

The Bellbird Hotel

THE CITY OF CESSNOCK

Buildings

Asset Management Plan

Wenty

PLANNING FOR OUR PEOPLE OUR PLACE OUR FUTURE **Document Control**

2/10/18

4.0



JFB

NB

MW

Document ID: asset management _ asset management plan _ buildings working version _ michelle watson						
Rev. No	Date	Revision Details	Author	Reviewer	Approver	
2.0	15/6/16	First Adoption	MW	SL	JFB	
3.0	5/5/17	For Second Adoption	MW	SL	JFB	
3.0	6/09/17	Adopted	MW	SL	JFB	

For Third Adoption

© Copyright 2012 – All rights reserved.

The Institute of Public Works Engineering Australia.

TABLE OF CONTENTS

1.	EXECUTIVE SUMMARY	2
(Context	2
١	What does it Cost?	2
١	What we will do	3
١	What we cannot do	3
1	Managing the Risks	3
(Confidence Levels	3
-	The Next Steps	3
2	2.1 Background	6
2	2.2 Goals and Objectives of Asset Management	7
2	2.3 Plan Framework	8
2	2.4 Core and Advanced Asset Management	9
2	2.5 Community Consultation	9
3.	LEVELS OF SERVICE	9
3	3.1 Customer Research and Expectations	9
3	3.2 Strategic and Corporate Goals	.10
3	3.4 Current Levels of Service	.12
3	3.4.1 Community Levels of Service	.12
3	3.5 Technical Levels of Service	.14
4	4. FUTURE DEMAND	15
4	4.1 Demand Drivers	15
4	4.2 Demand Forecast	.16
4	4.3 Demand Impact on Assets	.16
4	4.4 Demand Management	.18
4	4.5 Asset Programs to meet Demand	.18
5.	LIFECYCLE MANAGEMENT PLAN	.19
Ę	5.1 Background Data	19
Ę	5.2 Infrastructure Risk Management Plan	.23
Ę	5.3 Routine Operations and Maintenance Plan	.24
Ę	5.4 Renewal/Replacement Plan	.28
Ę	5.5 Creation/Acquisition/Expansion Plan	.32
Ę	5.6 Disposal Plan	33
Ę	5.7 Service Consequences and Risks	.34
6	6.1 Financial Statements and Projections	.35
6	6.2 Funding Strategy	41
6	6.3 Valuation Forecasts	.41
6	6.4 Key Assumptions made in Financial Forecasts	.43
6	6.5 Forecast Reliability and Confidence	.43
7.	PLAN IMPROVEMENT AND MONITORING	.44
7	7.1 Status of Asset Management Practices	.44
7	7.2 Improvement Program	46
-	7.3 Monitoring and Review Procedures	.47
	7.4 Performance Measures	.47
8.		48
9.	APPENDICES	49
	Appendix A Maintenance Response Levels of Service	.50
/	Appendix B: 4 Year Program. Extract CCC 2017–2021 Delivery Program	.51
/	Appendix C Budgeted Expenditures Accommodated in LTFP	.53
/	Appendix D Abbreviations	.54
	Appendix E Glossary	55

1. EXECUTIVE SUMMARY

Context

Cessnock City Council provides building assets to the community serving various functions, some of which include; community halls, libraries, sporting venues and aquatic facilities, public amenities and childcare.

Councils Building Asset Management Services comprise of¹:

- 6 Administration Buildings
- 4 Airport Buildings
- 60 Amenities/Toilet Blocks
- 25 Childcare Buildings²
- 20 Club Houses
- 3 Commercial Buildings
- 27 Community Facilities
- 20 Emergency Service Buildings
- 10 Grandstands
- 2 Libraries
- 23 Plant/Workshops
- 5 Residential Buildings
- 52 Sheds/Shelters/Carports
- 2 Sports Centres

These infrastructure assets have a replacement value of \$122,799,692.65, as at the 30th June 2018.

What does it Cost?

To determine the projected outlays necessary to provide the services covered by this Asset Management Plan (AM Plan/AMP) including; operations, maintenance, renewal and upgrade of existing assets over the 10 year planning period, Council has developed two funding scenarios.

Scenario 2, based on feedback received from Community Consultation undertaken in 2015, is the funding required to keep the asset stock in condition 3 "average" or better. Scenario 3 is developed from the available funds outlined in Councils' Long Term Financial Plan. The following tables highlight Councils' financial position when considering the projected outlays of scenario 2 "S2" or scenario 3 "S3":

Buildings S2 V1	
Executive Summary - What does it cost?	(\$000)
10 year total cost [10 yr Ops, Maint, Renewal & Upgrade Proj Exp]	\$79,894
10 year average cost	\$7,989
10 year total LTFP budget [10 yr Ops, Maint, Renewal & Upgrade LTFP Budget]	\$9,577
10 year average LTFP budget	\$958
10 year AM financial indicator	12%
10 year average funding shortfall	\$-7,032

Buildings_S3_V1	
Executive Summary - What does it cost?	(\$000)
10 year total cost [10 yr Ops, Maint, Renewal & Upgrade Proj Exp]	\$24,271
10 year average cost	\$2,427
10 year total LTFP budget [10 yr Ops, Maint, Renewal & Upgrade LTFP Budget]	\$22,408
10 year average LTFP budget	\$2,241
10 year AM financial indicator	92%
10 year average funding shortfall	\$-186

The following graphs show the projected expenditure required to provide services in this AMP, which have been developed from the outlays of scenario 2 & 3. It should be noted that capital construction/upgrade projects, as well as accounting for contributed assets from development will have an influence on projected expenditure. There has been no consideration given to the potential offset that may be possible from additional revenue that Council could generate from these developments.

¹ Accurate as at the 17/18 revaluation.

² Childcare facilities are leased from Council and have all maintenance undertaken by the lessee as part of their lease agreement. Childcare facilities are still owned by Council and are reported on in Councils' Financial Statements.

\$20,000									-	-		
\$17,500	-								_	-		
\$15,000			 									
\$12,500			 						_			
\$10,000	╢		 				 		-	-		
\$7,500	╢	-	_							-		
\$5,000	╢	_		-	_	-	-	_	<u> </u>	-		
\$2,500		_	_	-		-					_	
S0-												

Cessnock CC - Projected and Budget Expenditure for (Buildings_S2_V1)





What we will do

We plan to provide the following building asset services within the 10 year planning period of this AMP:

- On-going operation, maintenance, renewal and upgrade of existing building assets to meet service levels set in annual budgets.
- Annual community and recreational building renewal & construction programs
- Annual community and recreational maintenance program

What we cannot do

We do **not** have enough funding to provide all services at the desired service levels as outlined by demand forecasting. Works and services that cannot be provided under present funding levels are:

 Annual building maintenance and renewal items to sustain the asset stock in condition 3.

Managing the Risks

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

- Building Safety Asbestos
- Building Heritage Compliance
- Air Conditioning Legionella outbreak
- Building Electrics Electrical overload
 and burnout / electrocution
- Building Structural Building failures / deterioration
- Fire Service Failure
- Fall prevention device failure

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

- Ongoing/proactive inspections,
- Inspections to identify asbestos. Continual maintenance of the asbestos register
- Program to install circuit breakers and RCD's. Document/maintain register of building protection / electrical compliance. (Test and Tag)
- Engage external expertise for termite/pest inspections
- Program upgrades consistent with community demand and costs
- Programmed Fire safety inspections
- Programmed inspections of fall protection devices

Confidence Levels

This AM Plan is based on a high level of confidence information.

The Next Steps

The actions resulting from this AMP are:

- Engage the community on Levels of Service (LoS) and funding matters identifi ed in this AM Plan
- Incorporate the agreed LoS into the future planning, design, operational, maintenance and construction activities relating to building assets
- Incorporate into the LTFP

Questions you may have:

What is this plan about?

This asset management plan covers the infrastructure assets that serve the Cessnock City Council community's Building Assets needs. Some of these assets include community halls, libraries, sporting venues and aquatic facilities, public amenities and childcare facilities, which enable people in the community to engage and be a part of a connected community.

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?

In some instances Council's building assets have been constructed by developers, and/or provided through government grants, and are often accepted without consideration of ongoing operations, maintenance and replacement needs. Many of these assets are approaching the later years of their life and require replacement. Services from the assets are decreasing and maintenance costs are increasing.

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

What options do we have?

Resolving the funding shortfall involves several steps:

- 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,
- Improving our efficiency in operating, maintaining, renewing and replacing existing assets to optimise life cycle costs. Furthermore, this may also include the provision of energy efficient measure – solar, gas, water saving devices etc. to assist with this,
- Identifying and managing risks associated with providing services from infrastructure,
- Making trade-offs between service levels and costs to ensure that the community receives the best return from infrastructure,
- Identifying assets surplus to needs for disposal to make saving in future operations and maintenance costs,
- 6. Consulting with the community to ensure that the Building services and costs meet community needs and are affordable,
- 7. Developing partnership with other bodies, where available to provide services,
- Seeking additional funding from governments and other bodies to better reflect a 'whole of government' funding approach to infrastructure services,
- Ensure proposed new facilities incorporate a "multi-use"/"multi-functional" design i.e. community facilities with multiple user groups – sporting, health/wellbeing, commercial.

What happens if we don't manage the shortfall?

It is likely that we will have to reduce service levels in some areas, unless new sources of revenue are found. For the building assets the service level reduction may include:



Increase Structural issues



We can develop options, costs and priorities for future building assets 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 cost





Decline in roof replacement



Deterioration in Building services

2. INTRODUCTION

2.1 Background

This asset management plan is required 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 10 year planning period.

The asset management plan follows the format for AMPs recommended in Section 4.2 of the International Infrastructure Management Manual^{3.} The asset management plan is to be read with the Council's Asset Management Policy, Asset Management Strategy and the following associated planning documents:

- Cessnock 2027 Cessnock Community Strategic Plan
- Cessnock City Council Delivery Plan 2017-2021
- Cessnock City Council Operational Plan 2017-2018
- Cessnock City Council Annual Reports
- 2017-2018 Infrastructure Asset Revaluation Manual
- Cessnock City Council Recreation and Open Space Strategic Plan 2018
- Cessnock City Council: 2031: A Vision for the Future, Community Infrastructure Plan
- NSW OLG Integrated Planning Guidelines and Manual 2013
- Cessnock City Council 2016 Resident Satisfaction Survey Results
- Cessnock City Council 2015 Asset Management Research Satisfaction Survey Results
- Cessnock City Council 2017 Asset Management Research

The infrastructure assets covered by this asset management plan are shown in Table 2.1. These assets are used to provide various community services, such as; community halls, childcare facilities, cultural facilities, libraries, sporting facilities, and aquatic facilities:

Building Categories	Quantity	Building Categories	Quantity
Administration Facility	6	Emergency Services	20
Airport	4	Grandstand	10
Amenities/Toilet Blocks	60	Library	2
Childcare ⁵	25	Plant/Workshop	23
Club House	20	Residential	5
Commercial	3	Shed / Shelter / Carport	52
Community Facility	27	Sports Centres	2
Total Building Structures	259		

Table 2.1: Assets covered by this Plan^₄

³ IPWEA, 2015, Sec 4.2. Example of an Asset Management Plan Structure, pp 4|21 – 33.

⁴ Accurate as at 30th June 2018

⁵ Childcare facilities are leased from Council and have individual maintenance arrangements whereby the lessee undertakes most/all of the maintenance required as part of their lease agreement. Childcare facilities are still owned by Council and are considered in Council's Financial Statements.

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

Key Stakeholder	Role in Asset Management Plan
Councillors	 Represent needs of community, Allocate resources to meet the Council's objectives in providing services while managing risks, Ensure Council is financially sustainable, Provide stewardship by ensuring the protection of assets for current and future generations.
General Manager	 Ensure the development and implementation of Council's Asset Management Policy, Plans and Processes and for their integration with Council's Integrated Planning and Reporting Framework under the Local Government Act, Report on the status and effectiveness of Asset Management within Council.
Council Staff	 Development and implementation of Council's Asset Management Plans and Processes, and for their integration with Council's Integrated Planning and Reporting Framework under the Local Government Act, Ensure integration and compliance of the Asset Management Policy and Strategy with other policies and business processes of Council, Ensure compliance with legal obligations, Ensure sound business principles are reflected in the Asset Management strategies and plans that are developed, Implementation of activities in the plans, Engage up-to-date technologies, methodologies and continuous improvement processes, Facilitate "Best Appropriate Practice in Asset Management".
Community	• Provides input into the services required and the cost the community is prepared to pay.

Table 2.1.1: Key Stakeholders in the AM Plan

2.2 Goals and Objectives of Asset Management

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

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

- Providing a defined level of service and monitoring performance,
- Managing the impact of growth through demand management and infrastructure investment,
- Taking a lifecycle approach to developing cost-effective management strategies for the long-term that 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 financed⁶.

2.3 Plan Framework

Key elements of the plan are

- Section 3 Levels of service specifies the services and levels of service to be provided by the Council,
- Section 4 Future demand how this will impact on future service delivery and how this is to be met,
- Section 5 Life cycle management how we will manage our existing and future assets to provide defined levels of service,
- Section 6 Financial summary what funds are required to provide the defined services,
- Section 7 Asset management practices,
- Section 8 Monitoring how the plan will be monitored to ensure it is meeting the Council's objectives,
- Section 9 Asset management improvement plan.

A road map for preparing an asset management plan is shown below:

Figure 1: Road Map for preparing an Asset Management Plan

Source: IPWEA, 2015, IIMM, Fig 4.2.2, p 4I26.

⁶ Based on IPWEA, 2015, IIMM, Sec 1.2.2 p 1|7.

2.4 Core and Advanced Asset Management

This asset management plan is prepared as a 'core' asset management plan over a 10 year planning period in accordance with the International Infrastructure Management Manual⁷. It is prepared to meet minimum legislative and Council 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 asset management 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

In preparing this 'core' asset management plan, community consultation may be received through feedback of the AMP's once on public exhibition. Exhibition will occur prior to Council adoption of the plans. In 2017 Council undertook community consultation on service levels satisfaction specific to each asset class and possible scenarios to bridge the funding gaps. This assists the Council in matching the level of service desired by the community, it also identifies service gaps and the community's ability and willingness to pay for service level shifts (see TRIM Document DOC2017/027695).

⁷ IPWEA, 2015, IIMM.

- 10 -

3. LEVELS OF SERVICE

3.1 Customer Research and Expectations

Cessnock Council engaged Micromex Research in 2017 to undertake community research. In the telephone survey conducted residents were contacted to discuss their expectations in the delivery of existing community infrastructure and Building Services, identifying the following satisfaction levels:

Performance Measure	Importance	Satisfaction	Performance Gap				
Council buildings	3.60	3.40	0.20				

 Table 3.1: Community Satisfaction Survey Levels

Council also engaged Micromex Research in March of 2015 to undertake Community Consultation. This was to determine what the community finds as an acceptable condition state of the assets. The concluding evidence from this survey found: *"The majority of residents indicated that 'Condition 3 or better' was the acceptable condition for all assets"*. This has therefore been incorporated into "scenario 2" modelling within this amp.

3.2 Strategic and Corporate Goals

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

"Cessnock will be a cohesive and welcoming community living in an attractive and sustainable rural environment with diversity of business and employment opportunities supported by accessible infrastructure and services which effectively meet community needs".

In summary, the vision is:

"Cessnock - thriving, attractive and welcoming".

The 2017-21 Delivery Program has five desired outcomes as identified in the Community Strategic Plan, Cessnock 2027. They are:

- 1. A connected, safe and creative community;
- 2. A sustainable and prosperous economy;
- 3. A sustainable and healthy environment;
- 4. Accessible infrastructure, services and facilities;
- 5. Civic leadership and effective governance.

Relevant community desired outcomes and strategic directions, and how these are addressed in this asset management plan are:

Desired Outcome	Strategic Direction	How Goal and Objectives are addressed in Building Asset Management Plan
A Connected, Safe & Creative	1.1.1 Promote Social Connections	Promote better awareness of the available community facilities.
Community	1.2 Strengthening Community Culture	Support Community and Cultural Facilities – i.e. the Performing Arts Centre, & Libraries.
	1.3 Promoting Safe Communities	Provide maintenance as needed. Provide advice to project managers & construction services as needed.
	1.4 Fostering an Articulate and Creative Community	Support Community and Cultural Facilities – i.e. the Performing Arts Centre, & Libraries.
Desired Outcome	Strategic Direction	How Goal and Objectives are addressed in Building Asset Management Plan
A Sustainable & Healthy Environment	3.2.3 Better Utilisation of Existing Open Space – We have high quality, centralised multi-purpose sporting and recreation facilities	Ensure upgrades increase the quality of the facility & are designed & constructed for multipurpose use. Maintain sports & recreational facilities through capital works & maintenance.
	3.2.4 Better Utilisation of Existing Open Space – Our open spaces have suitable amenities and plenty of shade	Provide advice to project committees & design advice, costing, project management & construction services.

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

The Council will exercise its duty of care to ensure public safety in accordance with the infrastructure risk management plan prepared in conjunction with this AMP. Management of infrastructure risks are covered in Section 5.2

3.3 Legislative Requirements

We have to meet many legislative requirements including Australian and State legislation and State regulations. These include:

Legislation	Requirement
NSW Local Government Act 1993	Sets out role, purpose, responsibilities and powers of Council including preparing a long term financial plan supported by asset management plans. Council's core functions and how it must conduct its functions are detailed in the Act. Section 8 of the LG Act includes principles which summarise these functions and guide all activities. DLG Integrated Planning NSW Key requirement is to integrate community plans with operational and delivery plans.
Work Health and Safety Regulations 2011	These implement the Work Health & Safety Regulations and form part of a system of nationally harmonised occupational health and safety laws. The Regulations apply to the Commonwealth, public authorities and, for a transitional period, non-Commonwealth licensees ⁸ . Some of the chapters covered include: Chapter 2, representation and participation, including persons responsible for workplace health and safety. Chapter 3, general risks and workplace management. Chapter 4, hazardous work; including job specific tasks. Chapter 5, plant and structures. Chapter 6 Construction work.
Work Health & Safety Act 2011	This act provides a balanced and consistent framework to secure the health and safety of workers and workplaces ⁹ .
Disability Discrimination Act 1992 and Disability Discrimination Regulations 1996	This act seeks to eliminate discrimination against persons on the ground of <u>disability</u> and to ensure that persons with disabilities have the same rights to equality as the rest of the community; and to promote recognition and acceptance within the community of the principle that persons with disabilities have the same rights as the rest of the community.
Building Code of Australia	The Building Code of Australia (BCA) is a uniform set of technical provisions for the design and construction of buildings and other structures throughout Australia.
National Asset Management Framework 2010	Focuses on long term financial sustainability and provides a mandate to have long term strategy, financial statements and annual reporting mechanisms. AM plans are likely to be audited.

Table 3.3:	Legislative	Requirements
------------	-------------	--------------

In addition to the above, it is important to ensure that community facilities are inclusive of all people. Council in being responsive to the community, must continually assess and seek improvements that overcome access barriers to its facilities.

Council's Asset Management Plan in terms of access and inclusion has synergies with its Disability Inclusion Action Plan (2017-2021). Within that Plan, there is the goal to 'Create Liveable Communities' and it lists a number of actions that seek to continually improve access to Council

⁸ <u>http://www.comlaw.gov.au/Details/F2011L02664/Html/Text</u>

⁹ http://www.comlaw.gov.au/Details/C2011A00137/Html/Text#_Toc309986326

facilities. It also identifies the importance of ensuring works are undertaken in accordance with the Australian Standard for Access and Mobility (AS 1428).

3.4 Current Levels of Service

Service levels are currently defined as either; "Community Levels of Service" or "Technical Levels of Service".

3.4.1 Community Levels of Service

Community Levels of Service measure how the community receives the service and whether the Council is providing community value. Community levels of service measures used in the asset management plan are:

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

The Council's current and expected community service levels are detailed in Tables 3.4.1 and 3.5. Table 3.4.1 shows the agreed expected community levels of service, which has been based on; Cessnock City Council 2027 Community Strategic Plan, resource levels in the current long-term financial plan, and community consultation/engagement undertaken to date. Community consultation is frequently undertaken and future survey results will be incorporated into table 3.4.1 at the time of updating this AMP.

Key Performance Measure	Level of Service	Performance Measure Process	Performance Target	Current Performance			
COMMUNITY	COMMUNITY LEVELS OF SERVICE						
Quality	Well maintained and suitable Buildings	Community Satisfaction Survey	Average Satisfaction >= 3.0 Mean Score	 Public Toilets – 2.69 Facilities & Services for youth – 3.00 Swimming Pools – 3.26 Sports Fields and Buildings – 3.67 Community Services and facility planning – 3.29 Building for Community activities and meetings - 3.28 Performing Arts Centre – 4.27 			

Table 3.4.1: Community Levels of Service

Key Performance Measure	Level of Service	Performance Measure Process	Performance Target	Current Performance
Quality	Buildings maintained to an acceptable level that lowers users risks	No. of Buildings with Overall Condition >=3 "average"	< 10 Buildings	140 (2018)
COMMUNITY	LEVELS OF SER	VICE		
Functionality	Functionality of Council Buildings	All Buildings designed & fitted out to minimum needs to provide the service.	< 10 functionality complaints per year	1 (2018)
Capacity	Capacity of Council Buildings	All buildings have capacity to meet demand for the service it is intended to support; both currently and in the next 3 years	< 10 capacity complaints per year	1 (2018)
Functionality/ Utilisation	Availability of Council Buildings	Buildings to be available to users during normal operating hours of the service.	100%	100% (2018) with some restrictions/ prior arrangements made before the date of required access.
Quality	Response time to customer requests	Time taken to close customer requests	> 80% of requests responded inside target.	To be reviewed in line with technical level of service, with consultation with maintenance staff – see improvement plan.

3.5 Technical Levels of Service

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

Technical service measures are linked to annual budgets covering:

- **Operations** the regular activities to provide services such as opening hours, cleaning frequency, etc.
- **Maintenance** the activities necessary to retain an asset as near as practicable to an appropriate service condition (e.g. Tap/Washer Replacement, Minor Painting, Light Fitting/Globe Replacement),
- **Renewal** the activities that return the service capability of an asset up to that which it had originally (e.g. building component replacement, i.e. roof, doors, windows),
- **Upgrade** the activities to provide a higher level of service (e.g. Addition of a room/veranda) or a new service that did not exist previously (e.g. a new library).

Both the works delivery and asset management team aim to; implement and control technical service levels to influence the customer service levels.¹⁰

Table 3.5 shows the technical level of service expected to be provided under this Asset Management Plan.

		Technical Level	UI Service	
Key Performance Measure	Level of Service	Performance Measure Process	Performance Target	Current Performance
TECHNICAL LE	EVELS OF SERVICE			
Operations	To ensure all components are operational	Defect inspections Customer Requests Cleaning contract service performance.	Monitoring of defects through Authority. Team leaders and coordinators assessment of contractors.	90 day response to non-urgent customer requests. Desired service standards to be reviewed after further community consultation.
Maintenance	To ensure all components achieve their expected useful life	Defect inspections Customer Requests	Monitoring of defects through Authority.	90 day response to non-urgent customer requests. Desired service standards to be reviewed after further community consultation.
	Heritage Preservation	Each building listed on the State Heritage Register is preserved & maintained in accord with its Conservation Management Plan when funding permits	100%	100% achievement
Renewal	To ensure assets are renewed at the agreed intervention point	Community consultation results find the community desire condition 3 "average" or better.	All building assets/components in <= condition 3	Total building assets in worse than condition 3 = 53.67%

Table 3.5: Technical Level of Service

¹⁰ IPWEA, 2015, IIMM, p 2.23

Key Performance Measure	Level of Service	Performance Measure Process	Performance Target	Current Performance
TECHNICAL LE	VELS OF SERVICE			
Upgrade	Upgrade is addressed where a need is assessed through needs studies or master plans.	Recreational needs analysis, aquatic needs analysis, master plans and strategic plans.	Implementing where funding allows, including S94 contributions and grant funding.	100% achievement
	BCA Compliance	All new buildings comply. All new buildings are assessed by Councils' Building Surveyor for compliance.	100%	100% achievement

4. FUTURE DEMAND

4.1 Demand Drivers

Drivers affecting demand include population change, changes in demographics, seasonal factors, vehicle ownership rates, consumer preferences and expectations, technological changes, economic factors, agricultural practices, environmental awareness, etc.

4.2 Demand Forecast

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

4.3 Demand Impact on Assets

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

Demand drivers	Present position	Projection	Impact on services
Population	55,560 as at the 2016 Census.	The projected population for 2031 is 68,364 ¹¹ (low scenario) and 101,987 (high scenario).	Population growth will increase traffic volumes, and increase demand/pressure on transport infrastructure, such as bus & transport facilities, footpaths & cycleways, and will increase demand for multiuse buildings.
Demographics	Approximately 9% of the residents in the LGA do not come from an English speaking background.	An increase of migrants settling in Cessnock LGA from non-English speaking backgrounds, are expected to increase.	Signage to buildings and parks should incorporate universal diagrams or translations.
Demographics	Over 7% of the population need assistance in their day-to- day lives.	Expect to see an increase in demand for services due to the ageing population.	A greater need to improve DDA compliance of the existing facilities.
Climate Change	Scientific evidence supporting the notion of climate change.	Increase severity of weather events temperature rise in sea level.	Cessnock infrastructure assets will need to adapt to new climate risks to ensure appropriate infrastructure investment decisions are made to reduce long-term costs.
Residential Development	Increase in demand for residential land and infrastructure.	Estimated Increase by 2031 in population of between 18,120 (low scenario) and 51,740 (high scenario).	Required maintenance will increase with the addition of new assets that become the property of Council.

Table 4.3: Demand Drivers, Projections and Impact on Services

¹¹ Source: Cessnock City Council, Community Planning Unit (current as at August 2015).

Demand drivers	Present position	Projection	Impact on services
Changes in Land use	Changes in land use will result from rezoning and higher density developments.	As part of State Government policy higher density developments will be encouraged in the Hunter Valley Area. The current levels of growth are anticipated to continue.	Overburden facilities, higher use resulting in increased maintenance trends.
Section 94 Plans (S94)	 Residential S94 Contribution Plans Unformed Roads Contribution Plans Tourism S94 Contribution Plans Car Parking in Cessnock CBD S94 Contribution Plan Kitchener S94 Contributions Plan Kitchener S94 Contributions Plan Bellbird North S94 Contributions Plan Government Rd Cessnock S94 Contributions Plan Government Rd Cessnock S94 Contributions Plan Mount View Road Millfield S94 Contribution Plan Avery's Village Heddon Greta S94 Contributions Plan Nulkaba S94 Contribution Plan 	New Assets resulting from S94 Plans Bellbird North Recreation Facility - \$512,000 Bellbird North Community Facility - \$1,400,000 Bellbird North Childcare - \$4,850,000 Kitchener Recreation Facility - \$2,014,167 Kitchener Community Facility - \$1,883,000	The new assets are required to meet future population demands. These new assets will have longer term impact on projected operating and capital expenditure in the future (see figure 7A). They will also impact on the projected depreciation expense (see figure 10A).
Voluntary Planning Agreement's (VPA)	 Cliftleigh VPA Anvil Creek VPA Heddon Greta VPA Avery's Village VPA Cessnock Civic VPA Rose Hill Millfield VPA Huntlee VPA 	Anvil Creek Amenities Block - \$512,680 Cliftleigh Recreation Facility - \$1,500,000 Cliftleigh Community Facility – Future dedication to Kurri Kurri \$650,000 Avery's Lane Community Facility - \$1,816,023 Huntlee - Library/Community Centre - \$5,450,000 Huntlee - Community Building - \$1,250,000 Huntlee - Amenities - \$512,680 Huntlee Childcare - \$1,200,000	

4.4 Demand Management

Demand for new services will be managed through a combination of managing existing assets, upgrading of existing assets and considering the provision of new assets, in order to meet demand and demand management. Demand management practices also include non-asset solutions, insuring against risks and managing failures. Non-asset solutions focus on providing the required service without the need for the 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 failures¹². Examples of non-asset solutions include providing services from existing infrastructure such as aquatic centres and libraries that may be in another LGA or public toilets provided in commercial premises. Opportunities identified to date for demand management are shown in Table 4.4. Further opportunities will be developed in future revisions of this asset management plan.

Demand Driver	Impact on Services	Demand Management Strategy
Community Engagement – Explore community demand for Building Assets	Community expectation may increase	Engage with the community to identify justifiable community needs from other expectations and consider only community needs consistent with Council's charter.
Optimised Delivery Program	Decrease maintenance and reduce the need for more expensive renewal works	Study condition ratings from this plan and prioritise a list of buildings to be included in the annual renewal program.
New land Sub- divisions	Provision of new facilities	Implement enhanced quality control measures for donated assets. Colocation/multi-use facilities are to be proposed under new sub-divisions, where applicable.
Capital Works	Potential decrease in maintenance	New projects will need to be assessed with a balance between competing demands for investment to renew existing assets, as well as providing expenditure for new assets to meet growing demand.

Table 4.4:	Demand	Management Summary
------------	--------	--------------------

4.5 Asset Programs to meet Demand

The new assets required to meet growth will generally be acquired without costs to Council from land developments OR as a percentage contribution through Section 94 funding. New assets to be constructed/acquired by the Council are discussed in Section 5.5. The cumulative value of constructed asset values are summarised in Figure 1, including growth from contributed assets gained through development:

¹² IPWEA, 2015, IIMM, Table 3.4.1, p 3|58.





Contributed Constructed

Acquiring these new assets will commit the Council 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.

The lifecycle management plan details how the Council 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 asset management plan are shown in Table 2.1. Cessnock City Council is responsible for maintaining 259 Buildings which predominantly are; sporting amenities (22.00%), sheds/shelters (24%) and community facilities (10.00%). The age profile of the assets included in this AM Plan is shown in Figure 2¹³.

¹³ The age profile of Councils buildings has been established via a desktop assessment of aerial photos, or validation through opening plaques. This data was accurate as at 30th June 2018.

Figure 2: Building Asset Age Profile



5.1.2 Asset capacity and performance

The 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.

Location	Service Deficiency
Disability	Meeting the requirements of AS 1428.1-2009 (amended 2010), AS 1428.2 – 1992,
Discrimination Act	AS 1428.3 – 1992, AS/NZS 1428.4.1 – 2009, AS 1428.5 – 2010, Design for access
compliance/Accessib	and mobility. New buildings are assessed for their compliance. The review of
ility	Council's existing facilities for compliance is programmed in future years.
BCA Compliance	Buildings meeting current BCA standards
Fit for Purpose	Buildings that have become unfit for purpose as a result of change of use, change of demand drivers etc. Although some preliminary reports have been undertaken, including the Community Infrastructure Plan, to identify sites which are underutilised, and no longer suitable for the community, a full review of Council's building assets for fit for purpose is required to be undertaken. This is a task for future years when resourcing becomes available.
Heritage	Maintaining our State Heritage Listed Facilities to the "Minimal Standards of
Requirements	Maintenance and Repair" as per the NSW State Heritage Act 1977 and guidelines as
	set out at
	http://www.environment.nsw.gov.au/resources/heritagebranch/heritage/infominimum
	standards.pdf

Table 5.1.2: Known Service Performance Deficiencies

The above service deficiencies were identified from internal staff knowledge, and in some instances inspections on site.

5.1.3 Asset condition

Council has a documented condition assessment manual to condition rate buildings. This manual assists staff and contractors to assess the condition of Council's buildings and allows for consistent assessment of a building. This enables Council to determine the overall condition of its buildings network as well as identify those building assets that require repair or renewal in future years.

The current building condition assessments were done as part of assigning valuations in 2017/18. A score for capacity and functionality has also been assigned via desktop. The condition profile of our assets is shown in Figure 3.



Fig 3: 2018 Asset Condition Profile of CCC Building Network

Condition is measured using a 1 - 5 grading system¹⁴ with the addition of condition state 0 to represent newly constructed assets, and end of life (EOL) for assets out of service/closed to the public, see table 5.1.3 below.

Ele Co	ement Indition	Description
0	Constructed	Newly Constructed
1	As New	No visible signs of deterioration or very slight condition decline, OR rehabilitated back to "as new"
2	Good	Early stages of deterioration, functionality, performance, and serviceability are slightly impaired if at all.
3	Fair	Obvious deterioration. Functionality & serviceability affected & maintenance costs rising.
4	Poor	Deterioration severe and starting to limit serviceability. Maintenance costs high and pointing towards rehabilitation. Risk associated with deterioration would also be increasing.
5	Very Poor	Deterioration severe with severe serviceability problems requiring rehabilitation immediately, OR no longer serviceable and provides extreme risk in leaving asset in service.
(6)	End Of Life	Condemned Buildings/assets out of service.

Table	513	Buildings	Condition	Grading	Model
labie	0.1.0.	Dunungs	contantion	Graunig	mouer

5.1.4 Asset valuations

The value of assets recorded in the asset register as at 30 June 2018 covered by this asset management plan is shown below. Assets were last revalued at 30th June 2018. Assets are valued at a combination of current replacement cost (as per Rawlinson's Australian Construction Handbook 2017) and Market Value.

Current Replacement Cost\$Depreciable Amount\$Depreciated Replacement Cost15\$Annual Depreciation Expense\$





¹⁴ IPWEA, 2015, IIMM, Sec 2.5.4, p 2|80.

¹⁵ Also reported as Written Down Current Replacement Cost (WDCRC) or Carrying Value in Note 9a.

Useful lives were reviewed in June 2018 by benchmarking CCC values against industry standards. Key assumptions made in preparing the valuations were:

- The current levels of service will remain constant over the life of this plan.
- All predicted financial figures are based on 2017/18 rates and are not adjusted by the inflation rate for the particular year of works.
- Rates were determined from Rawlinson's Australian Construction Handbook 2017.

Major changes from previous valuations are due to:

- Reclassification of non-specialised buildings to specialised
- A change of building Quantities
- Change in the consumption profile

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	1.2%
(Annual depreciation exp/Depreciable amount)	
Rate of Annual Asset Renewal	0.2%
(Capital renewal exp/Depreciable amount)	
Rate of Annual Asset Upgrade/New (incl. contributed assets)	1%
(Capital upgrade exp/Depreciable amount)	

In 2018 Financial Year the Council plan to renew assets at 15.7% of the rate they are being consumed and will be increasing its asset stock by 1% in the year.

5.1.5 Historical Data

······································				
Budget	2015	2016	2017	
Operations	\$536,508	\$511,935	\$1,176,239.18	
Maintenance	\$762,876	\$927,965	\$737,655.34	
Capital Renewal	\$467,517	\$69,000	\$199,730.26	
Capital Upgrade	\$78,195	\$0	\$1,741,956.79	

5.1.5.1: Expenditure for Building Assets

5.2 Infrastructure Risk Management Plan

An assessment of risks¹⁶ 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 shock' to the Council. The risk assessment process identifies credible risks, the likelihood of the risk event occurring, the consequences should the event occur, develops a risk rating, evaluates the risk and develops a risk treatment plan for non-acceptable risks. Critical risks, being those assessed as 'Very High' - requiring immediate corrective action and 'High' – requiring prioritised corrective action identified in the Infrastructure Risk Management Plan, together with the estimated residual risk after the selected treatment plan is operational as shown below in Table 5.2. These risks are reported to management and Council.

¹⁶ CCC Infrastructure Risk Management Plan TRIM Reference DOC2015/012452

Risk Category	What can Happen	Risk Rating	Risk Treatment Plan	Residual Risk	Treatment Cost
Building Safety	Asbestosis	High	Update Asbestos Register and management plan.	High	In budget
	Asbestosis	High	Undertake asbestos remediation/removal where identified through asbestos management plans.	High	To be identified on a case-by- case scenario.
Building Heritage	Deteriorate below minimal acceptable standards of maintenance	High	An inspection regime is required to ensure State Heritage Facilities are maintained to the "Minimal Standards of Maintenance and Repair" as per the NSW State Heritage Act 1977 and guidelines as set out at http://www.environment.nsw.g ov.au/resources/heritagebranc h/heritage/infominimumstandar ds.pdf	High	\$85,000
Air – conditioning	Legionella outbreak	High	Regular inspection & chemical treatment in line with statutory requirements	Low	In Budget
Building Electrics	Electrical overload and burnout / electrocution	High	Maintenance and testing in line with Australian Standards occurs twice annually.	Medium	In Budget
Building Structure	Termite Infestation	High	Ongoing inspections in line with proactive inspection program.	Low	In Budget
	Buildings failures / deterioration	High	Ongoing Inspections in line with Proactive Inspection Program. Where hazards identified, a suitably qualified person is to review the risk and proposed treatment method.	High	\$659,000 ¹⁷
Building Fire Systems	Failure of fire prevention and detection systems	High	Maintenance and testing in line with Australian Standards occurs annually.	Medium	In Budget

Table 5.2: Critical Risks and Treatment Plans

Note:- The residual risk is the risk remaining after the selected risk treatment plan is operational.

¹⁷ The cost of the structural repairs will need to be included in future delivery programs, this information was received after establishing the current 17-21 delivery program.

5.3 Routine Operations and Maintenance Plan

Operations include regular activities to provide services such as public health, safety and amenity, e.g. Inspections and cleaning of buildings.

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.

An annual structural audit of all assets to identify any defects which have developed since the time of the previous inspection. When a defect is identified, it is recorded in the database with a condition assessment and priority action. The data in the database forms the basis of the annual programmed maintenance program.

5.3.1 Operations and Maintenance Plan

Operational¹⁸ activities affect service levels including quality and function through frequency (e.g. Building Cleaning), intensity (e.g. wattage of lighting), and opening hours (of building and other facilities).

Maintenance includes all actions necessary for retaining an asset as near as practicable to an appropriate service condition including regular ongoing day-to-day work necessary to keep assets operating, e.g. light bulb or tap washer replacement, window replacement. Maintenance may be classified into reactive and planned maintenance.

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 using the customer request system and/or a maintenance management system (MMS). MMS activities include inspections, 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. Actual past maintenance expenditure is shown in Table 5.3.1.

Activity	2015	2016	2017		
Operations	\$536,508	\$511,935	\$1,176,239.18		
Reactive Maintenance	\$369,110	\$456,000	\$389,856.01		
Planned Maintenance	\$393,766	\$472,000	\$347,799.33		

Required Maintenance is considered to be the amount of funding originally budgeted for in the adopted Long Term Financial Plan, this is reviewed annually. Future iterations of this AMP will further define the required maintenance.

Maintenance expenditure levels are considered to be underfunded to meet the projected service levels required in the medium to long term.

¹⁸ It has been identified that some inaccuracies are reflected in Councils current make up of what is captured as planned or reactive maintenance, in comparison to operational maintenance across most asset classes. The process to better define and accurately report this will be incorporated into the improvement plan within this AMP.

Where maintenance expenditure levels are such that will result in a lesser level of service, the service consequences have been identified and highlighted in this AMP. Assessment and prioritisation of reactive maintenance is undertaken by the Council's staff using experience and judgement.

5.3.2 Operations and Maintenance Strategies

The Council will operate and maintain assets to provide the defined level of service within 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 High and Extreme 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 the 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. In some instances hierarchy is used to determine service level planning and delivery, however at this point, Council currently does not utilise hierarchy based service level.

The Council's service hierarchy is shown in Table 5.3.2.

Service Hierarchy	Number Building Assets	Service Level Objective
Regional	79	High level of management and service being high, as they are required to cater for broad cross-section of the Council's population and visitors to the LGA. Generally caters for a population of over 15,000 with a capacity for over 500.
District	113	Reasonable level of management and service being medium, as they require to service several suburbs or whole communities depending on the surrounding population density. Generally caters for a population between 2,000 to 10,000 people and is larger than a local community facility.
Local	67	Standard level of management and service being low, as they are likely to attract users from a small catchment area and generally cater for short visits by very small groups. Caters for a population up to 2,000 with access within walking distance and capacity for up to 200 people.

Table 5.3.2: Asset Service Hierarchy

Critical Assets

Critical assets are those assets which have a high consequence of failure but not necessarily a high probability of failure. They are building assets that have varying influences, including; a commercial lease, high occupation or use, and/or are a basis for Council operations. By identifying critical assets Council has been able to develop the following management plan for each (see table 5.3.2.1 below). The management plan aims to highlight the assets critical failure modes, and the required investigative activities and maintenance plans¹⁹ based on their appropriate timing. Where funding permits, operations and maintenances activities may be targeted to mitigate critical assets failure and maintain service levels. Examples of such activities may include; increased inspection frequency, higher maintenance intervention levels, etc.

¹⁹ Renewal planning is addressed through the criteria set out in Table 5.4.2

Asset	What can happen	Annual Operations Activity	Planned Maintenance Activity
Baddeley Park Grandstand	Electrical failure during event	6 monthly RCD testing	
CCC Administration Building	Air Conditioning Failure		Monthly Service
CCC Administration Building	Emergency and Exit Light Failure	6 monthly tests	
CCC Administration Building	Electrical failure	6 monthly RCD testing	
CCC Administration Building	Hydraulic Failure		
CCC Administration Building	Lift Failure		Serviced Quarterly
CCC Administration	Fire system failure	Monthly testing	
Building	Hydrants	Annual Testing	
CCC Administration Building	Security or access failure		
CCC Works Depot ²⁰	Air Conditioning Failure	condition audits	Monthly Service
CCC Works Depot	Emergency and Exit Light Failure	6 monthly tests	
CCC Works Depot	Electrical failure	6 monthly RCD testing	
CCC Works Depot	Hydraulic Failure		
CCC Works Depot	Fire system failure	Monthly testing	
	Hydrants	Annual Testing	
CCC Works Depot	Security or access failure		
CCC Waste Depot	Air Conditioning Failure	condition audits	Monthly Service
CCC Waste Depot	Emergency and Exit Light Failure	6 monthly tests	
CCC Waste Depot	Electrical failure	6 monthly RCD testing	
CCC Waste Depot	Hydraulic Failure		
CCC Waste Depot	Fire system failure	Monthly testing	
CCC Waste Depot	Security or access failure		
Performing Arts Centre	Air Conditioning Failure	condition audits	Monthly Service
Performing Arts Centre	Emergency and Exit Light Failure	6 monthly tests	

Table 5.3.2.1: Critical Assets and Service Level Objectives

²⁰ Council Works Depot Building Assets include Asset No; 193, 202, 201, 194, 196, 229, 197, 198, 203, 206, 195, 204, 199, 207

Asset	What can happen	Annual Operations Activity	Planned Maintenance Activity
Performing Arts Centre	Electrical failure	6 monthly RCD testing	
Performing Arts Centre	Hydraulic Failure		
Performing Arts Centre	Fire system failure	Monthly testing	
	Hydrants	Annual Testing	
Performing Arts Centre	Lift Failure		Serviced Quarterly
Performing Arts Centre	Security or access failure		
Kurri Kurri Aquatic Facility and Plant Building ²¹	Air Conditioning Failure	condition audits	Monthly Service
Kurri Kurri Aquatic Facility and Plant Building	Emergency and Exit Light Failure	6 monthly tests	
Kurri Kurri Aquatic Facility and Plant Building	Electrical failure	6 monthly RCD testing	
Kurri Kurri Aquatic Facility and Plant Building	Hydraulic Failure		
Kurri Kurri Aquatic	Fire system failure	Monthly testing	
Facility and Plant Building	Hydrants	Annual Testing	
Kurri Kurri Aquatic Facility and Plant Building	Security or access failure		
Cessnock Library	Air Conditioning Failure		Monthly Service
Cessnock Library	Emergency and Exit Light Failure	6 monthly tests	
Cessnock Library	Electrical failure	6 monthly RCD testing	
Cessnock Library	Hydraulic Failure		
Cessnock Library	Lift Failure		Serviced Quarterly
Cessnock Library	Fire system failure	Monthly testing	
	Hydrants	Annual Testing	
Cessnock Library	Security or access failure		
Kurri Kurri Library	Air Conditioning Failure		Monthly Service

²¹ Does not include the pool structures and plant

Asset	What can happen	Annual Operations Activity	Planned Maintenance Activity
Kurri Kurri Library	Emergency and Exit Light Failure	6 monthly tests	
Kurri Kurri Library	Electrical failure	6 monthly RCD testing	
Kurri Kurri Library	Hydraulic Failure		
Kurri Kurri Library	Lift Failure		Serviced Quarterly
Kurri Kurri Library	Fire system failure	Monthly testing	
	Hydrants	Annual Testing	
Kurri Kurri Library	Security or access failure		
Cessnock Airport ²²	Air Conditioning Failure		Monthly Service
Cessnock Airport	Emergency and Exit Light Failure	6 monthly test	
Cessnock Airport	Electrical failure	6 monthly RCD testing	
Cessnock Airport	Hydraulic Failure		
Cessnock Airport	Fire system failure	Monthly testing	
	Hydrants	Annual Testing	
Cessnock Airport	Security or access failure		

NOTES:

- There are two communication buildings that house critical communication devices of Councils. The buildings however sit on land not owned or maintained by Council and the future maintenance or renewal of the assets is to be reviewed.
- Rural fire, SES and VRA buildings maintenance responsibilities are varying as a service agreement exists for the sites. Council is currently undertaking a review of these facilities and if necessary will incorporate any assets identified as required to be incorporated into the Critical Asset Management Plan in future iterations of this AMP.

Standards and specifications

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

- CCC Engineering Guidelines for Design
- Building Code of Australia (BCA)
- Australian Standards

²² Cessnock Airport Building assets considered as critical are asset no; 47, 48, and 76

Future 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 2017/18 dollar values (i.e. real values).

Figure 4: Projected Maintenance Expenditure

Cessnock CC - Projected Operations & Maintenance Expenditure (Buildings_S3_V1)



Year

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 (my predictor), 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'.

Methods 2 & 3 are both used as part of this Asset Management Plan.
The useful lives of building assets used to develop projected asset renewal expenditures are shown in Table 5.4.1. Asset useful lives were last reviewed on 30th June 2018.

Asset (Sub)Category	Useful life
Concrete Substructure	110
Brick and timber substructure	90
concrete and timber substructure	90
Concrete perimeter footing only	110
Shipping Containers Sub and Super	30
Timber Superstructure	110
Brick Superstructure	105
Metal Superstructure	50
Metal Frame only Superstructure	35
Polycarbonate Superstructure	20
Concrete Superstructure and roof	108
Mixed superstructure (brick, poly, metal)	110
Mixed superstructure (brick, Metal)	78
Compressed Sheet Superstructure	90
Roof Frame	Age Based on Council's oldest building asset (127 years) adjusted for life expectancy (150 years)
Metal Roof	50
Slate Roof	110
Tile Roof	40
Polycarbonate Roof	20
Metal/Polycarb	35
Fitout and Fittings	45
Fitout and Fittings (floor Covers) Epoxy/varnish	20
Fitout and Fittings (floor Covers) Tile	52
Fitout and Fittings (floor Covers) Carpet	30
Fitout and Fittings (floor Covers) vinyl	35
Fitout and Fittings (floor Covers) car/vinyl mix	33
Fitout and Fittings (floor Covers) car/tile mix	40
Fitout and Fittings (floor Covers) Epoxy/tile mix	36
Fitout and Fittings (floor Covers) Vinyl/tile mix	44
Services (Electrical)	45
Services (Mechanical)	22

Table 5.4.1: Useful Lives of Assets

Asset (Sub)Category	Useful life
Services (Hydraulic)	105
Services (Transportation)	39
Services (Fire)	30
Services (Security)	27
Site Services - ave Hydr & Elec	76
Market Value Assets	
Weatherboard/fibro, timber frame, brick piers, tin roof	77
concrete slab, Double Brick, tin roof	88
Hardwood boards, timber frame, brick piers, tin roof	83
Metal clad, metal frame	70
metal frame, metal roof	43
no substructure, hardwood clad, tin roof	80
concrete slab, Blockwork, timber frame, tin roof	88

Renewal Standards

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

- CCC Engineering Guidelines for Design
- Building Code of Australia (BCA)
- Australian Standards

In addition to these legislative standards and codes of practices, maintenance works and standards are intuitive to staff who have had a number of years undertaking this type of work. Council will however, endeavour to formally document these standards in future revisions of this Plan.

5.4.2 Renewal and Replacement Strategies

The Council 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 option that could address the service deficiency, evaluation of the options against evaluation criteria adopted by the Council, and
 - \circ select the best option to be included in capital renewal programs,
- Using 'low cost' renewal methods (cost of renewal is less than replacement) wherever possible,

- Maintain a current infrastructure risk register for assets and service risks associated with providing services from infrastructure assets and reporting Very High and High risks and residual risks after treatment to management and the Council,
- Review current and required skills base and implement workforce training and development to meet required construction and renewal needs,
- Maintain a current hierarchy of critical assets and capital renewal treatments and timings required,
- Review management of capital renewal and replacement activities to ensure the Council is obtaining best value for resources used.

Renewal ranking criteria

Asset renewal and replacement is typically undertaken to either:

- Ensure the reliability of the existing infrastructure to deliver the service it was constructed to facilitate (e.g. restoring/replacing components of a decommissioned toilet block to reopen it for use), or
- To ensure the asset is of sufficient quality to meet the service requirements (e.g. Fire Safety of Buildings to BCA).

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 Council,
- Have the highest average age relative to their expected lives,
- Are identified in the AM Plan as key cost factors,
- Have high operational or maintenance costs, and
- Where replacement with modern equivalent assets would yield material savings²³.

The ranking criteria which will be used to determine priority of identified future renewal and replacement proposals is detailed in Table 5.4.2. This will be the basis for determining future works after the adoption of this plan:

Table 5.4.2: Renewal and Re	eplacement Priority Ranking Criteria

Criteria	Weighting
Potential for High Risk as determined in Risk	35%
Matrix	
Needs	25%
Functionality	15%
Condition	15%
External Funding	10%
Total	100%

Note: Should something of a higher priority be estimated with a project value more than the available funding left within its year of program, it will be programmed in the first year that has the available funding. Consequently, in this instance, something with a lower priority but lesser project value may take its place.

²³ Based on IPWEA, 2011, IIMM, Sec 3.4.5, p 3|66.

5.4.3 Summary of future renewal and replacement expenditure

Projected future renewal and replacement expenditures are forecast to increase over time as the asset stock increases from growth. Figures 5 & 5.1 below summarise future projected expenditure, Fig.5 utilising scenario 2 financial outlays (based on community desired condition state) and Fig 5.1 scenario 3 (LTFP outputs). Note that all amounts are shown in real values. The projected capital renewal and replacement program for the four (4) yearly delivery program (2017-21) is shown in Appendix B.

Fig 5: Projected Capital Renewal and Replacement Expenditure – Scenario 2

Cessnock CC - Projected Capital Renewal Expenditure (Buildings_S2_V1)



Fig 5.1: Projected Capital Renewal and Replacement Expenditure – Scenario 3





Renewals and replacement expenditure in the Council's capital renewal works program will be accommodated in the long term financial plan. This is further discussed in Section 6.2.

5.5 Creation/Acquisition/Expansion Plan

New works are those works that create a new asset that did not previously exist, or works which expand 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 Council from land development. These assets from growth are considered in Section 4.4.

5.5.1 Selection criteria

New assets and upgrade/expansion of existing assets are identified from various sources such as councillor or community input into IP&R process, proposals identified by strategic plans, or proposals for partnerships with other Councils. 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 below, this will be utilised for developing future programs from the date of adoption of this plan.

Criteria	Weighting
Funding	40%
Need/importance to the community	25%
Functionality / Standard	20%
Perceived Risk Factor	15%

Table 5.5.1: New Assets Priority Ranking Criteria

Note: Should something of a higher priority be estimated with a project value more than the available funding left within the year it should be programmed, it will be programmed in the first year that has the available funding. Consequently, in this instance, something with a lower priority but lesser project value may take its place.

5.5.2 Capital Investment Strategies

The Council will plan capital expansion/new projects to meet level of service objectives by:

- Planning and scheduling capital replacement/expansion/new projects to deliver the defined level of service in the most efficient manner,
- Undertake project scoping for all capital replacement/expansion/new projects to identify:
 - The service delivery 'deficiency', present risk and required timeline for delivery of the replacement/expansion/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,
 - Evaluation of options against evaluation criteria adopted by Council, and
 - Select the best option to be included in capital replacement/expansion/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 the Council is obtaining best value for resources used.

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

5.5.3 Summary of future replacement/expansion/new assets expenditure

Projected replacement/expansion/new asset expenditures are summarised in Fig 6. The projected replacement/expansion/new capital works program is shown in Appendix C. All amounts are shown in real values.

Fig 6: Projected Capital Replacement/Expansion/New Asset Expenditure



Cessnock CC - Projected Capital Upgrade/New Expenditure (Buildings_S3_V1)

Expenditure on new assets and services in the Council's capital works program will be accommodated in the long term financial plan. This is further discussed in Section 6.2.

5.6 Disposal Plan

Disposal includes any activity associated with disposal of a decommissioned asset including sale, demolition or relocation. Assets identified for possible decommissioning and disposal are typically reviewed as part of Council's Strategic Property Review which identifies (where applicable) revenue gained from property disposals and determine the most appropriate use of property assets. The majority of the recent properties identified for sale do not have building assets on them, with the exception of:

• Asset No.68 Cottage 2 Quorrobolong Road Cessnock (settlement date 13/09/2018)

In addition, through asset review the following have been determined as surplus asset stock and are intended to be demolished (and site retained) in the 18/19 financial year:

- Asset No.143 Old Rothbury Bush Fire Shed
- Asset No.90 IGA Carpark Toilet Block

5.7 Service Consequences and Risks

The Council has prioritised decisions made in adopting this AMP to obtain the optimum benefits from its available resources. Decisions were made based on the development of 2 of the 3 scenarios, which are:

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

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

Scenario 3 – What we can do and be financially sustainable with AMPs matching long-term financial plans.

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

Based on the data collected by Council, Scenarios 2 & 3 have been developed for this AMP.

5.7.1 What we cannot do

There are some operations and maintenance activities, and capital renewal projects that are unable to be undertaken within the next 10 years based on the current spend. This includes:

- All of the required renewal and maintenance items required annually for all building assets to stay in average/fair condition (3) or better
- Increase in the required maintenance for assets to achieve their useful life

5.7.2 Service consequences

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

• Further deterioration of building assets/components, with the potential for some buildings to become unfit for use or purpose.

5.7.3 Risk consequences

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

- Potential for increase in risk to the community through building structural failure
- Potential for Council to lose tenants from some facilities
- Reduction in facilities available for sporting venues
- Negative public perception / political risk
- Increase in future funding required to renew/maintain building assets as a result of insufficient ongoing maintenance expenditure

These risks have been included with the Infrastructure Risk Management Plan summarised in Section 5.2 and 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 Asset Management Plan. The financial projections will be improved as further information becomes available on desired levels of service and current and projected future asset performance.

6.1 **Financial Statements and Projections**

The financial projections are shown in Fig 7 (scenario 2) and 7.1 (scenario 3) for projected operating, maintenance, and capital expenditure, including; renewal and upgrade/expansion/new assets. Note that all costs are shown in real values.







Year



Cessnock CC - Projected Operating and Capital Expenditure (Buildings_S3_V1)



6.1.1 Sustainability of service delivery

There are four key indicators for service delivery sustainability that have been considered in the analysis of the services provided by this asset category, these being the asset renewal funding ratio, long term life cycle costs/expenditures and medium term projected/budgeted expenditures over 5 and 10 years of the planning period.

Asset Renewal Funding Ratio

Asset Renewal Funding Ratio

```
100% (Scenario 3 – LTFP 2017)
```

The Asset Renewal Funding Ratio, when considering the budget allocations set out in Councils' Draft Long Term Financial Plan (scenario 3), and the current level of service is 100%. This ratio does not take into account any planned upgrade/new works, or impact of contributed assets, nor does it consider the associated operating and maintenance requirements for these assets as this is seen as a 'want' rather than a requirement. As a result this ratio differs to the 10 year AM financial indicator in the executive summary.

When considering the outcome of Councils' community consultation; all asset stock is to be in condition 3 'average' or better (scenario 2), the Asset Renewal Funding Ratio is 4%. The Asset Renewal Funding Ratio is the most important indicator and reveals that over the next 10 years, the Council is forecasting that it will require 96% of renewal funds required to keep assets performing at the desired level of service.

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 \$3,648,000 per year (average operations and maintenance expenditure plus depreciation expense projected over 10 years).

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 \$2,229,000 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 -\$1,419,000 per year (-ve = gap, +ve = surplus).

Life cycle expenditure is 61% 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.

Knowing the extent and timing of any required increase in outlays and the service consequences if funding is not available will assist Councils 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 \$2,409,000 on average per year.

Estimated (budget) operations, maintenance and capital renewal funding is \$2,229,000 on average per year giving a 10 year funding shortfall of -\$180,000 per year. This indicates that the Council expects to have 93% of the projected expenditures needed to provide the services documented in the asset management plan.

Medium Term – 5 year financial planning period

The projected operations, maintenance and capital renewal expenditure required over the first 5 years of the planning period is \$2,201,000 on average per year.

Estimated (budget) operations, maintenance and capital renewal funding is \$2,145,000 on average per year giving a 5 year funding shortfall of -\$56,000. This indicates that the Council expects to have 97% 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 7A: Asset Management Financial Indicators

Cessnock CC - AM Financial Indicators (Buildings_S3_V1)



Comparison of LTFP Outlays as a % of Projected Requirements

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 required from Scenario 2 over a 20 year planning period. The projected asset renewal and replacement expenditure is compared to planned renewal and replacement expenditure in the capital works program, which is accommodated in the long term financial plan.



Cessnock CC - Projected & LTFP Budgeted Renewal Expenditure (Buildings_S2_V1)



Table 6.1.1 shows the shortfall between projected renewal and replacement expenditures required from scenario 2 and expenditure accommodated in long term financial plan. Budget expenditures accommodated in the long term financial plan are shown in Appendix C.

Year End June 30	Projected Renewals (\$'000)	LTFP Renewal Budget (\$'000)	Renewal Financing Shortfall (- gap, + surplus) (\$'000)	Cumulative Shortfall (- gap, + surplus) (\$'000)
2019	\$234	\$234	\$0	\$0
2020	\$238	\$238	\$0	\$0
2021	\$242	\$242	\$0	\$0
2022	\$247	\$247	\$0	\$0
2023	\$252	\$251	\$-1	\$-1
2024	\$256	\$256	\$0	\$-1
2025	\$261	\$261	\$0	\$-1
2026	\$266	\$266	\$0	\$-1
2027	\$271	\$271	\$0	\$-1
2028	\$276	\$276	\$0	\$-1
2029	\$254	\$254	\$-0	\$-1
2030	\$254	\$254	\$-0	\$-1
2031	\$254	\$254	\$-0	\$-1
2032	\$254	\$254	\$-0	\$-1

 Table 6.1.1: Projected and LTFP Budgeted Renewals and Financing Shortfall (in \$'000)

Year End June 30	Projected Renewals (\$'000)	LTFP Renewal Budget (\$'000)	Renewal Financing Shortfall (- gap, + surplus) (\$'000)	Cumulative Shortfall (- gap, + surplus) (\$'000)
2033	\$254	\$254	\$-0	\$-2
2034	\$254	\$254	\$-0	\$-2
2035	\$254	\$254	\$-0	\$-2
2036	\$254	\$254	\$-0	\$-2
2037	\$254	\$254	\$-0	\$-2
2038	\$254	\$254	\$-0	\$-2

Note: A negative shortfall indicates a financing gap, a positive shortfall indicates a surplus.

Should the Council wish to meet the community demand for assets to improve to a minimum of condition 3, in order to be sustainable in meeting this service level, there will be a requirement to match projected asset renewal and replacement expenditure 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 AMP before finalising the asset management plan to manage required service levels and funding to eliminate any funding gap (including possibly revising the LTFP in future).

We 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 2017/2018 FY real values.

Year	Operations	Maintenance	Projected Capital Renewal	Capital Upgrade/New	Disposals
2019	\$1,194	\$651	\$234	\$180	\$0
2020	\$1,225	\$667	\$238	\$0	\$0
2021	\$1,269	\$688	\$242	\$0	\$0
2022	\$1,315	\$711	\$247	\$0	\$0
2023	\$1,345	\$726	\$252	\$0	\$0
2024	\$1,387	\$746	\$256	\$0	\$0
2025	\$1,428	\$767	\$261	\$0	\$0
2026	\$1,470	\$788	\$266	\$0	\$0
2027	\$1,663	\$890	\$271	\$0	\$0
2028	\$1,706	\$911	\$276	\$0	\$0
2029	\$1,639	\$883	\$254	\$18	\$0
2030	\$1,675	\$903	\$254	\$18	\$0
2031	\$1,711	\$922	\$254	\$18	\$0
2032	\$1,747	\$941	\$254	\$18	\$0

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

Year	Operations	Maintenance	Projected Capital Renewal	Capital Upgrade/New	Disposals
2033	\$1,783	\$961	\$254	\$18	\$0
2034	\$1,820	\$981	\$254	\$18	\$0
2035	\$1,856	\$1,000	\$254	\$18	\$0
2036	\$1,893	\$1,020	\$254	\$18	\$0
2037	\$1,931	\$1,040	\$254	\$18	\$0
2038	\$1,968	\$1,061	\$254	\$18	\$0
All dollar values are in (\$'000)'s					

6.2 Funding Strategy

After reviewing service levels 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 the Council, from assets constructed by land developers and others, and assets donated to the Council. Figure 9 shows the projected replacement cost of asset values over the planning period in real values.



Figure 9: Projected Asset Values

Cessnock CC - Projected Asset Values (Buildings_S3_V1)

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

Figure 10: Projected Depreciation Expense



Cessnock CC - Projected Depreciation Expense (Buildings_S3_V1)

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 11: Projected Depreciated Replacement Cost

Cessnock CC - Projected Depreciated Replacement Cost (Buildings_S3_V1)



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 renewal 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.

Key Assumptions	Risks of Change to Assumptions
Planned expenditure values obtained from current	The four year Delivery Program and LTFP may
budgets and Council's four year delivery program	change in the future. Any changes in funding,
(2017-2021), and Council's updated LTFP 2017 –	planned capital and maintenance will be reflected in
2027.	future asset management plans.
Contributed assets based on S711 and VPA's.	Potential for modification prior to commencement of
	development. Date of contribution to Council is an
	estimate only.

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

6.5 Forecast Reliability and Confidence

The expenditure and valuations projections in this AM Plan are based on best available data. Currency and accuracy of data is critical to effective asset and financial management. Data confidence is classified on a 5 level scale²⁴ in accordance with Table 6.5.

Confidence	Description
Grade	
A Highly	Data based on sound records, procedures, investigations and analysis, documented
Tellable	estimated to be accurate $\pm 2\%$
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
	extrapolation. Dataset is complete and estimated to be accurate + 10%
C Uncertain	Data based on limited 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	Data is based on unconfirmed verbal reports and/or cursory inspections and analysis.
Uncertain	Dataset may not be fully complete and most data is estimated or extrapolated. Accuracy
	± 40%
E Unknown	None or very little data held.

Table 6.5: Data Confidence Grading System

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

²⁴ IPWEA, 2015, IIMM, Table 2.4.6, p 2|59.

Data	Confidence	Comment	
	Assessment		
Demand drivers	D	Based on demographic analysis undertaken in 2014 and State	
	D	Government projections.	
Growth projections	D	Based on demographic analysis undertaken in 2014 and State	
	D	Government projections.	
Operations	в	Council financial records, operations and maintenance need	
expenditures		better definition and application.	
Maintenance	P	Council financial records, operations and maintenance need	
expenditures	В	better definition and application.	
Projected Renewal exp.	Λ	Assets revalued in 2017/18	
- Asset values			
- Asset residual values	A	No residual values	
- Asset useful lives	A	Useful lives based on industry standards.	
- Condition modelling	A	Condition assessment based on 2012/13 revaluation exercise.	
- Network renewals	Δ	Based on Renewal and Replacement Priority Ranking Criteria	
		Table 5.4.2	
- Defect repairs	В	Developed from customer requests and officer inspections.	
Upgrade/New		Based on hierarchy, customer requests, capacity/functionality	
expenditures	A	performance, condition & where identified in strategic/master	
		plans. To be based on selection ranking criteria by next version.	
Disposal expenditures	A	Where identified in Services Property Review.	

 Table 6.5.1: Data Confidence Assessment for Data used in AM Plan

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

7. PLAN IMPROVEMENT AND MONITORING

7.1 Status of Asset Management Practices

7.1.1 Accounting and financial systems

Council's accounting and financial system is CIVICA/Authority.

Accountabilities for financial systems

The financial systems are primarily managed by Council's Finance section within the Corporate and Community Services Directorate.

Accounting standards and regulations

In accounting for Cessnock City Council assets the following statutory requirements shall be adhered to:

- Australian Accounting Standards AASB116.
- NSW Local Government Act 1993.
- NSW Code of Accounting Practice and Financial Reporting (updated annually).
- The Australian Infrastructure Financial Management Manual.

Capital renewal/maintenance threshold

Building Assets	Operations	Maintenance and Repair	Capital Renewal	Capital New
	 Inspections Cleaning Opening hours/opening facilities 	 Reactive maintenance (burst pipe, smashed window) Part component replace/renew OR <\$2,000. 	 Component renewal to original standard – re- piering, roof replacement etc. OR >\$2,000 Complete component replace/ renew OR >\$2,000. 	 New assets/upgrade assets

Required changes to accounting financial systems arising from this AM Plan

In order to assist with future iterations of this AM Plan it is recommended that the accounting ledger be restructured to better reflect the different types of expenditure, i.e. operational, maintenance, and capital renewal and upgrade programs for asset that are yet to have these allocated.

7.1.2 Asset management system

Cessnock City Council Asset Management Implementation Project includes the deployment MyData (Assetic Software Package) Asset Management System.

ASSETIC – MyData

MyData, is an 'Asset Management System' (AMS) designed to assist with the management of all infrastructure assets as well as the potential to expand to non-infrastructure assets such as fleet, plant, computer, etc.

The MyData register has the ability to:

- Assign global formulae for remaining life based on age and/or condition.
- Use predictive modelling as a basis for defendable valuations (written down value and remaining life).
- Automatically update annual or monthly valuations.
- Add or remove assets but maintain an archived list.
- Perform audit trails for changes between two valuations.
- Import and export reports.
- Apply a range of unit replacement costs across asset categories.
- Classify each asset class into various sub-classes.

Asset registers

The key information flows into this Asset Management Plan are:

- The asset register data on size, age, value, remaining life of the network;
- The unit rates for categories of work/material;
- The adopted service levels;
- Projects of various factors affecting future demand for services;
- Correlations between maintenance and renewal, including decay models;
- Data on new assets acquired by Council.

Linkage from asset management to financial system

The key information flows from this Asset Management Plan are:

- The assumed asset renewal profile and trends;
- The resulting budget, valuation and depreciation projections;
- The useful life analysis.

These will impact the Long Term Financial Plan, Strategic Business Plan, annual budget and Unit Plans and budgets.

Accountabilities for asset management system and data maintenance

See Asset Management Strategy.

Required changes to asset management system arising from this AM Plan

Changes to the asset management system resulting from this Asset Management Plan may include:

- Modification of asset categories or sub-categories to assist in maintenance management systems;
- Improving the work order system for job planning and control;
- Improving the quality of specific data;
- Improving software systems and links to other systems (e.g. GIS and Authority to MyData)

Adopting a more frequent reconciliation cycle between the financial and technical asset registers.

7.2 Improvement Program

The asset management improvement plan generated from this AMP is shown in the following table:

Task No	Task	Responsibility	Resources Required	Timeline
1	Review both Community and Technical service levels.	Works and Infrastructure/Assets	In-house, external	Prior to Adoption of Version 4 (30/6/2020)

Table 7.2: Improvement Plan

NOTE: In 2015, an independent assessment was undertaken by an external consultant on Councils' overall asset maturity TRIM reference number DOC2015/020878, which is now due for review. Once the review is undertaken, outcomes will be incorporated into the improvement plan in this AMP.

7.3 Monitoring and Review Procedures

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

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

The AMP is to be reviewed annually in line with the budget, and a full revision undertaken during the year after the asset class is revalued.

7.4 **Performance Measures**

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

- The degree to which the required projected expenditures identified in this asset management plan 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 asset management plan;
- The degree to which the existing and projected service levels and service consequences (what we cannot do), risks and residual risks are incorporated into the Council's Delivery Program and associated plans.

8. **REFERENCES**

- IPWEA, 2015, 'International Infrastructure Management Manual', Institute of Public Works Engineering Australia, Sydney, <u>www.ipwea.org.au/IIMM</u>
- IPWEA, 2008, 'NAMS.PLUS Asset Management', Institute of Public Works Engineering Australia, Sydney, <u>www.ipwea.org.au/namsplus</u>.
- IPWEA, 2015, 'Australian Infrastructure Financial Management Manual', Institute of Public Works Engineering Australia, Sydney, <u>www.ipwea.org.au/AIFMG</u>.
- Cessnock City Council, Asset Management Policy,
- Cessnock City Council, Asset Management Strategy,
- Cessnock City Council, City Management Plan 2010 2013,
- Cessnock City Council, Recreation and Open Space Strategic Plan 2017
- Cessnock Community Strategic Plan (Cessnock 2027)
- Cessnock City Council Community Research Report 2016
- Cessnock City Council 2015 Asset Management Research Satisfaction Survey Results
- Cessnock City Council 2017-21 Delivery Plan
- Cessnock City Council 2017-2018 Operational Plan
- NAMS.Plus Maturity Assessment Report Cessnock City Council 2015
- Cessnock City Council 2017 Asset Management Research

9. APPENDICES

- Appendix A Maintenance Response Levels of Service
- Appendix B 4 year Capital Renewal and Replacement Works Program
- Appendix C Budgeted Expenditures Accommodated in LTFP
- Appendix D Abbreviations
- Appendix E Glossary

Planned Maintenance Activity	Nature of work	Priority Level	Response Time	
Asset Condition Assessment	Building Inspection	Refer to the Programmed Work Priority Ranking Table 3.4.4.B	As per the work schedule as per customer agreement.	
Buildings Essential Services maintenance	Programmed Building inspection and Service	Refer to the Programmed Work Priority Ranking Table 3.4.4.B	As per the work schedule as per legislative requirements.	
Preventative Maintenance	entative tenance Programmed Refer to the Programmed maintenance work to prevent failure Table 3.4.4.B		As per the work schedule as per customer agreement.	
Condition-based Maintenance	Corrective maintenance works to restore condition.	Refer to the Programmed Work Priority Ranking Table 3.4.4.B	As per the work schedule as per customer agreement.	

Appendix A Maintenance Response Levels of Service

Planned Maintenance Levels of Service

Programmed Work Priority Rank	Definition	Target
PPR-1	Works needed to meet WHS and statutory obligation.	Within 1 years
PPR-2	Works needed to avoid impacts to operational capacity in future or works needed that are likely to negate serious deterioration in future.	Within 2 years
PPR-3	Works which are desirable to keep building as a quality facility	Within 3 years
PPR-4	Works that can be deferred and reassessed later.	Beyond 3 years

Programmed Work Priority Ranking Table

Unplanned Maintenance Activity	Nature of work	Criticality	Priority Level	Response Time (from Customer Service Strategy – currently under review)
Condition-	Serious safety or environmental hazard or incident, irreplaceable or catastrophic loss to use / operation of building. Serious building damage	Emergency	Priority 1	Response - 2 hours (make site safe and repair permanently)
based reactive maintenance	Low risk safety hazard. Replaceable loss to usage of building	Non Critical but urgent	Priority 2	Response - 5 working days & make operational in 7 days
WORKS	Non urgent asset repairs. Minimal risk to asset usage or operation	Non critical non urgent	Priority 3	Response - 10 working days & make operational in 14 days
Corrective /	Serious safety or environmental hazard or incident, irreplaceable or catastrophic loss to use / operation of building. Serious building damage	Emergency	Priority 1	Response - 2 hours (make site safe & repair permanently)
reactive maintenance works	Low risk safety hazard. Replaceable loss to usage of building	Non Critical but urgent	Priority 2	Response - 5 working days & make operational in 7 days
	Non urgent asset repairs. Minimal risk to asset usage or operation	Non critical non urgent	Priority 3	Response - 10 working days & make operational in 14 days

Appendix B: 4 Year Program. Extract CCC 2017–2021 Delivery Program

RECREATION BUILDINGS RENEWAL	FUNDING YEAR								
LOCATION	PROJECT	201	7/18	2018/19		2019/20		2020/21	
Carmichael Park Bellbird	Change Room upgrade							\$20,000	RBR-2021-003
Cessnock Civic Indoor Sports Centre	Floor sanding and surfacing			\$50,000	RBR-2015-002				
Cessnock Civic Indoor Sports Centre	Internal painting							\$20,000	RBR-2017-001
Cessnock Civic Indoor Sports Centre	Carpet replacement							\$25,000	RBR-2017-002
Cessnock Hornets Clubhouse	Stage 1 - facility upgrade	\$50,000	RBR-2018-001						
Cessnock Hornets Clubhouse	Stage 2 - facility upgrade					\$90,000	RBR-2020-004		
Cessnock Sportsground	Internal Painting	\$25,000	RBR-2017-004						
Cessnock Tennis Clubhouse	Flooring improvements			\$35,000	RBR-2019-004				
Drain Oval (Cessnock)	Storage shed renewal							\$20,000	RBR-2021-001
Greta Central amenities	Ceiling improvements							\$15,000	RBR-2021-006
High Street Park Greta	Roof Replacment on Rotunda							\$8,000	RBR-2021-004
Mulbring Park	Grandstand Upgrade	\$35,000	RBR-2017-008						
Norman Brown Memorial Park (Greta)	Public toilet renewal					\$24,000	RBR-2020-003		
Orange Street Oval (Abermain)	Storage room renewal							\$10,000	RBR-2021-005
Weston Bears Soccer	Grandstand renewal			\$27,300	RBR-2019-003				
Various - Birralee Park, Kurri Kurri Netball Courts, Cessnock Civic Indoor Sports Centre, Mount View Park and Jeffery Park	Food Premises Compliance Program	\$23,500	RBR-2018-002	\$23,500	RBR-2019-002	\$24,100	RBR-2020-002	\$22,700	RBR-2021-002
	TOTAL	\$133,500		\$135,800		\$138,100		\$140,700	
Funding Source:	General Fund	\$133,500		\$135,800		\$138,100		\$140,700	

COMMUNITY BUILDINGS RENEWAL PROGRAM (RBC)			FUNDING YEAR							
LOCATION	PROJECT	201	7/18	2018/19		2019/20		2020/21		
Abermain Plaza Hall	Pier Replacement and ant capping					\$10,000	RBC-2020-001			
Bellbird Community Hall	External Painting							\$25,000	RBC-2021-001	
Bellbird Community Hall	Internal Painting							\$25,000	RBC-2021-002	
Bellbird Community Hall	Upgrade toilets	\$96,500	RBC-2018-001							
Branxton Community Hall	Female Toilet Upgrade			\$45,000	RBC-2019-001					
Former Greta Court House	Internal painting and repairs							\$20,000	RBC-2021-003	
Kearsley Community Hall (Grant Funding Dependent)	Replace kitchen cupboards	\$0	RBC-2018-002							
Kurri Kurri - Ambulance Hall (Grant Funding Dependent)	External Painting & repairs							\$0	RBC-2021-004	
Kurri Kurri - Ambulance Hall (Grant Funding Dependent)	Renew Kitchen Cabintery							\$0	RBC-2021-005	
Kurri Kurri Senior Citizens Hall	Replace Kitchen			\$26,500	RBC-2019-002					
Kurri Kurri Senior Citizens Hall	Internal painting					\$7,000	RBC-2020-002			
Laguna Community Hall	Pier Replacement and ant capping					\$9,800	RBC-2020-003			
North Cessnock Community Hall	Upgrage toilets					\$25,000	RBC-2020-004	\$18,000		
Pokolbin Community Hall (Grant Funding Dependent)	Concrete Water Tank replacement							\$0	RBC-2021-006	
Weston Civic Centre	Internal and External Painting							\$31,700	RBC-2021-007	
Weston Civic Centre	Upgrade toilets					\$45,000	RBC-2020-005			
Weston Civic Centre	Extend drainage to street					\$3,000	RBC-2020-006			
Wollombi Community Centre	Upgrade toilet			\$26,600	RBC-2019-003					
	TOTAL	\$96,500		\$98,100		\$99,800		\$101,700		
Funding Source:	General Fund	\$96,500		\$98,100		\$99,800		\$101,700		

CULTURAL FACILITIES RENEWAL PROGRAM (RFC)			FUNDING YEAR							
LOCATION	PROJECT	2017	7/18	2018/19		2019/20		2020/21		
Activity and Training Centre (Grant Funding Dependent)	Roof Replacement							\$0	RFC-2021-001	
Cessnock - CYCOS (Grant Funding Dependent)	Replacement of Deck			\$0	RFC-2019-002					
Cessnock - Library (Grant Funding Dependent)	Roof Replacement - staged					\$0	RFC-2020-003	\$0	RFC-2020-003	
Cessnock - Marthaville (Grant Funding Dependent)	Back Security Screen Door			\$0	RFC-2019-001					
Cessnock Performing Arts Centre (Grant Funding Dependent)	Dock Loading Bay			\$0	RFC-2019-005					
Cessnock Performing Arts Centre (Grant Funding Dependent)	Wheelchair lift					\$0	RFC-2020-001			
Kurri Kurri - Library (Grant Funding Dependent)	AC replacement, including ductwork					\$0	RFC-2020-002			
Kurri Kurri - Library (Grant Funding Dependent)	Replacement of water damaged chipboard			\$0	RFC-2019-004					
Richmond Main (Grant Funding Dependent)	Asset Renewal Plan			\$0	RFC-2019-003			\$0	RFC-2019-003	
	TOTAL	\$0		\$0		\$0		\$0		

Funding Source: Grant Funding Dependent

Note: Cultural Facilities currently have no general funds allocated for the above works.

Appendix C Budgeted Expenditures Accommodated in LTFP

Projected Expenditure	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Capital Expenditure on Renewal/Replacement of existing assets	\$234	\$238	\$242	\$247	\$252	\$256	\$261	\$266	\$271	\$276
Capital Expenditure on Upgrade/New assets	\$180	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Operational cost of existing assets	\$1,194	\$1,213	\$1,233	\$1,253	\$1,273	\$1,293	\$1,313	\$1,333	\$1,353	\$1,373
Maintenance cost of existing assets	\$651	\$660	\$669	\$678	\$687	\$696	\$705	\$714	\$723	\$732
Operational cost of New assets	\$0	\$12	\$36	\$62	\$72	\$94	\$115	\$137	\$310	\$333
Maintenance cost of New assets	\$0	\$7	\$19	\$33	\$39	\$50	\$62	\$74	\$167	\$179
Disposal of Surplus assets	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Appendix D Abbreviations

AAAC	Average annual asset consumption						
AM	Asset management						
AM Plan/AMP	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						
WDCRD	Written down current replacement cost						

Appendix E Glossary

Annual service cost (ASC)

- Reporting actual cost
 The annual (accrual) cost of providing a service including operations, maintenance, depreciation, finance/opportunity and disposal costs less revenue.
- For investment analysis and budgeting An estimate of the cost that would be tendered, per annum, if tenders were called for the supply of a service to a performance specification for a fixed term. The Annual Service Cost includes operations, maintenance, depreciation, and 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 noncurrent 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 Council's asset base consumed during reporting period а (generally a year). This may be calculated by dividing the depreciable amount by the useful life (or total future economic benefits/service potential) and totalled for each and every asset OR by dividing the carrying amount (depreciated replacement cost) by the remaining useful life (or remaining future economic benefits/service potential) and totalled for each and every asset in an asset category or class.

Borrowings

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

Capital expenditure

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

Capital expenditure - expansion

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

Capital expenditure - new

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

Capital expenditure - renewal

Expenditure on an existing asset or on replacing an existing asset, which returns the service capability of the asset up to that which it had originally. It is periodically expenditure. relativelv required 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 optimum time, e.g. resurfacing the or resheeting a material part of a road network, replacing a material section of a drainage network with pipes of the same capacity, resurfacing an oval.

Capital expenditure - upgrade

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

Capital funding

Funding to pay for capital expenditure.

Capital grants

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

Capital investment expenditure

See capital expenditure definition.

Capitalisation threshold

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

Carrying amount

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

Class of assets

See asset class definition.

Component

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

Core asset management

Asset management which relies primarily on the use of an asset register, maintenance management systems, job resource management, inventory control, condition assessment, simple risk assessment and defined levels of service, in order to establish alternative treatment options and long-term cash-flow predictions. Priorities are usually established on the basis of financial return gained by carrying out the work (rather than detailed risk analysis and optimised decisionmaking).

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 noncritical 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 the replace existing asset with а technologically modern equivalent new asset (not a second hand one) with the same economic benefits (gross service potential) allowing for any differences in the quantity and quality of output and in operating costs.

Deferred maintenance

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

Depreciable amount

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

Depreciated replacement cost (DRC)

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

Depreciation / amortisation

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

Economic life

See useful life definition.

Expenditure

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

Expenses

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

Fair value

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

Financing gap

A financing gap exists whenever an entity has insufficient capacity to finance asset renewal and other expenditure necessary to be able to appropriately maintain the range and level of services its existing asset stock was originally designed and intended to deliver. The service capability of the existing asset stock should be determined assuming no additional operating revenue, productivity improvements, or net financial liabilities above levels currently planned or projected. A current financing gap means service levels have already or are currently falling.

A projected financing gap if not addressed will result in a future diminution of existing service levels.

Heritage asset

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

Impairment Loss

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

Infrastructure assets

Physical assets that contribute to meeting the needs of Councils or the need for access to major economic and social facilities and services, e.g. roads, drainage, footpaths and These are typically large, cvclewavs. 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 customer and 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, e.g. road patching but excluding rehabilitation or renewal. It is operating expenditure required to ensure that the asset reaches its expected useful life.

Planned maintenance

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

Reactive maintenance

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

Specific maintenance

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

• Unplanned maintenance

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

Maintenance expenditure *

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

Materiality

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

Modern equivalent asset

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

Net present value (NPV)

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

Non-revenue generating investments

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

Operations

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

Operating expenditure

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

Operating expense

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

Operating expenses

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

Operations, maintenance and renewal financing ratio

Ratio of estimated budget to projected expenditure for operations, maintenance and renewal of assets over a defined time (e.g. 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, e.g. public halls and theatres, childcare centres, sporting and recreation facilities, tourist information centres, etc.

Risk management

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

Section or segment

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

Service potential

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

Service potential remaining

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

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