Clarence City Council

Clarence... a brighter place

Public Open Space

Asset Management Plan 2018

Scenario 1 Version 1

July 2018

Document Control	

Document ID: 59 299 140531 nams plus3 amp template v3.1					
Rev No	Date	Revision Details	Author	Reviewer	Approver
1	14 Mar 2018	Rev 1 from audit panel review	JJ	RLG	
2	14 Mar 2018	Rev 2 from audit panel comments	JJ	RLG	
3	30 July 2018	Rev 3 from audit panel comments	TM	RLG	

Note: Scenario and Version (S V) designations relate to the data used in construction of this Asset Management Plan. An explanation of how this information is utilised is included in section 5.7.

TABLE OF CONTENTS

1. EXECUTIVE SUMMARY 4
   Context 4
   What does it Cost? 4
   What we will do 4
   What we cannot do 4
   Managing the Risks 4
   Confidence Levels 5
   The Next Steps 5
2. INTRODUCTION 6
   2.1 Background 6
   2.2 Goals and Objectives of Asset Management 8
   2.3 Plan Framework 8
   2.4 Core and Advanced Asset Management 10
   2.5 Community Consultation 10
3. LEVELS OF SERVICE 11
   3.1 Customer Research and Expectations 11
   3.2 Strategic and Corporate Goals 11
   3.3 Legislative Requirements 13
   3.4 Current Levels of Service 13
4. FUTURE DEMAND 17
   4.1 Demand Drivers 17
   4.2 Demand Forecast 17
   4.3 Demand Impact on Assets 17
   4.4 Demand Management Plan 17
   4.5 Asset Programs to meet Demand 18
5. LIFECYCLE MANAGEMENT PLAN 19
   5.1 Background Data 19
   5.2 Infrastructure Risk Management Plan 22
   5.3 Routine Operations and Maintenance Plan 23
   5.4 Renewal/Replacement Plan 25
   5.5 Creation/Acquisition/Upgrade Plan 28
   5.6 Disposal Plan 30
   5.7 Service Consequences and Risks 30
6. FINANCIAL SUMMARY 31
   6.1 Financial Statements and Projections 31
   6.2 Funding Strategy 36
   6.3 Valuation Forecasts 36
   6.4 Key Assumptions made in Financial Forecasts 38
   6.5 Forecast Reliability and Confidence 38
7. PLAN IMPROVEMENT AND MONITORING 40
   7.1 Status of Asset Management Practices 40
   7.2 Improvement Plan 41
   7.3 Monitoring and Review Procedures 41
   7.4 Performance Measures 41
8. REFERENCES 42
9. APPENDICES 43
   Appendix A Maintenance Response Levels of Service 44
   Appendix B Projected 10 year Capital Renewal and Replacement Works Program 45
   Appendix C Projected Upgrade/Exp/New 10 year Capital Works Program 47
   Appendix D Budgeted Expenditures Accommodated in LTFP 49
   Appendix E Abbreviations 50
   Appendix F Glossary 51

1. EXECUTIVE SUMMARY

Context

This Public Open Space Asset Management Plan has been prepared to satisfy strategies identified in Council's 2016-2026 Strategic Plan. The Plan specifies current levels of service and expenditure requirements to maintain those levels of service in providing infrastructure within public open spaces throughout Clarence.

Public Open Space in Clarence
Public open space in Clarence comprises:

- 60 District & Local Parks;
- 11 regional parks;
- 16 sportsgrounds;
- 35 natural areas.

Typical infrastructure provided in public open space includes:

Play equipment, fitness equipment, sportsground facilities, BBQ facilities, shelters, picnic facilities, seating, lighting, paths and irrigation.

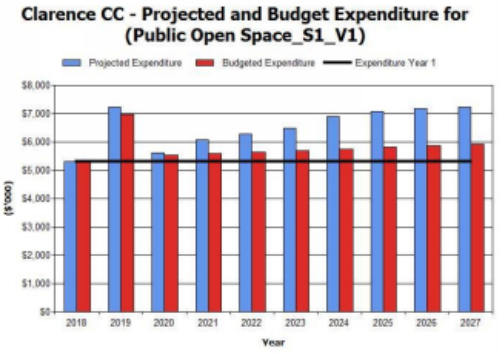
As of 24 August 2017, these infrastructure assets have a replacement value of **$22,670,746.**

What does it Cost?

The projected outlays necessary to provide the services covered by Public Open Space Asset Management Plan (POSAMP) includes operations, maintenance, renewal and upgrade of existing assets over the 10 year planning period is **$65,362,000** or **$6,536,000** on average per year.

Estimated available funding for this period is **$58,087,000** or **$5,809,300** on average per year which is **89%** of the cost to provide the service. This is a funding shortfall of **$727,000** on average per year. Projected expenditure required to provide services in the POSAMP compared with planned expenditure currently included in the 10 Year Financial Management Plan (Long Term Financial Plan) are shown in the Figure 4, below.

Figure 4: Projected Operations and Maintenance Expenditure (From 5.3.3)



What we will do

We plan to provide for the following:

- Operation, maintenance, renewal and upgrade of infrastructure within neighbourhood parks, regional parks, sportsgrounds and natural areas to meet service levels set in annual budgets.
- Increase the standards of regional parks including Simmons Park, Kangaroo Bay Parkland, Bellerive Beach Park and Wentworth Park.
- Plan for the development of new and upgraded sportsgrounds and facilities for example Seven Mile Beach.

What we cannot do

Due to broad budgetary shortfall, Council does not have adequate funding to provide all services at the current service levels and provide new services. Works and services that cannot be provided under present funding levels will be identified together with options for their management.

Managing the Risks

There are risks associated with providing the public open space infrastructure and not being able to complete all identified activities and projects. Council have identified major risks as:

- Injury to users of play equipment and fitness equipment.

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

- Maintenance requirements identified through inspections of play equipment twice a year,
- Visual checks of parks and sportsgrounds weekly.

Confidence Levels

This POSAMP is based on a medium level of confidence information. This means that data is based on sound records, procedures, investigations and analysis which is incomplete or unsupported, or extrapolated from a limited sample. The dataset is substantially complete but up to 50% is extrapolated data and accuracy estimated ± 25%.

The Next Steps

The actions resulting from this asset management plan are:

- Develop a comprehensive and accurate asset register,
- Prepare a Risk Management Plan for public open space assets

Questions you may have

What is this plan about?

This POSAMP covers the infrastructure assets that serve the Clarence City Council community's public open space areas. These assets include play equipment, fitness equipment, sportsground facilities, BBQ facilities, shelters, picnic facilities, seating, lighting, paths and irrigation.

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 asset management 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?

Council is making significant investment in new public open space infrastructure. Notable projects include Simmons Park, Bellerive Beach Park, Kangaroo Bay Parklands and Seven Mile Beach sportsground. The funding shortfall represents the extra funding required to operate and maintain the new assets.

What options does Council 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 life cycle 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 public open space services and costs meet community needs and are affordable,
7. Developing partnership with other bodies, where available to provide services,
8. Seeking additional funding from governments and other bodies to better reflect a 'whole of government' funding approach to infrastructure services.

What happens if Council doesn't manage the shortfall?

It is likely that Council will have to reduce service levels in some areas, unless new sources of revenue are found. For public open space, the service level reductions may include less frequent mowing or removal of equipment not fit for purpose.

What can Council do?

Council can develop options, costs and priorities for future public open space 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.

2. INTRODUCTION

2.1 Background

This asset management 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.

The asset management plan follows the format for POSAMPs recommended in Section 4.2.6 of the International Infrastructure Management Manual[1].

The asset management plan is to be read with the organisation's Asset Management Policy, Asset Management Strategy and the following associated planning documents:

- Clarence City Council Strategic Plan 2016 to 2026,
- Clarence City Council 10 Year Financial Management Plan (Long Term Financial Plan),,
- Clarence City Council Annual Report 2016/17,
- Clarence City Council Strategic Asset Management Policy,
- Clarence Tracks and Trails Strategy 2012,
- Clarence Tracks and Trails Action Plan 2015-2020,
- Clarence Bushland and Coastal Strategy 2011,
- Natural Area Activity Plans,
- Clarence Bicycle Strategy and Action Plan 2013-2017,
- Draft Public Open Space Strategy,
- Recreational Needs Analysis.

This infrastructure assets covered by this asset management plan are shown in Table 2.1. These assets are used to compliment the amenity of public open space throughout the City.

Table 2.1: Assets covered by this Plan

Asset category	Replacement Value
BBQs & shelters	$1,875,119
Equipment	$486,080
Fencing, walls etc	$2,086,318
Footpaths - concrete	$110,774
Furniture-recreation	$1,215,382
Infrastructure	$1,626,584
Irrigation	$3,370,078
Lighting	$3,886,471
Playground equipment	$2,955,110
Skate/bmx	$2,359,592
Sporting	$2,339,256
Toilet	$359,984
Total	$22,670,746

Key stakeholders in the preparation and implementation of this asset management plan are shown in Table 2.1.1.

[1] IPWEA, 2011, Sec 4.2.6, *Example of an Asset Management Plan Structure*, pp 4|24 – 27.

Table 2.1.1: Key Stakeholders in the POSAMP

Key Stakeholder	Role in Asset Management Plan
Aldermen	• Represent needs of community/shareholders, • Allocate resources to meet Council's objectives in providing services while managing risks, • Ensure organisation is financially sustainable, • Accept trade-offs between levels of service and costs.
General Manager	To communicate to Council the service and financial implications arising from the Asset Management Plan
Group Manager Engineering Services	To determine and identify any implications of not meeting funding requirements identified in this POSAMP i.e. consequences of reducing levels of service.
Manager Finance and Information Management	To determine and identify any implications the POSAMP may have on Council's financial sustainability.

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

2.2 Goals and Objectives of Asset Management

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

Council's 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 meet the defined level of service,
- Identifying, assessing and appropriately controlling risks, and
- Having a long-term financial plan which identifies required, affordable expenditure and how it will be financed.[2]

2.3 Plan Framework

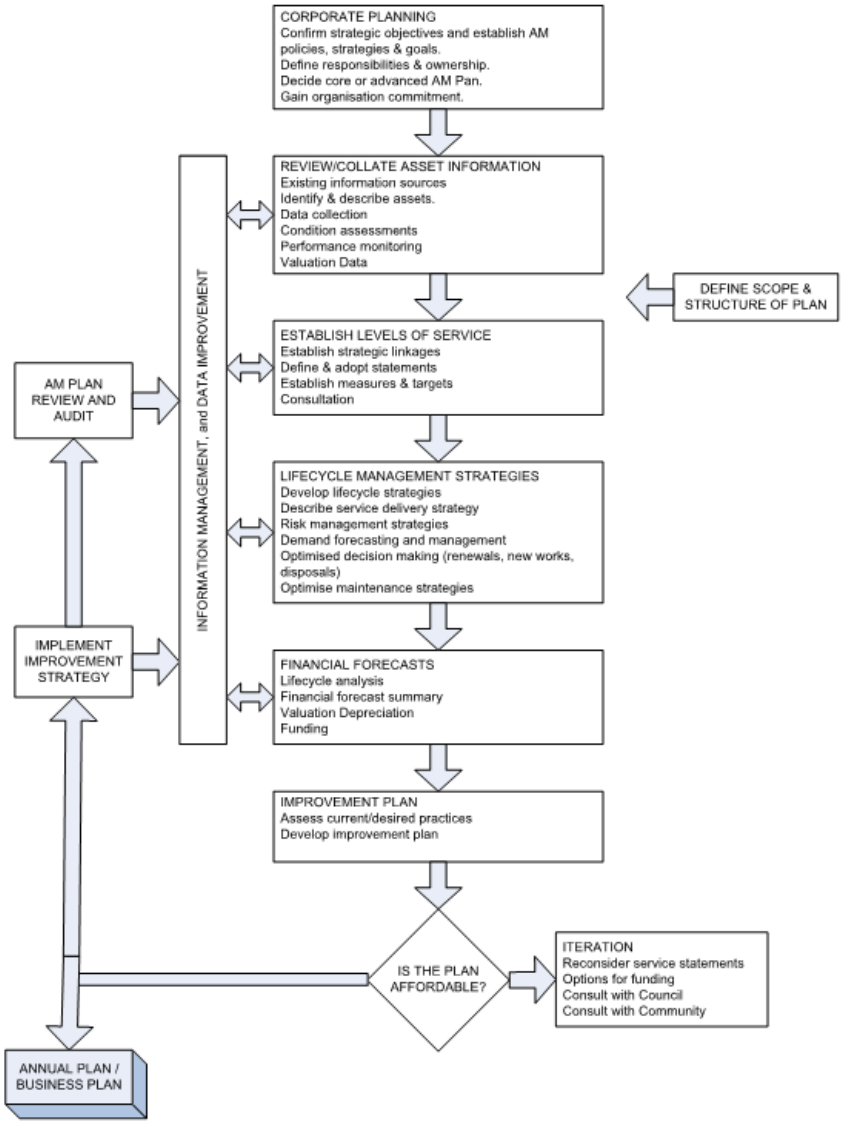
Key elements of the plan are:

- Levels of service – specifies the services and levels of service to be provided by the Council,
- Future demand – how this will impact on future service delivery and how this is to be met,
- Life cycle management – how Council will manage its 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 Council's objectives,
- Asset management improvement plan.

A road map for preparing an asset management plan is shown in 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, Figure 1.5.1, p 1.11.



2.4 Core and Advanced Asset Management

This POSAMP is prepared as a 'core' asset management 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 POSAMP 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

No community consultation has been undertaken in the preparation of the Public Open Space Asset Management Plan. Future revisions of the asset management plan may incorporate community consultation to assist in Council and the community 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

Council engages a consultant to conduct the Clarence City Council Service Quality Biennial Report. The report compiles results from a telephone survey of Clarence residents which gauge the importance that the community places on services provided by Council and the level of satisfaction with the delivery of those services. The 2008-2016 service quality survey covered several public open space related questions, with reported satisfaction levels as follows:

Table 3.1: Community Satisfaction Survey Levels

	"Service"	2016	2014	2012	2010	2008
% of respondents who consider that Council provides and maintains the "Service" is very important or important.	**Children's playgrounds**	83	78	80	78	82
	Parks & Gardens	92	91	90	93	90
	Sport Grounds	81	80	77	78	83
Performance in the provision and maintenance of the "Service" (% based on average score out of 10)	**Children's playgrounds**	80	76	73	71	72
	Parks & Gardens	75	75	72	71	72
	Sport Grounds	79	79	76	75	76

The Council uses this information in developing its Strategic Plan and in allocation of resources in the budget.

Section one of Table 3.1, shows the percentage of respondents who said that provision of the service was "very important" or "important". The community has held a steady view on the importance of children's playgrounds and parks & gardens, while the community view regarding the importance of sport grounds has increased since 2012.

Section two of Table 3.1, shows that the community's perception of Council's performance in the provision of children's playgrounds, parks & gardens, and sportsgrounds is slowly increasing.

3.2 Strategic and Corporate Goals

This asset management plan is prepared under the direction of the organisation's vision, mission, goals and objectives.

Our vision is:

To make Clarence a Vibrant, Prosperous and Sustainable City.

Our mission is:

Responding to the changing needs of the community through a commitment to excellence in leadership, advocacy, innovative governance and service delivery.

Clarence City Council's goals and objectives and how these are addressed in this asset management plan are shown in Table 3.2.

Table 3.2: Organisational Goals and how these are addressed in this Plan

Goal	Objective	How Goal and Objectives are addressed in POSAMP
Governance and Leadership: To provide leadership and accessible, responsive, transparent and accountable governance of the City.	Internal operating systems - Ensure appropriate management of risk associated with Council's operations and activities	The development of this POSAMP will inform Council of the consequences of its decisions and ensure that the provision and maintenance of public open space infrastructure is sustainable.
A People City: Clarence is a city which values diversity and encourages equity and inclusiveness, where people of all ages and abilities have the opportunity to improve their health and quality of life.	Community Safety and Well-being – Provide essential infrastructure to support, sustain and enhance community safety and social well-being. Public Spaces and Amenity - Develop and implement Asset Management Plans that respond to the identified needs of local communities.	The development of this POSAMP will help identify additional infrastructure needs and plan for the associated financial implications.
A Well Planned, Liveable City: Clarence will be a well-planned liveable city with services and supporting infrastructure to meet current and future needs.	Establish and review a prioritised list of outstanding road transport and alternative transport issues for the City to facilitate the appropriate ranking of projects for capital works planning and funding.	The development of this POSAMP will help identify additional infrastructure needs and plan for the associated financial implications.
Council's Assets & Resources: To efficiently and effectively manage Council's financial, human, and property resources to attain Council's strategic goals and meet statutory obligations.	Financial management – Maintain a financially sustainable organisation, Maintain Council in a sound financial position, Make affordable and equitable rates and charges, and have effective control of financial risk. Human resources management – Provide an equal opportunity workplace, foster an environment that encourages staff development and continuous learning to strengthen workforce capabilities.	The development of this POSAMP will inform funding decisions and ensure sustainable service delivery in the long term.
A Prosperous City: Clarence will develop its economy, improve prosperity, and expand both the level and equity of personal opportunity within its communities.	Economic Development - Provide and plan for essential infrastructure to support economic development.	The development of this BOSAMP will help identify additional infrastructure needs and plan for the associated financial implications.
An Environmentally Responsible City: Clarence is a city that values its natural environment and seeks to protect, manage, and enhance its natural assets for the long term environmental, social and economic benefit of the community.	Built Environment - Develop and implement strategic asset management plans for all Council asset classes.	The development of this POSAMP will directly address this objective.

3.3 Legislative Requirements

The Council have to meet many legislative requirements including Australian and State legislation and State regulations. These legislative requirements are shown in Table 3.3.

Table 3.3: Legislative Requirements

Legislation	Requirement
Boundary Fences Act 1908	An Act to consolidate and amend the law relating to boundary fences.
Civil Liability Act 2002	An Act to effect civil liability reforms.
Crown Lands Act 1976	An Act to make fresh provisions with respect to the management, sale, and disposal of the lands of the Crown.
Disability Discrimination Act 1992	An Act relating to the funding of the provision of specialist disability services, and other goods or services, in relation to persons with disability, the regulation of the use of restrictive interventions in relation to such persons, the repeal of the *Disability Services Act 1992*, the consequential amendment of certain legislation, and for related purposes.
Land Use Planning and Approvals Act 1993	An Act to make provision for land use planning and approvals.
Local Government (Building and Miscellaneous Provisions) Act 1993	An Act to provide for matters relating to building and for miscellaneous matters relating to local government.
Local Government Act 1993	An Act to provide for local government and establish councils to plan for, develop and manage municipal areas in the interests of their communities.
Nature Conservation Act 2002	An Act to make provision with respect to the conservation and protection of the fauna, flora and geological diversity of the State, to provide for the declaration of national parks and other reserved land and for related purposes.
Public Health Act 1997	An Act to protect and promote the health of communities in the State and reduce the incidence of preventable illness.
Threatened Species Protection Act 1995	An Act to provide for the protection and management of threatened native flora and fauna and to enable and promote the conservation of native flora and fauna.
Weed Management Act 1999	An Act to provide for the control and eradication of declared weeds and to promote a strategic and sustainable approach to weed management.
Work Health and Safety Act 2012 **Work Health and Safety Regulation 2012**	An Act to secure the health, safety and welfare of persons at work and for related purposes.

3.4 Current Levels of Service

In developing the 2003/04 to 2007/08 plan, the community was consulted through the use of focus groups, a phone survey of 400 residents. In discussing public open space with residents they were provided with the following descriptions of each type of park.

- District & Local Parks are designed to serve a local community. They are quite small and may have play equipment, a seat or two and some plants;
- Regional parks are larger and meet the needs of people from several suburbs e.g. Wentworth Park. They may have BBQs, shelters, considerable play equipment, toilets, etc.;
- Sportsgrounds meet the need for organised sporting activity; and
- Natural areas such as bushland and the foreshore, Perhaps with walking tracks or acting as a reserve (examples include Natone Hill and Waverley Flora Park).

As a result of the community consultation three tiers of service levels were developed.

- Primary Service Levels - Relate to the elements of public open space that would affect a majority of the community;
- Secondary Service Levels - Associated with those services which, if not carried out, could impact on the primary service levels;
- Tertiary Service Levels - All remaining services carried out by Council. The standard of tertiary service levels may impact on individuals or small groups of residents but should not adversely affect the community as a whole.

This plan is based on achieving all service levels but if in any year there is a need for budget restraint then it would be sensible to reduce the standard of tertiary service levels before reducing secondary or primary service levels. As part of the ongoing rollout of OneCouncil, Council will be expanding its capacity to record and evaluate service level data to improve on areas where data is considered to be insufficient. These processes will be detailed in the 2022 version of the AMP, as it is too early in their development to comment on specific implementation details.

Primary Service Levels

Primary service levels relate to services that are most important to the community and would affect a large proportion of residents.

The planned primary service levels for sportsgrounds, neighbourhood and regional parks are listed in the following table.

Table 3.4: Primary Service Levels

Asset	Purpose	Level of Service
Sportsgrounds	Provide sportsgrounds suitable for the relevant code of sport	• Maintain playing surfaces suitable for organised sport. • Provide toilet/ shower facilities.
	Provide facilities for informal recreation/ relaxation	• As the need arises convert unused areas to parkland with turfed areas, scattered trees, seating and walking paths.
District & Local Parks and ancillary properties	Provide facilities for informal recreation/ relaxation	• Develop vegetation in District & Local Parks to meet future requirements of parkland with turfed areas, scattered trees, seating and in larger parks walking paths. • Provide seating/ tables/ picnic facilities.
		• Remove play equipment assessed as priority 4[4]. • Pre 2005/2006, replace play equipment that has been removed. • From 2005/2006, replace play equipment in suburbs where the percentage of 0-14 year olds exceeds 15%.
Regional parks	Provide facilities for informal recreation/ relaxation	• Establish major regional parks at Wentworth Park, Bellerive Beach, Kangaroo Bay and Simmons Park.
		• Establish minor regional parks at Clarendon Vale, Clifton Beach, Cremorne, Lauderdale, Opossum bay, Oakdowns, Risdon Vale, Richmond, Rokeby, Seven Mile Beach and South Arm.
		• Provide play equipment, shade/ sheltered areas and picnic/BBQ facilities (scope of facilities dependent upon population serviced).

Natural areas are different from other parks in that the functions of the park i.e. provide for conservation and recreation can be mutually exclusive. To remedy this conflict it is proposed that parks be classed into one of four groups based on the classification system developed in Table 3.5. Parks at the top of the range would be managed primarily for conservation and at the other end of the scale recreation would be the dominant value. The proposed conservation/ recreational values for natural areas are listed in Table 3.6.

Table 3.5 identifies the classification of each natural area managed by Council.

[4] Priority 4 refers to play equipment that doesn't meet current standards or have reached the end of their physical life

Facilities to be included in natural areas are, as appropriate, walking tracks in accordance with AS2156, rubbish bins, parking facilities, picnic areas and seating.

Table 3.5: Classification of Natural Areas

Park Name	Conservation Value				Recreation value
	Capacity	Condition	Combined	Class	Condition
Lauderdale Wetlands	5	5	25	A	0
Mt. Rumney Bushland Reserves	5	5	25	A	0
Waverley Flora Park	5	4	20	A	2
Rokeby Hills Bushland Reserve	4	4	16	A	1
Glebe Hill Bushland Reserve	3	4	12	B	2
Mortimer Bay Coastal Reserve	5	3	15	B	3
Kuynah Bushland Reserve	3	5	15	B	3
Natone Hill Bushland Reserve	4	3	12	B	3
Bedlam Wall Reserve	4	3	12	B	3
Pilcher's Hill Bushland Reserve	4	3	12	B	0
Toorittya Bushland Reserve	3	4	12	B	3
Roches Coastal Reserve	4	3	12	B	2
Tangara Trail Reserves	3	2	6	C	4
Otago Bay Coastal Reserves	3	3	9	C	3
Roscommon Bushland and Wetland Reserve	4	3	12	B	3
Blessington Coastal Reserve	3	3	9	C	3
Rosny Hill-Montagu Bay Foreshore Reserve	3	3	9	C	2
Weina Bushland Reserve	2	3	6	C	2
Bellerive –Howrah Coastal Reserve	3	3	9	C	3
Tranmere Foreshore Reserve	3	2	6	C	2
Seven Mile Beach Coastal Reserve	3	2	6	C	3
Signal Hill Bushland Reserve	3	2	6	C	2
Potters Hill Bushland Reserve	2	2	4	D	2
Opossum Bay Foreshore Reserve	2	2	4	D	3
First Bellerive Bluff Foreshore Reserve	2	2	4	D	2
Lauderdale Coastal Reserve	3	1	3	D	3
Cremorne Coastal Reserve	3	1	3	D	4
Clarence Plains Riparian Reserve	3	1	3	D	3
Carella Gully Reserve	3	1	3	D	3
Richmond Recreation Reserve	3	1	3	D	3
Rokeby Beach Coastal Reserve	2	1	2	D	3
Risdon Vale/Grass tree Hill Rivulets	2	1	2	D	3
Nowra Bushland Reserve	3	0	0	D	1
Clifton Beach Foreshore Reserve	2	0	0	D	3
Koomela Bay Foreshore Reserve	1	0	0	D	4

Table 3.6: Conservation and Recreation Values

Class	Conservation Values	Recreation Values
A	Maintain vegetation free of introduced species and control access to special features.	Limit recreation to clearly defined areas such as walking tracks.
B	Restore natural vegetation, control introduced species, and control access to special features.	Limit recreation to clearly defined areas such as walking tracks.
C	Degraded site that should be protected from long-term damage such as erosion.	Allow a wide range of nature-based recreation such as walking, jogging, picnicking and cycling (mountain bikes).
D	A site with a natural character but is degraded and can include deliberately planted exotics.	Allow a wide range of nature-based recreation such as walking, jogging, picnicking and cycling.

	Should be protected from long-term damage such as erosion.	

Secondary Levels of Service

Secondary levels of service are shown in the following Table 3.7.

Table 3.7: Secondary Service Levels

Asset	Purpose	Level of Service
Sportsgrounds	Provide sportsgrounds suitable for the relevant code of sport	• Implementing a maintenance program for topdressing, coring, fertilising, spraying, irrigating and over-seeding. • Mow and line-mark sportsgrounds (on average) on a weekly basis. • Renovating one oval per year to meet acceptable risk management criteria. • Undertaking risk management inspections and report on a weekly basis.
Neighbourhood/ Regional parks and ancillary properties	Provide facilities for informal recreation/ relaxation	• Undertake risk management inspections and report on a weekly basis and repair as required. • Undertake external audit of play equipment twice a year and repair as required.
Natural Areas	Provide recreational opportunities in a natural setting	• Implement control program for priority weeds identified in Council's adopted weed strategy. • Undertake risk management inspections and report on an annual basis repair as required.

Tertiary Levels of Service

As mentioned earlier in times of budget restraint tertiary service levels would be the first area of the budget placed under review. Caution needs to be exercised in doing this though as many activities include high costs for plant which in the short term cannot be varied. Tertiary service levels are shown in the following Table 3.8.

Table 3.8: Tertiary Service Levels

Asset	Purpose	Level of Service
Sportsgrounds	Provide sportsgrounds suitable for the relevant code of sport	• Cleaning change rooms in accordance with hiring roster. • Removing litter as required when on site. • Repair/ replace synthetic wickets on a three-year cycle. • Maintain jetties and boat ramps controlled by Council.
Neighbourhood/ Regional parks and ancillary properties	Provide facilities for informal recreation/ relaxation	• Mow lawns on average once a month except Charles Hand Park which is to be mown fortnightly. • Remove mid-story vegetation. • Mulch 50% of garden beds on average each year. • Council offices – flower beds replaced twice a year, mow lawn fortnightly and fertilise twice a year. • Control weeds and pests twice a year to maintain healthy vegetation. • Remove litter as required when on site. • Remove/ replace dead/ dying plants.
All properties (Fire management)	Protect life, property and the environment	• Assess all Council properties (excluding those included in the fire management plan) for fire hazard. For those properties considered a fire hazard maintain a fuel reduced zone around the property perimeter annually. • Review fire management plan once every five years and implement.
Natural Areas	Provide recreational opportunities in a natural setting	• Support Landcare Coast care Groups with a $40,000 grants program. • Remove litter as required when on site.

4. FUTURE DEMAND

4.1 Demand Drivers

Drivers affecting demand are broader trends of change which may result in unavoidable increases in demand on Council's resources and time, impacting the overall Level of Service Council may be able to provide.

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	53,175 (ABS Estimated resident population June 2016).	70,882 (Projected resident population June 2037 @ 1.2%).	More demand for Council managed public open spaces.
Demographics	Aging population.	Proportion of people aged over 60 to increase.	More demand for infrastructure suitable for elderly users.
Increasing levels of service via legislative requirements	Disability Discrimination Act 1992, Disability Standards for Accessible Public Transport.	Higher standards for improved safety and amenity.	Higher levels of service may impact on the amount of maintenance and renewal able to be undertaken with allocated expenditure.
Lot sizes	Trend towards smaller residential lots and urban infill in established suburbs.	A greater proportion of the community will have limited private open space.	More demand for public open space. More potential users within the catchment of existing parks.
Climate Change	Mild dry spells.	Longer dry spells.	Increased irrigation requirements.
Sea Level Rise	Lauderdale Oval vulnerable to drains backing up during king tides.	Lauderdale Oval will be affected by a greater proportion of high tides.	Likely inundation and high brackish water table likely to cause grass die off.

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 Council to own the assets and management actions including reducing demand for the service, reducing the level of service (allowing some assets to deteriorate beyond current service levels) or educating customers to accept appropriate asset failures[5]. Examples of non-asset solutions include providing services from existing infrastructure such as aquatic centres and libraries that may be in another community area or public toilets provided in commercial premises.

Opportunities identified to date for demand management are shown in Table 4.4. Further opportunities will be evaluated with each future revisions of this POSAMP.

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

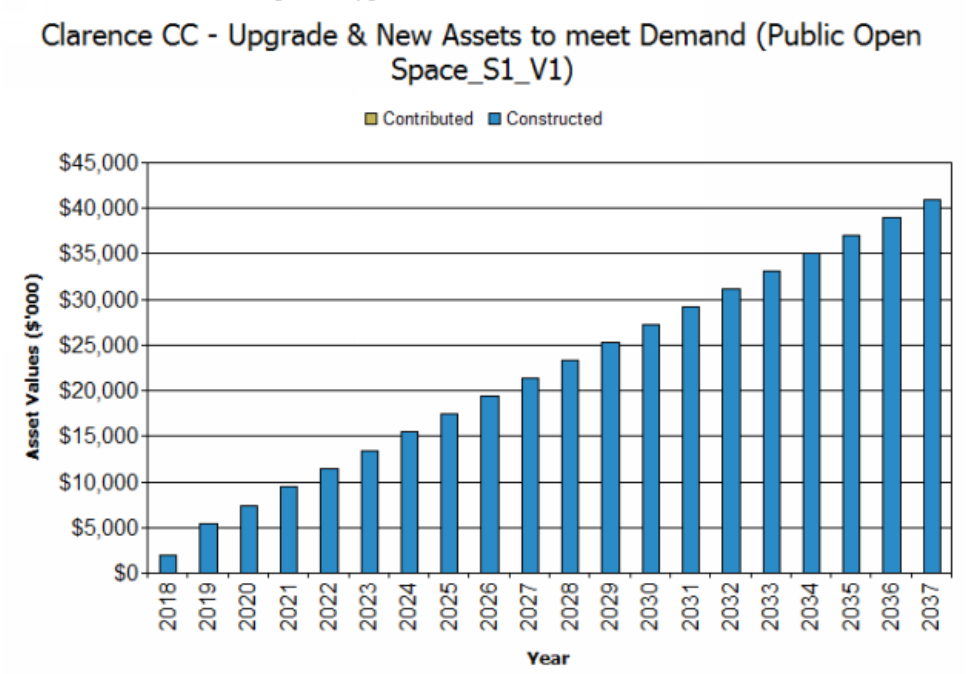
Table 4.4: Demand Management Plan Summary

Demand Driver	Impact on Services	Demand Management Plan
Population	More demand on Council managed public open spaces	Seek to rationalise/priorities investment in highly frequented parks.
Climate Change	Increased irrigation requirements	Upgrade irrigation systems with smart technology increasing efficiency. Investigate stormwater as a water source where practicable/economical to do so.

4.5 Asset Programs to meet Demand

The new assets required to meet growth will be acquired free of cost from land developments 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



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 life cycle costs.

5.1 Background Data

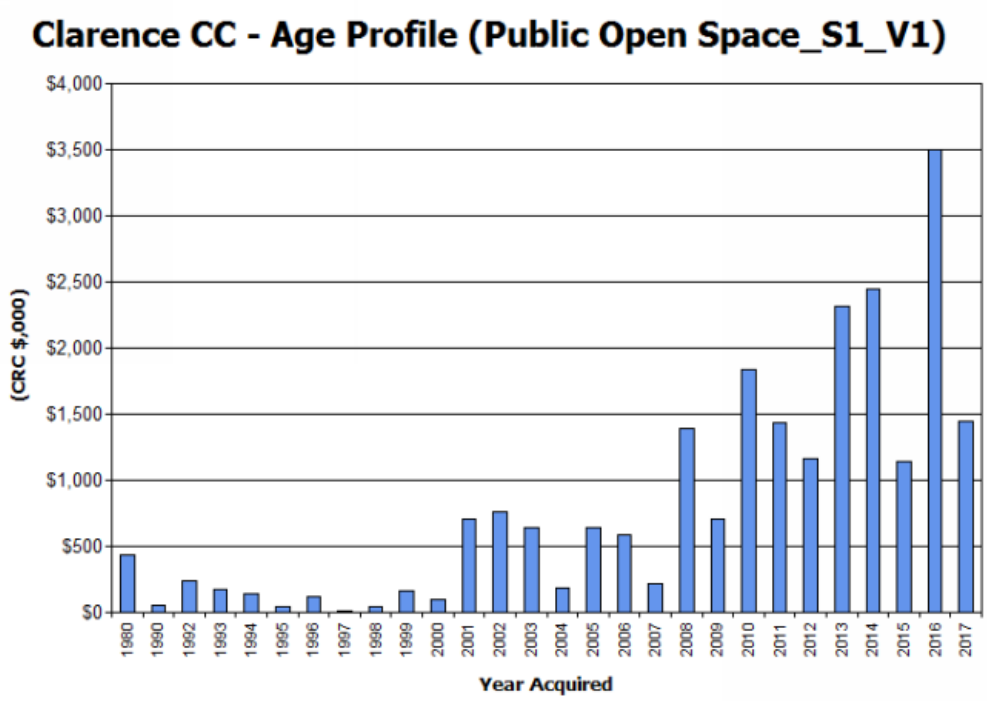
5.1.1 Physical parameters

The assets covered by this POSAMP are shown in Table 2.1.

The majority of Council's public open space infrastructure was constructed since 2000. This reflects the increased renewal effort recommended in the 2003/04 to 2007/08 Public Open Space Asset Management Plan in addition to new assets created in that time, notably fitness equipment installations and upgrades to sportsground lighting and irrigation.

The age profile of the assets include in this POSAMP is shown in Figure 2.

Figure 2: Asset Age Profile



5.1.2 Asset capacity and performance

Council'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

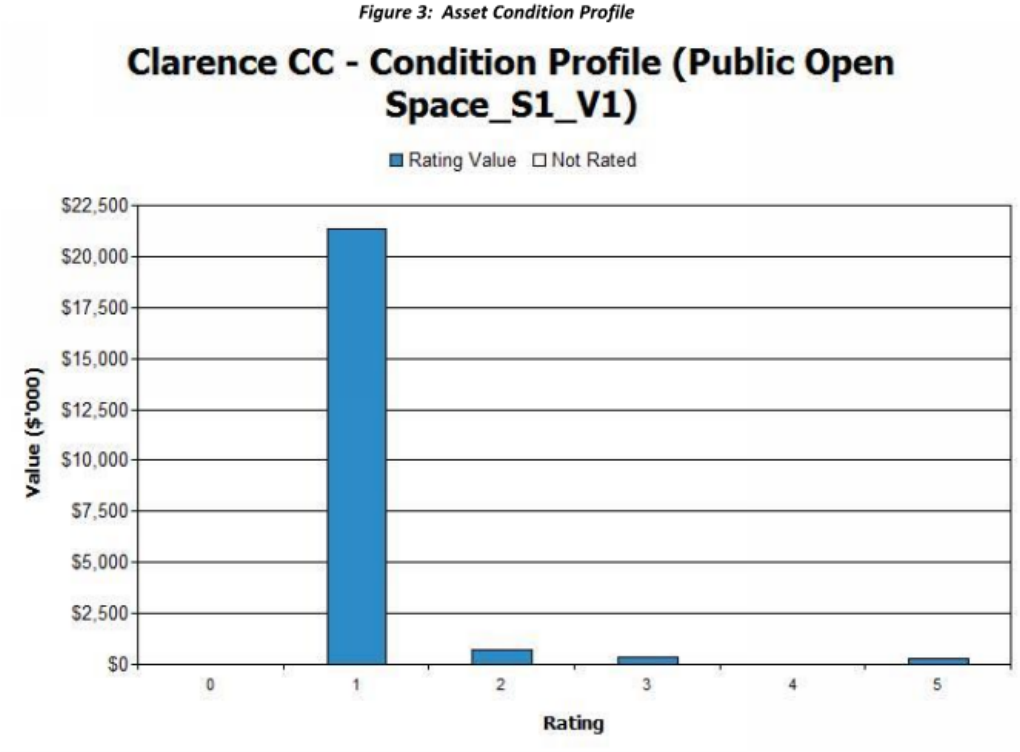
Location	Service Deficiency
Sportsgrounds	Drainage, Irrigation, Lighting and Ground closures
Play equipment	Many items are non-compliant with current Australian Standards

Softfall	Health concerns regarding pine bark softfall

5.1.3 Asset condition

Condition rating of infrastructure assets typically involves the allocation of a score, say 1 to 5, with 1 being new and 5 needing renewal or replacement. Council's public open space assets are not currently assigned a condition score, however they are inspected regularly. In lieu of a condition profile, a consumption profile has been generated. The consumption profile applies the same 1 to 5 scoring methodology as a condition profile. The scores as allocated based on the age of the asset compared to the useful life of the asset e.g. an asset that is in the first 20% of its lifecycle will be scored 1, while an asset in the last 20% of its lifecycle (or beyond) will be scored 5. The consumption profile is shown in Figure 3.

Figure 3: Asset Condition Profile



The weighted average score for Council's public open space assets is 2.26.

Play equipment is inspected twice annually for safety, general maintenance and compliance with relevant Australian Standards. The results of the November 2012 and 2016 inspection are summarised in Table 5.1.4.

Table 5.1.3: Park safety audit – November 2012 & 2016

Inspection Criteria	*No. of occurrences*	
	November 2012	*November 2016*
M1 – Maintenance – Urgent safety issue	*2*	*2*
M2 – Maintenance – High priority	*47*	*79*
M3 – Maintenance general	*139*	*222*
U – Under surfacing (softfall) upgrade required	*15*	*16*
G - Graffiti	*49*	*126*

S – Standards – Non-compliance issue	*93*	*93*
R – Recommendation to avoid a potential hazard	*272*	*202*
NC – Older equipment compliant at time of installation but non-compliant with latest Australian Standards	*505*	*404*

Council's other public open space assets are also inspected regularly. This enables staff to take remedial action before failure becomes a major concern to the community. Inspections also provide an information source for predicting future work requirements. Inspections are used for all assets on the basis that failure may increase risk to the community/Council or failure may result in increased maintenance costs.

Table 5.1.4: Inspection Regime

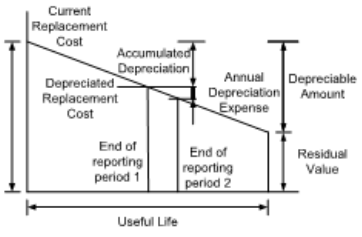
Asset	Type of Inspection	Frequency
Tracks in natural areas	• Visual check in accordance with AS2156	In accordance with AS2156 (between 1-18 months dependent upon track classification)
Sportsgrounds, Neighbourhood/ Regional parks and ancillary properties	• Visual check in accordance with inspection manual	Weekly
Play equipment	• Undertake external audit of twice a year and repair as required.	Twice a year
Natural Areas	• Visual check in accordance with inspection manual	Annual
Footpaths	• Visual check in accordance with inspection manual • Footpath Audit	Annual Every 3 years
Park condition	• Visual check in accordance with inspection manual	Annual

With the exception of walking tracks in natural areas the frequency and type of inspection in the above table is based on what is considered to be reasonable. The inspection program should be reassessed after considering the results from each inspection. As part of the ongoing rollout of OneCouncil, Council will seek to better incorporate the results of this condition inspection regime into its renewal and replacement plan, to be detailed in the 2022 version of this Asset Management Plan.

5.1.4 Asset valuations

The value of assets recorded in the asset register as at 30 July 2017 covered by this asset management plan is shown below. Assets were last revalued at 30 July 2017. Assets are valued by averaging rates tendered by contractors for Council projects throughout the prior year. The projects are typically brown field.

Current Replacement Cost	$22,671,000
Depreciable Amount	$22,671,000
Depreciated Replacement Cost[6]	$15,853,000
Annual Depreciation Expense	$938,000



[6] Also reported as Written Down Current Replacement Cost (WDCRC).

Various ratios of asset consumption and expenditure have been prepared to help guide and gauge asset management performance and trends over time.

Rate of Annual Asset Consumption (Depreciation/Depreciable Amount)	4.1%
Rate of Annual Asset Renewal (Capital renewal exp/Depreciable amount)	1.5%
Rate of Annual Asset Upgrade/New (Capital upgrade exp/Depreciable amount)	8.5%
Rate of Annual Asset Upgrade/New (including contributed assets)	8.5%

In 2017/18 the organisation plans to renew assets at 37.3% of the rate they are being consumed and will be increasing its asset stock by 8.5% in the year.

5.2 Infrastructure Risk Management Plan

A formalised infrastructure risk management plan will be prepared with the next review of this plan. In the meantime, Council currently manages risk by undertaking regular inspections of public open space and the assets within. The resulting remediation action/programs are prioritised according to an assessed level of residual risk.

An assessment of risks associated with service delivery from infrastructure assets has identified critical risks that will result in loss or reduction in service from infrastructure assets or a financial loss to Council. The risk assessment process identifies credible risks, the consequences and likelihood of the associated risk events occurring, the controls available to either eliminate or minimise the risks, and then evaluates the risks and develops a risk treatment plan.

Critical risks, being those assessed as 'Very High' - requiring immediate corrective action and 'High' – requiring prioritised corrective action will be identified in the future Infrastructure Risk Management Plan, together with the estimated residual risk after the selected treatment plan is operational as summarised in Table 5.2.

Table 5.2: Critical Risks and Treatment Plans

Service or Asset at Risk	Risk Event	Consequence	Risk Controls	Likelihood	Residual Risk
Parks					
Play equipment	Injury to users of play equipment	High	Twice yearly inspections and weekly visual inspections.	Possible	L
Sportsgrounds					
Playing surfaces	Injury to participants due to substandard surface	High	Irrigation provided to ensure appropriate grass growth.	Possible	L
Playing surfaces	Injury to participants due to substandard surface	High	Ground closures during very wet weather to prevent deterioration of playing surface.	Unlikely	L
Infrastructure	Injury to participants from insufficient runoff distances.	High	Fences are located at an appropriate runoff distance from the playing areas to prevent injury.	Unlikely	L
Infrastructure	Injury to participants from infrastructure	High	No infrastructure to be placed within playing areas with the exception of sprinkler	Negligable	L

	within playing area.		heads.		
Natural Areas					
Vegetation	Bushfire	High	Fuel reduction burns	Possible	M

5.3 Routine Operations and Maintenance Plan

Operations include regular activities to provide services such as safety and amenity, e.g. lighting and irrigation.

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

5.3.1 Operations and Maintenance Plan

Operations activities affect service levels including quality and function through irrigation frequency, cleaning frequency and opening hours of buildings and other facilities.

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

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

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

Specific maintenance is replacement of higher value components/sub-components of assets that is undertaken on a regular cycle 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
2013/14	$1,393,701	$411,804
2014/15	$1,407,152	$503,889
2015/16	$1,600,325	$420,402
2016/17	$1,791,095	$508,958

Planned maintenance work was 77.9% of total maintenance expenditure in 2016/17. Industry figures propose 30-50% unplanned maintenance work is desirable. The council's Roads unplanned maintenance expenditure of 22.1% represents an effective Council works program in this area.

Maintenance expenditure levels are considered to be adequate to meet current service levels. However, Council will need to increase operations and maintenance expenditure as new public open space assets are constructed.

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

5.3.2 Operations and Maintenance Strategies

Council 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 underutilised 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,
- Review management of operations and maintenance activities to ensure Council 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.

Council does not have a service hierarchy for their public open space assets at the moment and will develop one in the future.

Table 5.3.2: Asset Service Hierarchy

Service Hierarchy	Service Level Objective
Clarence City Council does not have a service hierarchy for this category as of yet.	N/A

Critical Assets

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

Operations and maintenances activities may be targeted to mitigate critical assets failure and maintain service levels. These activities may include increased inspection frequency, higher maintenance intervention levels, etc.

Council's Open Public Space assets are not considered as critical assets at this time. Failures by these assets are treated as risks which are managed according to Table 5.2.

Table 5.3.2.1: Critical Assets and Service Level Objectives

Critical Assets	Critical Failure Mode	Operations & Maintenance Activities
None Known	N/A	N/A

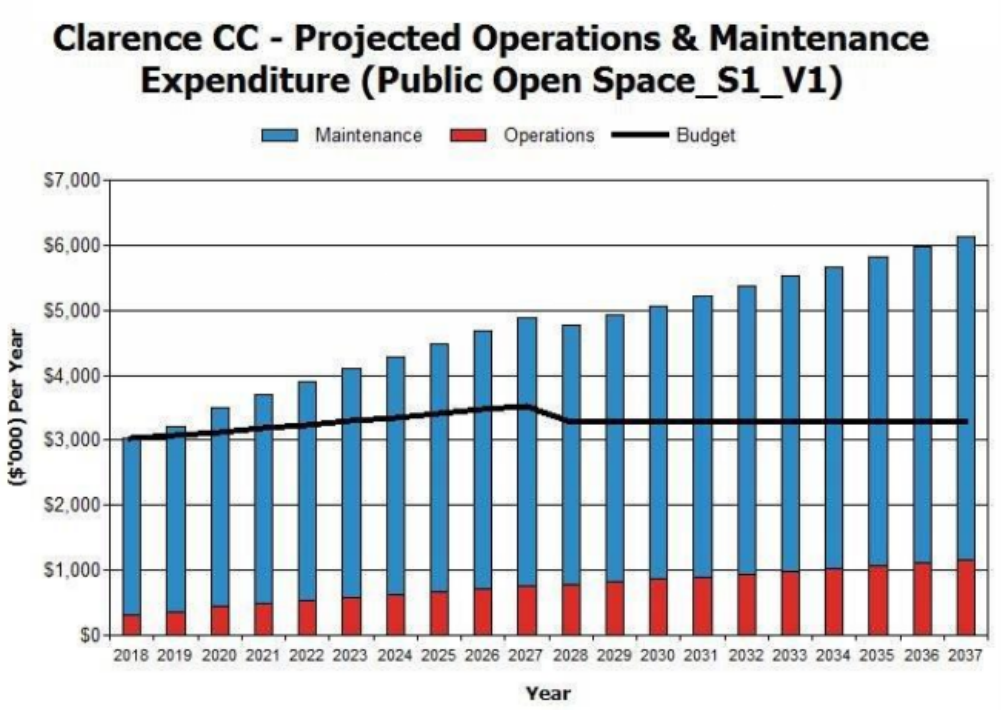
Standards and specifications

Maintenance work is carried out in accordance with the same Standards and Specifications listed in section 5.4.2.

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 2017 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 3 has been used in the preparation of this POSAMP.

The useful lives of assets used to develop projected asset renewal expenditures are shown in Table 5.4.1. Asset useful lives were last reviewed in 2016.[7]

Table 5.4.1: Useful Lives of Assets

Asset (Sub)Category	Useful life
Park Equipment (including playgrounds, BBQ, seating, fencing, lighting, etc.)	10-30 years
Shelters/Shade sails	50-100 years
Skate Parks & BMX Tracks	10-50 years
Services (electrics, Plant, water supply)	25 years

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 life cycle costs for each options that could address the service deficiency,
  - and evaluate the options against evaluation criteria adopted by the organisation, and
  - 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 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 ,
- Review management of capital renewal and replacement activities to ensure Council is obtaining best value for resources used.

[7] Clarence City Council, 2016, Annual Report, P 56.

Renewal ranking criteria

Asset renewal and replacement is typically undertaken to either:

- Ensure the reliability of the existing infrastructure to deliver the service it was constructed to facilitate (e.g. replacing subsoil drainage and irrigation systems on sportsgrounds), or
- To ensure the infrastructure is of sufficient quality to meet the service requirements (e.g. sportsground rehabilitation).[8]

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 POSAMP 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	50%
Age	30%
Usage	20%
Total	**100%**

Renewal and replacement standards

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

- AS/NZS 4422 : 2016 - Playground Surfacing - Specification's requirements & test method
- AS/NZS 4486 : 1997 - Playground Equipment - Development, installation inspection maintenance & operation
- AS 1924 Part 2 : 1981 - Design & Construction - Safety Aspects
- AS 4685-1 – 2014 - General Safety Requirements & test methods
- AS 4685-2 – 2014 - Particular safety requirements & test methods for swings
- AS 4685-3 – 2014 - Particular safety requirements & test methods for slides
- AS 4685-4 – 2014 - Particular safety requirements & test methods for runways
- AS 4685-5 – 2014 - Particular safety requirements & test methods for carousels
- AS 4685-6 – 2014 - Particular safety requirements & test methods for rocking equipment
- AS 4685-11- 2014 - Additional safety requirements & test methods for spatial networks
- AS 2156.1-2001 - Walking tracks – Classification and signage
- AS 2156.2-2001 - Walking tracks – Infrastructure design
- AS 1725.5-2010 - Chain link fabric fencing – Sports ground fencing – General requirements
- AS 4693-2004 - Surfaces for sports areas – Methods of test

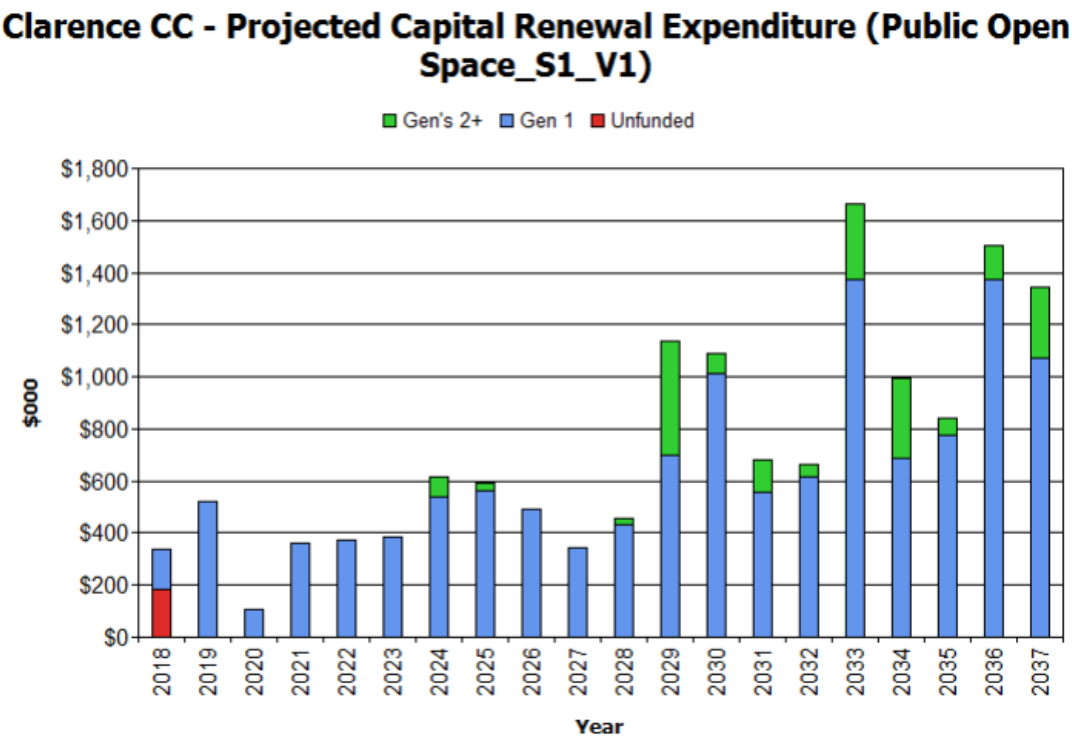
5.4.3 Summary of future renewal and replacement expenditure

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

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

[8] IPWEA, 2011, IIMM, Sec 3.4.4, p 3|60.
[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.

Renewals and replacement expenditure in the organisation's capital works program will be accommodated in the long term financial plan. 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/director 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 programmes. The priority ranking criteria is detailed in Table 5.5.1.

Table 5.5.1: New Assets Priority Ranking Criteria

Criteria	Weighting
Council strategies	50%
Demand	50%
Total	**100%**

5.5.2 Capital Investment Strategies

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

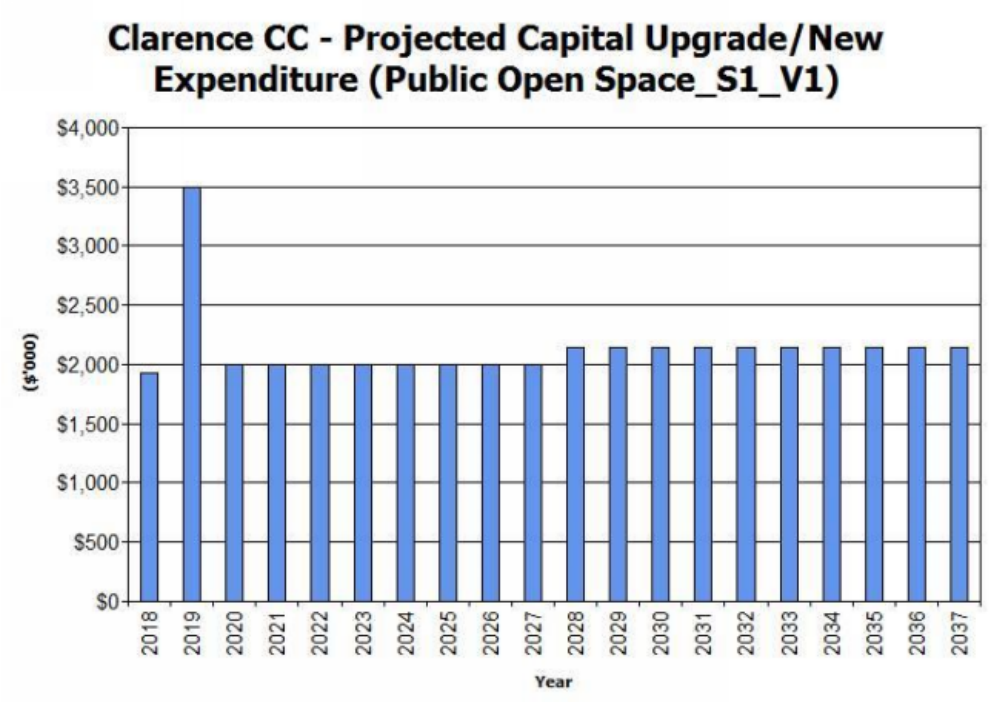
- Planning and scheduling capital upgrade and new projects to deliver the defined level of service in the most efficient manner,
- Undertake project scoping for all capital upgrade/new projects to identify:
  - the service delivery 'deficiency', present risk and required timeline for delivery of the upgrade/new asset,
  - the project objectives to rectify the deficiency including value management for major projects,
  - the range of options, estimated capital and life cycle 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, and
  - 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,
- Review management of capital project management activities to ensure Council 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 long term financial plan. This is further discussed in Section 6.2. In some cases, High capital expenditure in the current year reflects the presence of carryover construction from the previous financial year. Council does not currently review the influence of carryover funds on expenditure beyond the current financial year.

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 Council's long term financial plan. Where cashflow projections from asset disposals are not available, these will be developed in future revisions of this asset management plan.

Currently the Council does not have any public open space assets identified for decommissioning or disposal.

Table 5.6: Assets Identified for Disposal

Asset	Reason for Disposal	Timing	Disposal Expenditure	Operations & Maintenance Annual Savings
Public Open Space	None Proposed	N/A	N/A	N/A

5.7 Service Consequences and Risks

The intention is to prioritise decisions in adopting this POSAMP to obtain the optimum benefits from available resources based on the development of 3 scenarios of POSAMP's.

Scenario 1 - What Council would like to do based on asset register data.

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

Scenario 3 – What Council can do and be financially sustainable with POSAMP's matching long-term financial plans.

The development of Scenario 1 and Scenario 2 POSAMP's provides the tools for discussion with the Council and community on trade-offs between what Council would like to do (Scenario 1) and what Council 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:

- Renew and replace as necessary all non-compliant Public Open Space assets.
- Renew and replace as necessary all Public Open Space assets that are no longer of a community acceptable standard.

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:

- Usage will decline.
- Maintenance costs will increase.
- Possibly close spaces if areas are deemed unsafe.

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:

- Possible injury from failing components.

These risks will be included in the Infrastructure Risk Management Plan currently under development, with risk management plans actions and expenditures included within projected expenditures.

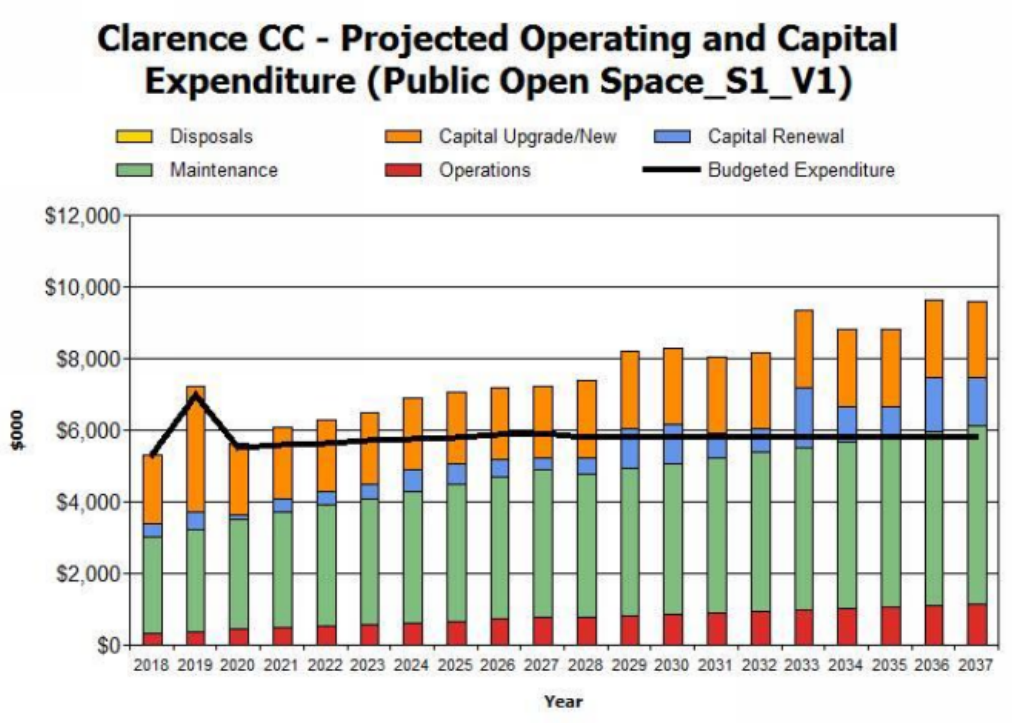
6. FINANCIAL SUMMARY

This section contains the financial requirements resulting from all the information presented in the previous sections of this POSAMP. 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.

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 are:

- The asset renewal funding ratio;
- The long term life cycle costs/expenditures;
- The medium term projected/budgeted expenditures over 5 years of the planning period and;
- The medium term projected/budgeted expenditures over 10 years of the planning period.

Asset Renewal Funding Ratio

Asset Renewal Funding Ratio[10] **97%**

The Asset Renewal Funding Ratio is the most important indicator and reveals that over the next 10 years, Council is forecasting that it will have 97% of the funds required for the optimal renewal and replacement of its assets.

Long term - Life Cycle Cost

Life cycle costs (or whole of life costs) are the average costs that are required to sustain the service levels over the asset life cycle. Life cycle costs include operations and maintenance expenditure and asset consumption (depreciation expense). The life cycle cost for the services covered in this asset management plan is $3,973,000 per year (average operations and maintenance expenditure plus depreciation expense projected over 10 years). The Long Term Financial Plan (LTFP) was developed alongside the Asset Management Plans (AMP) using expenditure projections from the AMP's to underpin a 10 year sustainable funding model for the Council. These AMP projections are quantified in the LTFP in terms of asset value, planned and reactive maintenance expense, life cycle depreciation and asset replacement costs of each asset portfolio.

Life cycle costs can be compared to life cycle expenditure to give an initial indicator of affordability of projected service levels when considered with age profiles. Life cycle expenditure includes operations, maintenance and capital renewal expenditure. Life cycle expenditure will vary depending on the timing of asset renewals. The life cycle expenditure over the 10 year planning period is $3,666,000 per year (average operations and maintenance plus capital renewal budgeted expenditure in LTFP over 10 years).

A shortfall between life cycle cost and life cycle expenditure is the life cycle gap. The life cycle gap for services covered by this asset management plan is $-1,253,000 per year (-ve = gap, +ve = surplus).

Life cycle expenditure is 74% of life cycle costs.

The life cycle costs and life cycle expenditure comparison highlights any difference between present outlays and the average cost of providing the service over the long term. If the life cycle expenditure is less than that life cycle cost, it is most likely that outlays will need to be increased or cuts in services made in the future. Should Council endorse additional funding to meet the LTFP/AMP's then this needs to take into account staff resourcing, plant, materials and capital works required to achieve this.

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 long term financial plan.

Medium term – 10 year financial planning period

This asset management 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 asset management 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 $4,393,000 on average per year.

Estimated (budget) operations, maintenance and capital renewal funding is $3,666,000 on average per year giving a 10 year funding shortfall of $728,000 per year. This indicates that Council expects to have 83% of the projected expenditures needed to provide the services documented in the asset management plan.

Medium Term – 5 year financial planning period

[10] AIFMG, 2012, Version 1.3, Financial Sustainability Indicator 4, Sec 2.6, p 2.16

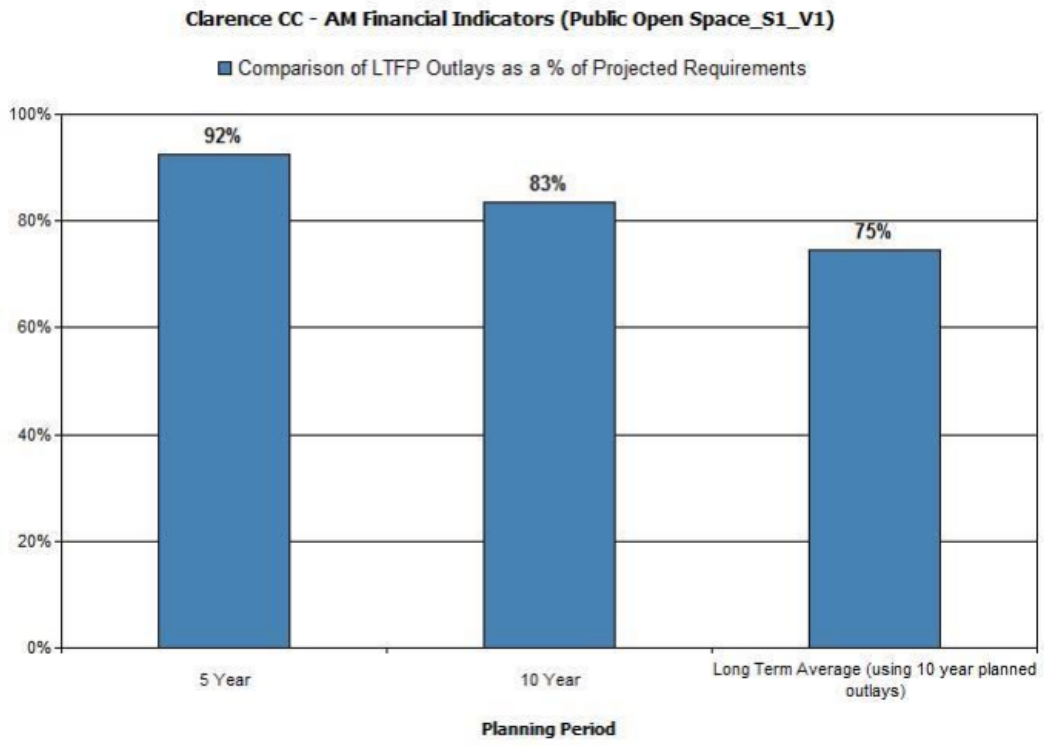
The projected operations, maintenance and capital renewal expenditure required over the first 5 years of the planning period is $3,811,000 on average per year.

Estimated (budget) operations, maintenance and capital renewal funding is $3,522,000 on average per year giving a 5 year funding shortfall of $289,000. This indicates that Council expects to have 92% of projected expenditures required to provide the services shown in this asset management plan.

Asset management financial indicators

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

Figure 8: 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 asset management plan and ideally over the 10 year life of the Long Term Financial Plan.

Figure 8 shows the projected asset renewal and replacement expenditure over the 20 years of the POSAMP. The projected asset renewal and replacement expenditure is compared to renewal and replacement expenditure in the capital works program, which is accommodated in the long term financial plan

Figure 9: Projected and LTFP Budgeted Renewal Expenditure

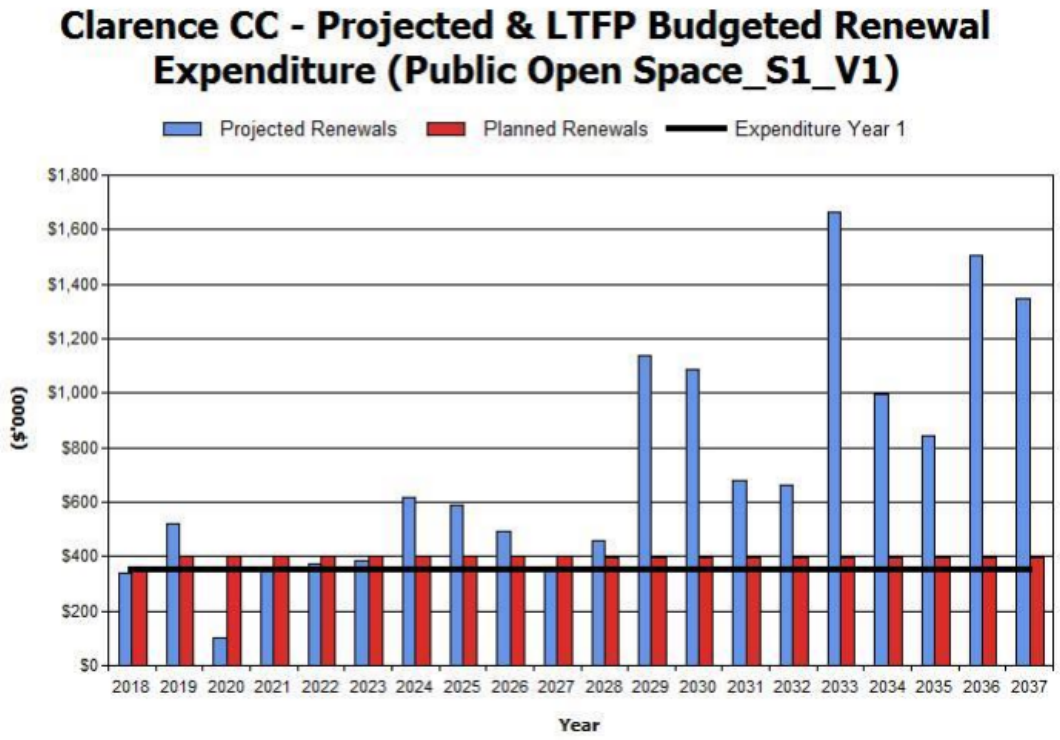


Table 6.1.1 shows the shortfall between projected renewal and replacement expenditures and expenditure accommodated in long term financial plan. Budget expenditures accommodated in the long term financial plan or extrapolated from current budgets are shown in Appendix D.

Table 6.1.1: Projected and LTFP Budgeted Renewals and Financing Shortfall

Year	Projected Renewals ($000)	LTFP Renewal Budget ($000)	Renewal Financing Shortfall ($000) (-ve Gap, +ve Surplus)	Cumulative Shortfall ($000) (-ve Gap, +ve Surplus)
2018	$340	$350	$10	$10
2019	$518	$400	$-118	$-108
2020	$104	$400	$296	$188
2021	$362	$400	$38	$226
2022	$376	$400	$24	$250
2023	$385	$400	$15	$265
2024	$617	$400	$-217	$48
2025	$590	$400	$-190	$-142
2026	$492	$400	$-92	$-234
2027	$345	$400	$55	$-178
2028	$456	$395	$-61	$-239
2029	$1,136	$395	$-741	$-980
2030	$1,089	$395	$-694	$-1,674

2031	$680	$395	$-285	$-1,959
2032	$665	$395	$-270	$-2,228
2033	$1,666	$395	$-1,271	$-3,500
2034	$997	$395	$-602	$-4,102
2035	$842	$395	$-447	$-4,549
2036	$1,507	$395	$-1,112	$-5,660
2037	$1,345	$395	$-950	$-6,610

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 long term financial plan.

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 POSAMP (including possibly revising the LTFP) before finalising the asset management plan to manage required service levels and funding to eliminate any funding gap.

Council will manage the 'gap' by developing this asset management 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 long term financial plan

Table 6.1.2 shows the projected expenditures for the 10 year long term financial plan.

Expenditure projections are in 2017 real values.

Table 6.1.2: Projected Expenditures for Long Term Financial Plan ($000)

Year	Operations ($000)	Maintenance ($000)	Projected Capital Renewal ($000)	Capital Upgrade/ New ($000)	Disposals ($000)
2018	$315	$2,713	$340	$1,932	$0
2019	$360	$2,855	$518	$3,500	$0
2020	$436	$3,075	$104	$2,000	$0
2021	$482	$3,222	$362	$2,000	$0
2022	$529	$3,370	$376	$2,000	$0
2023	$576	$3,519	$385	$2,000	$0
2024	$623	$3,669	$617	$2,000	$0
2025	$670	$3,819	$590	$2,000	$0
2026	$717	$3,971	$492	$2,000	$0
2027	$764	$4,124	$345	$2,000	$0

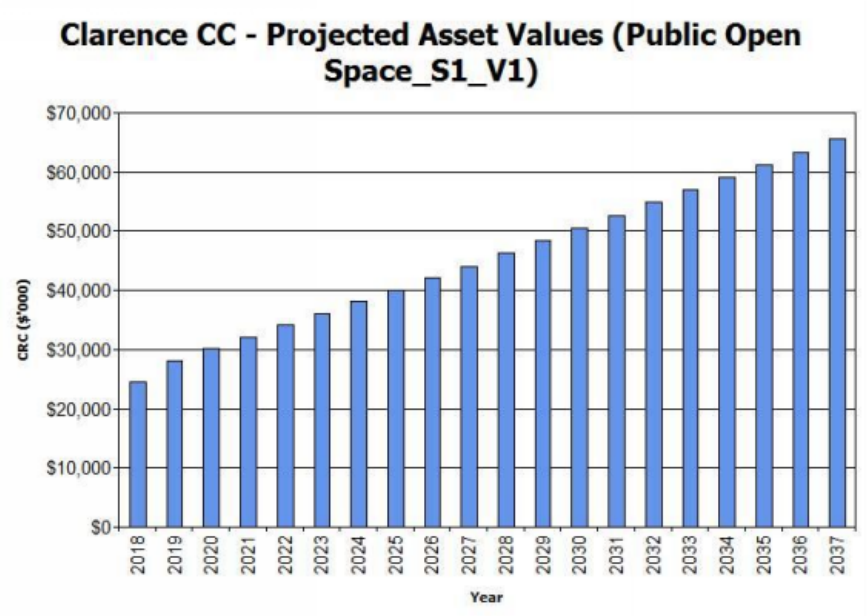
6.2 Funding Strategy

After reviewing service levels, as appropriate to ensure ongoing financial sustainability projected expenditures identified in Section 6.1.2 will be accommodated in the Council's 10 year long term financial plan.

6.3 Valuation Forecasts

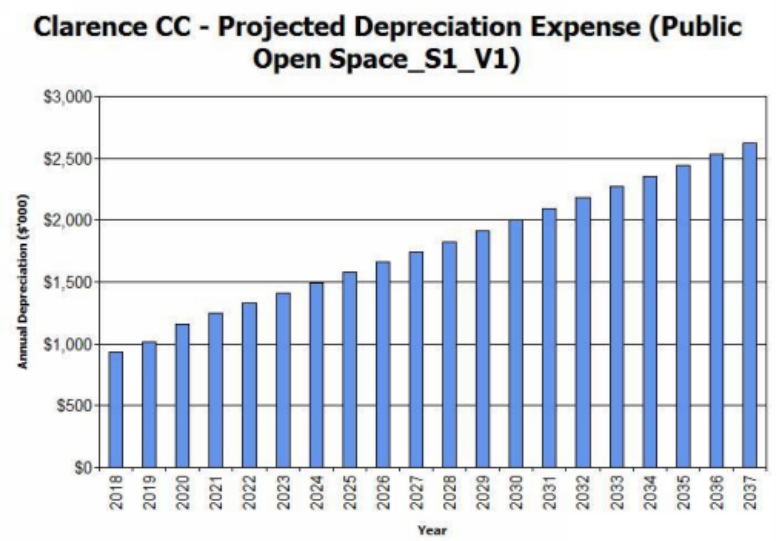
Asset values are forecast to increase as additional assets are added to the asset stock from construction and acquisition by Council and from assets constructed by land developers and others and donated to Council. Figure 9 shows the projected replacement cost asset values over the planning period in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

Figure 10: Projected Asset Values



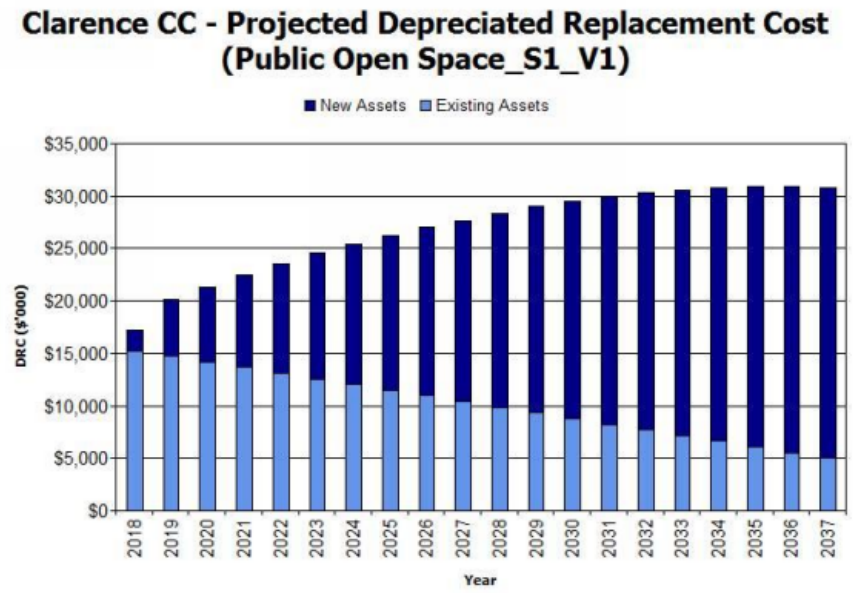
Depreciation expense values are forecast in line with asset values as shown in Figure 10.

Figure 11: 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 darker colour and in the lighter colour for existing assets.

Figure 12: 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 asset management plan and in preparing forecasts of required operating and capital expenditure and asset values, depreciation expense and carrying amount estimates. It is presented to enable readers to gain an understanding of the levels of confidence in the data behind the financial forecasts.

Key assumptions made in this asset management plan and risks that these may change are shown in Table 6.4.

Table 6.4: Key Assumptions made in POSAMP and Risks of Change

Key Assumptions	Risks of Change to Assumptions
All expenditure is stated in 2017 dollars with no allowance for inflation.	Low risk in the foreseeable future.
0% growth of asset stock from land developments	Very low risk as Council constructs all public open space assets.
Budget carryovers represent where money is unexpended for the Annual Plan and carried over to the next financial year.	Very low risk of Council budget carryover procedure changing.

6.5 Forecast Reliability and Confidence

The expenditure and valuations projections in this POSAMP 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 5 level scale[11] in accordance with Table 6.5.

Table 6.5: Data Confidence Grading System

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

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

Table 6.5.1: Data Confidence Assessment for Data used in POSAMP

Data	Confidence Assessment	Comment
Demand drivers	Reliable	
Growth projections	Reliable	
Operations expenditures	Reliable	
Maintenance expenditures	Reliable	
Projected Renewal exps. - Asset values	Reliable	
- Asset residual values	Unknown	
- Asset useful lives	Reliable	
- Condition modelling	Uncertain	
- Network renewals	Uncertain	Finance asset register available only
- Defect repairs	Reliable	Frequent inspections/audits
Upgrade/New expenditures	Reliable	10 year capex plan
Disposal expenditures	N/A	

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

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

7. PLAN IMPROVEMENT AND MONITORING

7.1 Status of Asset Management Practices

7.1.1 Accounting and financial systems

Council is currently implementing Technology One's OneCouncil system which will meet Council's Financial/Accounting IT requirements. OneCouncil is an integrated system used for all financial and accounting activities, including budget control, purchasing/debtors, invoicing/creditors, taxation and reporting. The system operates on a web browser platform with many employees across Council having regulated access on a needs basis. Finance Management generally operates the Finance modules of the system with other departments utilising it for purchasing tasks and for interrogation and reporting. Records are generally at a high level.

Accountabilities for financial systems

Manager Information and Finance Management is accountable for the finance system.

Accounting standards and regulations

As a State entity, the Audit Act 2008 require that following accounting principles be met:

- Unless otherwise required by any other written law, the financial statements are to be prepared in accordance with the accounting standards and other requirements issued by the Australian Accounting Standards Board.
- Revaluations of a class of assets normally occur at intervals of no greater than 5 years. However, a class of assets will be revalued at such time as there has been a significant movement in the current replacement cost of that asset class relative to the value disclosed in the financial statements. Market indices are applied as appropriate to reflect moderate market movements.

Capital/maintenance threshold

Thresholds determining the treatment of work undertaken on assets will vary according to the nature of the asset and relative scale/type of work undertaken. The judgement of qualified professionals will be obtained to determine the extent to which an activity represents maintenance (which retains the existing service potential of an asset and/or prevents untimely deterioration of the asset) or represents partial or full renewal of an asset. In any event, expenditure below $10,000 will generally be treated as maintenance.

Required changes to accounting financial systems arising from this POSAMP

Following the adoption of this policy, a full revaluation of the asset class will be undertaken (within reasonable time frames) to reflect the asset unit costs and asset lives identified within this policy. This is to ensure appropriate valuations are maintained for financial accounting purposes, and to ensure consistency between asset accounting records and adopted asset management plans.

7.1.2 Asset management system

The OneCouncil system also includes an asset management module, Enterprise asset Management (EAM).

OneCouncil will be used by Engineering Services staff for generating work orders, periodic maintenance scheduling, reporting and maintaining the asset register.

Linkage from asset management to financial system

OneCouncil is a fully integrated enterprise system

Accountabilities for asset management system and data maintenance

Group Manager Engineering Services is accountable for the asset management system and data maintenance.

Required changes to asset management system arising from this POSAMP

Continual improvement, including the implementation of the Strategic Asset Management module (SAM).

7.2 Improvement Plan

The asset management improvement plan generated from this asset management plan is shown in Table 7.2.

Table 7.2: Improvement Plan

Task No	Task	Responsibility	Resources Required	Timeline
1	Complete OneCouncil Asset Register & Review useful lives data	Asset management	Staff time	12 months
2	Prepare Risk Management Plan for public open space assets	Asset Management	Staff time	4 years

7.3 Monitoring and Review Procedures

This POSAMP 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 POSAMP will be updated to ensure it represents the current service level, asset values, projected operations, maintenance, capital renewal and replacement, capital upgrade/new and asset disposal expenditures and projected expenditure values incorporated into the council's long term financial plan.

The OPSAMP has a life of 4 years (Council election cycle) and is due for complete revision and updating in 2021/22.

7.4 Performance Measures

The effectiveness of the POSAMP can be measured in the following ways:

- The degree to which the required projected expenditures identified in this POSAMP are incorporated into Council's long term financial plan,
- The degree to which 1-5 year detailed works programs, budgets, business plans and organisational structures take into account the 'global' works program trends provided by the POSAMP,
- The degree to which the existing and projected service levels and service consequences (what Council cannot do), risks and residual risks are incorporated into the Council's Strategic Plan and associated plans,
- **The Asset Renewal Funding Ratio achieving the target of 1.0.**

8. REFERENCES

IPWEA, 2006, 'International Infrastructure Management Manual', Institute of Public Works Engineering Australasia, Sydney, www.ipwea.org/IIMM

IPWEA, 2008, 'NAMS.PLUS Asset Management', Institute of Public Works Engineering Australasia, Sydney, www.ipwea.org/namsplus.

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

IPWEA, 2011, 'International Infrastructure Management Manual', Institute of Public Works Engineering Australasia, Sydney, www.ipwea.org/IIMM

Clarence City Council, 'Strategic Plan 2016 – 2026',

Clarence City Council, 'Annual Plan and Budget'.

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 LTFP Budgeted Expenditures Accommodated in POSAMP

Appendix E Abbreviations

Appendix F Glossary

Appendix A Maintenance Response Levels of Service

Asset	Purpose	Level of Service
Sportsgrounds	Provide sportsgrounds suitable for the relevant code of sport	• Renovating one oval per year to meet acceptable risk management criteria. • Undertaking risk management inspections and report on a weekly basis. • Removing litter as required when on site. • Repair/ replace synthetic wickets on a three-year cycle. • Implementing a maintenance program for topdressing, coring, fertilising, spraying, irrigating and over-seeding. • Mow and line-mark sportsgrounds (on average) on a weekly basis.
Neighbourhood/ Regional parks and ancillary properties	Provide facilities for informal recreation/ relaxation	• Mow lawns on average once a month except Charles Hand Park which is to be mown fortnightly. • Undertake risk management inspections and report on a weekly basis and repair as required. • Mulch 50% of garden beds on average each year. • Council offices – flower beds replaced twice a year, mow lawn fortnightly and fertilise twice a year. • Control weeds and pests twice a year to maintain healthy vegetation. • Remove litter as required when on site. • Undertake external audit of play equipment twice a year and repair as required. • Remove/ replace dead/ dying plants.
Natural Areas	Provide recreational opportunities in a natural setting	• Remove litter as required when on site. • Undertake risk management inspections and report on an annual basis repair as required. • Implement control program for priority weeds identified in Council's adopted weed strategy.

Appendix B Projected 10 year Capital Renewal and Replacement Works Program

Clarence CC

Projected Capital Renewal Works Program - POS_S3_V1

($000)

Year	Item	Description	Estimate
2018		**Network Renewals**	
	1	BBQ replacements	$24
	2	Park irrigation	$40
	3	Softfall Replacement	$20
	4	Boardwalk Decking	$20
	5	Boardwalk Landings	$20
	6	Park equipment replacement	$150
2018		**Total**	**$274**

2019		**Network Renewals**	
	1	BBQ replacements	$15
	2	Park irrigation	$20
	3	Softfall Replacement	$20
	4	Boardwalk Decking	$10
	5	Boardwalk Landings	$40
	6	Park equipment replacement	$100
2019		**Total**	**$205**

($000)

Year	Item	Description	Estimate
2020		**Network Renewals**	
	1	Sportsground irrigation upgrades	$80
	2	Park equipment replacement	$100
	3	Softfall Replacement	$30
	4	BBQ replacements	$20
	5	Boardwalk Landings	$20
2020		**Total**	**$250**

2021		**Network Renewals**	Estimate
	1	Estimated POS Renewal	$140
2021		**Total**	**$140**

($000)

Year	Item	Description	Estimate
2022		**Network Renewals**	
	1	Estimated POS Renewal	$350
2022		**Total**	**$350**

2023		**Network Renewals**	
	1	Estimated POS Renewal	$400
2023		**Total**	**$400**

($000)

Year	Item	Description	Estimate
2024		**Network Renewals**	
	1	Estimated POS Renewal	$274
2024		**Total**	**$274**

2025		**Network Renewals**	
	1	Estimated POS Renewal	$250
2025		**Total**	**$250**

($000)

Year	Item	Description	Estimate
2026		**Network Renewals**	
	1	Estimated POS Renewal	$200
2026		**Total**	**$200**

2027		**Network Renewals**	
	1	Estimated POS Renewal	$150
2027		**Total**	**$150**

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

Clarence CC
Projected Capital Upgrade/New Works Program - Public Open Space_S1_V1

($000)

Year	Item	Description	Estimate
2018	1	Seven Mile Beach Sporting Precinct - Building Plans/approvals and site establishment	$600
	2	Wentworth Park - Replace current irrigation system & Construct ball catching fence	$320
	3	Other Active Recreation Works	$107
	4	Design Concept Plans & Consultation for the development of the Bellerive Rifle Range Avenue of Honour	$166
	5	Full rehabilitation of the South Street Reserve	$100
	6	Implementation of Pindos Park Master Plan - Stage 1	$200
	7	Social Heart - Replacment of play equipment within park	$143
	8	South Arm Masterplan Stage 3 Implementation	$222
	9	Other Passive Recreation Work	$425
	10	Natural Environment Works	$67
2018		**Total**	**$2,350**

($000)

Year	Item	Description	Estimate
2019	1	Seven Mile Beach	$3,000
	2	Estimated POS Upgrades	$1,000
2019		**Total**	**$4,000**

($000)

Year	Item	Description	Estimate
2020	1	Seven Mile Beach	$3,000
	2	Estimated POS Upgrades	$1,500
2020		**Total**	**$4,500**

($000)

Year	Item	Description	Estimate
2021	1	Seven Mile Beach	$2,000
	2	Estimated POS Upgrades	$1,500
2021		**Total**	**$3,500**

($000)

Year	Item	Description	Estimate
2022	1	Estimated POS Upgrades	$2,000
2022		**Total**	**$2,000**

($000)

Year	Item	Description	Estimate
2023	1	Estimated POS Upgrades	$1,500
2023		**Total**	**$1,500**

($000)

Year	Item	Description	Estimate
2024	1	Estimated POS Upgrades	$1,500
2024		**Total**	**$1,500**

($000)

Year	Item	Description	Estimate
2025	1	Estimated POS Upgrades	$1,500
2025		**Total**	**$1,500**

($000)

Year	Item	Description	Estimate
2026	1	Estimated POS Upgrades	$1,500
2026		**Total**	**$1,500**

($000)

Year	Item	Description	Estimate
2027	1	Estimated POS Upgrades	$1,500
2027		**Total**	**$1,500**

Appendix D Budgeted Expenditures Accommodated in LTFP

NAMS.PLUS3 Asset Management **Clarence CC**

Roads & Transport 2017/18_S1_V1 **Asset Management Plan**

First year of expenditure projections **2018** (financial yr ending)

Roads & Transport 2017/18

Asset values at start of planning period

			Calc CRC from Asset Register	
Current replacement cost	$13,961	(000)	$0	(000)
Depreciable amount	$13,961	(000)	This is a check for you.	
Depreciated replacement cost	$7,519	(000)		
Annual depreciation expense	$780	(000)		

Operations and Maintenance Costs for New Assets

	% of asset value
Additional operations costs	2.00%
Additional maintenance	5.00%
Additional depreciation	2.50%
Planned renewal budget (information only)	

You may use these values calculated from your data or overwrite the links.

Existing %ages calculated from data in worksheet

6.14%	of CRC (10 yr average)
14.98%	of CRC (10 yr average)
5.59%	of Dep Amt
1.96%	of CRC (Year 1 comparison)

Planned Expenditures from LTFP

20 Year Expenditure Projections Note: Enter all values in current **2018** values

Financial year ending	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**	**2036**	**2037**
	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000
Expenditure Outlays included in Long Term Financial Plan (in current $ values)											**Average of first 10 year Expenditure Outlays from LTFP**									
Operations																				
Operations **budget**	$857	$857	$857	$857	$857	$857	$857	$857	$857	$857	$857	$857	$857	$857	$857	$857	$857	$857	$857	$857
Management **budget**	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
AM systems **budget**	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total operations	$857	$857	$857	$857	$857	$857	$857	$857	$857	$857	$857	$857	$857	$857	$857	$857	$857	$857	$857	$857
Maintenance																				
Reactive maintenance **budget**	$1,487	$1,487	$1,487	$1,487	$1,487	$1,487	$1,487	$1,487	$1,487	$1,487	$1,487	$1,487	$1,487	$1,487	$1,487	$1,487	$1,487	$1,487	$1,487	$1,487
Planned maintenance **budget**	$604	$604	$604	$604	$604	$604	$604	$604	$604	$604	$604	$604	$604	$604	$604	$604	$604	$604	$604	$604
Specific maintenance items **budget**	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total maintenance	$2,091	$2,091	$2,091	$2,091	$2,091	$2,091	$2,091	$2,091	$2,091	$2,091	$2,091	$2,091	$2,091	$2,091	$2,091	$2,091	$2,091	$2,091	$2,091	$2,091
Capital																				
Planned renewal **budget**	$274	$205	$250	$140	$350	$400	$274	$250	$200	$150	$249	$249	$249	$249	$249	$249	$249	$249	$249	$249
Planned upgrade/new **budget**	$2,350	$4,000	$4,500	$3,500	$2,000	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500
Non-growth contributed asset valu	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Asset Disposals																				
Est Cost to dispose of assets	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Carrying value (DRC) of disposed asse	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Additional Expenditure Outlays Requirements (e.g from Infrastructure Risk Management Plan)											**Average of first 10 years Expenditure Outlays required from IRMP**									
Additional Expenditure Outlays required and not included above	2018 $000	2019 $000	2020 $000	2021 $000	2022 $000	2023 $000	2024 $000	2025 $000	2026 $000	2027 $000	2028 $000	2029 $000	2030 $000	2031 $000	2032 $000	2033 $000	2034 $000	2035 $000	2036 $000	2037 $000
Operations	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Maintenance	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Capital Renewal	to be incorporated into Forms 2 & 2.1 (where Method 1 is used) OR Form 2B Defect Repairs (where Method 2 or 3 is used)																			
Capital Upgrade	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
User Comments #2																				

Forecasts for Capital Renewal using Methods 2 & 3 (Form 2A & 2B) & Capital Upgrade (Form 2C)											**Average of first 10 years Capital Renewal & Upgrade Forecasts**									
	2018 $000	2019 $000	2020 $000	2021 $000	2022 $000	2023 $000	2024 $000	2025 $000	2026 $000	2027 $000	2028 $000	2029 $000	2030 $000	2031 $000	2032 $000	2033 $000	2034 $000	2035 $000	2036 $000	2037 $000
Forecast Capital Renewal from Forms 2A & 2B	$274	$205	$250	$140	$350	$400	$274	$250	$200	$150	$249	$249	$249	$249	$249	$249	$249	$249	$249	$249
Forecast Capital Upgrade from Form 2C	$2,350	$4,000	$4,500	$3,500	$2,000	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500

Appendix E Abbreviations

AAAC	Average annual asset consumption
AM	Asset management
POSAMP	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	Life Cycle cost
LCE	Life cycle 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
WDCRC	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, eg. 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, eg. 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, eg. 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 cashflow 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 arms 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, eg. 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.

Life Cycle Cost *
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 life cycle cost (LCC) is average cost to provide the service over the longest asset life cycle. It comprises average operations, maintenance expenditure plus asset consumption expense, represented by depreciation expense projected over 10 years. The Life Cycle Cost does not indicate the funds required to provide the service in a particular year.

Life Cycle Expenditure
The Life Cycle Expenditure (LCE) is the average operations, maintenance and capital renewal expenditure accommodated in the long term financial plan over 10 years. Life Cycle Expenditure may be compared to average Life Cycle 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, eg 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 needs to be identified as a specific maintenance item in the maintenance budget.
- **Unplanned maintenance**
  Corrective work required in the short-term to restore an asset to working condition so it can continue to deliver the required service or to maintain its level of security and integrity.

Maintenance 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 eg 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 Council, eg. parks and playgrounds, footpaths, roads and bridges, libraries, etc.

Operations
Regular activities to provide services such as public health, safety and amenity, eg 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, eg 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 (eg 5, 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. 5, 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, eg public halls and theatres, childcare centres, sporting and recreation facilities, tourist information centres, etc.

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

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

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

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

Specific Maintenance
Replacement of higher value components/sub-components of assets that is undertaken on a regular cycle including repainting, replacement of air conditioning equipment, etc. 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 (4 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 Council.

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

Source: IPWEA, 2009, Glossary

Additional and modified glossary items shown *