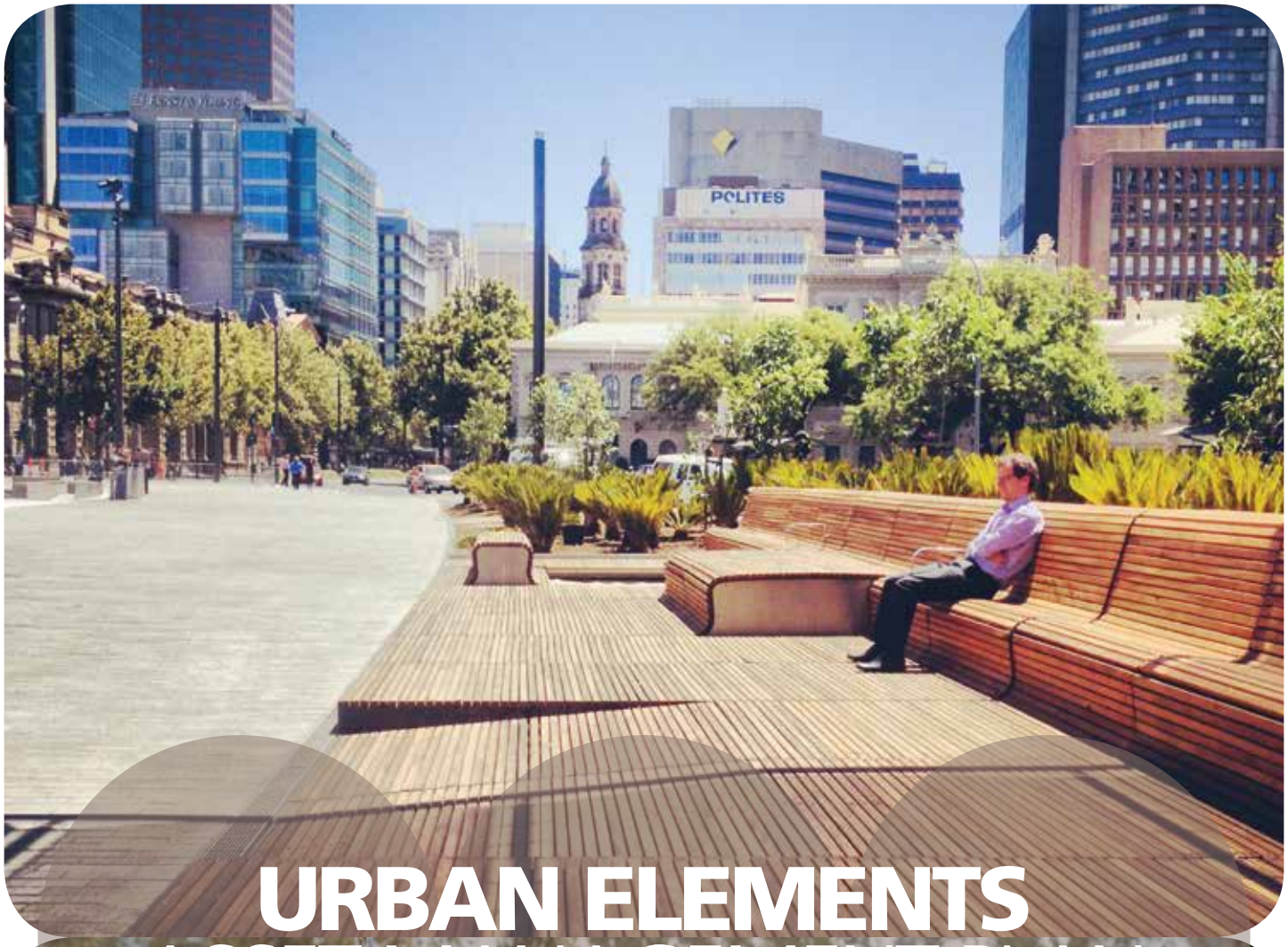


URBAN ELEMENTS
ASSET MANAGEMENT PLAN

CONTENTS

1. EXECUTIVE SUMMARY

Context

Adelaide City Council (Council) provides an Urban Elements suite of assets in the City Streets, Park Lands and Open Space Network in partnership at times with the State Government to enable residents, visitors and the general public to experience a safe, pleasant and inviting environment as well as access to facilities for sport, events and relaxation.

The asset group is contained within 760 hectares of open space, city streets, and associated public realm areas.

The City of Adelaide Strategic Plan 2016 - 20 seeks to deliver outcomes for the city and its community in alignment with the following four themes:

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

As a result, Council will undergo considerable change over the next 10 years with Council driving an activation of public spaces, significant increases in residents and people visiting the city resulting in greater residential density, demand on open space and connectivity with an emphasis on pedestrians, cyclists and public transport.

This Asset Management Plan (AM Plan) is designed to ensure the Urban Elements Infrastructure required to provide these services are delivered now and into the future to underpin the Adelaide economy, lifestyle, experience and way of life. The AM Plan also assists Council to meet financial sustainability obligations under the *Local Government Act*.

This AM Plan is intended to demonstrate how Council will achieve this outcome by applying the principles of responsible asset management planning, the object of which is to:

'Deliver a realistic level of service to existing and future customers in the most cost effective way'.

The Urban Elements Network

The Urban Elements Network comprises of numerous different assets that are very diverse, from outdoor public art and water features, bike racks, litter bins, seats, BMX track, to playspace equipment, fences, BBQ's, signage, and shade structures / arbours to name a few. Refer to Table 2.1 for the full list of assets.

These infrastructure assets have a current replacement value of $62.58 million.

What does it cost?

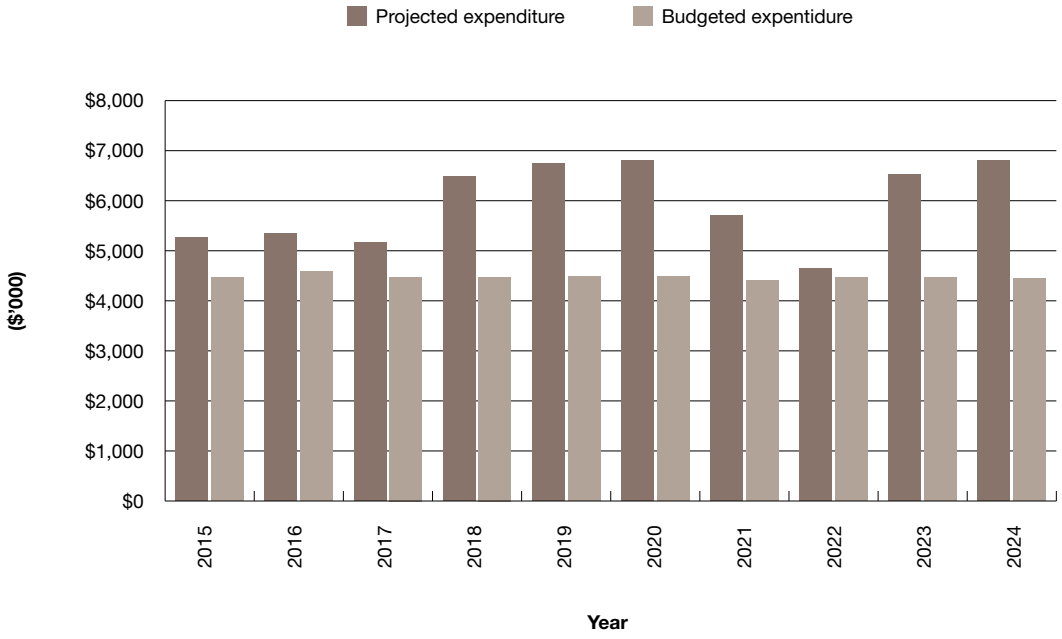
The projected outlays necessary to provide the services covered by this AM Plan includes operations, maintenance, renewal and upgrade of existing assets over the 10-year planning period is $59.49 million or $5.949 million on average per year, based on condition ratings and life expectancy of the assets when the plan was written.

Estimated available funding for this period is $44.73 million or $4.473 million on average per year. Which is 75% of the cost to provide the service. This is a funding shortfall of $1.477 million on average per year (25%), based on the condition ratings and life expectancy in 2014. The projected expenditure required to provide services in the AM Plan compared with planned expenditure currently included in the Long Term Financial Plan (LTFP) are shown in the graph below.

Council are currently carrying out an extensive condition audit and revised life expectancy calculations for the entire Urban Elements Asset Class to be completed in June 2016. This improved information, and the implementation of the *Adelaide Design Manual,* will provide opportunities and improvements which will be reflected in the Improvement Plan and next revision of the AM Plan.

This revised data will be at a high level of confidence and initial interrogation of the data obtained so far is projecting that the fluctuations for projected expenditure will reduce and flatten out over the 10-year planning period.

Figure 12: Projected and Budget Expenditure for Strategy



What we will do

We plan to provide Urban Element Infrastructure for the following:

- Operation, maintenance, renewal, and upgrade of the Urban Elements Asset Class to meet service levels; and
- Major renewals / upgrades within the 10-year planning period, which will include:
  - the Rundle Mall upgrade,
  - Pennington and Creswell Gardens adjacent the Adelaide Oval (DPTI),
  - ANZAC Walk Kintore Avenue (in partnership with DPTI),
  - Park 9, Park 15 and Park 14 Playspace / Activity / Hub upgrades / renewals,
  - Park 21 community recreational activity hub upgrade / renewal,
  - Refurbishment several major outdoor public artworks (Sir Donald Bradman, Gouger Street artworks, Voyagers Memorial, Captain Charles Sturt, John McDouall Stuart),
  - Upgrade of Gawler Place.

What we cannot do

Based on the current data we do not have enough funding to provide all services at the desired service levels or provide new services. Works and services that cannot be provided under present funding levels are:

- Upgrade and renew all the playspaces in accordance with the *Playspace Action Plan*;
- Fund and implement the *Sports Infrastructure Master Plan* for the western and southern Park Lands; and
- 25% of the predicted level of Urban Elements renewals each year.

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:

- Insufficient available funding;
- The impact on the city amenity; and
- The development of the new *Adelaide Design Manual,* which will present opportunities to provide a uniform suite of street and Park Land furniture. This may place increased pressure on the current funding and service levels.

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

- Reviewing this AM Plan or adjusting the LTFP to meet the required service levels;
- Audit and condition inspections every two years; updating RAMMS (asset database); and
- Prioritisation of resources, including reviewing the community service levels along with the asset utilisation mapping study that is currently being carried out. This will allow informed decisions on where assets are best placed for maximum use and allow the ability to deaccession existing assets that are not utilised at a suitable level.

Confidence levels

This AM Plan is based on low level of confidence information. Council are currently carrying out an extensive condition audit and revised life expectancy calculations for the entire Urban Elements Asset Class. This improved information, and the impending implementation of the *Adelaide Design Manual,* is expected to greatly affect the current data and AM Plan. This confidence will improve to 'High' as more quality data becomes available which will be included in the next revision of the AM Plan.

The next steps

The actions resulting from this AM Plan are:

- To review and improve on available asset related data;
- Ongoing development of Asset Management System to achieve a more advanced model;
- Balance available funding against service levels;
- Align the new *City of Adelaide Strategic Plan 2016 - 20* (once endorsed) with the AM Plan;
- Identify opportunities to coordinate infrastructure renewals with enhancement projects, such as the extension of the O-Bahn, upgrade of Park 19 to a metropolitan activity hub, upgrade of Gawler Place;
- Understanding and programming the effect on operational, maintenance, and renewal these projects will have on the city and this plan;
- Review and improve on available asset related data;
- Align available funding against service levels; and
- Work through the development of the *Adelaide Design Manual* and opportunities associated with its implementation. Collaborating with other areas of Council to determine how these opportunities can be delivered and integrated into the next revision of the AM Plan.

Questions you may have

What is this plan about?

This AM Plan covers the infrastructure assets that serve the community's Urban Elements needs. These assets include play-spaces, Park Lands recreational elements (community tennis courts, three on three basketball courts, BMX track, skate park, fitness stations, dog park equipment, petanque pists), outdoor public artworks including water features, bus shelters, Shade shelters, fences and gates, signs (business, cultural, way finding, gateway, Park Land, street name plates), street and Park Land furniture, retaining walls, rotundas, china town gateways and the Victoria Square Christmas tree throughout the community area that enable people to enjoy a pleasant, safe, and inviting environment.

What is an Asset Management 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.

Why is there a funding shortfall?

Some of the organisation's Urban Elements network installed by Council, developers and from government grants, is often provided and accepted without consideration of ongoing operations, maintenance and replacement needs.

A large number of these assets are approaching the end of their useful life according to the current data and require renewal or replacement, resulting in services from the assets decreasing and maintenance costs increasing.

The supply of additional new assets with new additional and more intensive maintenance requirements including:

- Victoria Square;
- Victoria Park;
- Rundle Mall;
- ANZAC Memorial Walk Kintore Avenue; and
- Upcoming upgrade of Gawler Place.

The present funding levels are insufficient to continue to provide existing services at current levels in the medium to long term.

What options do we have?

Resolving the funding shortfall involves several steps:

1. Improving asset knowledge so that data accurately records the asset inventory, how assets are performing and when assets are not able to provide the required service levels;
2. Improving our efficiency in operating, maintaining, renewing, and replacing existing assets to optimise lifecycle costs;
3. Identifying and managing risks associated with providing services from infrastructure;
4. Making trade-offs between service levels and costs to ensure that the community receives the best return from infrastructure;
5. Identifying assets surplus to needs for disposal to make saving in future operations and maintenance costs;
6. Consulting with the community to ensure that the Urban Elements services and costs meet community needs and are affordable;
7. Developing partnership with other bodies, where available, to provide services; and
8. Seeking additional funding from governments and other bodies to better reflect a 'whole of government' funding approach to infrastructure services.

What happens if we don't manage the shortfall?

It is likely that service levels will have to be reduced in some areas, unless new sources of revenue are found. For Urban Elements the service level reduction may include reduced maintenance, therefore reducing the life of the asset and increasing renewal costs. Not renewing or replacing assets when their useful life is up will result in more demand to provide maintenance. The main implication is that the city's Urban Elements will not be presented is a way that represents the city to be an inviting, pleasant, and safe environment. This can detract and deter people from coming into or encourage people to leave and not utilise the city, its Park Lands, and all it has to offer.

Examples of current and reduced levels of service:

Current levels of service

Reduced levels of service

Before renewal reduced levels of service

After renewal current levels of service

King George before and after

Before renewal reduced levels of service

After renewal current levels of service

What can we do?

We can develop options, costs, and priorities for future Urban Elements 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 and feedback on issues raised in this AM Plan and suggestions on how we may implement its Urban Elements Infrastructure mix to ensure that the appropriate level of service can be provided to the city and community within available funding.

2. INTRODUCTION

2.1 Background

This AM Plan is to demonstrate responsive management of assets (and services provided from 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, Asset Management Strategy,* and the following associated planning documents:

- *Draft City of Adelaide Strategic Plan 2016 - 20*;*
- *Long Term Financial Plan;*
- *City of Adelaide 2014 - 15 Annual Business Plan and Budget;*
- *City of Adelaide Active City Strategy 2013 - 23;*
- *Community Land Management Plans and Master Plans;* and
- Other relevant strategies, policies and guidelines.

The infrastructure assets covered by this AM Plan are shown in Table 2.1. These assets are used to provide a pleasant, safe, and inviting services to the city's community and all other users and stakeholders.

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

Table 2.1: Assets Covered by this Asset Management Plan

Asset category	Dimension / number	2014 Replacement value
Outdoor public art and water features	610	**$22,749,700**
5 - 10 year assets		**$17,164,024**
Bike racks	1,037	$431,100
Litter bins	821	$1,762,750
Butt out bins	185	$55,500
Dog bag dispensers	84	$21,000
Street name plates	2,150	$860,630
Seats / benches	1,605	$4,511,480
Gates	349	$220,700
Fences / barriers	34,989 m	$6,245,014
Bollards	4,584	$2,836,850
Planter boxes	390	$219,000
10 - 20 year assets		**$8,192,300**
BBQs	40	$756,000
Picnic tables	123	$309,000
Drinking fountains	114	$471,000
Park Land / cultural signs	203	$1,527,500
Flag poles	76	$337,000
Shade structures / arbours / pergolas	10	$1,290,000
Park Lands recreational elements (BMX tracks, three on three basketball, cricket pitches, netball courts, tennis courts, petanque pistes)		$2,647,500
Bus shelters	31	$775,000
Horse agistment equipment		$80,000

Table 2.1: Assets Covered by this Asset Management Plan *(continued)*

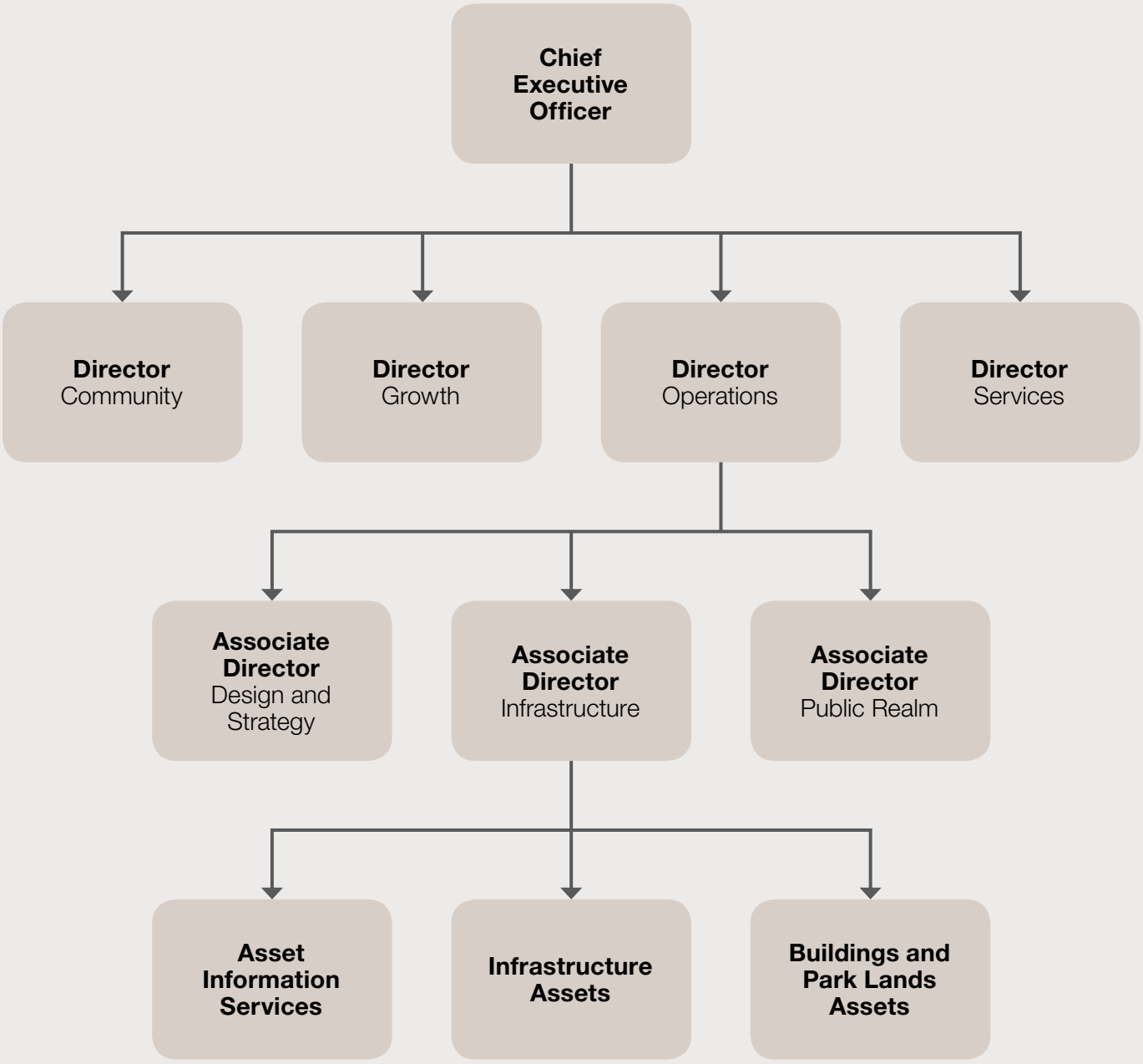
Asset category	Dimension / number	2014 Replacement value
Playspace equipment	11 playspaces	**$2,860,500**
Fitness equipment	17 stations	**$167,568**
Parking ticket machines	309	**$3,090,000**
Retaining walls	3,502 m^2	**$3,759,036**
Elder Park Rotunda		**$ 1,500,000**
Kingston Gardens Rotunda		**$300,000**
Moonta Street China Town gateways		**$ 2,800,000**
TOTAL		**$62,583,128**

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
Councillors	• Represent needs of community / shareholders; • Allocate resources to meet the organisation's objectives in providing services while managing risks; and • Ensure organisation is financial sustainable.
CEO / Directors	Executive management endorsement, sign off, and executive ownership.
Associate Director- Infrastructure Program	Review and approval of the AM Plan.
Asset Manager Urban Elements	Development, implementation and maintenance of the AM Plan to meet community levels of service.
Public Realm Program	Infrastructure maintenance, depot services, horticulture, and cleansing teams operate and maintain the infrastructure managed under the AM Plan to meet technical levels of service.
Finance and Businesses and Governance	Development of annual business plan and budget and Strategic Management Plan review.
Finance and Businesses	Funding for LTFP.
Wellbeing and Resilience	Development and updating of *Active City Strategy*, *Playspace Action Plan,* and other relevant plans and strategies for the assets.
Design and Strategy	Design and documentation support for infrastructure management in delivering the AM Plan.
Sustainability Program and Park Lands Strategy team	Development of sustainable service delivery outcomes involving renewal and enhancement of Urban Elements Infrastructure assets.

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.

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:

- 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 meets 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

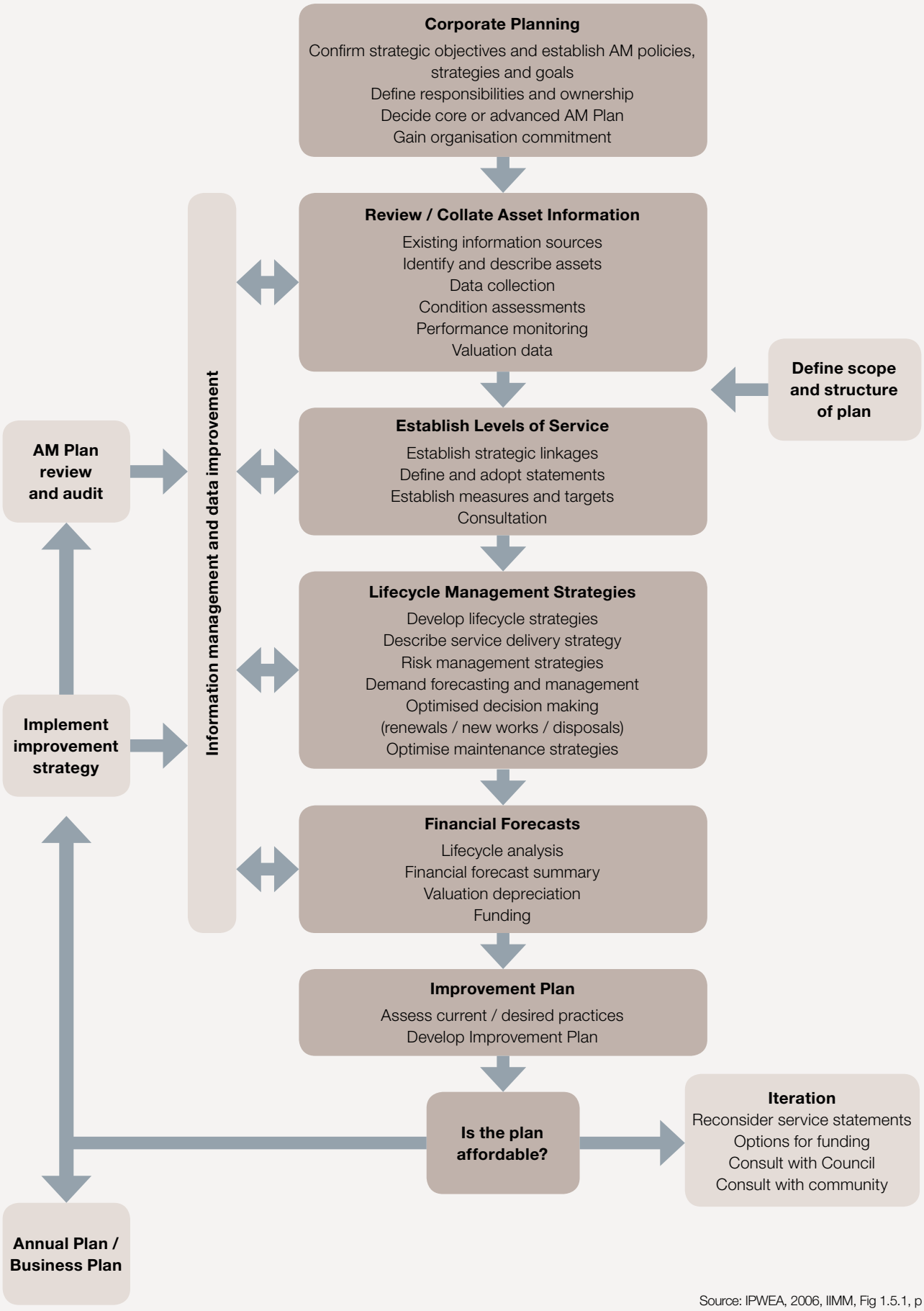
Key elements of the plan are:

- 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 next 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' AM Plan is prepared to facilitate community consultation initially through feedback on public display of draft AM plans prior to adoption by the Council. The feedback received from the *Park Lands Use Survey* carried out by *Park Lands Strategy* and the *GHD 2015 Customer Survey* of the Council's assets.

Council has undertaken extensive community consultation in the development of service levels for Park Lands and Open Space through the work undertaken in the formulation of the following documents:

- *Adelaide Design Manual;*
- *Adelaide Park Lands Management Strategy;*
- *Adelaide Park Lands Landscape Master Plan;*
- *The City of Adelaide 2015 - 16 Business Plan and Budget;*
- AM plans and *Customer Levels of Service - Community Engagement Outcomes Stage 1;* and
- *The City Of Adelaide Active City Strategy 2013 - 23.*

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

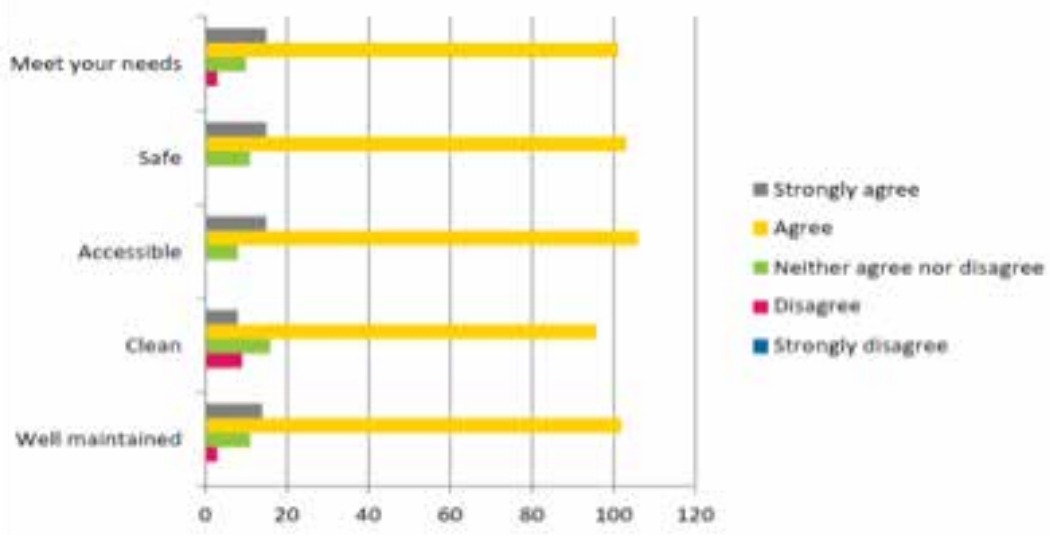
In November 2015, Council's Infrastructure Management Team commissioned an AM Plan and *Customer Levels of Service - Community Engagement Outcomes Stage 1 Survey*. The survey was carried out to explore perceptions of service across three core areas including streets, buildings and Park Lands, and captured opinions covering a wide range of infrastructure, much of which is not included in this plan.

A variety of tools and engagement activities were used during the consultation process and included:

- Key stakeholder letters (e.g. State Government departments, precinct groups, sporting organisations);
- Newspaper advertisements;
- Social media advertisements;
- Council Customer Service Centre digital screens;
- Libraries and community centres;
- Three focus groups (27 participants);
- Three workshops (eight participants only);
- Street interviews (131 participants); and
- Online survey through Your Say Adelaide.

It is the intention of the Infrastructure Management Team to revisit this survey process on a regular basis to allow supply of information required to ensure this plan remains relevant.

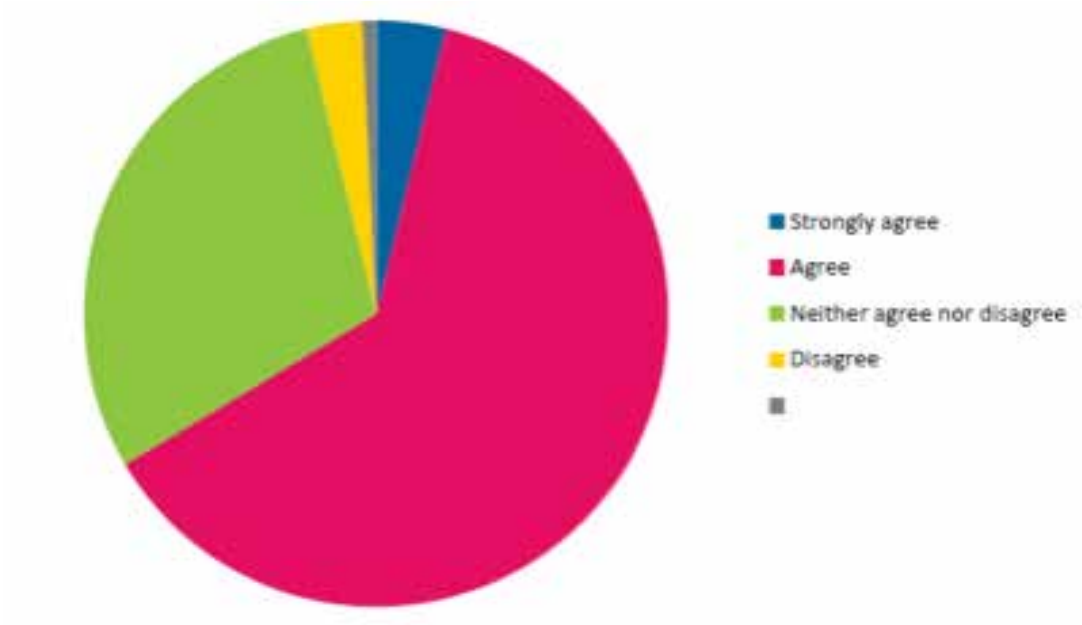
Table 3.1: Community Satisfaction Survey Levels
Urban Elements in Streets 2015 (public art, signage, benches etc)



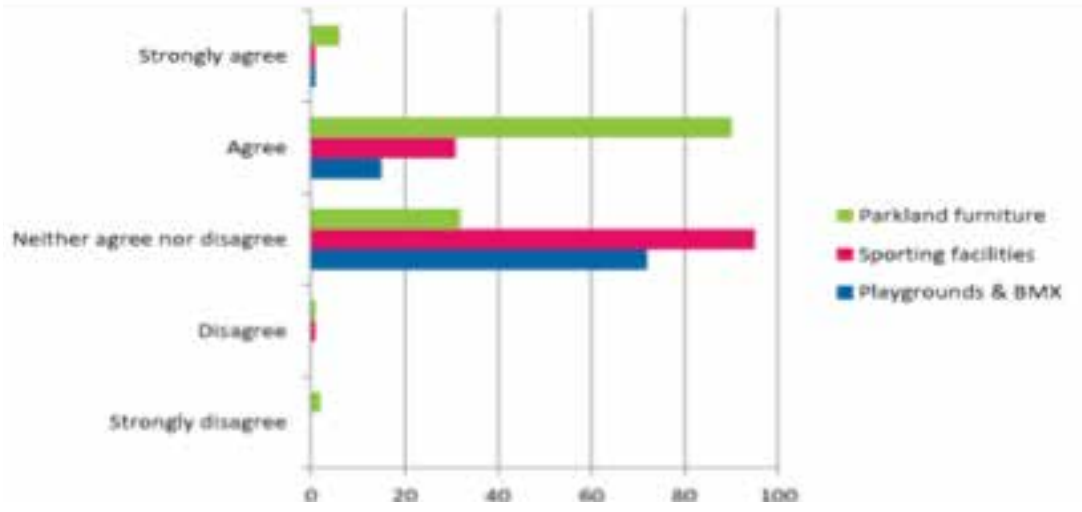
The graph highlights that the majority of the community is satisfied with the Urban Elements in the streets. It meets their needs, is safe to use, easily accessible, clean, and well maintained.

Urban Elements in Park Lands 2012

Is Park Land furniture clean? (public art, signage, bins, benches etc)



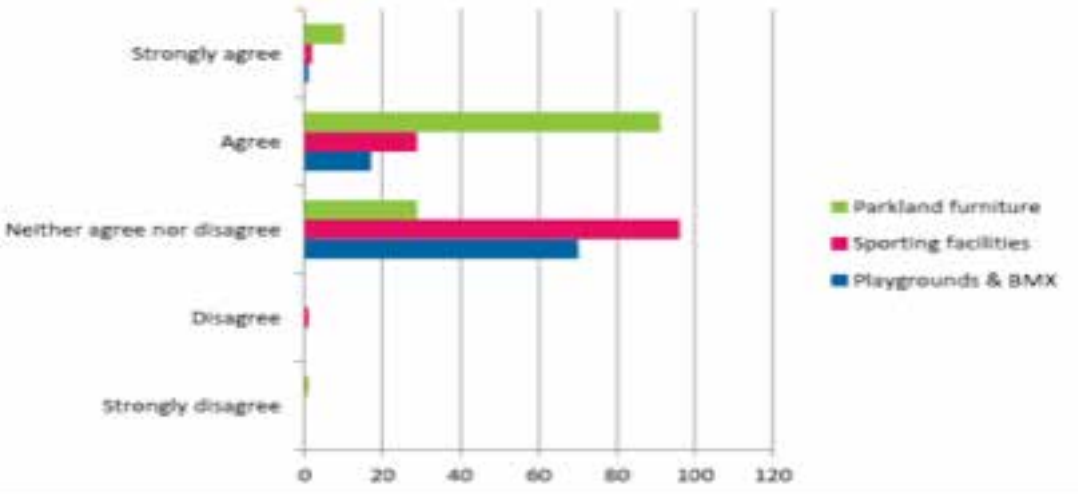
The graph highlights that the majority of people surveyed agree or strongly agree that the Park Land furniture is clean and suitable for use.



Do you consider furniture, sporting facilities and Playspaces in the Park Lands to be well maintained?

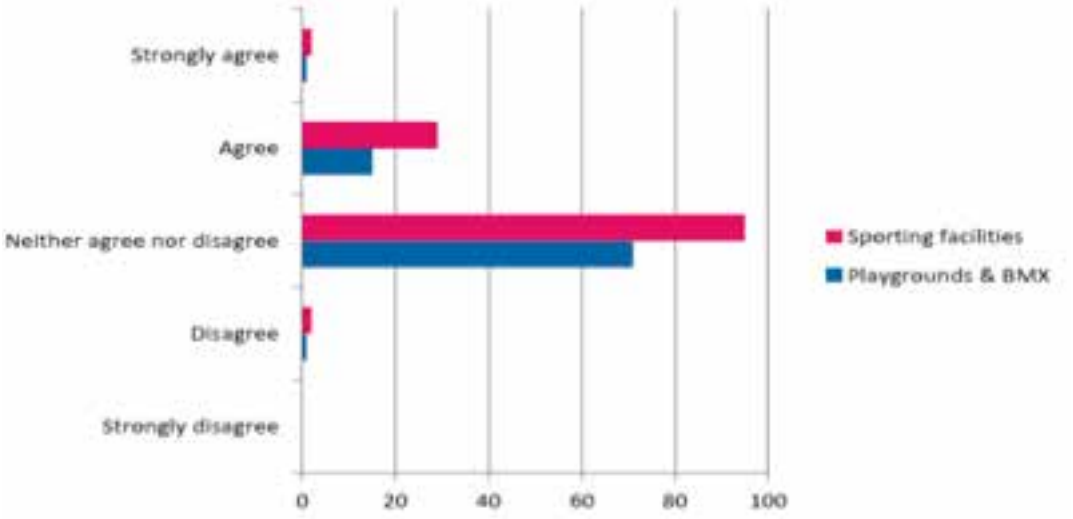
The graph highlights that a majority of people surveyed agree that the Park Land furniture is well maintained, whilst a smaller proportion agree that the sporting facilities, playgrounds, and BMX track are well maintained. It should be noted that a significant amount neither agree or disagree whether these assets are well maintained or not. It is a positive result in that they don't disagree. Council can assess how to move this opinion into the 'agree' status.

Do you consider furniture, sporting facilities and playspaces in the Park Lands accessible?



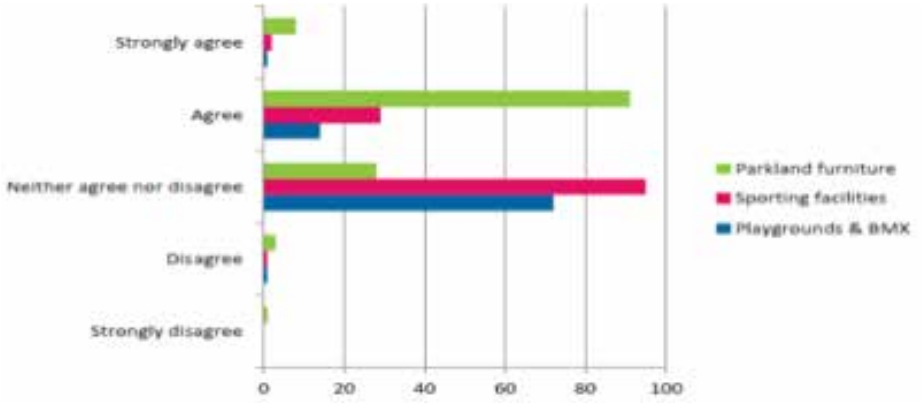
A majority of respondents agree that the Park Land furniture is accessible and a smaller proportion also agree that the sporting facilities, playgrounds, and BMX track are accessible. The majority of responses neither agree or disagree that the sporting facilities, playgrounds, and BMX track are accessible. There is room to improve and get agreement from future people surveyed.

Are recreational areas and sporting facilities in the Park Lands safe?



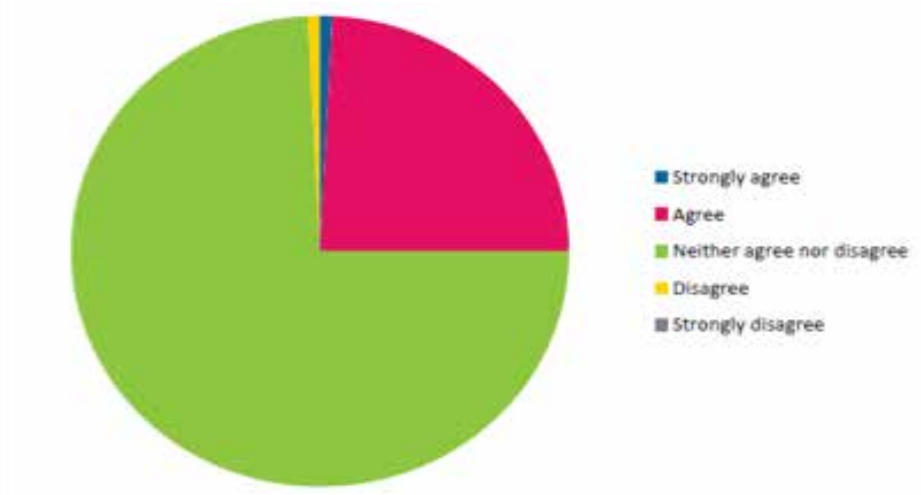
The majority of respondents had no issues with whether or not the recreational facilities where safe or not. A small amount felt the facilities where safe and the remainder had no opinion.

Does furniture, sporting facilities and recreational areas in the Park Lands meet your needs?



The number of responses that felt the assets did not meet their needs was negligible. A large portion had no opinion, which highlights an opportunity to improve the facilities to meet the needs of the users.

Do sporting facilities provide value for money?



There was a negligible number of responses who felt the assets do not provide value for money. 25% felt the assets provided value for money, and 73% had no opinion.

Summary of comments from 2015 Customer Survey

- More seating in areas such as Central Market precinct, the city's West End and at bus stops.
- Seating placed in shade whenever possible.
- Additional bins in the Park Lands and increase the frequency they are emptied.
- Additional seating in the Park Lands.
- Upgrade the South Park Lands netball courts and additional seating at soccer fields.
- Utilisation of food trucks during peak sporting periods.
- More regular cleaning around the BMX track.
- Additional play areas and outdoor fitness equipment.

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 in December 2015 during the finalisation of this AM Plan.

From the preliminary information available, the following Council vision, mission, goals and objectives associated with community services provided by water 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 organisation goals and objectives and how these are addressed in this AM Plan are presented in Table 3.2:

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

Theme	Objective	Action	How actions are addressed in AM Plan
Smart	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.	Build upon the growing laneway and entrepreneurial culture in the city by rejuvenating primary laneways and pedestrian connections. Priorities for completion by 2018 will be the Adelaide Railway Station to Adelaide Central Market link and Rundle Mall laneways including Gawler Place.	Coordinate renewals with new and upgraded infrastructure proposals including laneway rejuvenations. Ensure the Urban Elements assets are managed to maintain vehicle, pedestrian, and bicycle accessibility to pedestrian connections.
Green	Reduce city carbon emissions by 35% from the 2006 - 07 baseline, on the way to an 80% real reduction by 2040.	By 2017, our procurement practices will reasonably require the environmental track record and / or credentials of suppliers and estimates of carbon emissions of products and services.	Maximise the use of products, materials, and assets in the renewal program that are environmentally sustainable.
	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 greening with street trees, gardens, community gardens, green walls and roofs, vegetable gardens on street verges, providing incentives where appropriate.	Coordinate renewals with strategic greening projects, to enhance and maximise greening outcomes.
		Work with local communities on public greening activities that will beautify streets and parks.	Coordinate renewals to encompass local communities where the renewal can improve the amenity and greening of the area, e.g. playspaces, community courts, etc.
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 to ensure all new and existing infrastructure is delivered and maintained to high quality standards incorporating technology, heritage, arts, and green elements.	Ensure that the infrastructure renewal and enhancement projects deliver high quality multi-objective outcomes encompassing several elements to provide an environment / area that is inviting and people want to go to and utilise.

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

Theme	Objective	Action	How actions 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.	Work with neighbouring councils and the State Government to enhance the facilities, attractions, landscapes, and movement networks in the Park Lands to meet the needs and expectations of growing high density communities living in and near the city.	Align renewal projects with strategic projects both council and state to provide an amenity that is highly sort after and utilised by all regardless of demographic or location where they live, e.g. new temporary skate park, new activity hub adjacent the Bowden development in Bonython Park North, playspaces, and assets adjacent trails in the Park Lands.
	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.	Plan and deliver priority walking and cycling routes to provide East-West and North-South cycleways and connections.	Coordinate renewals with new and upgraded infrastructure proposals including cycling and pedestrian connections.
		Plan and seek partnerships for major city infrastructure projects including cycling corridors, major transport routes, laneways, and city squares.	Coordinate renewals to align with all major redevelopment timeframes.
Creative	The number of people attending events in the city and Park Lands has grown 5% by 2020, on the way to 15% growth by 2040.	Work with neighbouring councils and the State Government to enhance the role of the Park Lands in supporting artistic, sporting, and recreational activities.	Coordinate renewals in consultation with neighbouring councils and the State Government so the renewals enhance the ability of parks to host recreational and cultural events.
	A detailed measure of the number of people creating and actively participating in arts, culture, sport, and recreation activities has been developed and influences our work.	Promote the role of the Park Lands in increasing levels of physical activity through formal and informal sport and recreation opportunities.	Develop and renew existing community courts and recreational elements to encourage use by residents and people outside the city for formal and informal use.
	People who say the city has great places to enjoy events, activities, art and culture has grown from 8.4 to 9 out of 10 by 2020 and to 9.5 by 2040.	Identify opportunities to use specialised lighting to showcase the city's unique attractions, character, and heritage.	Allow for lighting to assets such as artworks, water features and community courts to provide an asset that is illuminated for an artwork, can provide a light show such as water features and community courts have the ability to be utilised after sun set and activate the area.

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.

3.3 Legislative Requirements

We have 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 AM plans for sustainable service delivery.
Development Act 1993	Certain assets in the Urban Elements Asset Class require development approval prior to any works taking place, i.e. restoration of heritage listed structures, artworks.
Heritage Act 1993 and Heritage Places Act 1993	These acts set out the responsibilities of the Council to maintain and preserve the heritage value of any Urban Elements that are heritage listed.
Public Health Act 2011	All potable water features drinking fountains safe for human contact and consumption.
Environment Protection Act 1993	Sets out the requirements for any works to comply with the EPA.
Disability Discrimination Act 1992	To ensure assets are placed and comply with the requirements of the act for ease of access.
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.

3.4 Community Levels of Service

We have defined service levels in two terms.

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?

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	Assets are maintained and suitable for users / use.	Customer's satisfaction with the Urban Elements assets.	Achieved 89% (well maintained) and 79% (cleanliness) in customer satisfaction survey.	>90% for well maintained and cleanliness.
Function	Assets are provided in a condition that meets required community needs for access and leisure without compromising public safety.	Customer's satisfaction for usability of the Urban Elements assets.	Achieved 92% (accessible), 90% (safe), and 89% (meets user needs) in customer satisfaction survey.	>90% for accessible, safe, and meets user needs.
Capacity / Utilisation	Provide Urban Element assets that are suitable for a capital city and meet program delivery needs.	Customer satisfaction for usage, availability, and value for money.	Achieved 97% value for money for sporting facilities, playgrounds, and BMX track.	Remain at 97% or greater.

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 frequency, mowing frequency, etc;
- Maintenance – the activities necessary to retain an asset as near as practicable to an appropriate service condition (e.g. road patching, unsealed road grading, building, and structure 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 road resurfacing and pavement reconstruction, pipeline replacement, and building component replacement); and
- Upgrade – the activities to provide an higher level of service (e.g. widening a road, sealing an unsealed road, replacing a pipeline with a larger size) or a new service that did not exist previously (e.g. a new library).

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

Our current service levels are detailed in Table 3.5.

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					
Condition / operation	All Urban Elements assets are kept at an agreed Condition 3 or better.	Documented audit inspections performed by Public Realm updated into RAMMS and reviewed quarterly by Infrastructure Management.	Data is entered into RAMMS as each stage is audited and reviewed by Infrastructure Management.	75% assets have a current accurate condition rating.	90% assets in Condition 3 or better.
Amenity / maintenance	All Urban Elements assets are maintained and available for intended use.	Monitoring level of service requests, pathways and complaints received in relation to agreed service standards.	All requests, enquiries, complaints are actioned within agreed timescales as per service level standards.	75% achieved.	85% assets are available for intended use.
Upgrade / new	Enhancement programs are aligned to take into account renewal when possible.	Consultation for enhancement programs takes place with Infrastructure Management, and the information is taken into account at the design stage.	Consultation takes place, at times the feedback given is not utilised to its fullest extent.	100% of enhancement projects are consulted with Infrastructure Management and the feedback is utilised to achieve the best outcome from a design, asset management and maintenance perspective.	At this stage there is no agreed sustainable position due to projects being influenced by other agendas such as budget constraints, political environment, public perception. Ideally it would be 100%.
Safety	Assets are maintained and presented to ensure safety for all users.	Safety audits of effected assets, monitoring of reportable accidents, incidents or accepted claims in association with Urban Element Asset Class.	Level 2 safety inspections on play equipment every month. Independent Level 3 audits on play equipment every two years, water features and drinking fountains are safe for human contact / accidental ingestion.	<Six accidents / incident claims for last 12 months (from legal and risk records).	<12 accidents / incidents claims per annum.
Cost effectiveness	Provide asset management and maintenance services in cost effective manner.	Benchmark services – process improvement. Compliance with planned budget and program for the area of work completed against actual.	Infrastructure Management in consultation with Public Realm have developed a draft set of maintenance guidelines.	All maintenance and renewal is supplied within budgets and at best value.	Given current asset base this is just achievable; any future increases in assets without appropriate budget increases will not be sustained.

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, changes in demographics, seasonal factors, vehicle ownership rates, consumer preferences and expectations, technological changes, economic factors, agricultural practices, environmental awareness, etc.

4.2 Demand Forecast

The present position and projections for demand drivers that may impact future service delivery and utilisation of assets were identified and are documented in Table 4.3.

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	22,280	38,959 by 2036	Increase the environmental, recreational, cultural, and environmental value of Urban Elements.
Demographics	**Age group (years)** / **Number** 0 to 4 — 641 5 to 9 — 389 10 to 14 — 358 15 to 19 — 1,791 20 to 24 — 4,185 25 to 29 — 3,402 30 to 34 — 2,045 35 to 39 — 1,340 40 to 44 — 1,129 45 to 49 — 1,042 50 to 54 — 1,119 55 to 59 — 1,035 60 to 64 — 1,124 65 to 69 — 994 70 to 74 — 601 75 to 79 — 413 80 to 84 — 299 >85 — 372 22,280 residents total. 9,560 households average two occupants.	**Age group (years)** / **Number** 0 to 4 — 1,006 5 to 9 — 691 10 to 14 — 627 15 to 19 — 3,339 20 to 24 — 8,019 25 to 29 — 6,032 30 to 34 — 3,768 35 to 39 — 2,450 40 to 44 — 1,930 45 to 49 — 1,752 50 to 54 — 1,713 55 to 59 — 1,598 60 to 64 — 1,573 65 to 69 — 1,357 70 to 74 — 1,155 75 to 79 — 872 80 to 84 — 622 >85 — 455 38,959 residents by 2036. 18,699 households by 2036 average two occupants.	Increase the environmental, recreational, cultural, and environmental value of Urban Elements.

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

Demand drivers	Present position	Projection	Impact on services
Community expectation of Urban Elements	Status quo.	Higher level of service expected.	Equitably distributed, accessible, safe, of high quality, and provide diverse settings to meet the needs of user groups.
Awareness of the city and Park Lands environment	Status quo.	Community expecting to see action on behalf of Council.	Need to protect and enhance the Urban Elements to get the maximum whole of life.
Gifting of assets	Council is expected to absorb manage and maintain gifted assets.	The asset base will increase as government infrastructure projects are completed and gifted to Council, i.e. NRAH, Grenfell Street Super Bus Ways, etc.	Need to protect and enhance the Urban Elements to get the maximum whole of life.

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].

Council has and continues to strategically plan for the city Park Lands and Open Space. Much of this planning has been done to understand the stakeholder / community demand for the city Park Lands and Open Space environs and typically results in expansion or upgrade consequences leading to an inevitable higher level of service demanded. Council will face the challenge of balancing these expectations within a sustainable funding regime moving forward.

Examples include:

- Adelaide Oval Redevelopment including the Park 27 Railway Land;
- Riverbank Precinct bridge and environs;
- *Victoria Park Master Plan;*
- *Victoria Square Master Plan;*
- New Royal Adelaide Hospital Development (NRAHD);
- *Residential Street Development Program;* and
- Narnungga (Park 25) Urban Forest.

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

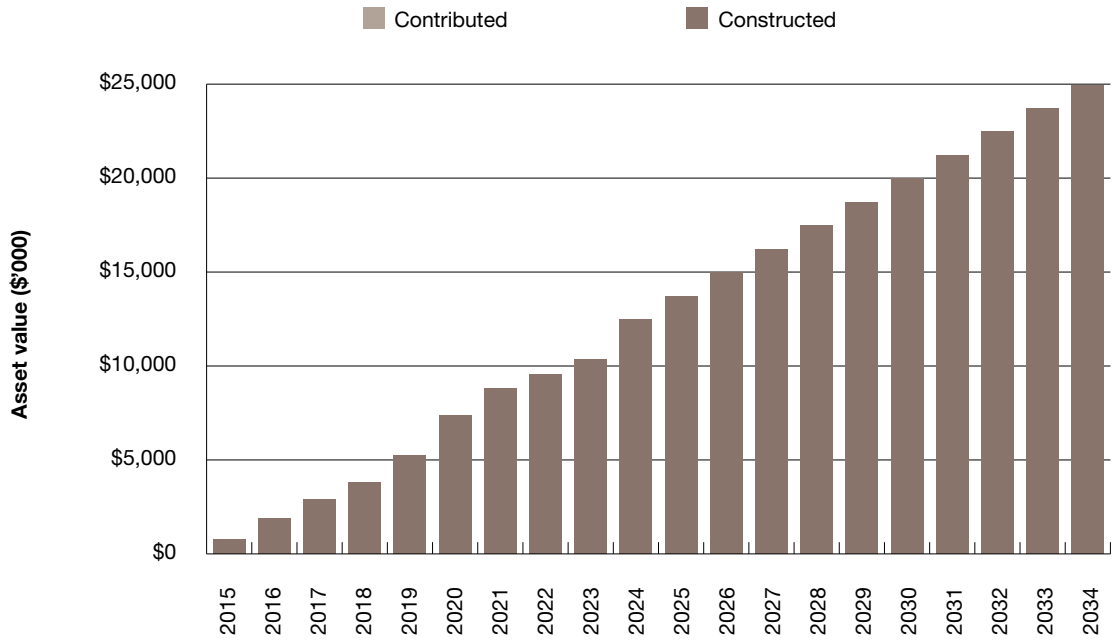
Demand driver	Impact on services	Demand Management Plan
Land transfer to Council of Narnungga (Park 25)	Increase in Urban Elements and maintenance needs.	There is an agreement in place with Maxima Group to use trainees / apprentices for horticultural maintenance. This does not take into account the Urban Elements and will need to be included as part of future AM plans and maintenance plans.
NRAH Development	Increase in Urban Elements and maintenance needs.	Any additional Urban Elements will need to be included as part of future AM plans and maintenance plans.
Sports Infrastructure Management Plan	Increase in Urban Elements and maintenance needs.	Any additional Urban Elements will need to be included as part of future AM plans and maintenance plans.

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 will be acquired free of cost from land developments, budgeted enhancement programs, and 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



Note: 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.

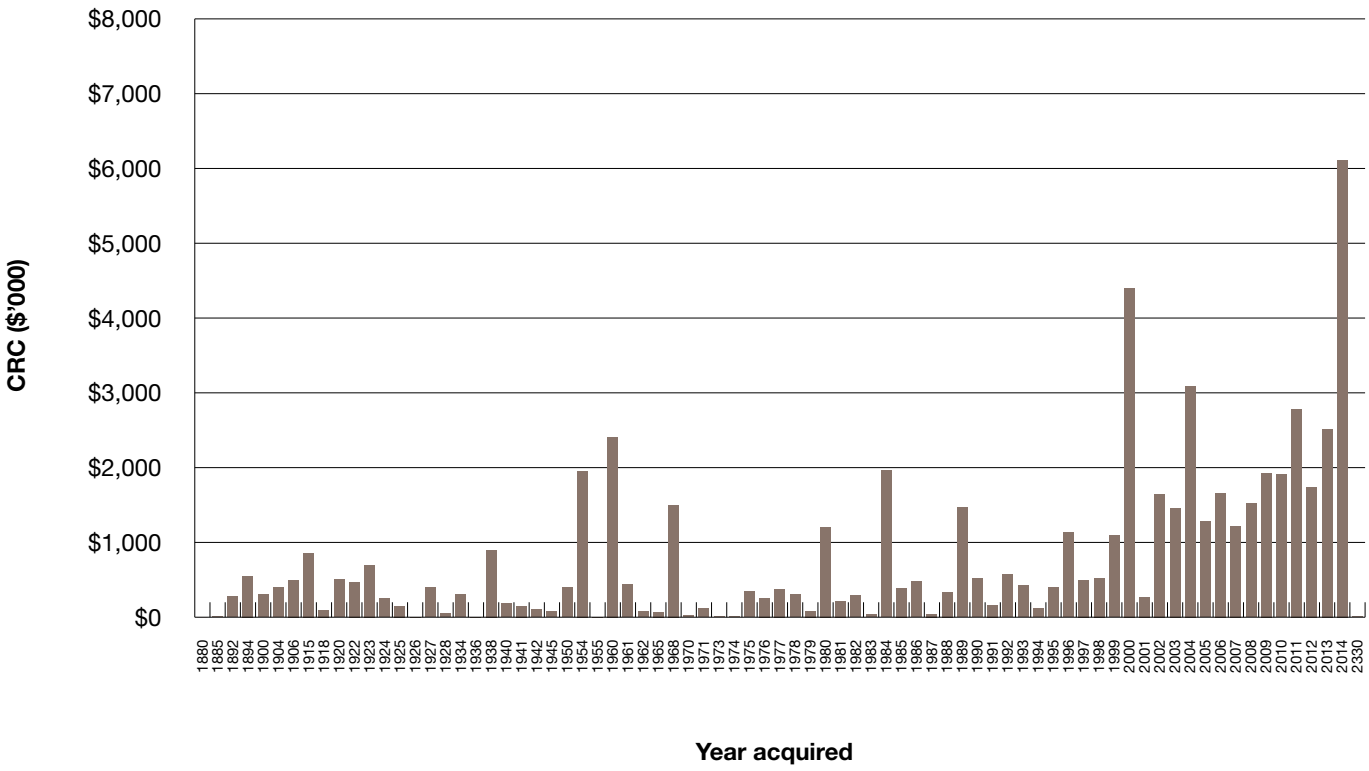
5.1 Background Data

5.1.1 Physical parameters

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

The age profile of the assets included in this AM Plan is shown in Figure 2, note age profile for some assets has been determined by using the condition rating assigned to the asset. Due to this information not being recorded or lost.

Figure 2: Asset Age Profile



5.1.2 Asset capacity and performance

The organisation's services are generally provided to meet 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
None at this stage.	

The above service deficiencies were identified from the Capital Renewal Program.

5.1.3 Asset condition

Condition is monitored via regular input into Council's RAMM data base. This is achieved by four-yearly audits, and whenever maintenance is carried out on the asset, the condition rating is updated.

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

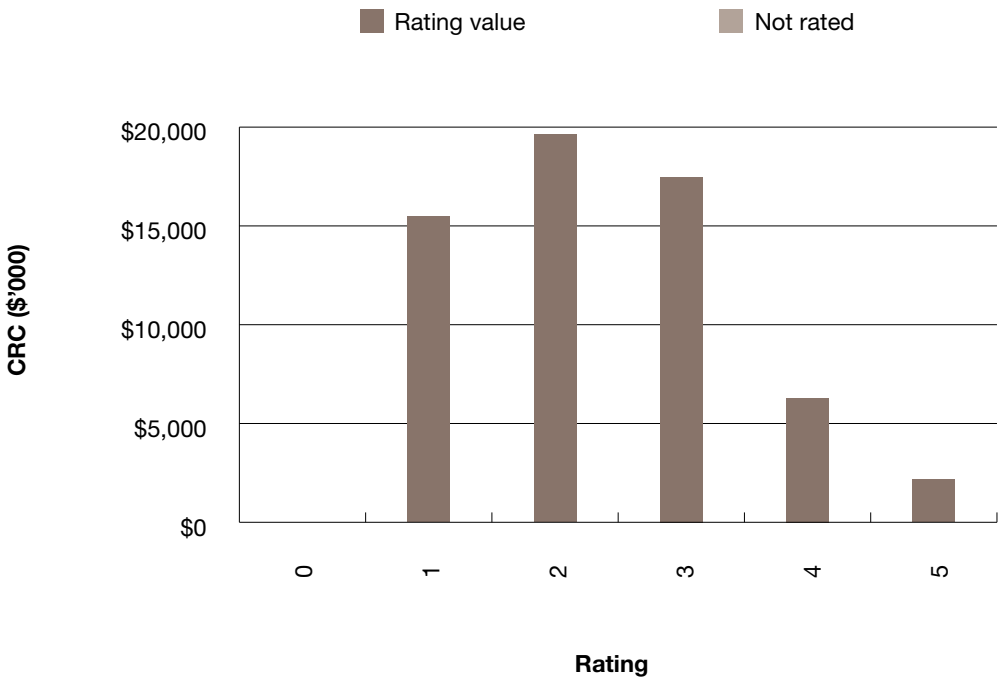
Table 5.1.3: Simple Condition Grading Model

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.

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

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

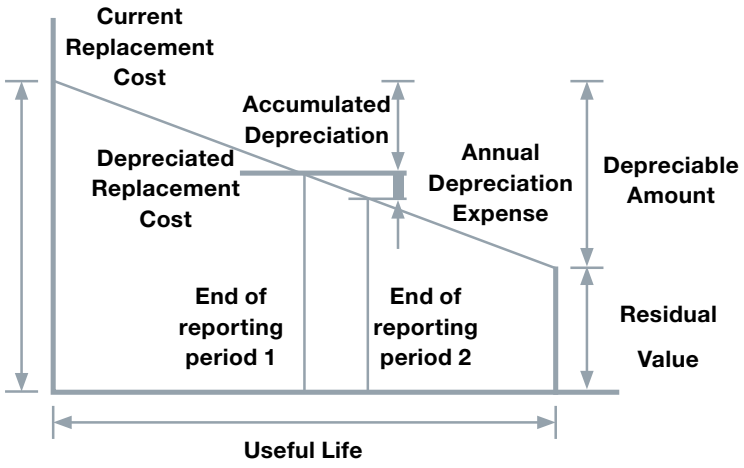
Figure 3: Asset Condition Profile



5.1.4 Asset valuations

The value of assets recorded in the asset register as at September 2014 covered by this AM Plan is shown below. Assets were last revalued at $62,583,128. Assets are valued at current replacement cost.

Current replacement cost	$62,583,128
Depreciable amount	$62,583,128
Depreciated replacement cost[7]	$37,655,000
Annual depreciation expense	$2,617,000



Useful lives were reviewed in September 2014.

The useful lives of the assets have been determined by the condition rating of the asset, taking into consideration the year it was acquired, and the expected life left in the asset. For example, a 10-year asset in Condition 1 would have a useful life of 90%. If it was installed in 2000 and has a condition rating of one in 2014, its useful life would be 2014 – 2000 = 14 + 90% of 10; therefore its useful life can be reasonably assumed to be 14 + 9 = 23, giving the asset a useful life of 23 years.

Key assumptions made in preparing the valuations were:

- Current replacement costs for the assets.

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 4.2%
(Depreciation / depreciable amount)

Rate of annual asset renewal 2.4%
(Capital renewal expenditure / depreciable amount)

Rate of annual asset upgrade / new 1.24%
(capital upgrade expenditure / depreciable amount)

Rate of annual asset upgrade / new 1.84%
(including contributed assets)

From 2015 to 2033 the organisation plans to renew assets at 4.2% of the rate they are being consumed and will be increasing its asset stock by 1.84% in the year.

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

5.1.5 Historical data

All data and condition assessments have been carried out January 2014 - September 2014 and entered into Council's RAMMS program, which supersedes the 2008 AM Plan.

Historically the Urban Elements Renewal Program has received an allocation of $900,000 to $1,000,000 since 2004. The 2013 - 14 program received an increase to $1,400,000.

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.

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
Playspace equipment	Structural failure.	High	Regular maintenance and renewal.	Acceptable	Part of the renewal and maintenance budgets.
	Non-compliance.	High	Ensuring all new and existing equipment complies and is certified by suppliers / installers, weekly, and monthly inspections and every two to three years certified by an independent auditor. Appropriate insurance cover for liability claims.	Acceptable	Part of the renewal and maintenance budgets.
Water features	Public illness.	High	Sanitation procedures are within standard for human contact.	Acceptable	Maintenance budget.
Water features	Water supply and associated infrastructure.	High	Ensure levels of service are adequate for supply of water to this asset. Have contingency plan such as water trucks to keep topping up the levels until supply is re-established.	Acceptable	Maintenance budget.
Drinking fountains	Cross connection and contamination with recycled and potable supply.	Very High	Separation audit processes as required by Office of Technical Regulator.	Acceptable	Maintenance budget.
Lack of funding	Assets deteriorate.	Medium	Manage available budgets to achieve best value. Ensure Council are aware and understand of the consequences and comfortable with the decision.	Acceptable	Renewal and maintenance budgets.

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. maintaining play space equipment and the playspace, keeping water features clean and suitable for human contact, BBQ's operational and clean, etc.

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 of the assets.

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. replacing a worn swing seat but excluding rehabilitation or renewal. Maintenance may be classifies 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 including repainting, replacing air conditioning units, etc. 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
2012	$1,801,824	$169,362
2013	$1,857,550	$174,600
2014	$1,915,000	$180,000

Planned maintenance work is currently 91.4% of total maintenance expenditure as advised by Council's Public Realm Program.

Maintenance expenditure levels are considered to be adequate to meet projected service levels, which may be less than or equal to current service levels. Where maintenance expenditure levels are such that 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*.

Assessment and prioritisation of reactive maintenance is undertaken by the organisation's staff using experience and judgement.

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. The hierarchy includes the asset class and component used for asset planning and financial reporting and service level hierarchy used for service planning and delivery.

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

Table 5.3.2: Asset Service Hierarchy

Service hierarchy	Service level objective
Victoria Square Urban Elements	To provide an area and amenity of high quality that is kept to a high standard as it is a show piece for the city and event space.
Rundle Mall Urban Elements	To provide an area and amenity of high quality in the city's main shopping hub that is kept to a high standard and a show piece for the city and event space.
Adelaide Suite Elements	This element class is placed in high profile streets and parks, such as King William Street and Elder Park, to provide an area and amenity of a high quality and is kept to a high standard relevant to the areas profile.
Specific assets to streets and parks	This element class is placed in high profile streets and parks, such as Melbourne Street, Gouger Street, and Victoria Park, to provide an area and amenity of a high quality and uniqueness and is kept to a high standard relevant to the areas profile.
General assets streets and parks	These assets are placed in streets and parks that are not as higher profile, however the requirement to keep them in a high standard is required.

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 refines 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, higher maintenance intervention levels, etc. 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
Playspace equipment	Poor maintenance practices may lead to injury / death.	Regular maintenance and renewal on top of monthly Level 2 inspections and biannual independent Level 3 audits.
Water features	Poor maintenance practices may lead to injury / death.	Regular maintenance and renewal to ensure the water feature is suitable for human contact.
Drinking fountains	Poor maintenance practices may lead to illness / death.	Regular maintenance and renewal to ensure the drinking fountain water is suitable for human consumption.

Standards and specifications

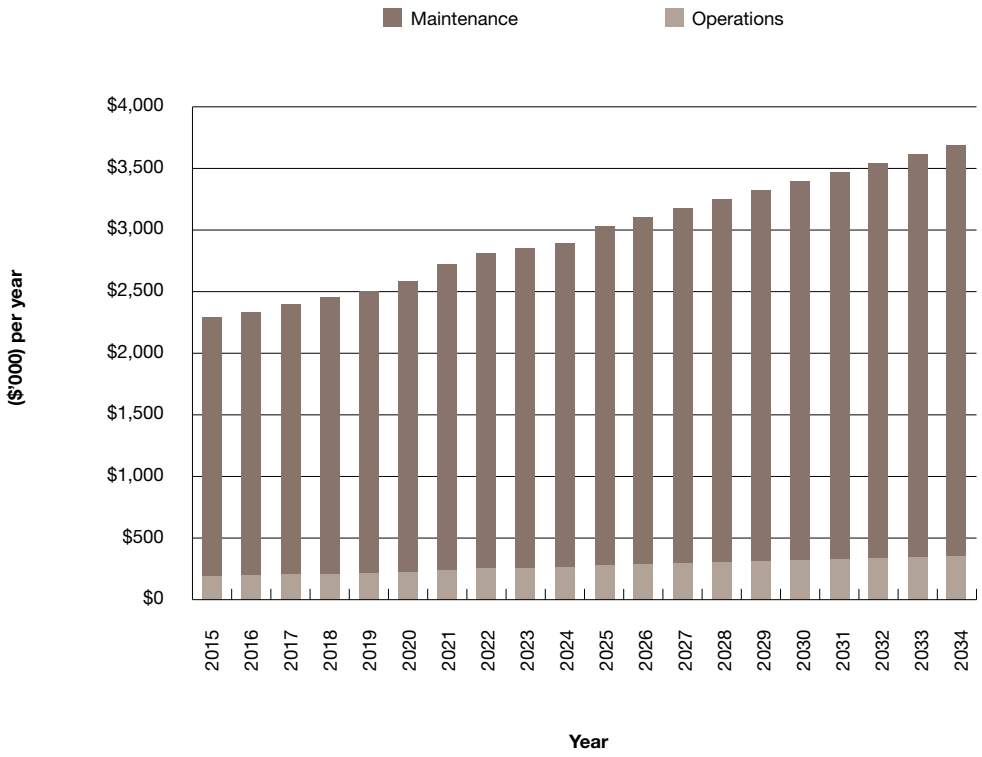
Maintenance work is carried out in accordance with the following Standards and Specifications:

- *AS 4685 Playground Equipment Safety Standards 1-6 2014;*
- *AS 4685 Spatial Net Safety Standards Pt 11 2012;*
- *AS / NZS 4422 Playground Surfacing 1996;*
- *AS 4486-1 Playground Inspection and Maintenance 1997;*
- EPA requirements for water features and human contact and consumption;
- *City Works Guidelines;* and
- *Urban Elements Guidelines*.

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).

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 are used to develop projected asset renewal expenditures, asset useful lives were last reviewed September 2014.

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:

- 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:
  - 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,
  - and 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; or
- To ensure the infrastructure is of sufficient quality to meet the service requirements.

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; and
- 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
Condition rating of five and four	60%
Assets in high profile and demand areas (i.e. Victoria Square, Rundle Mall, Elder Park, Rymill Park, Victoria Park, Adelaide Oval Environs)	20%
Collaborative renewal projects	15%
Collaborative renewal and enhancement projects	5%
TOTAL	**100%**

Renewal and replacement standards

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

- *AS 4685 Playground Equipment Safety Standards 1-6 2014;*
- *AS 4685 Spatial Net Safety Standards Pt 11 2012;*
- *AS / NZS 4422 Playground Surfacing 1996;*
- *AS 4486-1 Playground Inspection and Maintenance 1997;*
- EPA requirements for water features and human contact and consumption;
- *City Works Guidelines;* and
- *Urban Elements Guidelines*.

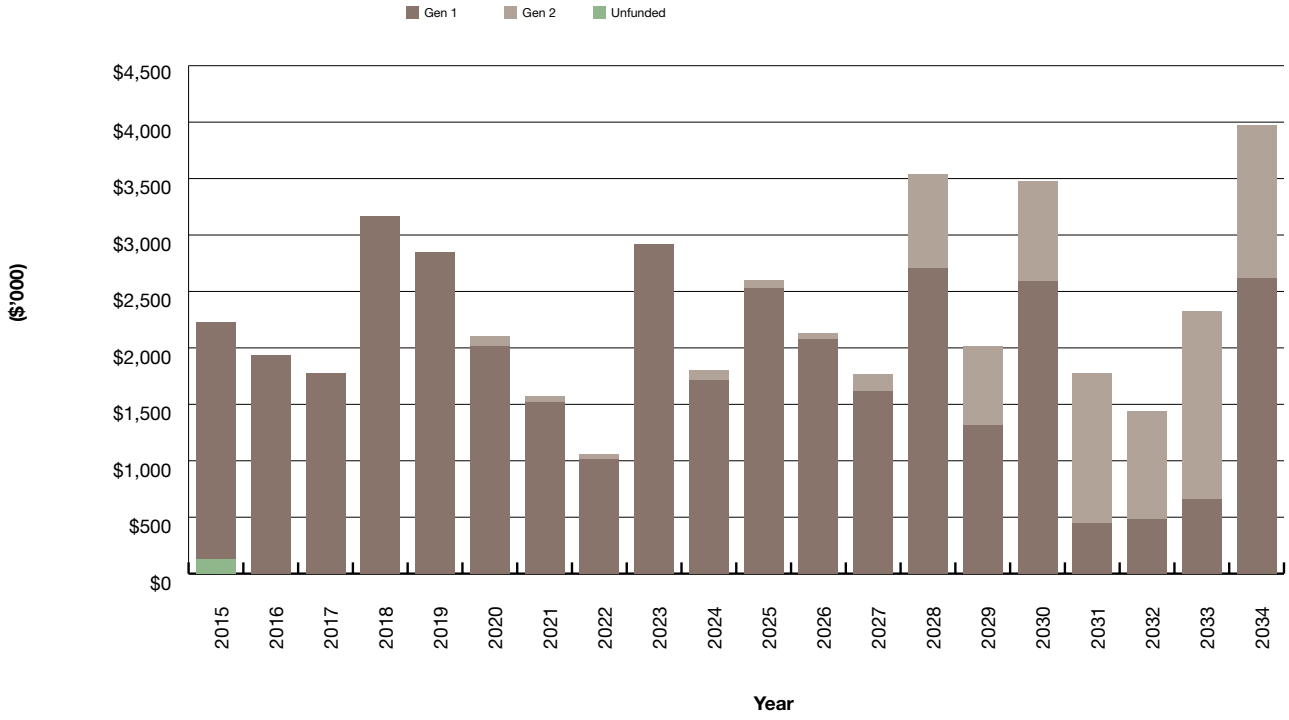
5.4.3 Summary of future renewal and replacement expenditure

Projected future renewal and replacement expenditures are forecast to increase over time as the asset stock increases from growth. The expenditure is summarised in Fig 5. Note that all amounts are shown in real values.

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

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

Figure 5: Projected Capital Renewal and Replacement Expenditure



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.

The unfunded component (light brown) for 2014 is due to the reduction in funding for artwork refurbishment for this year. 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.

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 or partnerships with other organisations. 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. The priority ranking criteria is detailed below.

Table 5.5.1: New Assets Priority Ranking Criteria

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

Assets proposed for acquisition (including assets proposed to be gifted) will be assessed 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

5.5.2 Capital investment strategies

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

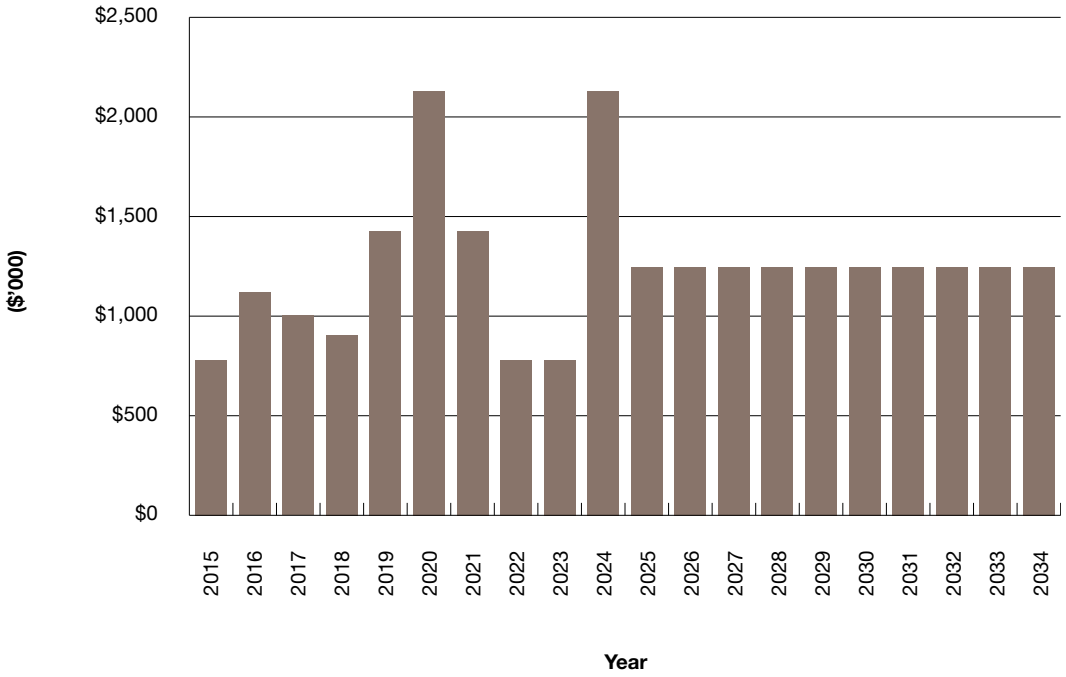
- Planning and scheduling capital upgrade and new projects to deliver the defined level of service in the most efficient manner;
- Undertaking project scoping for all capital upgrade / new projects to identify:
  - the service delivery 'deficiency', present risk and required timeline for delivery of 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.

Figure 6: Projected Capital Upgrade / New Asset Expenditure



Expenditure on new assets and services in the organisation's capital works program will be accommodated 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
None at this stage.				

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 of AM Plans.

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).

5.7.1 What we cannot do

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

- Implementation of capital upgrade / new projects contained within open space strategic planning reports, such as the *Sports Infrastructure Management Plan* that has made several recommendations for improvements and new assets. This plan is currently unfunded but is providing a hold point for renewal of assets that sit in this space.

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:

- Operational funding reductions or lack of increased funding will reduce level of service for certain service delivery and will have to be reflected in a revised *Urban Elements Maintenance Guidelines* agreement.

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:

- Decline in condition may result in an increase in personal risk to users; and
- A backlog in funding being created may expose Council to future financial risk.

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.

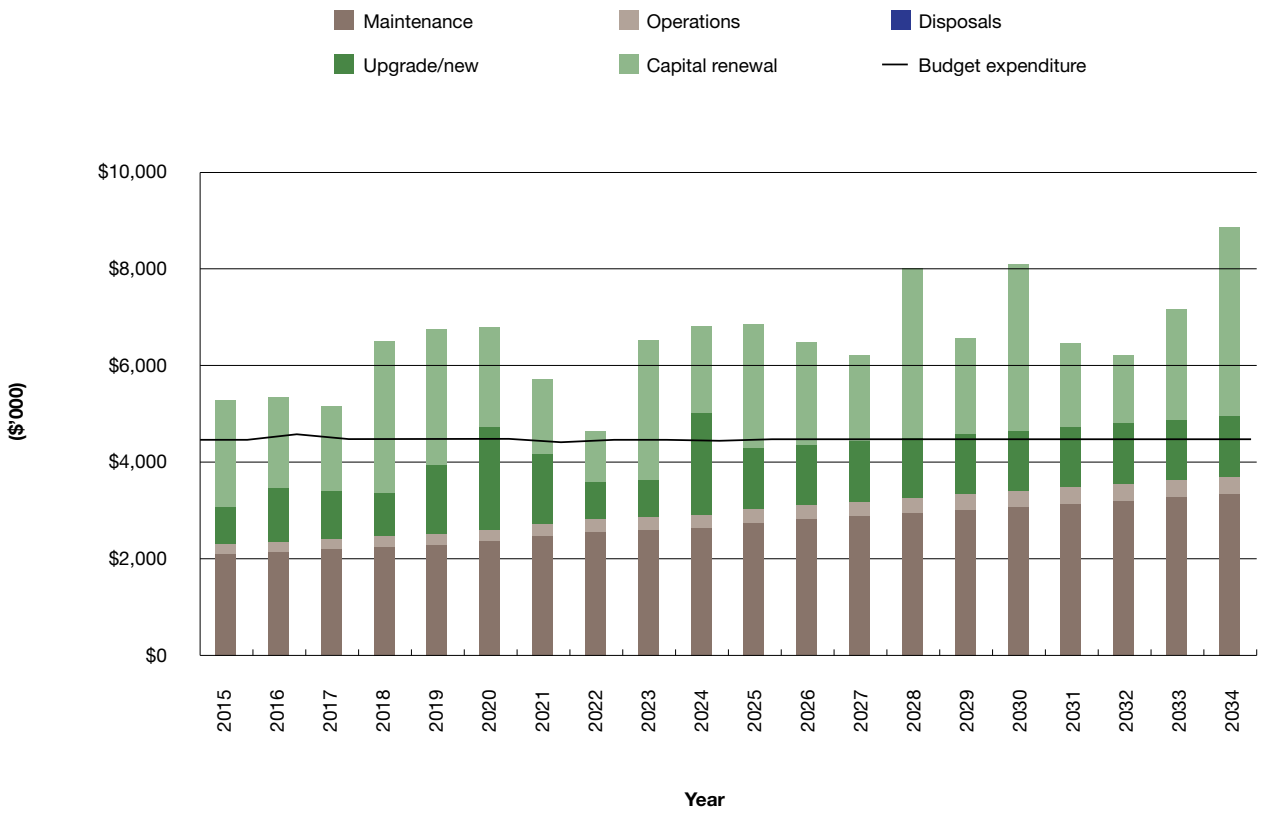
6. FINANCIAL SUMMARY

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. The budgeted expenditure line has slight variations over the 10-year period due to variances in the renewal budget as derived from this AM Plan. Council are currently carrying out an extensive condition audit and revised life expectancy calculations for the entire Urban Elements Asset Class. This revised data will be at a high level of confidence, and initial interrogation of the data obtained so far is projecting that the fluctuations will reduce over the 10-year planning period.

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 Urban Elements[10] 83%

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 83% of the funds required for the optimal renewal and replacement of its Urban Elements assets.

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 $5,949,000 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 $4,473,000 per year (average operations and maintenance plus capital renewal budgeted expenditure in LTFP over 10 years).

A shortfall between lifecycle cost and lifecycle expenditure is the lifecycle gap. The lifecycle gap for services covered by this AM Plan is $1,477,000 per year (-ve = gap, +ve = surplus).

Lifecycle expenditure is 75% 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 that 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 $4,473,000 on average per year.

Estimated (budget) operations, maintenance, and capital renewal funding is $4,473,000 on average per year giving a 10-year funding shortfall of $1,47,000 per year. This indicates that the organisation expects to have 75% of the projected expenditures needed to provide the services documented in the AM Plan.

Medium term – 5-year financial planning period

The projected operations, maintenance, and capital renewal expenditure required over the five-year planning period is $4,022,000 on average per year.

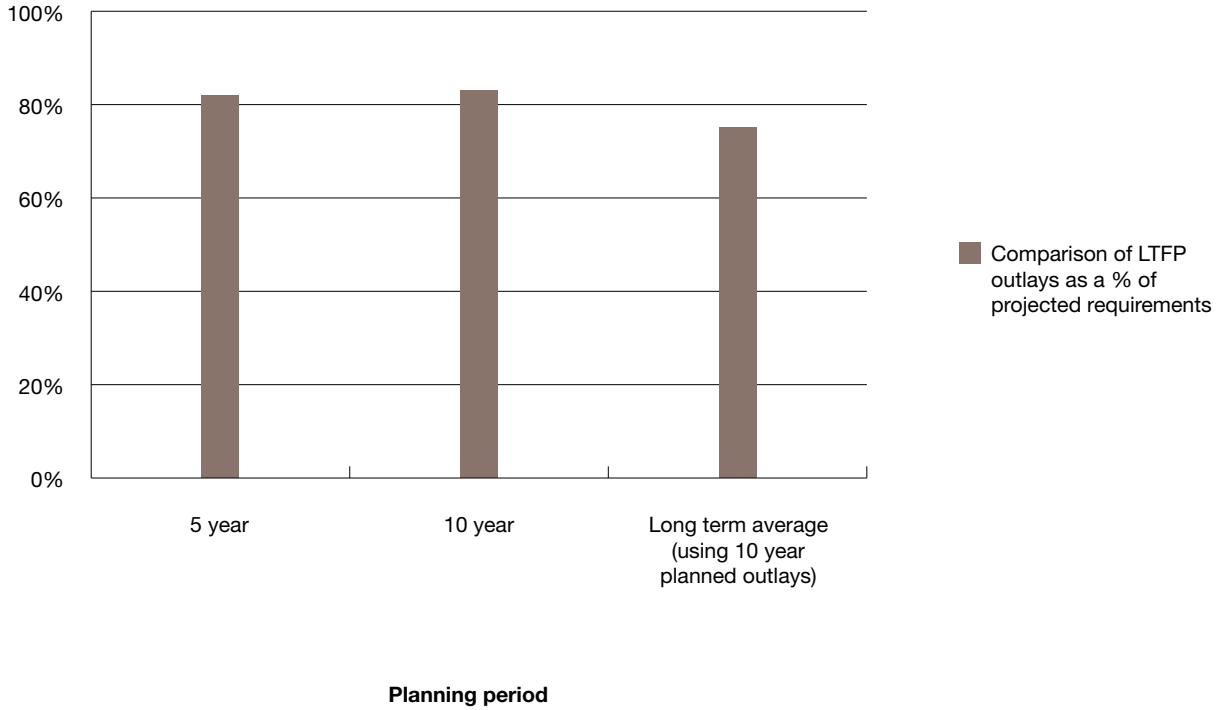
10. AIFMG, 2009, *Financial Sustainability Indicator 8*, Sec 2.6, p 2.18

Estimated (budget) operations, maintenance, and capital renewal funding is $4,022,000 on average per year giving a five-year funding shortfall of $151,000 per year. This indicates that the organisation expects to have 82% of the projected expenditures needed to provide the services documented in the AM Plan.

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.

Figure 8: Projected and LTFP Budgeted Renewal Expenditure

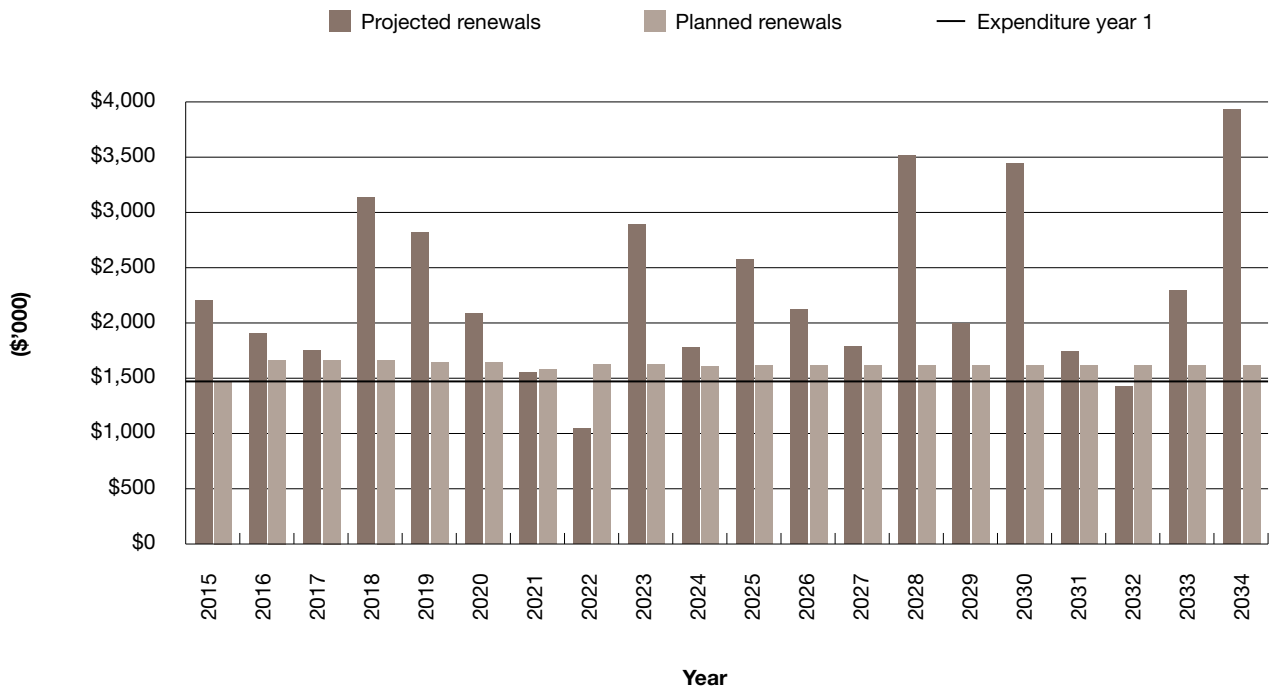


Table 6.1.1 shows the shortfall between projected renewal and replacement expenditures and expenditure accommodated in LTFP. Budget expenditures accommodated in the LTFP or extrapolated from current budgets are shown in Appendix D.

Table 6.1.1: Projected and LTFP Budgeted Renewals and Financing Shortfall

Year (end June 30)	Projected renewals ($,000)	LTFP renewal budget ($,000)	Renewal financing shortfall ($,000) (-ve gap, +ve surplus)	Cumulative shortfall ($,000) (-ve gap, +ve surplus)
2015	$2,202	$1,475	$-727	$-727
2016	$1,902	$1,665	$-237	$-965
2017	$1,755	$1,665	$-90	$-1,055
2018	$3,134	$1,665	$-1,469	$-2,524
2019	$2,816	$1,645	$-1,171	$-3,694
2020	$2,082	$1,645	$-437	$-4,132
2021	$1,552	$1,575	$23	$-4,109
2022	$1,046	$1,625	$579	$-3,530
2023	$2,889	$1,625	$-1,264	$-4,793
2024	$1,781	$1,605	$-176	$-4,969
2025	$2,571	$1,619	$-952	$-5,921
2026	$2,121	$1,619	$-502	$-6,423
2027	$1,783	$1,619	$-164	$-6,588
2028	$3,518	$1,619	$-1,899	$-8,486
2029	$1,995	$1,619	$-376	$-8,863
2030	$3,440	$1,619	$-1,821	$-10,684
2031	$1,745	$1,619	$-126	$-10,809
2032	$1,427	$1,619	$192	$-10,617
2033	$2,294	$1,619	$-675	$-11,292
2034	$3,931	$1,619	$-2,312	$-13,603

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.

A gap between projected asset renewal / replacement expenditure and amounts accommodated in the LTFP indicates that further work is required on reviewing service levels in the AM Plan (including possibly revising the LTFP) before finalising the AM Plan to manage required service levels and funding to eliminate any funding gap.

We will manage the 'gap' by developing this AM Plan to provide guidance on future service levels and resources required to provide these services, and review future services, service levels, and costs with the community.

6.1.2 Projected expenditures for LTFP

Table 6.1.2 shows the projected expenditures for the 10-year LTFP.

Expenditure projections are in 2014 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	$198	$2,095	$2,202	$779	$0
2016	$200	$2,133	$1,902	$1,119	$0
2017	$207	$2,191	$1,755	$1,004	$0
2018	$213	$2,241	$3,134	$904	$0
2019	$218	$2,285	$2,816	$1,429	$0
2020	$228	$2,361	$2,082	$2,129	$0
2021	$246	$2,479	$1,552	$1,429	$0
2022	$257	$2,555	$1,046	$779	$0
2023	$260	$2,592	$2,889	$779	$0
2024	$264	$2,629	$1,781	$2,129	$0
2025	$282	$2,747	$2,571	$1,248	$0
2026	$290	$2,812	$2,121	$1,248	$0
2027	$299	$2,877	$1,783	$1,248	$0
2028	$307	$2,943	$3,518	$1,248	$0
2029	$315	$3,008	$1,995	$1,248	$0
2030	$324	$3,073	$3,440	$1,248	$0
2031	$332	$3,138	$1,745	$1,248	$0
2032	$341	$3,203	$1,427	$1,248	$0
2033	$349	$3,269	$2,294	$1,248	$0
2034	$357	$3,334	$3,931	$1,248	$0

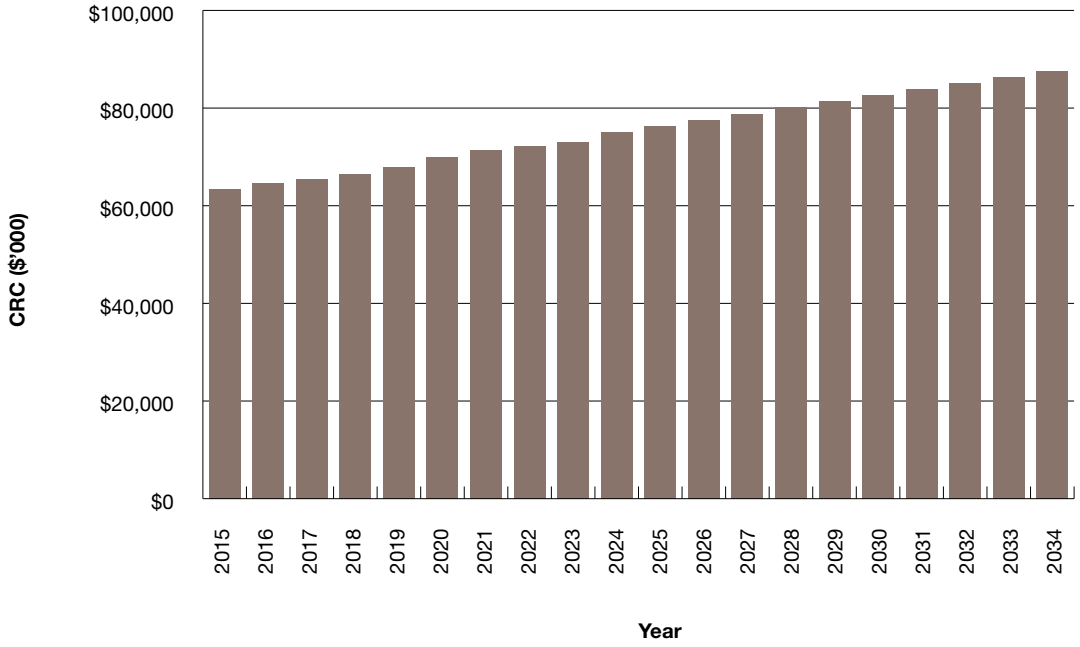
6.2 Funding Strategy

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

6.3 Valuation Forecasts

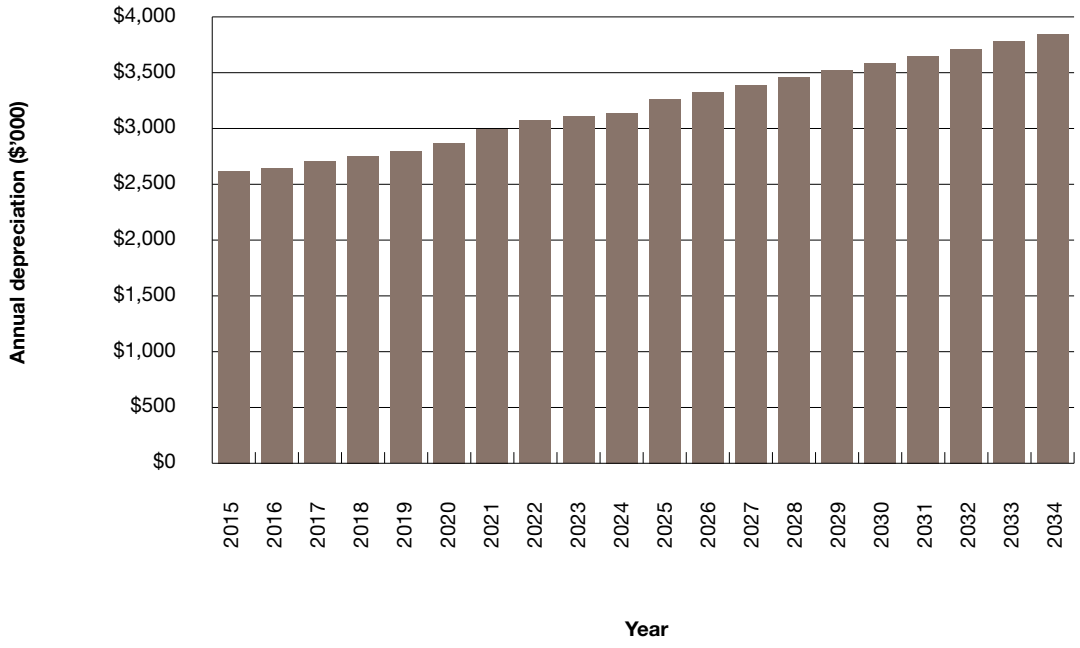
Asset values are forecast to increase as additional assets are added to the asset stock from construction and acquisition by the organisation and from assets constructed by land developers and others and donated to the organisation. Figure 9 shows the projected replacement cost asset values over the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

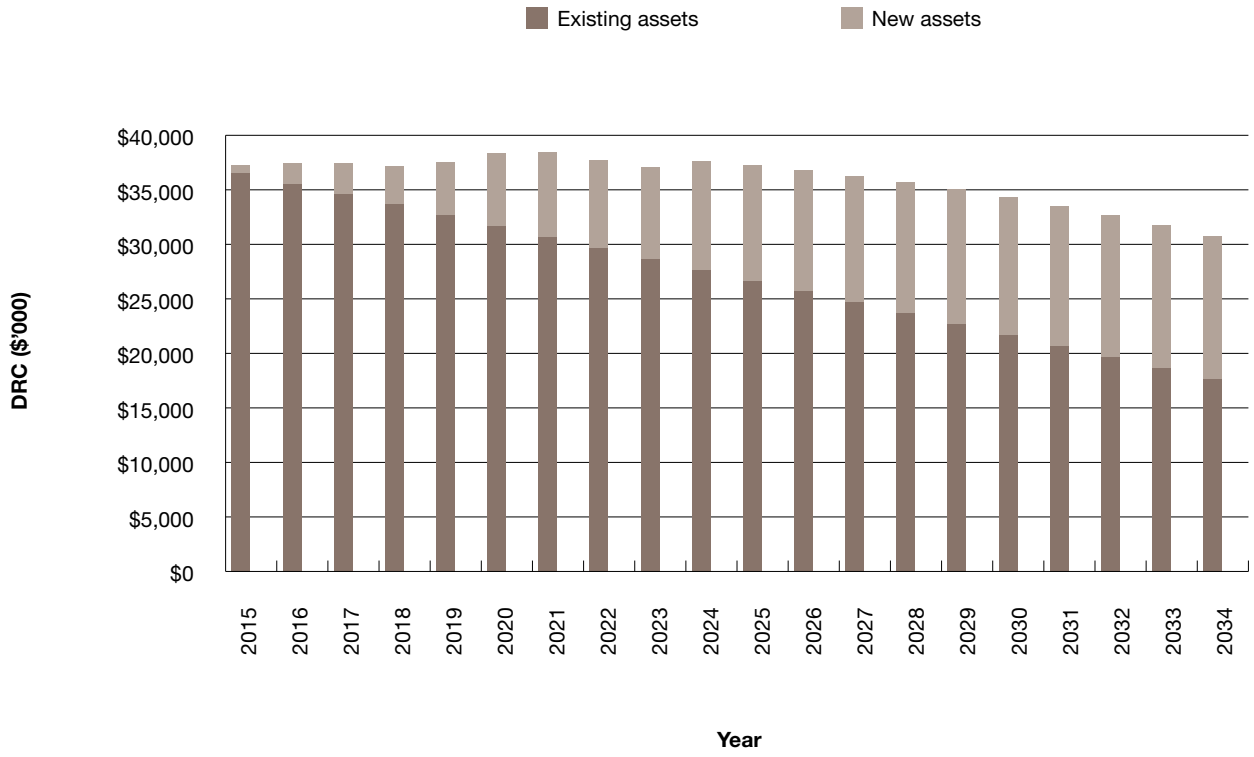
Figure 10: Projected Depreciation Expense



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 colour and in the darker 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
The data is based on the industry rates 2014.	Renewal rates can vary due to market rise and fall.
Due to the large variation and complexity of these assets they have been grouped into six categories based on whole of life.	The data may vary depending on which assets type is in which category, there is room for fine tuning.
Maintenance budgets are used on assets they are allocated to.	If there is cross contamination of budgets the data may not reflect what is really happening. Can overestimate or underestimate budgets.
Renewal budgets are stable.	Over or underestimation of renewal costs.

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] A to E 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		B	Strategic Plans, Master Plans have included community demand via the consultation process and mechanisms.
Growth projections		C	Growth projections are based on government predictions.
Operations expenditures		B	Based on the existing budgets that are increased in line with CPI.
Maintenance expenditures		B	Based on the existing budget that is increased with CPI.
Projected renewal expenditures	Asset values	C	Based on condition assessments and useful life of the assets.
	Asset residual values	B	There is no residual value.
	Asset useful lives	B	Based on previous assets and useful lives obtained.
	Condition modelling	B	Based on three factors: appearance, structural, and age.
	Defect repairs	C	Defects are covered under warranties.
Upgrade / new expenditures		C	Limited long term planning available or no accurate funding attached.
Disposal expenditures		C	Disposal is part of renewal and included in the cost.

Over all data sources, the data confidence is assessed as low 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

The financial system used by Council is Technology One. The financial modules within Technology One include:

- General Ledger;
- Receipting;
- Payroll;
- Rate Debtors / Property Management;
- Purchasing;
- Accounts Receivable / Accounts Payable;
- Inventory;
- Bank Reconciliation;
- Estimates;
- Contracts;
- Loans;
- Plant;
- Work Orders; and
- Capital Value Register.

Within the work orders module there are links to the General Ledger, the plant module, and the AIM System.
Within the Capital Value Register the following programs / functions are available:

- Asset capitalisation;
- Asset disposal;
- Depreciation; and
- Revaluation.

All the above programs perform automatic updates to the General Ledger via control accounts created for each asset record.

Depreciation charges are processed monthly according to the useful life (taking into consideration residual values) recorded against each asset record.

Infrastructure assets are revalued every three to five years and also have annual 'desktop' valuations.

The Capital Value Register incorporates the following asset classifications:

- Land;
- Buildings;
- Plant and Equipment;
- Furniture and Fittings;
- Roads and Footpaths;
- Bridges;
- Stormwater Infrastructure;
- Lighting and Electrical Infrastructure;

- Irrigation Systems;
- Urban Elements;
- Park Lands; and
- Other.

Accountabilities for financial systems

The responsibility for the integrity of the Finance System is assigned to the Executive Manager Finance and Risk, senior finance staff, corporate, and program managers.

Accounting standards and regulations

The accounting Standards and Guidelines that must be complied with are as follows:

- *Local Government Act 1999;*
- *Local Government General Regulations 1999;*
- *Local Government (Financial Management) Regulations 2022;*
- State and Federal Legislation (e.g. taxes);
- Australian Accounting Standards set by the Australian Accounting Standards Board (AASB); and
- Council financial policies and procedures.

Capital / maintenance threshold

Assets should have a useful life of greater than one year in order for the expenditure to be capitalised and have a value above the materiality thresholds described below.

Any expenditure considered to be capital must also pass a materiality test. Materiality levels are set so as not to misstate financial statements and to provide a guide whether it is practical from an administrative perspective that expenditure is capitalised.

Asset group	New / replacement
Infrastructure	$5,000
Land	$5,000
Buildings	$5,000
Furniture and fittings	$5,000
Equipment	$5,000
Other	$5,000

Networked / Aggregated Assets – Expenditure can still be capitalised on items that fall below materiality thresholds individually but operate together as a cohesive whole to form a substantial / significant total value. Examples are bins, seats, planter boxes, etc.

Required changes to accounting financial systems arising from this AM Plan

Review and improvements to asset management systems is an ongoing part of the organisation process towards best practice. Improvements are implemented as required.

7.1.2 Asset management system

An Asset Management System is a combination of processes, data, and software applied to provide the essential outputs for effective asset management such as reduced risk and optimum infrastructure investment.

Council has relied in the past on Hanson (INFOR product) for overall management and long term planning of infrastructure. In 2013, following a review of asset systems and their functionalities, Council decided on Road Assessment and Maintenance Management (RAMM) software to supply one product option capable of containing asset condition, date acquired, work orders, and maintenance histories.

This has now become the corporate Asset Management System.

Asset registers

Detail from a number of different registers has been used in the compilation of this plan as detailed in Section 5.1.3. A key improvement for this plan will be the ongoing development and maturity of the RAMM software as a central register of assets for future planning purposes.

Linkage from asset management to financial system

The Hanson product is used in a limited way for end of financial year needs, while the future is with the use of RAMM. There is currently no direct link to the Finance System for this software as the interface has not yet been installed.

Accountabilities for asset management system and data maintenance

The responsibility of asset management is assigned to the Corporate Manager Infrastructure Management, strategic management senior staff, asset managers, and operational users of the system through the use of field tablets.

Required changes to asset management system arising from this AM Plan

Keep using the RAMM software with the implementation and development of its available functionality picking up the link to the finance software.

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 identified as per Urban Elements assets.	Finance		
2	Review in line with adopted policies and strategies such as the *Adelaide Design Manual*, strategic plans, and master plans. Work through the development of the *Adelaide Design Manual* and opportunities associated with its implementation. Collaborating with other areas of Council to determine how these opportunities can be delivered and integrated into the next revision of the AM Plan.	Infrastructure Management		
3	Undertake end user consultation to identify customer satisfaction with Urban Elements assets.	Infrastructure Management		
4	Review annually to ensure alignment with Council strategies.	Infrastructure Management		
5	Review and update existing maintenance guidelines in collaboration with Public Realm and the utilisation of RAMM.	Infrastructure Management and Public Realm		
6	Investigate and utilise sustainable assets to achieve environmental and sustainable improvements, e.g. solar powered bus shelters, renewable forest timbers, recycled materials if they meet the criteria.	Infrastructure Management		
7	Continue community levels of service and review technical levels of service.	Infrastructure Management		
8	Develop plans for the upgrade, renewal, and new facilities to meet forecast demand.	Infrastructure Management		
9	Liaise with Public Realm to ensure staff are suitably trained for specialist maintenance, e.g. artworks, graffiti removal, etc.	Infrastructure Management and Public Realm		

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 organisation'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 organisation'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

The City of Adelaide, 2012, *The City of Adelaide Strategic Plan 2012 - 16,* www.adelaidecitycouncil.com/assets/Policies-Papers/docs/STRATEGY-strategic-plan-july-2012-16.pdf

The City of Adelaide, 2016, *The City of Adelaide Strategic Plan 2016 - 20* (draft), https://s3-ap-southeast-2.amazonaws.com/ehq-production-australia/27e8fc2d16bc92bd969fad6fe4f8dde8fc2a67ff/documents/attachments/000/032/665/original/ACC_Strategic_Plan_2016_2020.pdf?1456454116

The City of Adelaide, 2012, *Adelaide City Council - The Corporation Plan 2012 - 16,* www.adelaidecitycouncil.com/assets/Policies-Papers/docs/PLAN-Corporation-Plan-2012-16.pdf

IPWEA, 2006, *International Infrastructure Management Manual*, Institute of Public Works Engineering Australia, Sydney, www.ipwea.org.au/IIMM

IPWEA, 2008, *NAMS.PLUS Asset Management*, Institute of Public Works Engineering Australia, Sydney, www.ipwea.org.au/namsplus

IPWEA, 2009, *Australian Infrastructure Financial Management Guidelines*, Institute of Public Works Engineering Australia, Sydney, www.ipwea.org.au/AIFMG

IPWEA, 2011, *International Infrastructure Management Manual*, Institute of Public Works Engineering Australia, Sydney, www.ipwea.org.au/IIMM

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 Abbreviations

Appendix F Glossary

Appendix A: Maintenance Response Levels of Service

The Urban Elements Maintenance Guidelines provides the maintenance response levels of service. The document is filed in TRIM the hyperlink is ACC2014 / 189030 This document is a live document that will be regularly reviewed every 12 months or as required due to additional information and data becoming available.

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

Where the asset register data is the method used for renewal modelling (Method 1), download the Projected Renewal Program for AM Plan Appendix B from the Graphs and Reports page of the NAMS.PLUS2 web site, export the renewal and replacement program to an Excel spreadsheet, COPY and PASTE the first 10 years of the program into Appendix B.

These tables will be added as part of the Improvement Plan with an overview of the entire Urban Elements Asset Class and smaller tables provide a breakdown of asset classes.

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

These tables and graphs will be added as part of the Improvement Plan with an overview of the entire Urban Elements Asset Class and smaller tables provide a breakdown of asset classes.

Appendix D: Budgeted Expenditures Accommodated in LTFP

NAMS.PLUS3 Asset Management

2014 5-10 year Assets_S1_V1 Asset Management Plan

First year of expenditure projections 2014 (financial year ending)

2014 5-10 year Assets

Asset values at start of planning period			Calc CRC from asset register		Operations and maintenance costs for new assets	% of asset value
Current replacement cost	$17,164	(000)	$17,164	(000)	Additional operations costs	0.19%
Depreciable amount	$17,164	(000)	This is a check for you.		Additional maintenance	2.79%
Depreciated replacement cost	$8,141	(000)			Additional depreciation	4.75%
Annual depreciation expense	$815	(000)			Planned renewal budget (information only)	

Planned expenditures from LTFP

20-year expenditure projections Note: Enter all values in current 2014 values. You may use these values calculated from your data or overwrite the links.

Financial year ending	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000
Expenditure outlays included in *Long Term Financial Plan* (in current $ values)										
Operations										
Operations budget	$1	$1	$1	$1	$1	$1	$1	$1	$1	$1
Management budget	$27	$27	$27	$27	$27	$27	$27	$27	$27	$27
AM systems budget	$5	$5	$5	$5	$5	$5	$5	$5	$5	$5
TOTAL OPERATIONS	**$33**	**$33**	**$33**	**$33**	**$33**	**$33**	**$33**	**$33**	**$33**	**$33**
Maintenance										
Reactive maintenance budget	$15	$15	$15	$15	$15	$15	$15	$15	$15	$15
Planned maintenance budget	$364	$364	$364	$364	$364	$364	$364	$364	$364	$364
Specific maintenance items budget	$100	$100	$100	$100	$100	$100	$100	$100	$100	$100
TOTAL MAINTENANCE	**$479**	**$479**	**$479**	**$479**	**$479**	**$479**	**$479**	**$479**	**$479**	**$479**
Capital										
Planned renewal budget	$300	$300	$300	$300	$300	$300	$300	$300	$300	$300
Planned upgrade / new budget	$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
Asset disposals										
Est cost to dispose of assets	$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
Additional expenditure outlays requirements (e.g. from *Infrastructure Risk Management Plan*)										
Additional expenditure outlays required	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**
and not included above	**$000**	**$000**	**$000**	**$000**	**$000**	**$000**	**$000**	**$000**	**$000**	**$000**
Operations	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Maintenance	$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
User comments #2										
Forecasts for capital renewal using methods 2 and 3 (Form 2A and 2B) and capital upgrade (Form 2C)										
	2014	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**
	$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
Forecast capital upgrade from Form 2C	$86	$86	$86	$86	$86	$86	$86	$86	$86	$86

Appendix D: Budgeted Expenditures Accommodated in LTFP *continued*

NAMS.PLUS3 Asset Management

2014UE 20 year Assets_S1_V1 Asset Management Plan

First year of expenditure projections 2014 (financial year ending)

2014UE 20 year Assets

Asset values at start of planning period			Calc CRC from asset register		Operations and maintenance costs for new assets	% of asset value
Current replacement cost	$8,193	(000)	$8,091	(000)	Additional operations costs	0.40%
Depreciable amount	$8,193	(000)	This is a check for you.		Additional maintenance	6.79%
Depreciated replacement cost	$6,122	(000)			Additional depreciation	4.13%
Annual depreciation expense	$338	(000)			Planned renewal budget (information only)	

Planned expenditures from LTFP

20-year expenditure projections — **Note: Enter all values in current 2014 values. You may use these values calculated from your data or overwrite the links.**

Financial year ending	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000
Expenditure outlays included in *Long Term Financial Plan* (in current $ values)										
Operations										
Operations budget	$1	$1	$1	$1	$1	$1	$1	$1	$1	$1
Management budget	$27	$27	$27	$27	$27	$27	$27	$27	$27	$27
AM systems budget	$5	$5	$5	$5	$5	$5	$5	$5	$5	$5
TOTAL OPERATIONS	**$33**	**$33**	**$33**	**$33**	**$33**	**$33**	**$33**	**$33**	**$33**	**$33**
Maintenance										
Reactive maintenance budget	$61	$61	$61	$61	$61	$61	$61	$61	$61	$61
Planned maintenance budget	$165	$165	$165	$165	$165	$165	$165	$165	$165	$165
Specific maintenance items budget	$330	$330	$330	$330	$330	$330	$330	$330	$330	$330
TOTAL MAINTENANCE	**$556**	**$556**	**$556**	**$556**	**$556**	**$556**	**$556**	**$556**	**$556**	**$556**
Capital										
Planned renewal budget	$410	$410	$410	$410	$410	$410	$410	$410	$410	$410
Planned upgrade / new budget	$463	$388	$288	$288	$313	$313	$313	$313	$313	$313
Non-growth contributed asset value	$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
Carrying value (DRC) of disposed assets	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Additional expenditure outlays requirements (e.g. from *Infrastructure Risk Management Plan*)										
Additional expenditure outlays required	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**
and not included above	**$000**	**$000**	**$000**	**$000**	**$000**	**$000**	**$000**	**$000**	**$000**	**$000**
Operations	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Maintenance	$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
User comments #2										
Forecasts for capital renewal using methods 2 and 3 (Form 2A and 2B) and capital upgrade (Form 2C)										
	2014	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**
	$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
Forecast capital upgrade from Form 2C	$463	$388	$288	$288	$313	$313	$313	$313	$313	$313

Appendix D: Budgeted Expenditures Accommodated in LTFP *continued*

NAMS.PLUS3 Asset Management

2014 Parking Ticket Machines_S1_V1 Asset Management Plan

First year of expenditure projections 2014 (financial year ending)

2014 Parking Ticket Machines

Asset values at start of planning period			Calc CRC from asset register		Operations and maintenance costs for new assets	% of asset value
Current replacement cost	$3,090	(000)	$3,090	(000)	Additional operations costs	1.07%
Depreciable amount	$3,090	(000)	This is a check for you.		Additional maintenance	13.59%
Depreciated replacement cost	$1,485	(000)			Additional depreciation	7.96%
Annual depreciation expense	$246	(000)			Planned renewal budget (information only)	

Planned expenditures from LTFP

20-year expenditure projections Note: Enter all values in current 2014 values. You may use these values calculated from your data or overwrite the links.

Financial year ending	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000
Expenditure outlays included in *Long Term Financial Plan* (in current $ values)										
Operations										
Operations budget	$1	$1	$1	$1	$1	$1	$1	$1	$1	$1
Management budget	$27	$27	$27	$27	$27	$27	$27	$27	$27	$27
AM systems budget	$5	$5	$5	$5	$5	$5	$5	$5	$5	$5
TOTAL OPERATIONS	**$33**	**$33**	**$33**	**$33**	**$33**	**$33**	**$33**	**$33**	**$33**	**$33**
Maintenance										
Reactive maintenance budget	$60	$60	$60	$60	$60	$60	$60	$60	$60	$60
Planned maintenance budget	$100	$100	$100	$100	$100	$100	$100	$100	$100	$100
Specific maintenance items budget	$260	$260	$260	$260	$260	$260	$260	$260	$260	$260
TOTAL MAINTENANCE	**$420**	**$420**	**$420**	**$420**	**$420**	**$420**	**$420**	**$420**	**$420**	**$420**
Capital										
Planned renewal budget	$300	$300	$300	$300	$300	$300	$300	$300	$300	$300
Planned upgrade / new budget	$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
Asset disposals										
Est cost to dispose of assets	$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
Additional expenditure outlays requirements (e.g. from *Infrastructure Risk Management Plan*)										
Additional expenditure outlays required	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**
and not included above	**$000**	**$000**	**$000**	**$000**	**$000**	**$000**	**$000**	**$000**	**$000**	**$000**
Operations	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Maintenance	$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
User comments #2										
Forecasts for capital renewal using methods 2 and 3 (Form 2A and 2B) and capital upgrade (Form 2C)										
	2014	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**
	$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
Forecast capital upgrade from Form 2C	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Appendix D: Budgeted Expenditures Accommodated in LTFP *continued*

NAMS.PLUS3 Asset Management

2014 Artworks & Water Features_S1_V1 Asset Management Plan

First year of expenditure projections 2014 (financial year ending)

2014 Artworks & Water Features

Asset values at start of planning period			Calc CRC from asset register		Operations and maintenance costs for new assets	% of asset value
Current replacement cost	$22,749	(000)	$22,749	(000)	Additional operations costs	0.15%
Depreciable amount	$22,749	(000)	This is a check for you.		Additional maintenance	1.75%
Depreciated replacement cost	$14,826	(000)			Additional depreciation	3.14%
Annual depreciation expense	$714	(000)			Planned renewal budget (information only)	

Planned expenditures from LTFP

20-year expenditure projections Note: Enter all values in current 2014 values. You may use these values calculated from your data or overwrite the links.

Financial year ending	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000
Expenditure outlays included in *Long Term Financial Plan* (in current $ values)										
Operations										
Operations budget	$1	$1	$1	$1	$1	$1	$1	$1	$1	$1
Management budget	$27	$27	$27	$27	$27	$27	$27	$27	$27	$27
AM systems budget	$5	$5	$5	$5	$5	$5	$5	$5	$5	$5
TOTAL OPERATIONS	**$33**	**$33**	**$33**	**$33**	**$33**	**$33**	**$33**	**$33**	**$33**	**$33**
Maintenance										
Reactive maintenance budget	$23	$23	$23	$23	$23	$23	$23	$23	$23	$23
Planned maintenance budget	$120	$120	$120	$120	$120	$120	$120	$120	$120	$120
Specific maintenance items budget	$254	$254	$254	$254	$254	$254	$254	$254	$254	$254
TOTAL MAINTENANCE	**$397**	**$397**	**$397**	**$397**	**$397**	**$397**	**$397**	**$397**	**$397**	**$397**
Capital										
Planned renewal budget	$230	$230	$230	$230	$230	$230	$230	$230	$230	$230
Planned upgrade / new budget	$230	$230	$230	$230	$230	$230	$230	$230	$230	$230
Non-growth contributed asset value	$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
Carrying value (DRC) of disposed assets	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Additional expenditure outlays requirements (e.g. from *Infrastructure Risk Management Plan*)										
Additional expenditure outlays required	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**
and not included above	**$000**	**$000**	**$000**	**$000**	**$000**	**$000**	**$000**	**$000**	**$000**	**$000**
Operations	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Maintenance	$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
User comments #2										
Forecasts for capital renewal using methods 2 and 3 (Form 2A and 2B) and capital upgrade (Form 2C)										
	2014	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**
	$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
Forecast capital upgrade from Form 2C	$230	$230	$230	$230	$230	$230	$230	$230	$230	$230

Appendix D: Budgeted Expenditures Accommodated in LTFP *continued*

NAMS.PLUS3 Asset Management

2014 Playspace & Fitness Equipment_S1_V1 Asset Management Plan

First year of expenditure projections 2014 (financial year ending)

2014 Playspace & Fitness Equipment

Asset values at start of planning period			Calc CRC from asset register		Operations and maintenance costs for new assets	% of asset value
Current replacement cost	$3,028	(000)	$3,028	(000)	Additional operations costs	1.09%
Depreciable amount	$3,028	(000)	This is a check for you.		Additional maintenance	6.04%
Depreciated replacement cost	$1,705	(000)			Additional depreciation	6.58%
Annual depreciation expense	$199	(000)			Planned renewal budget (information only)	

Planned expenditures from LTFP

20-year expenditure projections Note: Enter all values in current 2014 values. You may use these values calculated from your data or overwrite the links.

Financial year ending	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000
Expenditure outlays included in *Long Term Financial Plan* (in current $ values)										
Operations										
Operations budget	$1	$1	$1	$1	$1	$1	$1	$1	$1	$1
Management budget	$27	$27	$27	$27	$27	$27	$27	$27	$27	$27
AM systems budget	$5	$5	$5	$5	$5	$5	$5	$5	$5	$5
TOTAL OPERATIONS	**$33**	**$33**	**$33**	**$33**	**$33**	**$33**	**$33**	**$33**	**$33**	**$33**
Maintenance										
Reactive maintenance budget	$11	$11	$11	$11	$11	$11	$11	$11	$11	$11
Planned maintenance budget	$40	$40	$40	$40	$40	$40	$40	$40	$40	$40
Specific maintenance items budget	$132	$132	$132	$132	$132	$132	$132	$132	$132	$132
TOTAL MAINTENANCE	**$183**	**$183**	**$183**	**$183**	**$183**	**$183**	**$183**	**$183**	**$183**	**$183**
Capital										
Planned renewal budget	$100	$200	$200	$200	$200	$200	$200	$200	$200	$200
Planned upgrade / new budget	$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
Asset disposals										
Est cost to dispose of assets	$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
Additional expenditure outlays requirements (e.g. from *Infrastructure Risk Management Plan*)										
Additional expenditure outlays required and not included above	**2014 $000**	**2015 $000**	**2016 $000**	**2017 $000**	**2018 $000**	**2019 $000**	**2020 $000**	**2021 $000**	**2022 $000**	**2023 $000**
Operations	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Maintenance	$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
User comments #2										
Forecasts for capital renewal using methods 2 and 3 (Form 2A and 2B) and capital upgrade (Form 2C)										
	2014 $000	2015 $000	2016 $000	2017 $000	2018 $000	2019 $000	2020 $000	2021 $000	2022 $000	2023 $000
Forecast capital renewal from Forms 2A and 2B	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Forecast capital upgrade from Form 2C	$0	$415	$400	$300	$800	$1,500	$800	$150	$150	$1,500

Appendix D: Budgeted Expenditures Accommodated in LTFP *continued*

NAMS.PLUS3 Asset Management

2014 Walls Rotundas China T Gateways_S1_V1 Asset Management Plan

First year of expenditure projections 2014 (financial year ending)

2014 Walls Rotundas China T Gateways

Asset values at start of planning period			Calc CRC from asset register		Operations and maintenance costs for new assets	% of asset value
Current replacement cost		(000)		(000)	Additional operations costs	0.15%
Depreciable amount		(000)	This is a check for you.		Additional maintenance	1.75%
Depreciated replacement cost		(000)			Additional depreciation	3.14%
Annual depreciation expense		(000)			Planned renewal budget (information only)	

Planned expenditures from LTFP

20-year expenditure projections Note: Enter all values in current 2014 values. You may use these values calculated from your data or overwrite the links.

Financial year ending	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000
Expenditure outlays included in *Long Term Financial Plan* (in current $ values)										
Operations										
Operations budget	$1	$1	$1	$1	$1	$1	$1	$1	$1	$1
Management budget	$27	$27	$27	$27	$27	$27	$27	$27	$27	$27
AM systems budget	$5	$5	$5	$5	$5	$5	$5	$5	$5	$5
TOTAL OPERATIONS	**$33**	**$33**	**$33**	**$33**	**$33**	**$33**	**$33**	**$33**	**$33**	**$33**
Maintenance										
Reactive maintenance budget	$10	$10	$10	$10	$10	$10	$10	$10	$10	$10
Planned maintenance budget	$25	$25	$25	$25	$25	$25	$25	$25	$25	$25
Specific maintenance items budget	$25	$25	$25	$25	$25	$25	$25	$25	$25	$25
TOTAL MAINTENANCE	**$60**	**$60**	**$60**	**$60**	**$60**	**$60**	**$60**	**$60**	**$60**	**$60**
Capital										
Planned renewal budget	$90	$180	$180	$180	$160	$160	$90	$140	$140	$120
Planned upgrade / new budget	$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
Asset disposals										
Est cost to dispose of assets	$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
Additional expenditure outlays requirements (e.g. from *Infrastructure Risk Management Plan*)										
Additional expenditure outlays required and not included above	**2014 $000**	**2015 $000**	**2016 $000**	**2017 $000**	**2018 $000**	**2019 $000**	**2020 $000**	**2021 $000**	**2022 $000**	**2023 $000**
Operations	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Maintenance	$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
User comments #2										
Forecasts for capital renewal using methods 2 and 3 (Form 2A and 2B) and capital upgrade (Form 2C)										
	2014 $000	**2015 $000**	**2016 $000**	**2017 $000**	**2018 $000**	**2019 $000**	**2020 $000**	**2021 $000**	**2022 $000**	**2023 $000**
Forecast capital renewal from Forms 2A and 2B	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Forecast capital upgrade from Form 2C	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Appendix E: 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 F: 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 *