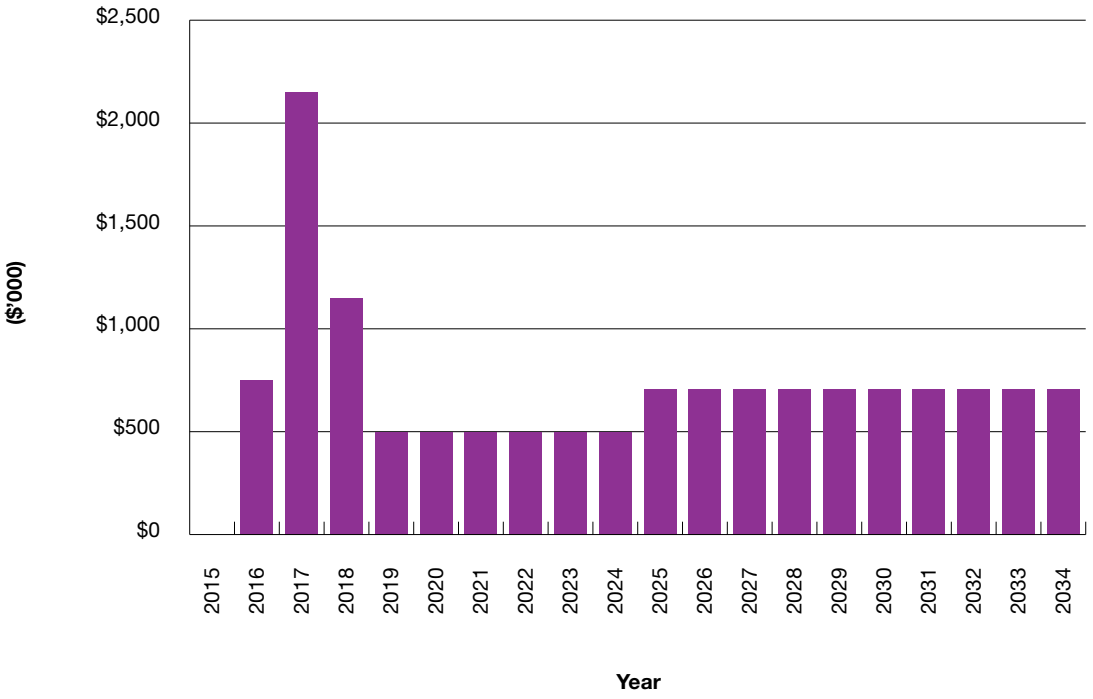
Some of the new assets identified to meet growth include:

Year	Projected capital upgrade and new projects	Estimate
2016	New public toilets	$250,000
2017	Provision of Changing Places facility	$1,400,000
2017	Provision for delivery of *Park Land Building Strategy* / new public toilets	$750,000
2018	Provision for delivery of *Park Land Building Strategy* / new public toilets	$500,000
2019	Provision for delivery of *Park Land Building Strategy* / new public toilets	$500,000
2020	Provision for delivery of *Park Land Building Strategy* / new public toilets	$500,000
2021	Provision for delivery of *Park Land Building Strategy* / new public toilets	$500,000
2022	Provision for delivery of *Park Land Building Strategy* / new public toilets	$500,000
2023	Provision for delivery of *Park Land Building Strategy* / new public toilets	$500,000
2024	Provision for delivery of *Park Land Building Strategy* / new public toilets	$500,000

Demand for these new assets has been identified within Council strategic documents including *The City of Adelaide Strategic Plan 2016 – 20* and *Park Lands Management Strategy*.

Funding for new assets to meet growth is not currently recognised in the LTFP and funding for these projects are subject to the annual business plan and budget process.

Figure 6: Projected Capital Upgrade / New Asset Expenditure



Expenditure on new assets and services in the organisation's capital works program is not currently allocated in the LTFP. This is further discussed in Section 6.2.

5.6 Disposal Plan

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 5.6, together with estimated annual savings from not having to fund operations and maintenance of the assets. 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. Any revenue gained from asset disposals is accommodated in the organisation's LTFP.

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

Table 5.6: Assets Identified for Disposal

Asset	Reason for disposal	Timing	Disposal expenditure	Operations and maintenance annual savings
Veale Gardens Conservatory	Dilapidated and redundant once new satellite hub is constructed.	2016 - 17	$15,000	$2,000

5.7 Service Consequences and Risks

The organisation has prioritised decisions made in adopting this AM Plan to obtain the optimum benefits from its available resources. Decisions were made based on the development of three Scenarios.

Scenario 1 – What we would like to do based on asset register data.

Scenario 2 – What we should do with existing budgets and identifying level of service and risk consequences (i.e. what are the operations and maintenance and capital projects we are unable to do, what is the service and risk consequences associated with this position). This may require several versions of the AM Plan.

Scenario 3 – What we can do and be financially sustainable with AM plans matching LTFPs.

The development of Scenario 1 and Scenario 2 AM plans provides the tools for discussion with the Council and community on trade-offs between what we would like to do (Scenario 1) and what we should be doing with existing budgets (Scenario 2) by balancing changes in services and service levels with affordability and acceptance of the service and risk consequences of the trade-off position (Scenario 3).

This version of the AM Plan incorporates Scenarios 1 and 2, and future versions will include the third Scenario.

5.7.1 What we cannot do

Projected operational and maintenance expenditure is predicted to reach capacity by 2022, on the basis that no additional expenditure is required for the buildings. There may be some operational and maintenance activities or capital projects that will be unable to be undertaken within the next 10 years should this eventuate. Further investigation and planning will identify whether this is a likely outcome.

5.7.2 Service consequences

Operations and maintenance activities and capital projects that cannot be undertaken will maintain or create service consequences for users. These include:

- Non-compliance with legislative requirements;
- End user dissatisfaction;
- Increased vacancy rates in commercial buildings; and
- Community dissatisfaction.

5.7.3 Risk consequences

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

- Risk of breach of contractual arrangement with third parties;
- Risk of breach of Essential Safety Provisions; and
- Further deterioration or failure of building structure or services.

These risks have been included with the *Infrastructure Risk Management Plan* summarised in Section 5.2 and *Risk Management Plan's* actions and expenditures included within projected expenditures.

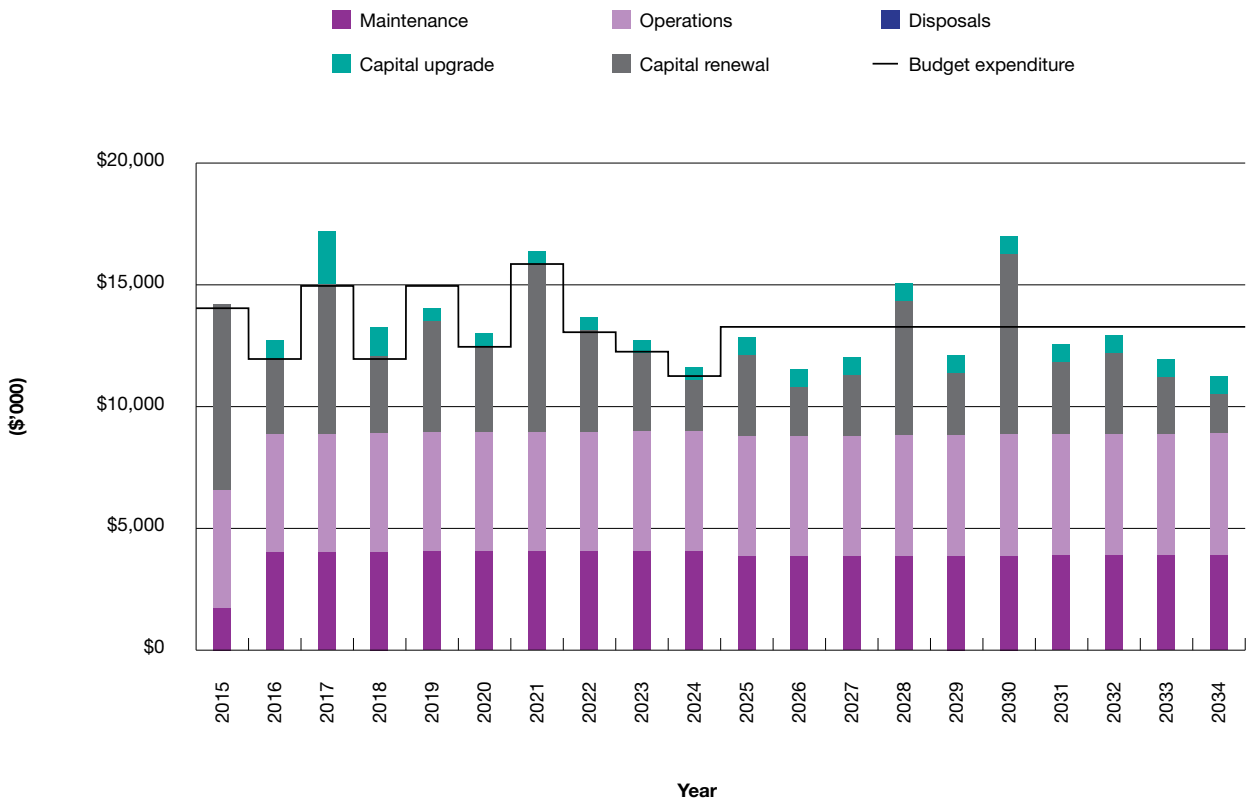
6. FINANCIAL SUMMARY

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

6.1 Financial Statements and Projections

The financial projections are shown in Figure 7 for projected operating (operations and maintenance) and capital expenditure (renewal and upgrade / expansion / new assets). Note that all costs are shown in real values. From 2016 identified planned maintenance has been included in maintenance rather than capital renewal categories.

Figure 7: Projected Operating and Capital Expenditure



6.1.1 Sustainability of service delivery

There are four key indicators for service delivery sustainability that have been considered in the analysis of the services provided by this asset category, these being the Asset Renewal Funding Ratio, long term lifecycle costs / expenditures, and medium term projected / budgeted expenditures over five and 10 years of the planning period.

Asset Renewal Funding Ratio

Asset Renewal Funding Ratio[10] 104%

The Asset Renewal Funding Ratio is the most important indicator and reveals that over the next 10 years, the organisation is forecasting that it will have 104% of the funds required for the optimal renewal and replacement of its assets.

This ratio is within Council's current financial sustainability target of 90% - 110%.

Long term - lifecycle cost

Lifecycle costs (or whole of life costs) are the average costs that are required to sustain the service levels over the asset lifecycle. Lifecycle costs include operations and maintenance expenditure and asset consumption (depreciation expense). The lifecycle cost for the services covered in this AM Plan is $17,967,000 per year (average operations and maintenance expenditure plus depreciation expense projected over 10 years).

Lifecycle costs can be compared to lifecycle expenditure to give an initial indicator of affordability of projected service levels when considered with age profiles. Lifecycle expenditure includes operations, maintenance, and capital renewal expenditure. Lifecycle expenditure will vary depending on the timing of asset renewals. The lifecycle expenditure over the 10-year planning period is $13,274,000 per year (average operations and maintenance plus capital renewal budgeted expenditure in the LTFP over 10 years).

A shortfall between lifecycle cost and lifecycle expenditure is known as the lifecycle gap. The lifecycle 'gap' for services covered by this AM Plan is -$4,694,000 per year (-ve = gap). This gap may be as a result of asset expenditure being undertaken by third party occupiers (tenants) of some of Council's building assets.

Lifecycle expenditure is currently 74% of lifecycle costs.

The lifecycle costs and lifecycle expenditure comparison highlights any difference between present outlays and the average cost of providing the service over the long term. If the lifecycle expenditure is less than the lifecycle cost, it is most likely that outlays will need to be increased or cuts in services made in the future.

Knowing the extent and timing of any required increase in outlays, and the service consequences if funding is not available, will assist organisations in providing services to their communities in a financially sustainable manner. This is the purpose of the asset management plans and LTFP.

Medium term – 10-year financial planning period

This AM Plan identifies the projected operations, maintenance, and capital renewal expenditures required to provide an agreed level of service to the community over a 10-year period. This provides input into 10-year financial and funding plans aimed at providing the required services in a sustainable manner.

These projected expenditures may be compared to budgeted expenditures in the 10-year period to identify any funding shortfall. In a core AM Plan, a gap is generally due to increasing asset renewals for ageing assets.

The projected operations, maintenance, and capital renewal expenditure required over the 10-year planning period is $13,169,000 on average per year.

Estimated (budget) operations, maintenance, and capital renewal funding is $13,169,000 on average per year, giving a 10-year funding shortfall of $105,000 per year. This indicates that the organisation expects to have 105% of the projected expenditures needed to provide the services documented in the AM Plan. As more detailed data is collected on the condition of the building assets, the gap in funding and projected expenditure may narrow.

10. AIFMG, 2009, *Financial Sustainability Indicator 8*, Sec 2.6, p 2.18

Medium term – 5-year financial planning period

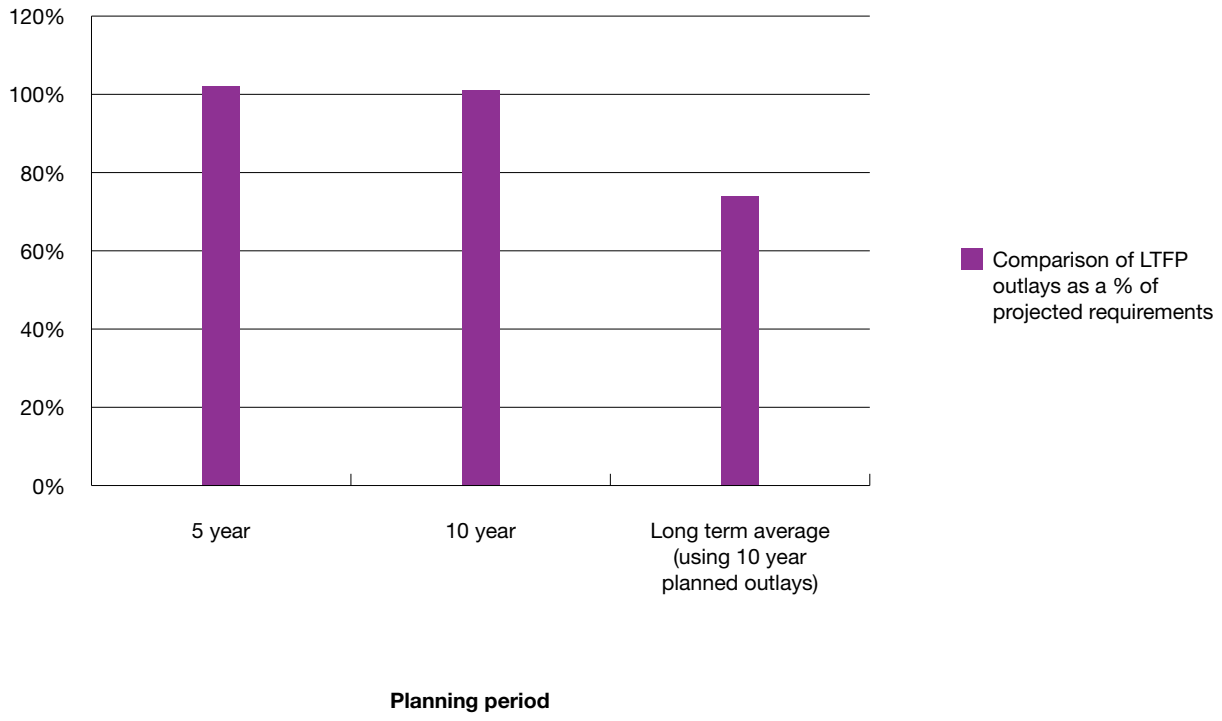
The projected operations, maintenance, and capital renewal expenditure required over the first five years of the planning period is $12,652,000 on average per year.

Estimated (budget) operations, maintenance, and capital renewal funding is $13,361,000 on average per year giving a five-year funding shortfall of $210,000. This indicates that the organisation expects to have 102% of projected expenditures required to provide the services shown in this AM Plan. As more detailed data is collected on the condition of the building assets, the gap in funding and projected expenditure may narrow.

Asset management financial indicators

Figure 7A shows the asset management financial indicators over the 10-year planning period and for the long term lifecycle.

Figure 7A: Asset Management Financial Indicators



Providing services from infrastructure in a sustainable manner requires the matching and managing of service levels, risks, projected expenditures, and financing to achieve a financial indicator of approximately 1.0 for the first years of the AM Plan, and ideally over the 10-year life of the LTFP.

Figure 8 shows the projected asset renewal and replacement expenditure over the 20 years of the AM Plan. The projected asset renewal and replacement expenditure is compared to renewal and replacement expenditure in the capital works program, which is accommodated in the LTFP.

Funding requirements will be reviewed annually and changes made to the LTFP where appropriate to reflect delivery against agreed levels of service.

Figure 8: Projected and LTFP Budgeted Renewal Expenditure

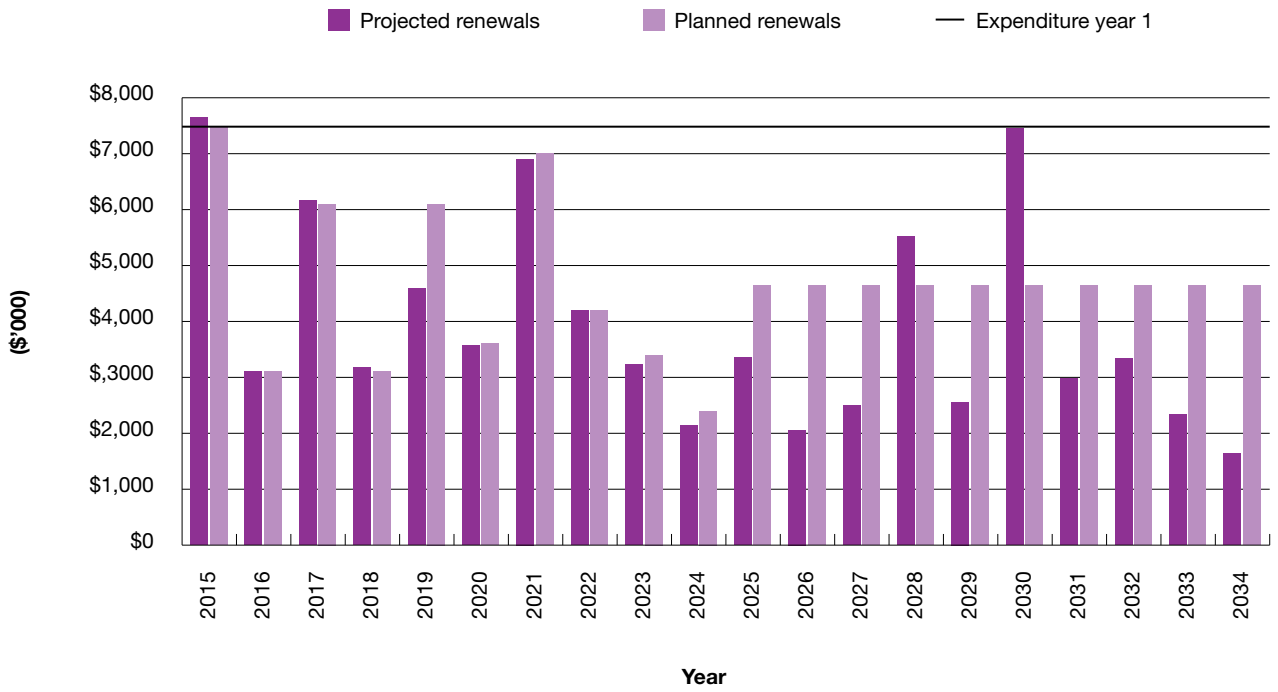


Table 6.1.1 shows the projected renewal and replacement expenditures and expenditure currently in the LTFP. Budget expenditures accommodated in the LTFP or extrapolated from current budgets are shown in Appendix D.

In years where projected renewals (dark purple) are above expenditure (current budget), building components will be reviewed and prioritised based on risk and safety factors. This will enable non critical renewals to be deferred to a future financial year.

The gaps shown between projected renewals (dark purple) and expenditure (current budget) represents the current budget for renewals and may be adjusted in future years to more closely align with the planned renewals. The surplus in 2019 is a result of a significant capital renewal item that has been reallocated to a future year pending analysis of the future strategic direction of the asset.

There is a significant cumulative surplus in the later years of Table 6.1.1. This is a result of lower projected renewals in later years compared to the LTFP renewal budget used from 2025 being the average of the first 10 years of this plan.

Table 6.1.1: Projected and LTFP Budgeted Renewals and Financing Shortfall

Year	Projected renewals ($,000)	LTFP renewal budget ($,000)	Renewal financing shortfall ($,000) (-ve gap, +ve surplus)	Cumulative shortfall ($,000) (-ve gap, +ve surplus)
2015	$7,642	$7,483	-$159	-$159
2016	$3,106	$3,100	-$6	-$164
2017	$6,159	$6,100	-$59	-$223
2018	$3,175	$3,100	-$75	-$297
2019	$4,590	$6,100	$1,510	$1,213
2020	$3,570	$3,600	$30	$1,242
2021	$6,905	$7,000	$95	$1,337
2022	$4,200	$4,200	$0	$1,337
2023	$3,228	$3,400	$172	$1,508
2024	$2,141	$2,400	$259	$1,767
2025	$3,358	$4,648	$1,290	$3,058
2026	$2,057	$4,648	$2,591	$5,649
2027	$2,501	$4,648	$2,147	$7,796
2028	$5,524	$4,648	-$876	$6,920
2029	$2,562	$4,648	$2,086	$9,006
2030	$7,454	$4,648	-$2,805	$6,201
2031	$2,979	$4,648	$1,669	$7,870
2032	$3,333	$4,648	$1,315	$9,185
2033	$2,337	$4,648	$2,311	$11,497
2034	$1,643	$4,648	$3,005	$14,502

Note: A negative shortfall indicates a financing gap; a positive shortfall indicates a surplus for that year.

Providing services in a sustainable manner will require matching of projected asset renewal and replacement expenditure to meet agreed service levels with the corresponding capital works program accommodated in the LTFP.

Identifying agreed levels of service has still to be finalised and this may alter the projected renewal and replacement expenditure. As discussed earlier in this plan, these figures may be revised as the results of the detailed investigation into the condition of structural elements of the Building Asset Class are revealed.

6.1.2 Projected expenditures for LTFP

Table 6.1.2 shows the projected expenditures for the 10-year LTFP.
Note: From 2016, planned maintenance has been reallocated from Projected Capital Renewal to Maintenance.

Expenditure projections are in 2014 - 15 real values.

Table 6.1.2: Projected Expenditures for LTFP ($000)

Year	Operations ($,000)	Maintenance ($,000)	Projected capital renewal ($,000)	Capital upgrade / new ($,000)	Disposals ($,000)
2015	$4,823	$1,734	$7,642	$0	$0
2016	$4,851	$4,004	$3,106	$750	$0
2017	$4,860	$4,011	$6,159	$2,150	$0
2018	$4,884	$4,030	$3,175	$1,150	$0
2019	$4,897	$4,040	$4,590	$500	$0
2020	$4,903	$4,044	$3,570	$500	$0
2021	$4,909	$4,049	$6,905	$500	$0
2022	$4,914	$4,053	$4,200	$500	$0
2023	$4,920	$4,058	$3,228	$500	$0
2024	$4,926	$4,062	$2,141	$500	$0
2025	$4,929	$3,840	$3,358	$705	$0
2026	$4,937	$3,846	$2,057	$705	$0
2027	$4,945	$3,852	$2,501	$705	$0
2028	$4,953	$3,858	$5,524	$705	$0
2029	$4,961	$3,865	$2,562	$705	$0
2030	$4,969	$3,871	$7,454	$705	$0
2031	$4,977	$3,877	$2,979	$705	$0
2032	$4,985	$3,883	$3,333	$705	$0
2033	$4,993	$3,890	$2,337	$705	$0
2034	$5,001	$3,896	$1,643	$705	$0

6.2 Funding Strategy

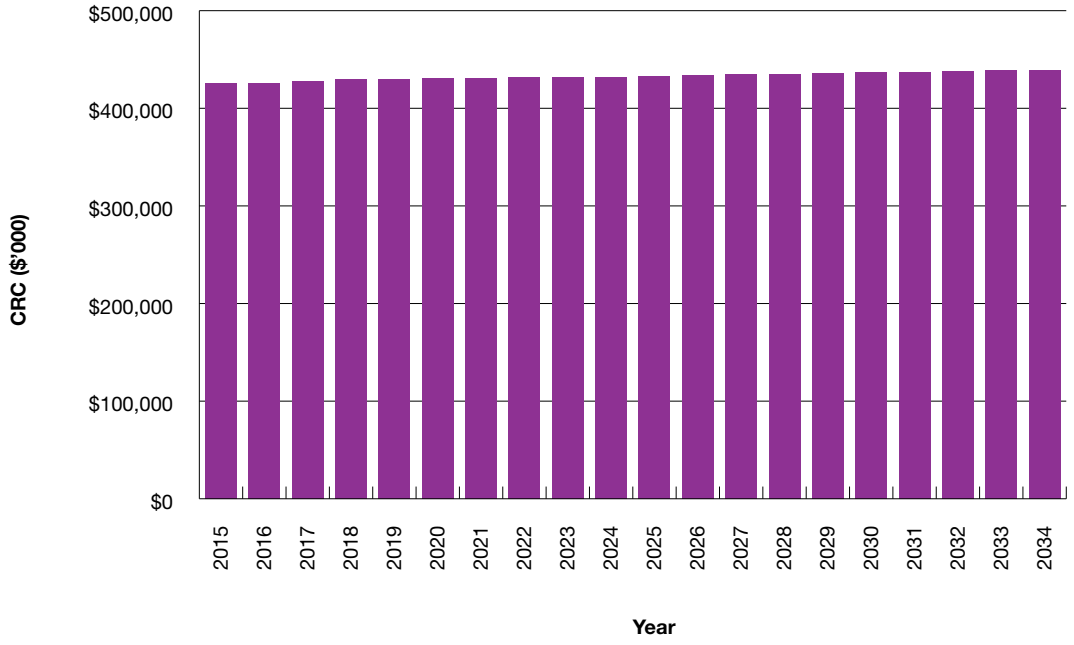
After reviewing service levels, as appropriate to ensure ongoing financial sustainability projected expenditures (excluding new assets) identified in Section 6.1.2 will be accommodated in the organisation's 10-year LTFP.

Note: This will not include the identified funding for provision of new assets which is currently subject to the annual business plan and budget process.

6.3 Valuation Forecasts

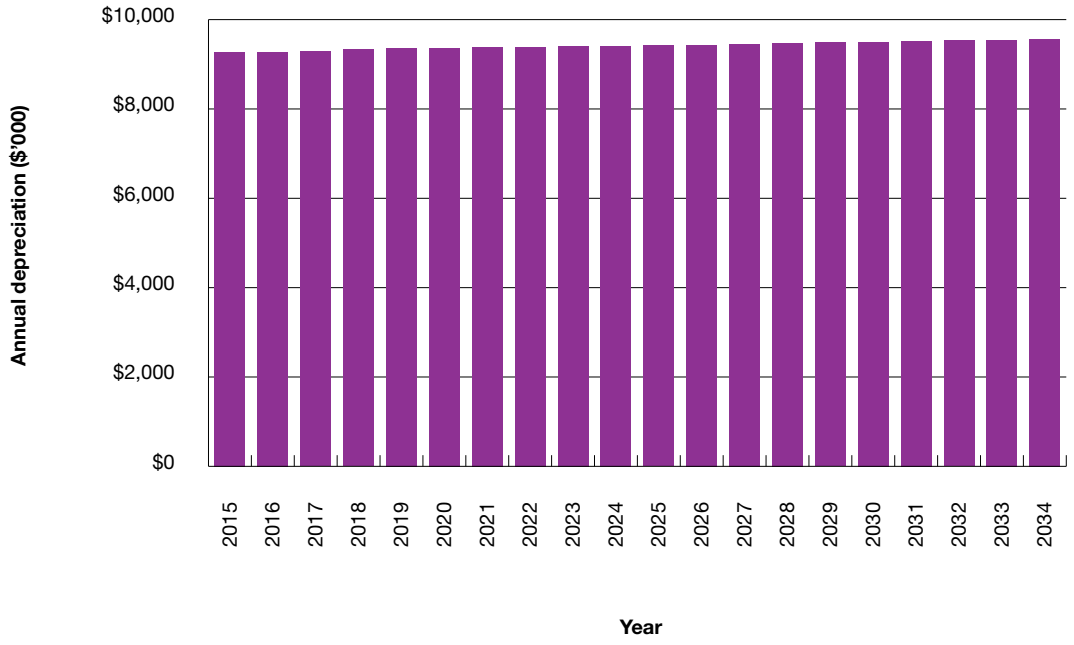
Asset values are forecast to increase as additional assets are added to the asset stock from construction and acquisition by the organisation and from assets constructed by land developers and others and donated to the organisation.
Figure 9 shows the projected replacement cost asset values over the planning period in real values.

Figure 9: Projected Asset Values



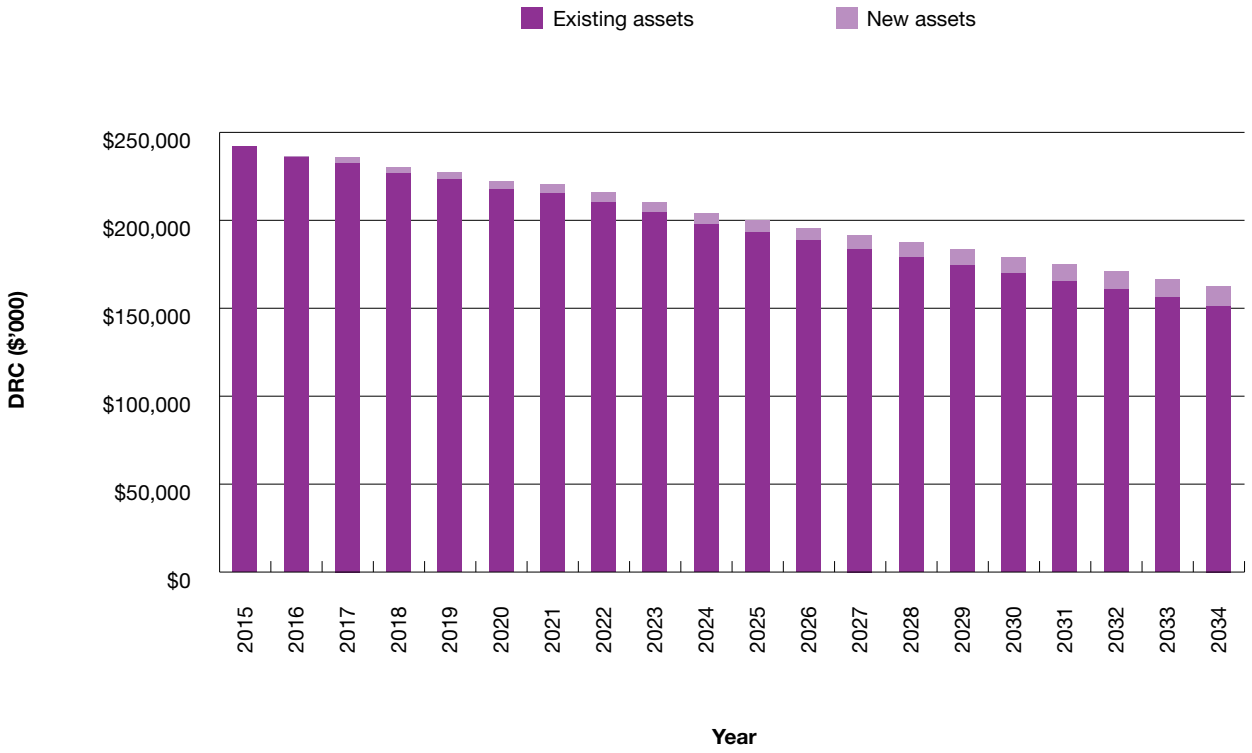
Depreciation expense values are forecast in line with asset values as shown in Figure 10.

Figure 10: Projected Depreciation Expense



The depreciated replacement cost will vary over the forecast period depending on the rates of addition of new assets, disposal of old assets, and consumption and renewal of existing assets. Forecast of the assets' depreciated replacement cost is shown in Figure 11. The depreciated replacement cost of contributed and new assets is shown in the lighter purple colour and in the darker purple colour for existing assets.

Figure 11: Projected Depreciated Replacement Cost



6.4 Key Assumptions Made in Financial Forecasts

This section details the key assumptions made in presenting the information contained in this AM 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 AM Plan and risks that these may change are shown in Table 6.4.

Table 6.4: Key Assumptions made in Asset Management Plan and Risks of Change

Key assumptions	Risks of change to assumptions
Rates adopted for components are accurate.	Insufficient budget to meet required expenditure.
No significant change in demand.	Unable to meet community expectations or end user requirements.
No significant changes in legislation.	Changes may increase operational / maintenance costs.
Budget allocation will be sufficient to enable the agreed service levels (both community and technical) to be met.	Non-compliance of buildings due to essential maintenance not being completed.
	Inability to satisfy needs of end users / community.
	Inability to use buildings due to failure of components (such as air conditioning, lifts).
	Reduction in services being available to community.

6.5 Forecast Reliability and Confidence

The expenditure and valuations projections in this AM Plan are based on best available data. Currency and accuracy of data is critical to effective asset and financial management. Data confidence is classified on a five level scale[11] in accordance with Table 6.5.

Table 6.5: Data Confidence Grading System

Confidence grade	Description
A Highly reliable	Data based on sound records, procedures, investigations, and analysis, documented properly and recognised as the best method of assessment. Dataset is complete and estimated to be accurate ± 2%.
B Reliable	Data based on sound records, procedures, investigations, and analysis, documented properly but has minor shortcomings, for example some of the data is old, some documentation is missing, and / or reliance is placed on unconfirmed reports or some extrapolation. Dataset is complete and estimated to be accurate ± 10%.
C Uncertain	Data based on sound records, procedures, investigations, and analysis which is incomplete or unsupported, or extrapolated from a limited sample for which Grade A or B data are available. Dataset is substantially complete but up to 50% is extrapolated data and accuracy estimated ± 25%.
D Very Uncertain	Data is based on unconfirmed verbal reports and / or cursory inspections and analysis. Dataset may not be fully complete and most data is estimated or extrapolated. Accuracy ± 40%.
E Unknown	None or very little data held.

The estimated confidence level for and reliability of data used in this AM Plan is shown in Table 6.5.1.

11. IPWEA, 2011, IIMM, Table 2.4.6, p 2|59.

Table 6.5.1: Data Confidence Assessment for Data used in Asset Management Plan

Data		Confidence assessment	Comment
Demand drivers		Reliable	Based on current Council strategies including *The City of Adelaide Strategic Plan 2016 - 20* and *Adelaide Park Lands Management Strategy*.
Growth projections		Reliable	Based on targets in the State Government's *30-year Plan for Greater Adelaide* and Council's Strategic Plan.
Operations expenditures		Reliable	Directly sourced from finance system.
Maintenance expenditures		Reliable	Directly sourced from finance system.
Projected renewal expenditures	Asset values	Reliable	Based on 2014 condition audit.
	Asset residual values	Not applicable	No asset residual values have been used in this plan.
	Asset useful lives	Reliable	Based on 2014 condition audit and asset valuation.
	Condition modelling	Uncertain	Further analysis and condition modelling has yet to be completed.
	Defect repairs	Reliable	Based on 2014 condition audit.
Upgrade / new expenditures		Uncertain	Only based on conceptual design data.
Disposal expenditures		Reliable	Based on known conditions.

Over all data sources, the data confidence is assessed as medium confidence level for data used in the preparation of this AM Plan.

7. PLAN IMPROVEMENT AND MONITORING

7.1 Accounting / Financial Systems

7.1.1 Accounting and financial systems

Since 2004, Council have used the Technology One Finance One System. It is a finance system where all income and expenditures are recorded. The General Ledger captures all financial activities for Council, and is comprised of three sub ledgers:

- Capital Works Ledger for all capital budgets;
- Property Ledger for property budgets; and
- Public Realm Ledger for all depot works.

All three ledgers are consolidated into the General Ledger.

The Capital Works Ledger records all the budgets for the renewals program. All costs for renewals are tracked through this ledger. Through the XLOne tool, reports can be generated on an individual project as well as asset category level. This allows project managers and asset managers to keep track of their project spend on a regular basis. Once projects are completed and they are then capitalised into the HANSEN Asset Management System.

Accountabilities for financial systems

All financial information in relation to all asset classes (buildings, land, roads, footpaths, stormwater, bridges, traffic signals, kerbs, landscaping, lighting, and appurtenances) are stored in the Corporate Asset Management System – Hansen. IT Equipment and Plant and Fleet assets are stored in Finance One.

Finance One also stores General Ledger information, Accounts Payable / Receivable, Bank Reconciliation, and Balance Sheet.

Accounting standards and regulations

There are various regulations and accounting standards that we must comply with; however, those that are specifically related to asset management are:

- *South Australian Local Government Act 1999* and *Local Government (Financial Management) Regulations 2011;*
- AASB 116 Property Plant and Equipment; and
- AASB 13 Fair Value Measurement.

Capital / maintenance threshold

Council maintain an asset accounting policy which sets the threshold of materiality for all asset classes at $5,000. Where an individual asset falls below the threshold amount but those individual assets form part of a network, e.g. stormwater assets, street and Park Lands furniture, then those assets are capitalised based on the aggregated value of the assets above the threshold.

Required changes to accounting financial systems arising from this AM Plan

Council is currently implementing RAMM Asset Maintenance Management System across all asset classes. It is anticipated that some changes to the financial systems arising from the integration of Finance One with RAMM.

Improvements to the reporting of renewal / enhancement / new asset capital expenditure, reactive and planned maintenance, and operating expenses have been identified to enhance future versions of this AM Plan.

7.1.2 Asset management system

Council currently uses Hansen as its Asset Management System. This system is linked to ArcGIS.

Council is in the process of implementing RAMM maintenance management software which has some core functionality as an Asset Management System.

Council also uses SPM assets software for condition audits and long term planning of building assets.

Asset registers

Currently all infrastructure assets (excluding bridges and traffic signals) have been established in RAMM. Buildings and Plant and Fleet assets are managed in Hansen.

Linkage from asset management to financial system

There is no direct interface between the asset management systems and the financial systems. As part of the RAMM implementation this has been scheduled to occur in later financial year for infrastructure assets. Buildings and Plant and Fleet will not be included in this implementation in the first instance.

Accountabilities for asset management system and data

Processes have been established to ensure that data in the asset management systems are up-to-date and audit processes are in place to maintain and improve the data integrity.

Required changes to asset management system arising from this AM Plan

Council has recognised that improved analysis of data for long term predictive modelling, and integration of valuations and unit rates into asset information systems is very crucial to achieve asset management outcomes.

7.2 Improvement Program

The Asset Management Improvement Plan generated from this AM Plan is shown in Table 7.2.

Table 7.2: Improvement Plan

Task no.	Task	Responsibility	Resources required	Timeline
1	Improve financial reporting to enable capital / maintenance / operational costs to be captured and identified per building.	Finance	Finance	March 2017
2	Develop Asbestos Removal Program.	Infrastructure Management	Asset Officers	June 2016
3	Develop Public Toilet Action Plan to plan for the upgrade / renewal and new facilities required to meet the standards in the *Operating Guideline for Public Toilets*.	Infrastructure Management	City Safety, Cleansing	July 2016
5	Undertake consultation to identify customer satisfaction with building assets.	Infrastructure Management	Park Lands Strategy, Active City, P and C, Governance, City Community, Public Realm, UPark, Property and external stakeholders	April 2016 and annually
6	Assess property portfolio to identify strategic alignment and fit with adopted strategies.	Infrastructure Management	Property Development	July 2016 and annually
7	Review in line with adopted *Adelaide Design Manual*.	Infrastructure Management		As ADM is adopted
8	Undertake cost benefit analysis of implementing a preventative maintenance program.	Infrastructure Management	Facilities Management	December 2016
9	Review annually to ensure alignment with Council strategies.	Infrastructure Management	Asset Officers	December each year
10	Develop internal audit / review process to ensure asset management processes and implementation are consistent with the endorsed plan.	Infrastructure Management	Asset Officers	December 2016
11	Continue to improve asset data collection including improvement to the asset handover procedure.	Infrastructure Management	Asset Officers	December 2016
12	Develop plans for the upgrade, renewal, and new facilities to meet forecast demand.	Infrastructure Management	Asset Officers	2016 - 17
13	Review community levels of service and technical levels of service against customer satisfaction results.	Infrastructure Management	Asset Officers	Ongoing
14	Update *Disability Discrimination Act Management Plan*.	Infrastructure Management	Asset Officers / external consultants	2017
15	Review prioritisation ranking criteria for renewal, enhancement or new assets.	Infrastructure Management	Finance	April 2017
16	Identify appropriate approach for addressing residential investment properties within asset management framework and general property strategy.	Property / Infrastructure Management	Property Officers and Building Asset Officers	December 2016

7.3 Monitoring and Review Procedures

This AM Plan will be reviewed during annual budget planning processes and amended to recognise any material changes in service levels and / or resources available to provide those services as a result of budget decisions.

The AM Plan will be updated annually to ensure it represents the current service level, asset values, projected operations, maintenance, capital renewal and replacement, capital upgrade / new and asset disposal expenditures, and projected expenditure values incorporated into the Council's LTFP.

The AM Plan has a life of four years (Council election cycle) and is due for complete revision and updating within two years of each Council election.

7.4 Performance Measures

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

- The degree to which the required projected expenditures identified in this AM Plan are incorporated into the Council's LTFP;
- The degree to which one to five-year detailed works programs, budgets, business plans, and organisational structures take into account the 'global' works program trends provided by the AM 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 organisation's Strategic Plan and associated plans; and
- The Asset Renewal Funding Ratio achieving the target of 1.0.

8. REFERENCES

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9. APPENDICES

Appendix A Maintenance Response Levels of Service

Appendix B Projected 10-year Capital Renewal and Replacement Works Program

Appendix C Projected 10-year Capital Upgrade / New Works Program

Appendix D Budgeted Expenditures Accommodated In LTFP

Appendix E Risk Register

Appendix F Abbreviations

Appendix G Glossary

Appendix A: Maintenance Response Levels of Service

Maintenance and Inspection Program

Activity	Type	Frequency	Comments	Corporate	Community	Commercial	Facilities
Air conditioning	Inspection	Monthly	Australian Standards apply	Yes	Council when responsible	Council when landlord responsibility	Yes
Back flow prevention devices	Inspection	Yearly	Australian Standards apply	Yes	Yes	Yes	Yes
Building Maintenance System (BMS)	Inspection	Monthly		Yes	Yes	Yes	Yes
Cleaning	Maintenance	Daily	Dependant on usage	Yes	Council as occupier only	Council when landlord responsibility	Yes
Cleaning (carpet)	Maintenance	Annually	Dependant on usage	Yes	Council as occupier only	Council when landlord responsibility	NA
Cleaning (hygiene services)	Maintenance	Monthly		Yes	Council when responsible	Council when landlord responsibility	Yes
Cleaning (window)	Maintenance	Six monthly / annually	Dependant on usage	Yes	Council when responsible	Council when landlord responsibility	Yes
Clock	Inspection	Monthly	Town Hall	Yes			
Electrical compliance (switchboards)	Inspection	Annually	Australian Standards apply	Yes	Council when responsible	Yes	Yes
Emergency evacuation system	Inspection	Annually	Australian Standards apply	Yes	Council when responsible	Council when landlord responsibility	Yes
Exit and emergency lighting	Inspection	Monthly	Australian Standards apply	Yes	Council when responsible	Council when landlord responsibility	Yes
Fall restraint / harness system	Inspection	Annually	Australian Standards apply	Yes	Yes	Yes	Yes
Fire emergency systems	Inspection			Yes	Yes	Yes	Yes

Appendix A: Maintenance Response Levels of Service *continued*

Maintenance and Inspection Program

Activity	Type	Frequency	Comments	Corporate	Community	Commercial	Facilities
Fire extinguishers / hose reels	Inspection	Six monthly	Australian Standards apply	Yes	Council when responsible	Council when landlord responsibility	Yes
Fire separation / flame retardant spray	Inspection	Annually	Australian Standards apply	Yes	Yes	Yes	Yes
Floor coverings	Replace	As required	Dependant on condition	Yes	Council when responsible	Council when landlord responsibility	Yes
General property inspection	Inspection	Six monthly / annually		Yes			Yes
Grease traps	Maintenance	Monthly / quarterly	Dependant on usage	Yes	Council when responsible	Council when landlord responsibility	NA
Lifts	Maintenance	Monthly	Australian Standards apply	Yes	Yes	Yes	Yes
Painting	Maintenance	5-7 years	Adjusted based on hierarchy of building	Yes	Council when responsible	Council when landlord responsibility	Yes
Pest control	Maintenance	Monthly - six monthly	Dependant on location and usage	Yes	Council when responsible	Council when landlord responsibility	Yes
Roller doors / gates (automatic / manual)	Inspection	Monthly		Yes	Council when responsible	Council when landlord responsibility	Yes
Roof and gutter cleaning	Maintenance	Six monthly		Yes	Council when responsible	Yes	Yes
Security (systems and monitoring)	Inspection	Monthly	Australian Standards apply	Yes	Council as occupier only	Council when landlord responsibility	Yes
Testing and tagging	Inspection	Yearly	Australian Standards apply	Yes	Council when responsible	Council when landlord responsibility	Yes

Appendix A: Maintenance Response Levels of Service *continued*

Maintenance and Inspection Program

Activity	Type	Frequency	Comments	Corporate	Community	Commercial	Facilities
Thermostatic mixing	Inspection	Annually	Australian Standards apply	Yes	Council when responsible	Council when landlord responsibility	Yes
Toilets (automatic)	Inspection	Quarterly	Maintenance contract				Yes
Water testing (e.g. chlorine, drinking fountains)	Inspection	Annually	Australian Standards apply	Yes	Council when responsible	Council when landlord responsibility	Yes

Note: Commercial and some community buildings are leased to third parties - maintenance responsibilities vary between landlord and tenant - individual leases should be checked to verify responsibility.

Appendix A: Maintenance Response Levels of Service *continued*

Reactive Maintenance Response Times

Asset type	Task	Intervention level	Make safe time	Repair time (from notification)
Mechanical	Air conditioning repair / replace	Inspection / report (repair time depends on extent of damage / severity)	≤ 1 hour - 24 hours	≤ 5 working days (30 days for non-urgent)
Mechanical	Hot water systems repair / replace	Upgrade or malfunction	≤ 1 hour - 24 hours	≤ 5 working days (30 days for non-urgent)
Mechanical	Lift breakdown	Inspection / report	≤ 1 hour - 24 hours	≤ 5 working days
Mechanical	Building Maintenance System (BMS)	Inspection / report	≤ 1 hour - 24 hours	≤ 5 working days (30 days for non-urgent)
Mechanical	Lift (non urgent)	Inspection / report	≤ 1 hour - 24 hours	≤ 30 working days
Mechanical	Automatic doors	Inspection / report	≤ 1 hour - 24 hours	≤ 5 working days (30 days for non-urgent)
Plumbing	Plumbing failure	Inspection / report (repair time depends on extent of damage / severity)	≤ 1 hour - 24 hours	≤ 5 working days
Electrical	Upgrade electrical system	No longer compliant	≤ 5 working days	≤ 6 months
Electrical	Electrical repairs (major)	Inspection / report (repair time depends on extent of damage / severity)	≤ 1 hour - 24 hours	≤ 5 working days (30 days for non-urgent)
Electrical	Electrical repairs (minor)	Inspection / report (repair time depends on extent of damage / severity)	≤ 1 hour - 24 hours	≤ 5 working days (30 days for non-urgent)
Electrical	Lights general maintenance (bulbs / tubes) excluding exit and emergency lighting	Inspection / report	≤ 1 hour - 24 hours	≤ 30 working days
Electrical	Exit and emergency lighting repairs	Inspection / report	≤ 1 hour - 24 hours	≤ 5 working days
Fire Services	Fire services	Inspection / report	≤ 1 hour - 24 hours	≤ 5 working days (30 days for non-urgent)
Envelope	Glazing	Inspection / report (repair time depends on extent of damage / severity)	≤ 1 hour - 24 hours	≤ 5 working days (30 days for non-urgent)
Envelope	Floor coverings (replace / repair)	Inspection / report (repair time depends on extent of damage / severity)	≤ 1 hour - 24 hours	≤ 5 working days (30 days for non-urgent)
Envelope	Graffiti (offensive)	Inspection / report		≤ 1 hour - 24 hours
Envelope	Graffiti (non-offensive)	Inspection / report		≤ 5 working days
Envelope	Doors / windows (break in response)	Inspection / report (repair time depends on extent of damage / severity)	≤ 1 hour - 24 hours	≤ 5 working days (30 days for non-urgent)
Envelope	Carpentry and joinery	Inspection / report (repair time depends on extent of damage / severity)	≤ 1 hour - 24 hours	≤ 5 working days (30 days for non-urgent)
Envelope	Signage	Inspection / report	≤ 1 hour - 24 hours	≤ 5 working days (30 days for non-urgent)
Envelope	Window treatments (blinds, etc)	Inspection / report	≤ 1 hour - 24 hours	≤ 5 working days (30 days for non-urgent)
Envelope	Locks / opening systems	Inspection / report	≤ 1 hour - 24 hours	≤ 5 working days (30 days for non-urgent)
Envelope	Building structure (roof, downpipes, etc)	Inspection / report	≤ 1 hour - 24 hours	≤ 5 working days (30 days for non-urgent)

Appendix B: Projected 10-year Capital Renewal and Replacement Works Program

	Renewal cost
2016	**$3,105,611**
Commercial	$656,500
Community	$870,076
Corporation	$1,030,015
Facilities	$549,020
2017	**$6,158,233**
Commercial	$3,026,013
Community	$983,583
Corporation	$1,690,943
Facilities	$457,694
2018	**$3,174,533**
Commercial	$22,500
Community	$103,115
Corporation	$2,633,444
Facilities	$415,474
2019	**$4,589,803**
Commercial	$1,680,362
Community	$288,371
Corporation	$2,594,630
Facilities	$26,440
2020	**$3,547,809**
Commercial	$1,446,060
Community	$729,737
Corporation	$1,295,403
Facilities	$76,609

	Renewal cost
2021	**$6,882,843**
Commercial	$1,147,456
Community	$834,208
Corporation	$4,777,044
Facilities	$124,135
2022	**$4,177,686**
Commercial	$1,824,543
Community	$494,496
Corporation	$1,826,513
Facilities	$32,134
2023	**$3,205,998**
Commercial	$663,960
Community	$1,619,241
Corporation	$783,530
Facilities	$139,267
2024	**$2,118,658**
Commercial	$760,272
Community	$424,412
Corporation	$793,084
Facilities	$140,890
GRAND TOTAL	**$36,961,174**

Appendix C: Projected Upgrade / New 10-year Capital Works Program

Year	Item	Description	Estimate ($,000)
2015		**TOTAL**	**$280**
2016	1	Town Hall - lighting bar and lights	$30
	2	Public toilets	$250
	3	Victoria Park change room and toilets	$600
2016		**TOTAL**	**$880**
2017	1	Public toilets	$250
	2	Park Land buildings (Master Plan)	$500
2017		**TOTAL**	**$750**
2018	1	Park Land buildings (Master Plan)	$500
2018		**TOTAL**	**$500**
2019	1	Park Land buildings (Master Plan)	$500
2019		**TOTAL**	**$500**
2020	1	Park Land buildings (Master Plan)	$500
2020		**TOTAL**	**$500**
2021	1	Park Land buildings (Master Plan)	$500
2021		**TOTAL**	**$500**
2022	1	Park Land buildings (Master Plan)	$500
2022		**TOTAL**	**$500**
2023	1	Park Land buildings (Master Plan)	$500
2023		**TOTAL**	**$500**
2024	1	Park Land buildings (Master Plan)	$500
2024		**TOTAL**	**$500**

Appendix D: Budgeted Expenditures Accommodated in LTFP

NAMS.PLUS3 Asset Management

Buildings inc 3 yr plan_S2_V5 Asset Management Plan

First year of expenditure projections 2015 (financial year ending)

Asset values at start of planning period			Calc CRC from asset register		Operations and maintenance costs for new assets	% of asset value	Existing % calculated from data in worksheet	
Current replacement cost	$425,233	(000)	$99,769	(000)	Additional operations costs	1.14%	1.14%	of CRC (10-year average)
Depreciable amount	$425,233	(000)	This is a check for you.		Additional maintenance	0.89%	0.89%	of CRC (10-year average)
Depreciated replacement cost	$243,754	(000)			Additional depreciation	2.18%	2.18%	of Dep Amt
Annual depreciation expense	$9,270	(000)			Planned renewal budget (information only)		1.76%	of CRC (year one comparison)

Planned expenditures from LTFP

20-year expenditure projections **Note: Enter all values in current 2015 values. You may use these values calculated from your data or overwrite the links.**

Financial year ending	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000
Expenditure outlays included in *Long Term Financial Plan* (in current $ values)											**Average of first 10-year expenditure outlays from LTFP**									
Operations																				
Operations budget	$4,823	$4,851	$4,851	$4,851	$4,851	$4,851	$4,851	$4,851	$4,851	$4,851	$4,848	$4,848	$4,848	$4,848	$4,848	$4,848	$4,848	$4,848	$4,848	$4,848
Management budget	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
AM systems budget	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
TOTAL OPERATIONS	**$4,823**	**$4,851**	**$4,851**	**$4,851**	**$4,851**	**$4,851**	**$4,851**	**$4,851**	**$4,851**	**$4,851**	**$4,848**	**$4,848**	**$4,848**	**$4,848**	**$4,848**	**$4,848**	**$4,848**	**$4,848**	**$4,848**	**$4,848**
Maintenance																				
Reactive maintenance budget	$1,030	$1,682	$1,682	$1,682	$1,682	$1,682	$1,682	$1,682	$1,682	$1,682	$1,617	$1,617	$1,617	$1,617	$1,617	$1,617	$1,617	$1,617	$1,617	$1,617
Planned maintenance budget	$704	$626	$626	$626	$626	$626	$626	$626	$626	$626	$634	$634	$634	$634	$634	$634	$634	$634	$634	$634
Specific maintenance items budget	$0	$1,696	$1,696	$1,696	$1,696	$1,696	$1,696	$1,696	$1,696	$1,696	$1,526	$1,526	$1,526	$1,526	$1,526	$1,526	$1,526	$1,526	$1,526	$1,526
TOTAL MAINTENANCE	**$1,734**	**$4,004**	**$4,004**	**$4,004**	**$4,004**	**$4,004**	**$4,004**	**$4,004**	**$4,004**	**$4,004**	**$3,777**	**$3,777**	**$3,777**	**$3,777**	**$3,777**	**$3,777**	**$3,777**	**$3,777**	**$3,777**	**$3,777**
Capital																				
Planned renewal budget	$7,483	$3,100	$6,100	$3,100	$6,100	$3,600	$7,000	$4,200	$3,400	$2,400	$4,648	$4,648	$4,648	$4,648	$4,648	$4,648	$4,648	$4,648	$4,648	$4,648
Planned upgrade / new budget	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Non-growth contributed asset value	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Asset disposals																				
Est cost to dispose of assets	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Carrying value (DRC) of disposed assets	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Appendix D: Budgeted Expenditures Accommodated in LTFP *continued*

Planned expenditures from LTFP

20-year expenditure projections Note: Enter all values in current 2015 values. You may use these values calculated from your data or overwrite the links.

Financial year ending	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000
Additional expenditure outlays requirements (e.g. from *Infrastructure Risk Management Plan*)											**Average of first 10 years expenditure outlays required from IRMP**									
Additional expenditure outlays required	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
and not included above	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000
Operations	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Maintenance	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Capital renewal	**to be incorporated into Forms 2 and 2.1 (where method 1 is used) OR Form 2B Defect Repairs (where method 2 or 3 is used)**																			
Capital upgrade	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
User comments #2																				
Forecasts for capital renewal using methods 2 and 3 (Form 2A and 2B) and capital upgrade (Form 2C)											**Average of first 10 years capital renewal and upgrade forecasts**									
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000
Forecast capital renewal from Forms 2A and 2B	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Forecast capital upgrade from Form 2C	$0	$750	$2,150	$1,150	$500	$500	$500	$500	$500	$500	$705	$705	$705	$705	$705	$705	$705	$705	$705	$705

Appendix E: Risk Register

Risk Identification, Analysis and Evaluation

Risk no.	Asset providing the service	What can happen?	Likelihood	Overall consequences	Risk rating	Action required timing	Is risk acceptable?
1	Buildings	Total building loss.	Unlikely	Catastrophic	High	Prioritised action required.	No
2	Buildings	Failure to comply with legislative and regulatory conditions.	Possible	Moderate	High	Prioritised action required.	No
3	Buildings	Personal injury or potential loss of life.	Possible	Moderate	High	Prioritised action required.	No
4	Buildings	Deterioration of, and / or damage to the building.	Possible	Minor	Medium	Planned action required.	No
5	Buildings	Risk of building occupant exposure to hazardous materials.	Possible	Moderate	High	Prioritised action required.	No
6	Buildings	Environmental hazard.	Unlikely	Minor	Low	Manage by routine procedures.	Yes
7	Buildings	Maintenance costs increasing.	Possible	Minor	Medium	Planned action required.	No
8	Buildings	Buildings not suiting the needs of end users.	Unlikely	Minor	Low	Manage by routine procedures.	Yes
9	Buildings	Maintenance and renewal budget inadequate to service new assets.	Unlikely	Minor	Low	Manage by routine procedures.	Yes
10	Buildings	Failure to dispose of redundant assets in a timely manner.	Unlikely	Minor	Low	Manage by routine procedures.	Yes

Appendix E: Risk Register *continued*

Risk Treatment

Risk no.	Asset providing the service	What can happen?	Existing controls	Risk rating	Treatment option	Estimated cost ($,000)	Options residual risk	Risk Treatment Plan	Residual risk
1	Buildings	Total building loss.	Insurances.	High	A Ensure that there is a Business Continuity Plan around total loss of certain buildings.	NA	Medium	Ensure committee is in place to continually develop and assess the effectiveness of Business Continuity Plan and ensure all insurances are current.	Low
					B Ensure adequate insurances are in place.	Dependent on particular buildings.	Low		
2	Buildings	Failure to comply with legislative and regulatory conditions.	Contracts and internal processes.	High	A Ensure compliance with relevant legislation and regulations.		Low	Delegated personnel to keep up to date with relevant legislation and ensure implementation as required.	Low
3	Buildings	Personal injury or potential loss of life.	Inspections and internal processes.	High	A Condition of buildings to be regularly inspected and necessary works identified.	$50 p.a.	Medium	Undertake regular condition audits and develop works program.	Low
4	Buildings	Deterioration of, and / or damage to the building.	Inspections and internal processes.	Medium	A Condition of buildings to be regularly inspected and necessary works identified.	$50 p.a.	Low	Undertake regular condition audits and develop works program.	
5	Buildings	Risk of building occupant exposure to hazardous materials.	Registers.	High	A Ensure correct identification and storage of all hazardous materials.	NA	Low	Consult with WHS department to ensure message regarding correct storage and access is communicated.	Low
					B Ensure MSDS are read and understood.	NA	Low		
6	Buildings	Environmental hazard.	Regular inspections.	Low	A NA				

Appendix E: Risk Register *continued*

Risk Treatment

Risk no.	Asset providing the service	What can happen?	Existing controls	Risk rating	Treatment option	Estimated cost ($,000)	Options residual risk	Risk Treatment Plan	Residual risk
7	Buildings	Maintenance costs increasing.	Three-year works program and LTFP.	Medium	A Use regular condition audits to inform three-year works program and LTFP.	$50 p.a.	Low	Develop three-year works program.	Low
8	Buildings	Buildings not suiting the needs of end users.	Continue to monitor not only the condition of buildings, but how well they suit the needs of users.	Low	A NA				
9	Buildings	Maintenance and renewal budget inadequate to service new assets.	Three-year works program and LTFP.	Low	A NA				
10	Buildings	Failure to dispose of redundant assets in a timely manner.	Strategic Property Team.	Low	A NA				

Appendix E: Risk register *continued*

Risk Treatment Plan

Risk no.	Asset providing the service	What can happen?	Risk rating	Action required timing	Risk Treatment Plan	Residual risk	Actions	Responsibility	Resources required	Estimated budget ($,000)	Date due
1	Buildings	Total building loss.	High	Prioritised action required	Ensure committee is in place to continually develop and assess the effectiveness of Business Continuity Plan and ensure all insurances are current.	Low	1 Regular schedule of meetings to be implemented.	Risk Committee	NA	NA	Ongoing
2	Buildings	Failure to comply with legislative and regulatory conditions.	High	Prioritised action required	Delegated personnel to keep up to date with relevant legislation and ensure implementation as required.	Low	1 Implementation of controls to ensure compliance.	Compliance Officer	NA	NA	Ongoing
							2 Audit of Controls to assess effectiveness.	WHS Committee	Staff time	NA	Six-monthly
3	Buildings	Personal injury or potential loss of life.	High	Prioritised action required	Undertake regular condition audits and develop works program.	Low	1 Schedule regular condition audits.	Building Asset Class Officer	Staff time	$50 p.a.	Yearly
4	Buildings	Deterioration of, and / or damage to the building.	Medium	Planned action required	Undertake regular condition audits and develop works program.		1 Schedule regular condition audits.	Building Asset Class Officer	Staff time	$50 p.a.	Yearly
5	Buildings	Risk of building occupant exposure to hazardous materials	High	Prioritised action required	Consult with WHS department to ensure message regarding correct storage and access is communicated.	Low	1 Regular communication from WHS regarding requirements.	WHS Committee	Staff time	NA	Quarterly

Appendix E: Risk register *continued*

Risk Treatment Plan

Risk no.	Asset providing the service	What can happen?	Risk rating	Action required timing	Risk Treatment Plan	Residual risk	Actions	Responsibility	Resources required	Estimated budget ($,000)	Date due
6	Buildings	Environmental hazard.	Low	Manage by routine procedures.							
7	Buildings	Maintenance costs increasing.	Medium	Planned action required.	Develop three-year works program.	Low	1 Three-year works program to be developed and implemented.	Building Asset Class Team	Staff time	$5,000 p.a.	Update yearly
8	Buildings	Buildings not suiting the needs of end users.	Low	Manage by routine procedures.							
9	Buildings	Maintenance and renewal budget inadequate to service new assets.	Low	Manage by routine procedures.							
10	Buildings	Failure to dispose of redundant assets in a timely manner.	Low	Manage by routine procedures.							

Appendix F: Abbreviations

AAAC	Average annual asset consumption
AM	Asset management
AM Plan	Asset management plan
ARI	Average recurrence interval
ASC	Annual service cost
BOD	Biochemical (biological) oxygen demand
CRC	Current replacement cost
CWMS	Community wastewater management systems
DA	Depreciable amount
DRC	Depreciated replacement cost
EF	Earthworks / formation
IRMP	Infrastructure risk management plan
LCC	Lifecycle cost
LCE	Lifecycle expenditure
LTFP	Long term financial plan
MMS	Maintenance management system
PCI	Pavement condition index
RV	Residual value
SoA	State of the assets
SS	Suspended solids
vph	Vehicles per hour
WDCRD	Written down current replacement cost

Appendix G: Glossary

Annual service cost (ASC)

1) Reporting actual cost

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

2) 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 category

Sub-group of assets within a class hierarchy for financial reporting and management purposes.

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 hierarchy

A framework for segmenting an asset base into appropriate classifications. The asset hierarchy can be based on asset function or asset type or a combination of the two.

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.

Asset renewal funding ratio

The ratio of the net present value of asset renewal funding accommodated over a 10-year period in a Long Term Financial Plan relative to the net present value of projected capital renewal expenditures identified in an Asset Management Plan for the same period [AIFMG Financial Sustainability Indicator No 8].

Average annual asset consumption (AAAC)*

The amount of an organisation'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 organisation'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 organisation'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.

Class of assets

See 'asset class' definition.

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.

Core asset management

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 cash flow predictions. Priorities are usually established on the basis of financial return gained by carrying out the work (rather than detailed risk analysis and optimised decision-making).

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.

Critical assets

Assets for which the financial, business or service level consequences of failure are sufficiently severe to justify proactive inspection and rehabilitation. Critical assets have a lower threshold for action than non-critical assets.

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.

Deferred maintenance

The shortfall in rehabilitation work undertaken relative to that required to maintain the service potential of an asset.

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 outlays.

Expenses

Decreases in economic benefits during the accounting period in the form of outflows or depletions of assets or increases in liabilities that result in decreases in equity, other than those relating to distributions to equity participants.

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.

Financing gap

A financing gap exists whenever an entity has insufficient capacity to finance 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 financing gap means service levels have already or are currently falling. A projected financing 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.

Infrastructure assets

Physical assets that contribute to meeting the needs of organisations or the need for access to major economic and social facilities and services, e.g. roads, drainage, footpaths, and cycleways. These are typically large, interconnected networks or portfolios of composite assets. The components of these assets may be separately maintained, renewed or replaced individually so that the required level and standard of service from the network of assets is continuously sustained. Generally the components and hence the assets have long lives. They are fixed in place and are often have no separate market value.

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.

Level 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.

Lifecycle cost (LCC) *

1. **Total LCC**
   The total cost of an asset throughout its life including planning, design, construction, acquisition, operation, maintenance, rehabilitation, and disposal costs.
2. **Average LCC**
   The LCC is average cost to provide the service over the longest asset lifecycle. It comprises average operations, maintenance expenditure plus asset consumption expense, represented by depreciation expense projected over 10 years. The LCC does not indicate the funds required to provide the service in a particular year.

Lifecycle expenditure

The lifecycle expenditure (LCE) is the average operations, maintenance, and capital renewal expenditure accommodated in the *Long Term Financial Plan* over 10 years. LCE may be compared to average lifecycle cost to give an initial indicator of affordability of projected service levels when considered with asset age profiles.

Loans / borrowings

See 'borrowings'.

Maintenance

All actions necessary for retaining an asset as near as practicable to an appropriate service condition, including regular ongoing day-to-day work necessary to keep assets operating, 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.
- **Specific maintenance**
  Maintenance work to repair components or replace sub-components that need 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 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 organisation 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 the organisation, e.g. parks and playgrounds, footpaths, roads and bridges, and libraries.

Operations

Regular activities to provide services such as public health, safety, and amenity, e.g. street sweeping, grass mowing, and street lighting.

Operating 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.

Operating expenses

Recurrent expenses continuously required to provide a service, including power, fuel, staff, plant equipment, maintenance, depreciation, on-costs, and overheads.

Operations, maintenance, and renewal financing ratio

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

Operations, maintenance, and renewal gap

Difference between budgeted expenditures in a Long Term Financial Plan (or estimated future budgets in absence of a Long Term Financial Plan) and projected expenditures for operations, maintenance, and renewal of assets to achieve / maintain specified service levels, totalled over a defined time (e.g. five, 10, and 15 years).

Pavement management system (PMS)

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 *

The ratio of annual asset consumption relative to the depreciable amount of the assets. It measures the amount of the consumable parts of assets that are consumed in a period (depreciation) expressed as a percentage of the depreciable amount.

Rate of annual asset renewal *

The ratio of asset renewal and replacement expenditure relative to depreciable amount for a period. It measures whether assets are being replaced at the rate they are wearing out with capital renewal expenditure expressed as a percentage of depreciable amount (capital renewal expenditure / DA).

Rate of annual asset upgrade / new *

A measure of the rate at which assets are being upgraded and expanded per annum with capital upgrade / new expenditure 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.

Rehabilitation

See 'capital renewal expenditure' definition above.

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.

Renewal

See 'capital renewal expenditure' definition above.

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.

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 class.

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).

Specific maintenance

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

Strategic Longer-Term Plan

A plan covering the term of office of councillors (four years minimum) reflecting the needs of the community for the foreseeable future. It brings together the detailed requirements in the Council's longer-term plans such as the *Asset Management Plan* and the *Long Term Financial Plan*. The plan is prepared in consultation with the community and details where the 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.

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 the organisation.

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, AIFMG Glossary

Additional and modified glossary items shown *