COPPER COAST COUNCIL

Infrastructure and Asset Management Plan

2017 - 2027

lifestyle location of choice

Contents

1. EXECUTIVE SUMMARY

This Infrastructure and Asset Management Plan has been prepared to demonstrate responsible and sustainable management of assets (and services provided from assets), compliance with regulatory requirements, and to communicate funding necessary to provide required levels of service.

The Infrastructure and Asset Management Plan provides essential guidance for the Council's Capital Works Program and financial input into the Long Term Financial Plan.

1.1 What Council Provides

The Copper Coast Council has a significant portfolio of community assets under its care and control. Council is the custodian of buildings, recreation and other community assets in partnership with government, community, private groups and other external parties. Through its assets, Council aims to provide quality public infrastructure and amenities that are safe, functional and meet the needs of the local community, visitors, tourists, industry and commerce and Council employees.

This plan ensures sustainable management of community assets

Community assets, in the broadest sense, are infrastructure, buildings and pieces of land that are essential part of the social fabric of the area. Where they are in existing use, the loss of assets for community use, would significantly affect that community's wellbeing. The continuity, upgrade and creation of assets should fulfil a real need in the community.

This Infrastructure and Asset Management Plan, contains the following types of assets:

- Transport Assets

  Council provides a transport network in partnership with the Department of Planning, Transport & Infrastructure and private road owners to enable the delivery of a transport network that is safe, reliable and enables access to/from key nodes within the Copper Coast Council with minimal of delays.

  The Transport Asset group includes sealed surfaces, unsealed surfaces, road base, kerbing, cycleways and footpaths.

- Stormwater Infrastructure Network of Assets

  Council aims to provide a Stormwater network in conjunction with the Department for Planning, Transport & Infrastructure and the Natural Resource Management Board to:
  - Enable the control of stormwater sufficient to prevent flooding of properties during a 1 in 5 storm event,
  - Minimise damage to properties during a 1 in 100 storm event, and
  - Provide pollution control

  This group of assets include a combination of underground stormwater systems, pumping stations, wetlands & detention basins and open channel

systems which combine to provide flood prevention and protection to the Copper Coast Council.

- Community Wastewater Management Scheme
  Council aims to provide a Community Wastewater Management Scheme that collects, treats, re-use and/or disposes of treated sewerage from properties. The collection system is a network of pipes and pumping stations which transport the sewerage from the properties to the treatment site.

- Building, Recreational & Other Community Assets
  Incorporates office buildings, sheds, sporting fields, aged home units, public amenities as well as other community assets such as playgrounds, boat ramps, foreshore infrastructure, car parks, caravan parks and waste transfer and recycling facilities.

It should be noted that some of the buildings and structures included in this plan have been built on Council owned or controlled land by community organisations, eg sporting facilities, or by other levels of government, eg emergency services buildings. In these circumstances, Council does not intend to renew or replace these buildings when they reach the end of their effective lifecycle, although the occupier may intend to renew these assets. Wherever possible Council has been working with these groups to establish land only leases to clarify these arrangements and to facilitate the removal of the built structures from Council's asset inventory.

1.2 What does it cost?

The projected outlays necessary to provide the services covered by this Asset Management Plan includes operations, maintenance, renewal and upgrade of existing assets over the 10 year planning period as identified in the Long Term Financial Plan.

We currently do **not** allocate enough funding to sustain all of our services at the desired standard or to provide all new services being sought. The Long Term Financial Plan proposes to fully fund this amount by 2020 through a strategic program of rate increases and savings from operational efficiencies. While this effectively funds the required asset servicing and immediate renewal requirements, Council still needs to quantify the backlog of asset works from previous years of under commitment.

1.3 Strategic Objectives for Asset Management

Council plans to operate and maintain its community assets to achieve the following strategic objectives:

- The quality and functionality of assets and their associated services is aligned to on-going service delivery programs and Council's Strategic Plans.
- Balancing renewal and new assets, through the strategic allocation of a small proportion of the capital program to new assets that provide economic growth and sustainability.

- Buildings, recreation and other community assets are maintained in a safe and function condition consistent with the planned levels of service.
- Accessibility, sustainability and risk management principles are integrated into the management of assets and infrastructure.
- 10 year or longer infrastructure and asset management plans are utilised in Council budget decision making process
- Recreation assets meet the identified needs of the community and visitors for pedestrian paths and trails, playgrounds, swimming facilities and boating facilities
- Upgraded and new assets meet the needs of the Council's growth at planned service levels and deliver strategic direction priorities.
- Catchment and treatment of stormwater throughout the Council in accordance with the Stormwater Management Plans.
- Incorporate water reduction strategies and storage facilities into Council's development requirements
- Transport Assets provide a safe and accessible transport network to meet the needs of industry, tourists and the community. A focus on maintaining the existing infrastructure rather than on new or upgrading, with the exception of footpaths and shared use paths where council's current budgets aim for 5km of upgraded paths per year.

Meeting the diverse needs of existing and future residents…. contribute to a high quality of life and provide opportunity and choice.

1.4 Measuring our Performance

1.4.1 Quality

Community assets will be maintained in a safe and functional condition. Defects found or reported that are outside adopted service standards will be repaired. Levels of service that the Council is deriving on behalf of the community are determined by considering the needs and desires of those affected by the asset. These levels of service and operational risk assessments determine the inspection regimes and maintenance and renewal program.

The financial implications of this asset management plan define the long term financial requirements for the management of the assets.

The plan includes an improvement program to continually refine and improve asset management practices and processes.

Transport assets will be maintained in a fit for use condition. Defects found or reported that are outside our service standard will be repaired.

1.4.2 Function

Council's intent is to maintain appropriate buildings, recreation and other community assets in partnership with other levels of government and stakeholders to deliver facilities that meet the needs of associated stakeholders.

Asset Management Planning has the following key functional objectives:

- Levels of service are maintained, regularly reviewed and revised if required
- Demand for the use of assets is monitored and asset/facility management is reviewed when required
- Assets are maintained in a strategic way from planning and creation, through the lifecycle of use, maintenance and repair, to renewal, upgrade or disposal
- Financial commitments are identified for asset management at planned levels of service for the full asset life cycle
- Information and systems support the optimum management of assets, allocation of required funding and continuous improvements of practices

Our intent is that an appropriate transport network is maintained in partnership with other levels of government and stakeholders to improve the provision and maintenance of public infrastructure and facilities to support the growth of the Council area.

Transport asset attributes will be maintained at a safe level and associated signage and equipment be provided as needed to ensure public safety. We need to ensure key functional objective are met:

- Transport network does not endanger the safety of the general public
- Transport network created and maintained to relevant standards and guidelines

1.4.3 Safety

Buildings, recreation and other community and infrastructure assets will be maintained at a safe level and associated signage and equipment provided, to ensure public safety.

Council will undertake inspections regularly and prioritise and repair defects to ensure assets are adequately maintained to meet their design standards.

Council has various policies, procedures and systems in place to minimise risk to the community by ensuring that:

- Building work undertaken is compliant with the Development Act and Regulations, the National Construction code and Australian Standards
- Risks are identified and effectively managed
- Contractors engaged to undertake work on buildings are licensed and managed via stringent contractor management processes

- Procurement practices are in place and include risk management principles
- Water Reuse Scheme infrastructure is maintained within the guidelines of the relevant management plans endorsed by the EPA
- Transport Asset defects are monitored through the use of an appropriate software system.
- Council inspects its transport assets regularly and prioritises the repair of defects in accordance with risk management principles to ensure they are safe.

2. INTRODUCTION

2.1 Background

This Infrastructure and Asset Management Plan has been prepared to demonstrate responsible and sustainable management of assets (and services provided from assets), compliance with regulatory requirements, and to communicate funding necessary to provide required levels of service.

The Infrastructure and Asset Management Plan is to be read in conjunction with the following associated Council documents:

- Long Term Financial Plan 2016-2026 (and future versions)
- Strategic Plan 2015 – 2025
- Asset Management Policy
- Stormwater Management Plans

The Infrastructure and Asset Management Plan provides essential guidance for the Council's Capital Works Program and financial input into the Long Term Financial Plan.

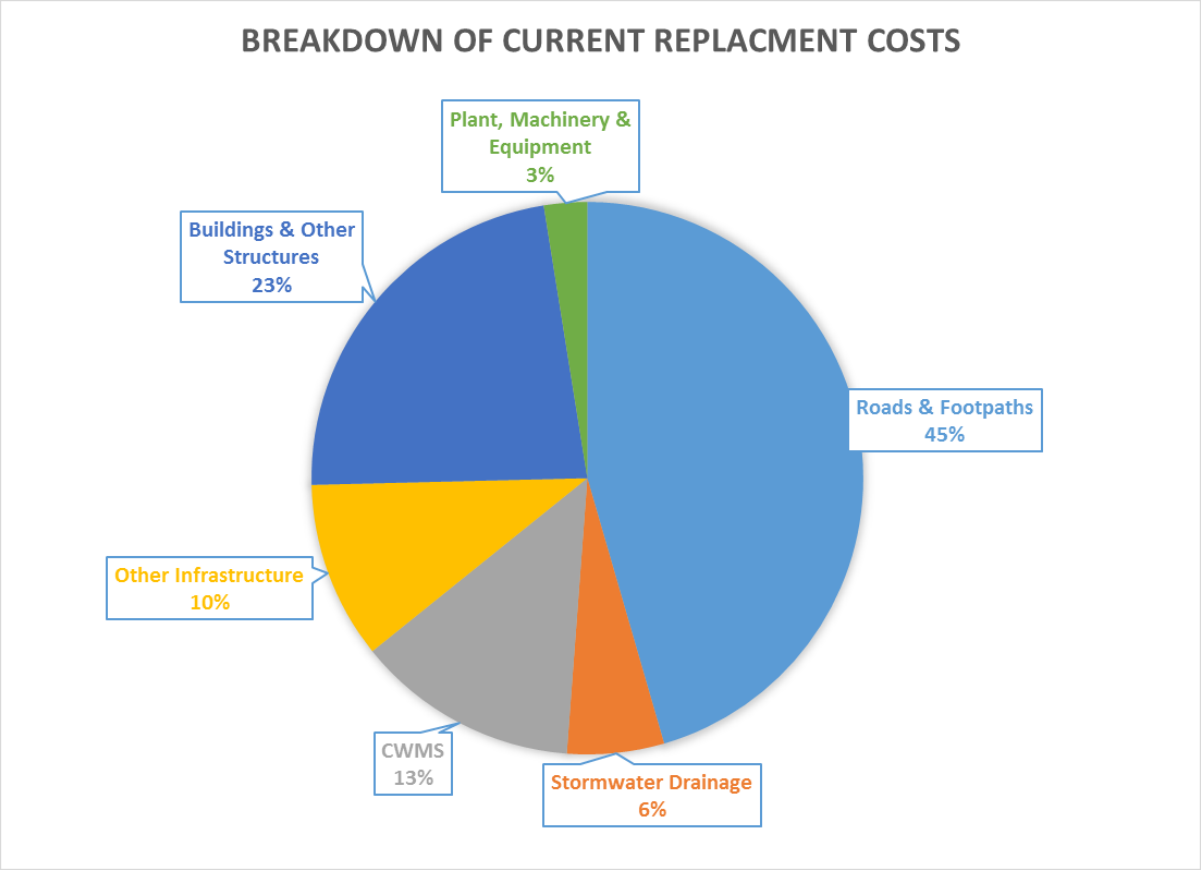
2.2 Asset Categories

This Infrastructure and Asset Management Plan cover the following assets as categorised in the table below:

AMP	Assets Covered	Replacement Cost $'000
Transport	Pavement and seal, unsealed roads, kerb and gutter, footpaths, bridges, roadside furniture and traffic control devices	$178,173
Stormwater	Underground pipes, pits, headwalls and open drains, pump stations, lagoons, open drains, levee and easements	$22,247
CWMS	Pump stations, lagoons, underground pipes, manholes, house connection branches, building structures	$51,003
Buildings	Community, Council, recreation, cultural buildings, toilet blocks	$89,464
Plant & Equipment	Graders, loaders, tractors, trucks, utilities, sweepers, mowers, cars and other.	$9,919

Current Replacement Cost

Council periodically performs a revaluation of its assets to determine the current replacement cost of its portfolio. Revaluations are performed when it is considered that the carrying amount of the asset may differ materiality from the fair value of the class. These values are detailed in the asset overview section of this plan.



The above graph provides a breakdown of the current replacement cost of each asset category.

2.3 Operational and Capital Expenditure

Council is responsible for the management, operation and maintenance of its assets and in doing so aims to operate and maintain its asset network to achieve the following objectives.

- Ensure the assets contribute to strategic objectives by providing the required levels of service
- Ensure the assets are maintained at a safe and functional standard which will be set out in this Asset Management Plan
- Ensure the inspection and maintenance plans for all assets are sufficient to meet the legislative and operational requirements in order to deliver the required levels of service to the community.

In the lifecycle of the assets, Council will also plan for capital renewal and replacement projects to meet the level of service objectives and minimise risk associated with infrastructure failure. The lifecycle costs of an asset need to be budgeted for and the impact of doing so is explained in the following section.

2.3.1 Operations and Maintenance Expenditure

Definitions of the various types of expenditure are provided as follows:

Operational Expenditure is generally recurrent expenditure, continuously required to provide a service, typically including power, fuel, staff, plant and equipment, on-costs and overheads.

Operating Expense is the gross outflow of economic benefits, being cash and noncash items, arising in the course of ordinary activities of an entity, typically including depreciation.

Maintenance Expenditure is recurrent expenditure which is periodically or regularly required to ensure that the asset achieves its useful life and provides the required level of service. Maintenance can include:

Planned: Work identified through a maintenance management system, through inspection, assessment, prioritisation, actioning and reporting, to form a reliable history to improve future delivery and performance.

Unplanned: Corrective work required in the short-term to restore an asset to working condition so it can continue to deliver the required service

Reactive: Works undertaken in response to service requests and management direction.

Significant: Major work as detailed in long term maintenance budgets

2.3.2 Capital Expenditure

Capital expenditure is relatively large expenditure, which will produce benefits expected to last for more than 12 months. Types of capital expenditure are as follows.

Capital Renewal
Expenditure on an existing asset or to replace an existing asset, which returns it to its original service capability. Typically includes resurfacing or re-sheeting a material part of a road network, replacing a material section of a drainage network with pipes of the same capacity, replacing a building or structure with a similar asset.

Capital Upgrade
Expenditure which enhances an existing asset to provide a higher level of service or expenditure that will increase the life of an asset beyond that which it had originally. Typically includes widening the sealed area of an existing road, replacing drainage pipes with pipes of a greater capacity, enlarging a building or structure.

Capital 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. Typically includes extending a drainage or road network, the provision of a park in a new subdivision for new residents.

Capital New
Expenditure which creates a new asset providing a new service/output that did not exist beforehand. It will increase future operations and maintenance expenditure.

Ultimately, the Capital Works Program seeks:

- To achieve an average Asset Sustainability Ration of approximately 100% (meaning Council is spending the equivalent of its annual depreciation cost on renewing and replacing existing assets);
- To include new and additional infrastructure assets to cater for the anticipated future demands and growth of the community; and
- To provide a responsible, consistent and affordable expenditure program over the term of the Program.
- To foster community sustainability and economic growth, through a small allocation to new assets.

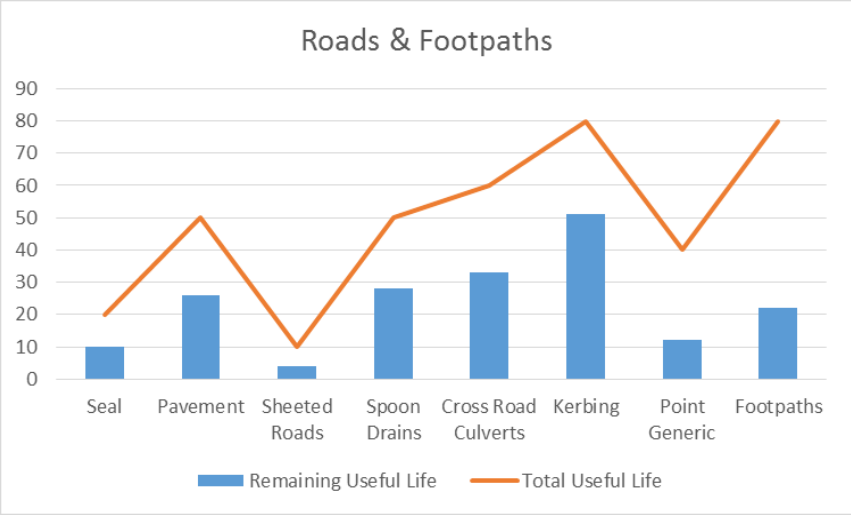
Council is planning to spend enough each year to renew all assets as they wear out.

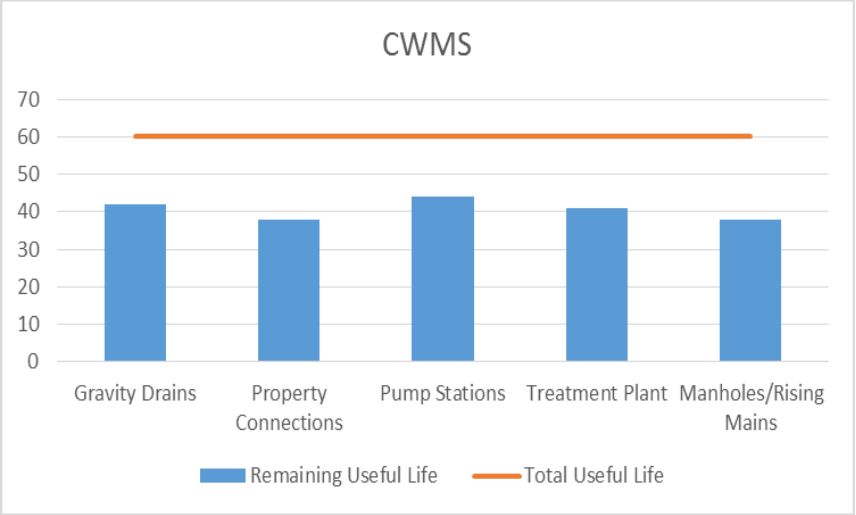
The graph on the following page provides a representation of the forecasted expenditure for

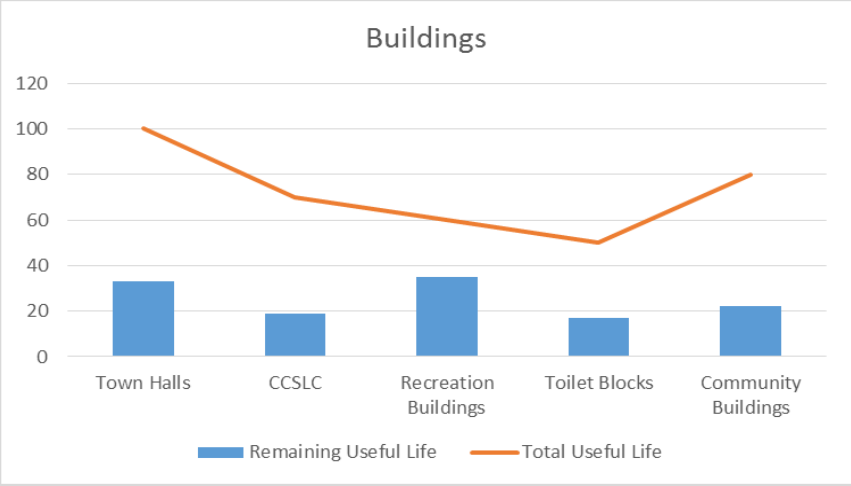
1. Renewal and replacement of existing assets; and
2. New assets and the upgrade of existing assets

as detailed in the Capital Works Expected Commitments contained in Long Term Financial Plan

2.4 Remaining Useful Life vs Total Useful Life







The graphs are based on the consumption of useful life versus the total useful life of an asset.

The CWMS graph includes data for the ageing schemes in Wallaroo and Kadina as well as the new scheme in Moonta. The data is an average as the remaining useful life of the newly implemented scheme will be equal to the total useful life at this stage of the report being 30/6/2017.

2.5 Goals and Objectives

This Infrastructure and Asset Management Plan has been prepared within the direction of Council's vision, mission, goals and objectives as detailed in its Strategic Plan.

Our Vision

*"South Australia's **lifestyle location of choice** to live and visit"*

lifestyle location of choice

Our Mission

"To Enhance Community Lifestyle"

- Providing effective and affordable facilities and services
- Managing and protecting our environmental assets
- Encouraging growth through responsible development
- Fostering community achievement

Relevant goals and objectives and how these are addressed in this plan are:

Goal	Objective	How Goal and Objective are addressed in this plan
To enhance the quality of life of our community by encouraging health, wellbeing and safety.	Social	To play a lead role in the establishment of a safe and healthy environment for the aged with safe and appropriate footpaths and street lighting
To responsibly manage the natural and built environment to ensure its sustainability and diversity to the community.	Environmental	To implement ecologically sustainable programs for development of infrastructure and management of waste and ensure asset management and other infrastructure plans are completed. To preserve and enhance the natural environment by ensuring management plans for foreshores, parks, gardens and open spaces prepared and implemented and also the principles (Local Reserves, Local Parks) of the Public Open Space Policy are being implemented To establish and maintain safe routes for pedestrians, cyclists and other modes of alternative transport by implementing the Copper Coast Council Walking and Cycling Strategy. Construction of 5km of new footpaths annually and a % of the annual budget spent on walking and cycle paths. To provide and maintain sewerage and solid waste infrastructure to all our communities by establishing Community Wastewater Management Systems (CWMS) in all major towns and undertake a feasibility study for North Beach To reduce the impact of flooding on people and their property through effective stormwater infrastructure and management by the development and begin implementation of “whole of area” Stormwater Management Plans this includes a percentage of new areas established as wetlands and stormwater retention areas To facilitate continual improvement of Council assets and maintenance of Council property by maintenance and management programs prepared to protect and enhance Council’s assets this includes a review of Council’s assets and disposal of surplus.
To promote community identity by supporting rich lifestyle experiences including arts, heritage, culture and leisure activities.	Cultural	To facilitate a diverse range of quality sporting venues with recreational opportunities for all ages and abilities and a percentage of budget allocated to maintaining sports facilities.

The Council will exercise its duty of care to ensure public safety in accordance with its policies and procedures.

3. LEVELS OF SERVICE

3.1 Current levels of Service

Service levels can be defined in two terms as follows:

3.1.1 Community Levels of Service

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

3.1.2 Technical Levels of Service

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

Technical service measures are linked to annual budgets covering:

- Operations – the regular activities to provide services, such as opening hours, mowing frequency, etc
- Maintenance – the activities necessary to retain an asset as near as practicable to an appropriate service condition (eg road patching, unsealed road grading, building and structure repairs, etc)
- Renewal – the activities that return the service capability of an asset up to that which it had originally (eg frequency and cost of road resurfacing and pavement reconstruction, pipeline replacement and building component replacement, etc)
- Upgrade – the activities to provide a higher level of service (eg widening a road, sealing an unsealed road, replacing a pipeline with a larger size) or a new service that did not exist previously (eg a new library).

The information used to determine the current levels of service has been gathered through physical data collection, consultant reports, staff knowledge and many other sources. It is expected that as more data is collected, the quality of Council's asset data will continue to improve which leads to more accurate costing and reporting of levels of service.

3.2 Desired levels of Service

Desired or future levels of service have been considered in the context of asset management as follows:

- Future operations, maintenance and renewal requirements are based on current and future demand forecasts
- Management of existing assets can be better modelled when demand is considered
- More educated decisions can be made to upgrade existing assets when demand by the community can be understood
- Decisions regarding provision of new assets can be better made
- The implementation of non-asset solutions can be enhanced

Factors effecting desired or future levels of service include but are not limited to:

- Population (increase/decrease)
- Demographics
- New (and in-fill) development
- Increased legislative demands
- Increased environmental demands
- Market conditions
- Resources
- Increase in percentage of people from urban areas for 'sea change' reasons
- Progressive move to environmentally sustainable and recyclable materials to achieve sustainability goals
- Changes in construction materials, techniques and equipment to maximise on opportunities to build more efficiently and in harmony with the environment
- Improved design techniques adopted to arrive at more durable and utilitarian designs of public facilities to reduce maintenance costs
- Building management systems to be more capable of providing universal comfort level effectively
- Computerised asset management systems
- The development of Geographic Information Systems (GIS) and mobile mapping (GPS)

3.3 Legislative Requirements

Council must comply with many legislative requirements including Australian and State legislation and State regulations. These include:

Legislation	Requirement
Australian Guidelines for Water Recycling Managing Health and Environmental Risks (Phase 1) – 2006	Provides quality standards for treatment of effluent for "Municipal Use – Unrestricted Access and Application"
Australian Standards as applicable	Specifications and procedures designed to ensure that a material, product, method or service is fit for its purpose and consistently performs in the way it was intended and establishes safety criteria.
Building Code of Australia	The goal of the BCA is to enable the achievement of nationally consistent, minimum necessary standards of relevant, health, safety (including structural safety and safety from fire), amenity and sustainability objectives efficiently.
Community Titles Act 1996	An Act to provide for the division of land into lots and common property; to provide for the administration of the land by the owners of the lots; and for other purposes.
Council Development Plan	Council Development Plan is arranged with the objectives and principles of development control for the Copper Coast, appearing first, following by the Council Wide policies and in turn more detailed policies relating to particular zones, and areas.
Development Act 1993	An Act to provide for planning and to regulate development in the State, to regulate the use and management of land and buildings, and the design and construction of buildings; to make provision for the maintenance and conservation of land and buildings where appropriate; and for other purposes.
Disability Discrimination Act (Cth) 1992	To eliminate discrimination against people with disabilities To promote community acceptance of the principle that people with disabilities have the same fundamental rights as all members of the community, and To ensure as far as practicable that people with disabilities have the same rights to equality before the law as other people in the community
Environment Protection Act 1993	An Act to provide for the protection of the environment; to establish the Environment Protection Authority and define its functions and powers; and for other purposes
Food Act 2001	An Act to provide for the safety and suitability of food; and for other purposes
Highways Act 1926	An Act to provide for the appointment of a Commissioner of Highways and to make further and better provision for the construction and maintenance of roads and work; and for other purposes
Housing Improvement Act 1940	An Act to provide for the improvement of sub-standard housing conditions, to provide for housing of persons of limited means, to regulate the rentals of sub-standard dwelling/houses in the metropolitan area and in certain other parts of the State, and for other purposes
Land and Business (Sale and Conveyancing) Act 1994	An Act to regulate the sale of land and businesses and the preparation of conveyancing instruments; and for other purposes
Liquor Licensing Act 1997	An Act to regulate the sale, supply and consumption of liquor; and for other purposes
Local Government Act 1999	Sets out role, purpose, responsibilities and powers of local governments including the preparation of a long term financial plan supported by

	infrastructure and asset management plans for sustainable service delivery
Native Vegetation Act	An Act to provide incentive and assistance to landowners in relation to the preservation and enhancement of native vegetation; to control the clearance of native vegetation; and for other purposes
Natural Resources Management Act 2004	An Act to promote sustainable and integrated management of the State's natural resources; to make provision for the protection of the State's natural resources; and for other purposes
Road Traffic Act 1961	Consolidates and amends certain enactments relating to road traffic and other purposes
South Australian Public Health Act 2011	An Act dealing with public and environmental health; to repeal the Health Act 1935, the Noxious Trades act 1934 and the Venereal Diseases Act 1947; and for other purposes
Water Industry Act 2012	An Act to facilitate planning in connection with water demand and supply; to regulate the water industry, including by providing for the establishment of a licensing regime and providing for the regulation of prices, customer service standards, technical standards for water and sewerage infrastructure and installations and plumbing, and by providing performance monitoring of the water industry; to provide for other measures relevant to the use and management of water; and for other purposes.

4. FUTURE DEMAND

4.1 Demand Forecast

Factors influencing demand for services and assets will include population change, changes in demographics, seasonal factors, vehicle ownership, consumer preferences and expectations, changes in our productive economy, agricultural practices, technological change, climate change, environmental awareness and changes to legislation.

Future amendments to the Development Plan and planning decisions for specific new developments that will generate increased demand for services and assets, will consider associated demands for community services and assets together with existing infrastructure capacity, so that future infrastructure requirements can be identified and where relevant included in future Asset Management Plans.

Development and population growth will be linked to increased numbers and/or values of rateable properties, which in turn will generate new rates revenue, and hence the capacity to invest in and manage new and upgraded assets to meet the needs of the growing community.

4.2 Demand Factors, Projections and Impact on Services

4.2.1 Population Projections

The Age-Sex Population Projections by Local Government Area, 2006-2026, prepared by the Department of Planning, Transport and Infrastructure predict the population of the Copper Coast will be 15,871 persons in 2026. Measured from the original 2011 projection of 12,968, this represents a 22% total growth rate over a 15 year period.

Further to the above report the 2016 census results indicated our population hit 14,139, so on that basis our 2017 population should be around 14,440 and be over 15,000 by 2019. The Copper Coast now has the 4th highest LGA population in Regional South Australia (up from 6th), passing that of Port Augusta and Port Lincoln.

Of note is the following:

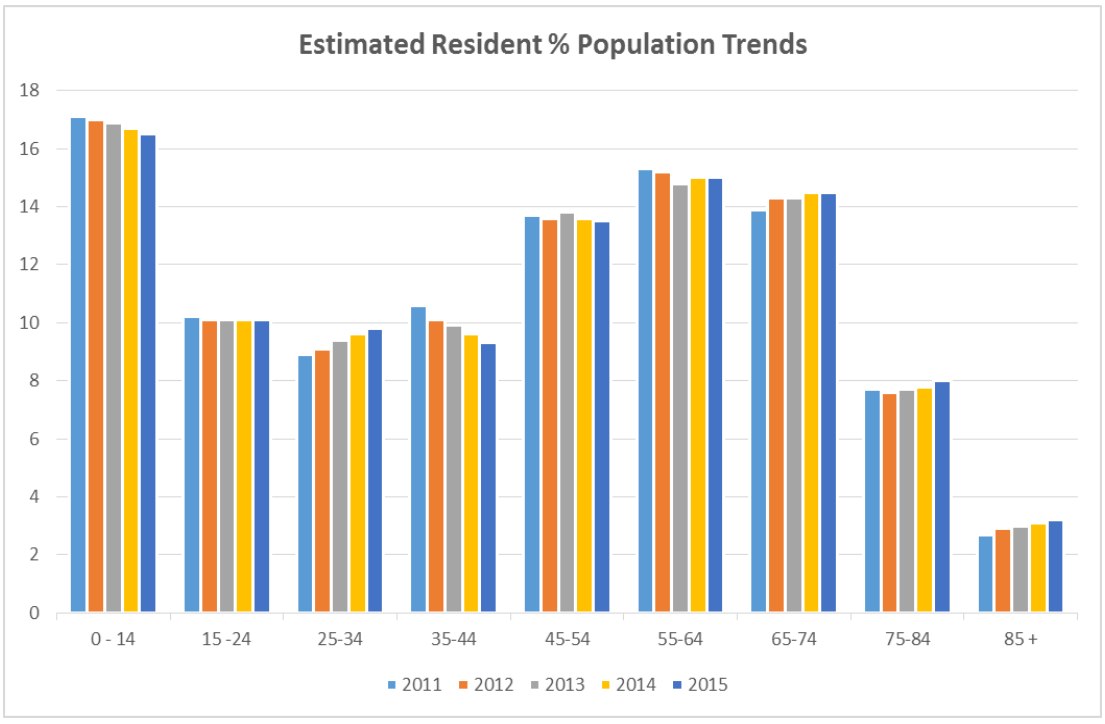
- We were the 4th fastest growing Local Government Area outside Metropolitan Adelaide and we were the 2nd fastest growing Regional Local Government Area behind Lower Eyre Peninsula
- We were the 7th fastest growing Council in the State (5th with a population greater than 10,000) our % population increase was above that of Alexandrina and Victor Harbour Council's
- Disregarding LGA's with a population below 10,000 persons, we have had the 2nd largest % population increase outside of Metropolitan Adelaide (behind Mount Barker) and highest % population increase within Regional South Australia.

Population projections are simply estimates of the future size, age structure and geographic distribution of populations, based on particular assumptions about future fertility, mortality and migration. In particular it should be noted that policy, economic and societal changes may result in population outcomes different from those presented in this plan.

4.2.2 Ageing Demographic Changes

In October 2011 the District Council of the Copper Coast sought the assistance from the National Centre for Social Applications of GIS (GISCA) at the University of Adelaide to undertake a demographic study to determine the demographic profile of the Copper Coast and to predict future population trends based on current population projections. The study was conducted by Dr Kevin Harris under the auspices of Professor Graeme Hugo. The main component of the work was a survey of both resident and non-resident ratepayers and a final report was produced in July 2012.

At the time of the survey non-resident ratepayers represented approximately 35% and permanent ratepayers approximately 65% of the total number of ratepayers in the Copper Coast District Council. Surveys were sent out to 75% of all non-resident ratepayers and 75% of all permanent resident ratepayers. The response rate for non-resident ratepayers was 35.9% and for resident ratepayers 38.1%, with an overall response rate of 37.3% which is regarded as exceptional.



The above graph was prepared using the 2016 Census data by age brackets.

4.2.3 Changes in Technology

Technology changes are forecast to have very little impact on the delivery of services covered by this plan. Some of the changes may be in the form of:

New construction methods and systems including automated construction techniques and modular building systems will have a significant impact on the construction of council assets in the future. Given the long lives of some civil assets it is feasible that by the time they are due to be replaced, automated construction techniques will enable them to be replaced for considerably less than their current replacement cost.

Advances in material science could see huge increases in the useful lives of many civil assets. Carbon nanotubes and grapheme, for example, have far greater tensile strengths than steel and structures built from them will be much lighter.

Environmentally Sustainable Power and the cost of solar power has been dropping consistently over the past three decades.

Advances in Technology are likely to continue at a rapid pace.

Together with high-capacity, fibre-optic communication networks, they can turn a fragmented, unwieldly set of hardware and software components into a single, flexible infrastructure that numerous councils can share, creating consistency of data application, economies of scale and operating efficiencies.

4.2.4 Demand Management Plans

Demand for increased services will be managed through a combination of

- Managing existing assets, upgrading of existing assets and providing new assets to meet demand and
- Implementing demand management practices, including non-asset solutions, proactively managing risks and addressing failures.

A key principle in responding to growth based service demand will be the maintenance of a current (or otherwise specifically agreed) service levels while meeting the needs of a larger population.

Opportunities for demand management will be developed in future revisions of this Asset Management Plan.

Demand management strategies provide alternative ways of meeting community service needs without the creation of new assets, thus deferring or reducing the need for new asset acquisitions. These strategies will need to maximise the utilisation of existing assets through consolidating services and activities and/or divesting assets that are surplus to requirements.

4.2.5 New Assets from Growth

New buildings and other community assets required to meet needs generated by the Council's growth will be acquired either through land developments or contributions required by development plan requirements. Where possible, Council will endeavour to meet demand by renewing, optimising the use of or upgrading existing assets.

Council also appreciates the importance of strategic land purchases for future generations.

Under the *Development Act 1993* certain developments must make a contribution to the Open Space Contribution Fund. This contribution can be either monetary or via contribution of a portion of land within the development to provide for open spaces for community use, guided by both the Development Plan and Council's open space policies.

Any new assets will commit 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 for inclusion in the long term financial plan.

5. STRATEGY

The following section details how Council proposes to manage and operate the assets at the planned levels of service (defined in section 3) whilst optimising life cycle costs.

Initial capital cost constitutes significant up-front costs and often dominate the decision-making process when acquiring new assets. However, ongoing recurrent expenditures (including depreciation) usually represent a high portion of the total life-cycle costs of many assets. It is therefore important that they be considered in the financial analysis undertaken to evaluate asset investment options.

The way an asset is acquired or created may have a great impact on its future operation, maintenance or even disposal. There may also be substantial costs associated with disposal at the end of an asset's service life (eg clean up or demolition costs).

5.1 Background Data

5.1.1 Physical parameters

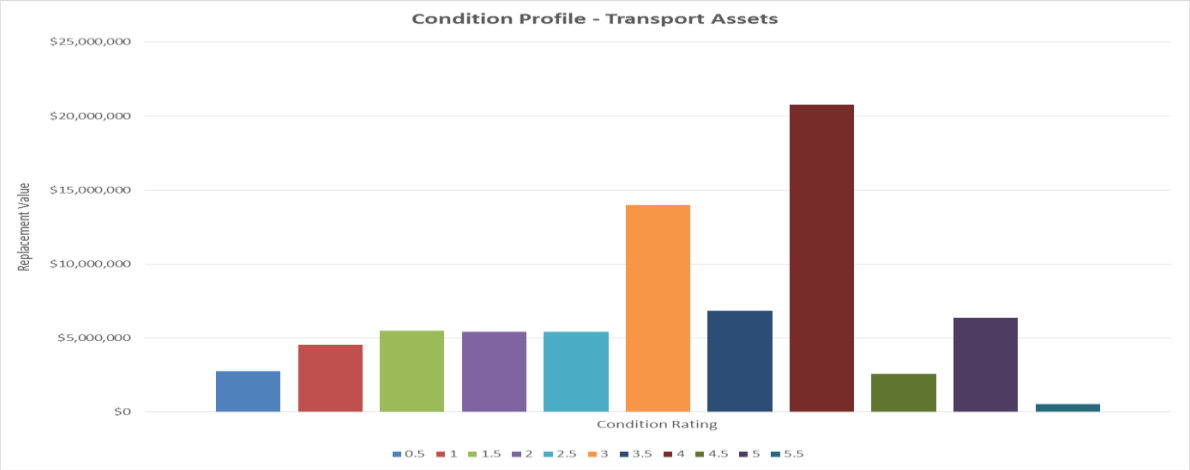
The assets covered by this infrastructure and asset management plan are shown in Table 2.2.

5.1.2 Asset capacity and performance

Council's assets are generally provided to meet design standards where these are available. There are no locations where deficiencies in service performance are known at the time of the preparation of this plan.

5.1.3 Asset condition

JLL Infrastructure Advisory Pty Ltd, Property Consultants and Valuers valued Council's Infrastructure Assets (excluding Buildings & Land) as at 30 June 2017 and a condition rating was determined for each of the transport assets and/or components working alongside the information collected by staff. The resultant condition profile of Councils Transport assets is shown below.



Condition is measured using a 0.5 – 5.5 rating system as per the table below.

Condition	% of Life Remaining
0.5	100.00%
1	95.00%
1.5	83.75%
2	72.50%
2.5	61.25%
3	50.00%
3.5	38.75%
4	27.50%
4.5	12.50%
5	5.00%
5.5	0.00%

5.1.4 Asset valuations

JLL Infrastructure Advisory Pty Ltd, Property Consultants and Valuers valued Council's Infrastructure Assets (excluding Buildings & Land) as at 30 June 2017 and Maloney Field Services valued Land & Improvements along with Buildings and Other Structures as at 30 June 2015.

5.2 Risk management plan

The purpose of infrastructure risk management is to document the results and recommendations resulting from the periodic identification, assessment and treatment of risks associated with providing services from infrastructure, using the fundamentals of International Standard ISO 31000:2009 Risk management – Principals and guidelines.

Risk Management is defined in ISO 31000:2009 as: 'coordinated activities to direct and control with regard to risk'.

A comprehensive assessment of risks associated with service delivery from buildings and structure assets has not been completed at the time of preparation of this plan. The risk assessment process, when completed, will identify credible risks, the likelihood of the risk event occurring, the consequences should the event occur, develops a risk rating, will eventuate the risk and develop a risk treatment plan for non-acceptable risks.

Infrastructure staff are currently working through Council's buildings to prepare this information. An example of what these risks and treatment plans detail is as follows:

Asset at Risk	What can happen	Risk Rating	Risk Treatment Plan
All Buildings	Destruction by fire	Medium	Check adequacy of insurance, install fire alarms and develop continuity plan (where appropriate)
Aged Buildings	Structural damage	High	Inspect, monitor and report
Aged Buildings	Obsolescence	Medium	Planned Maintenance Program

5.3 Routine maintenance plan

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

5.3.1 Maintenance plan

Maintenance includes reactive, planned and cyclic maintenance work activities.

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

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

Cyclic maintenance is replacement of higher value components/sub-components of assets that is undertaken on a regular cycle including repainting, building roof replacement, etc. This work generally falls below the capital/maintenance threshold.

Assessment and prioritisation of reactive maintenance is undertaken by Council staff using experience and judgement.

5.3.2 Standards and specifications

Maintenance work is carried out in accordance with the Building Code of Australia, including various referred Australian Services standards and specifications.

5.3.3 Summary of future maintenance expenditure

Future maintenance expenditure is forecasted in the Long Term Financial Plan to increase with CPI taking into account any additional assets.

Deferred maintenance, ie works that are identified for maintenance and unable to be funded is to be included in the risk assessment process in the plan.

Maintenance is funded from Council's operating budget and grants where available.

5.4 Renewal/Replacement plan

Renewal expenditure is major work that does not increase the asset's design capacity but restores, rehabilitates, replaces or renews an existing asset to its original 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 are identified from estimates of remaining life obtained from the asset register. Renewal proposals are inspected to verify accuracy of remaining useful life estimate and to develop a preliminary renewal estimate. These proposals are ranked by priority and available funds are scheduled in future capital programs.

5.4.2 Renewal standards

Renewal work is carried out in accordance with the Building Code of Australia, including various referred Australian Services standards and specifications.

5.4.3 Summary of future renewal expenditure

Future maintenance expenditure is forecasted in the Long Term Financial Plan to increase with CPI taking into account any additional assets.

Deferred renewal, ie those assets that are identified for renewal and not scheduled in capital works programs are to be included in the risk assessment process in the plan.

Renewals are funded from Council's capital works budget and grants where available.

5.5 Creation/Acquisition/Upgrade plan

New works are those works that create a new asset that did not previously exist, or works that upgrade or improve an existing asset beyond its existing capacity. They may result from growth, social or environmental needs. Asset may also be acquired at no cost to the Council.

5.5.1 Selection criteria

New assets and upgrade/expansions of existing assets are identified from various sources such as Elected Members or Community requests, proposals identified by strategic plans or partnerships with other organisations. New and upgrade proposals are inspected to verify need and to develop a preliminary renewal estimate. Verified proposals are then ranked by priority and available funds and scheduled in future capital programs.

5.5.2 Standards and specifications

Standards and specifications for new assets and for upgrade/expansion of existing assets are the same for renewal work shown above in 5.4.2

5.6 Disposal plan

Disposal includes any activity associated with the disposal of a decommissioned asset including sale, demolition or relocation. Whilst a disposal plan for buildings, land and structures has not yet been developed, the process of identifying assets that will fall into this category has commenced.

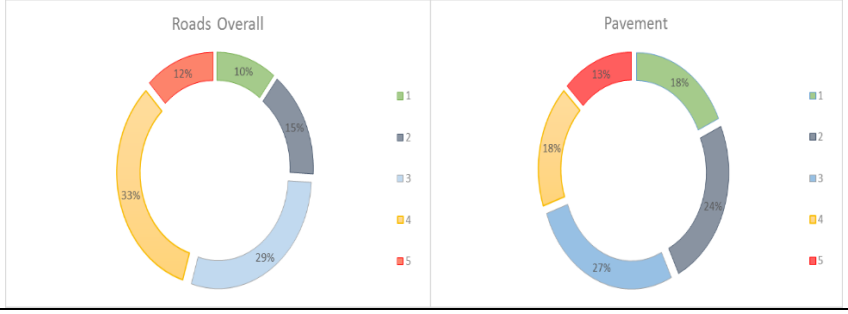
6. SUMMARY OF EACH ASSET CLASS

6.1 Roads & Footpaths Overview

Council is responsible for 949 km of roads and as at the time of this plan being prepared these roads can be categorised as follows:

Sealed Roads – 274 km
Sheeted Roads – 544 km
Other Roads – 131 km

This asset class also includes spoon drains, cross road culverts, kerbing, point generic and footpaths.

KEY DATA	DETAILS
Replacement Costs	The replacement cost of the road network at the time of the last revaluation (30 June 2017) was $177,694,604 and is componentised as follows: • Surface - $51,131,624 • Pavement - $50,094,529 • Earthworks - $53,297,906 The replacement cost of the road network associated assets at the time of the last revaluation (30 June 2017) was $23,648,766 and is componentised as follows: • Spoon drains - $135,840 • Cross Road Culverts - $201,547 • Kerbing - $12,324,063 • Point Generic - $478,220 • Footpaths - $10,509,096 All work completed on these assets since the revaluation has been recorded at cost. A condition assessment (1 being New and 5 being approaching obsolescence) of the road network was undertaken at the same time as the revaluation in 2017. It reported that 55% of the road network was acceptable and that the remaining roads would need substantial maintenance required. 

<table>
<tr><td></td><td>When looking at the pavement component of the road network 70% of the pavement is acceptable at a very good condition or requiring minor maintenance.</td></tr>
<tr><td>Identified Issues</td><td>There is a backlog of sealed roads that need immediate treatment. For most, resealing will be an adequate treatment but some will require reconstruction.

These roads are itemised in the attached roads program under the headings of reshape and reconstruction.

Footpaths across the region are currently under review and a need for more access through our community has been identified. There is a backlog of footpaths that need to be installed throughout the Council area. Council's aim is complete 5kms of footpaths and/or shared use paths per year.</td></tr>
<tr><td>Age</td><td>The age of the roads varies and a construction date has been recorded for the majority of the roads. Age and an assets engineering life are the primary factors for determining the renewal schedule for the assets, with the assets actual condition altering this timeframe once the asset gets closer to its renewal date.</td></tr>
<tr><td>Residual Lives</td><td>The remaining lives have been reported on the basis of age based condition and are reported below as an average.

If the road, kerbing & footpath network is maintained each year through operational and capital works, then useful lives will be extended. Continued inspection of the road network is required to determine the current status regarding to the extent of capital and operational works required to maintain the infrastructure.

<table>
<tr><th>Asset Type</th><th>Total Useful Life (years)</th></tr>
<tr><td>Seal</td><td>15 - 20</td></tr>
<tr><td>Pavement</td><td>50</td></tr>
<tr><td>Sheeted Roads</td><td>10</td></tr>
<tr><td>Spoon Drains</td><td>50</td></tr>
<tr><td>Cross Road Culverts</td><td>60</td></tr>
<tr><td>Kerbing</td><td>80</td></tr>
<tr><td>Point Generic</td><td>15 - 40</td></tr>
<tr><td>Footpaths</td><td>30 - 80</td></tr>
</table>

*Point Generic assets are traffic islands, car parks, guard rails, etc</td></tr>
<tr><td>Risk Management</td><td>There is a need to:
• Assess the sealed road network periodically to determine the extent of the surface distress, potholes, cracking and</td></tr>
</table>

	edge breaks so that the remaining life can be checked and modified as required • Inspect the sheeted roads to assess corrugation, potholes and gravel loss especially in the event of high rain fall and flooding; • Assess the footpath network periodically to assess the extent of lifting and cracking so that the remaining life can be checked and modified as required; and, • Ensure that footpaths are adequately maintained to avoid exposure to liability issues. • Allocate funding to resealing annually to ensure that the road network does not deteriorate to the point that it needs more extensive repairs. • Allocate funding to resheeting annually to ensure the integrity of the sheeted road network is maintained.
Service Levels	The service levels considered are: <u>Community</u> Community levels of service relate to how the community receives the service in terms of safety, quality, quantity, reliability, responsiveness, cost/efficiency and legislative compliance. The first priority is to maintain the assets at the standard when the land was developed. A secondary consideration is upgrading the infrastructure in partnership with the affected residents. <u>Technical</u> It is important that the sealed roads are maintained to a serviceable standard and that the sheeted roads are maintained and graded frequently. Connectivity across the road network for all users must be maintained.

6.2 Stormwater Drainage Overview

KEY DATA	DETAILS
Current Replacement Costs	The replacement cost of the stormwater infrastructure at the time of revaluation as at 30 June 2017 is $22,246,953. All work completed on the stormwater infrastructure since the revaluation has been recorded at cost.
Identified Issues	Council is in the process of creating Stormwater Management Plans for each of its three main catchment areas. These plans will identify the need for capital improvements to existing infrastructure to protect property from flood events and it increase its capacity for future community development.
Age	The age of the infrastructure varies and records for older infrastructure are not available. Age and an assets engineering life are the primary factors for determining the renewal schedule for the assets, with the assets actual condition altering this timeframe once the asset get closer to its renewal date.. For example • If a concrete pipe is installed properly is should easily achieve a life of 100 years. However, underground pipes in a marine environment

<table>
<tr><td></td><td>exposed to corrosive soil types and brackish water may degrade from exposure</td></tr>
<tr><td>Residual Lives</td><td>Remaining lives have been reported on the basis of age based condition and are reported below as an average. More information is required to determine the actual condition of the stormwater infrastructure.

If the stormwater infrastructure is maintained each year through operational and capital works, then the useful lives will be extended.

All Stormwater assets as valued have been given a useful life of as per the table below.

<table>
<tr><th>Asset Type</th><th>Total Useful Life (years)</th></tr>
<tr><td>Headwalls</td><td>60 - 100</td></tr>
<tr><td>Gravity Pipes</td><td>60 - 100</td></tr>
<tr><td>SW Junction</td><td>60 - 100</td></tr>
<tr><td>Pits</td><td>60</td></tr>
<tr><td>Spoon Drains</td><td>70</td></tr>
</table>
</td></tr>
<tr><td>Risk Management</td><td>There is a need to:
Identify where local flooding problems occur and determine if the cause is condition or capacity;
Implement the priority recommendations of the stormwater management plans for the Council area
Ensure lagoons, pump stations and rising mains are maintained to ensure adequate drainage</td></tr>
<tr><td>Service Levels</td><td>The service levels considered are:

<u>Community</u>
Community levels of service relate to how the community receives the service in terms of safety, quality, quantity, reliability, responsiveness, cost/efficiency and legislative compliance.

<u>Technical</u>
It is important that the stormwater assets are maintained to a serviceable standard..</td></tr>
</table>

6.3 Community Wastewater Management Scheme Overview

Council is responsible for a Community Wastewater Management Scheme (CWMS) servicing the three townships of Wallaroo, Kadina and Moonta.

<table>
<tr><th>KEY DATA</th><th>DETAILS</th></tr>
<tr><td>Current Replacement Costs</td><td>The replacement cost of the CWMS infrastructure at the time of revaluation as at 30 June 2017 is $51,002,621.

The extension of the scheme to include Moonta was completed in 2017.</td></tr>
<tr><td>Identified Issues</td><td>Ongoing maintenance and monitoring is required at the treatment plants to ensure operational legislative compliance.</td></tr>
<tr><td>Age</td><td>The age of the CWMS infrastructure varies. Whilst asset condition is a factor when the asset is getting closer to the end of its engineered life expectancy, the age is considered the primary factor in determining the current condition of these assets and their expected replacement date.</td></tr>
<tr><td>Residual Lives</td><td>Remaining lives have been reported on the basis of age based condition and are reported below as an average.

If the CWMS infrastructure is maintained each year through operational and capital works, then the useful lives will be extended.

<table>
<tr><th>Asset Type</th><th>Total Useful Life (years)</th></tr>
<tr><td>Gravity Drains</td><td>60</td></tr>
<tr><td>Manholes</td><td>60</td></tr>
<tr><td>Pressure Lines</td><td>60</td></tr>
<tr><td>Property Connections</td><td>60</td></tr>
<tr><td>Structures</td><td>60</td></tr>
<tr><td></td><td></td></tr>
</table>
</td></tr>
<tr><td>Risk Management</td><td>There is a need to:
Ensure pump stations and rising mains are maintained to ensure adequate drainage; and</td></tr>
</table>

	• Maintain treatment plants to ensure ongoing operational legislative compliance
Service Levels	The service levels considered are: **Community** Community levels of service relate to how the community receives the service in terms of safety, quality, quantity, reliability, responsiveness, cost/efficiency and legislative compliance. **Technical** It is important that the CWMS is maintained to a serviceable standard that meets all legislative requirements.

6.4 Buildings Overview

KEY DATA	DETAILS
Current Replacement Costs	The replacement cost of Council Buildings & other structures at the time of the last revaluation (30 June 2015) was $89,464,000 and includes values for the following buildings as itemised: • Caravan Parks - $6,791,000 • Retirement Units - $8,658,000 • Town Halls - $16,836,000 • Resource Recovery Centre - $1,519,000 • Other Assets - $55,660,000 All additions to Council buildings and other structures since the revaluation have been recorded at cost. The land parcels occupied by the buildings do not have a value in regard to their useful life and depreciation but they do have a separate market value.
Identified Issues	Council currently owns a number of buildings & structures within the region. It has been identified that some of these buildings are community managed and operated and/or surplus to Council's requirements. There is a need to make a decision in regards to the future of the surplus buildings. That is, if certain buildings were to burn down or get to a stage that they were a risk to the community, would Council replace them or would they just dispose of them? This would impact on costs of insurance and depreciation as both are dependent upon replacement costs of the buildings. Leases and Licences are a common way of groups within the community to occupy Council buildings. These documents outlines the conditions of occupancy. Council currently has issued approximately 125 leases and 56 licences. Land leases are a mechanism to clarify the responsibilities, ownership and liability of community owned assets on Council's land. They also enable depreciation costs for those assets to be removed from the Council's accounts. The revenue generated from these arrangements is negligible and in some cases Council is still responsible for capital renewal and maintenance.
Age	The age of the buildings and structures varies and some records for older infrastructure are not available. Whilst age

<table>
<tr><td></td><td>is considered, the primary factor determining the service level of these assets is condition.</td></tr>
<tr><td>Residual Lives</td><td>Remaining lives have been reported on the basis of age based condition and are reported below as an average. More information is required to determine the actual condition of the buildings.

If the buildings are maintained each year through operational and capital works, then the useful lives will be extended.

<table>
<tr><th>Asset Type</th><th>Total Useful Life (years)</th></tr>
<tr><td>Town Halls</td><td>100</td></tr>
<tr><td>CCSLC</td><td>70</td></tr>
<tr><td>Recreation Buildings</td><td>60</td></tr>
<tr><td>Toilet Blocks</td><td>50</td></tr>
<tr><td>Community Buildings</td><td>80</td></tr>
<tr><td></td><td></td></tr>
</table>

Asset valuations on Council buildings do not include condition information. Maintenance requirements are based on information from the users of the facilities and also inspections by Council’s Infrastructure department.</td></tr>
<tr><td>Risk Management</td><td>There is a need to ensure that all buildings are adequately maintained to:
Avoid exposure to liability issues;
Meet all legislative requirements; and
Ensure that they remain fit for their intended purpose</td></tr>
<tr><td>Service Levels</td><td>The service levels considered are:

<u>Community</u>
Community levels of service relate to how the community receives the service in terms of safety, quality, quantity, reliability, responsiveness, cost/efficiency and legislative compliance.

<u>Technical</u>
It is important that key community buildings are maintained to the appropriate standards.</td></tr>
</table>

6.5 Other Infrastructure Overview

<table>
<tr><th>KEY DATA</th><th>DETAILS</th></tr>
<tr><td>Current Replacement Costs</td><td>The replacement cost of the other infrastructure as at 30 June 2017 was $40,691,000.

This class of asset includes site improvements and structures. It includes items such as lighting, shelters, fencing, walking trails, seating, monuments, etc</td></tr>
<tr><td>Identified Issues</td><td>Council has an extensive list of items incorporated under this asset class. Some of the items such as BBQ’s are provided for the enjoyment of the community and whilst needing to be maintained for operational efficiency they also require a capital replacement program.

Monuments on the other hand are not requiring operational maintenance other than to the structure to maintain the history of each item.

This class of asset encompasses a wide number of items and therefore many identifiable issues.</td></tr>
<tr><td>Age</td><td>The age of the buildings and structures varies and some records for older infrastructure are not available. Whilst age is considered, the primary factor determining the service level of these assets is condition.</td></tr>
<tr><td>Residual Lives</td><td>Remaining lives have been reported on the basis of age based condition and are reported below as an average. More information is required to determine the actual condition of the drainage infrastructure.

If the infrastructure is maintained each year through operational and capital works, then the useful lives will be extended.

<table><tr><th>Asset Type</th><th>Total Useful Life (years)</th></tr><tr><td>Other Infrastructure</td><td>5 - 100</td></tr><tr><td></td><td></td></tr></table></td></tr>
<tr><td>Risk Management</td><td>There is a need to:
To maintain its other infrastructure with regular servicing and maintenance to ensure that the level of service is maintained; and
To ensure that these items are replaced at appropriate intervals to ensure that the need for major costly repairs is avoided.</td></tr>
</table>

Service Levels	The service levels considered are: <u>Community</u> Community levels of service relate to how the community receives the service in terms of safety, quality, quantity, reliability, responsiveness, cost/efficiency and legislative compliance. <u>Technical</u> It is important that these assets are maintained to a serviceable standard.

6.6 Machinery, Plant & Equipment Overview

KEY DATA	DETAILS
Current Replacement Costs	The replacement cost of the machinery, plant and equipment as at 30 June 2017 was $7,928,000. A replacement program has been developed to ensure that a reasonable outcome can be achieved to maximise trade in values and minimise the need for major costly repairs on ageing machinery. MEX is a software program that is currently being used to capture and monitor the data for this program.
Identified Issues	Council has an extensive fleet of plant and equipment. It is important that the plant and equipment is suitable to deliver the capital and operational works programs. Breakdowns of major plant can impact significantly on works delivery and increase costs due to repairs and also having to hire substitute plant if required. Over time through changes in legislation, including but not restricted to Work Health and Safety and other work practices, some plant and equipment is no longer suitable and needs to be replaced by more modern models. Modern machinery also performs more effectively and efficiently due to improvements in technology and performance.
Age	The age range for each category of plant and equipment is shown below. However, age is not necessarily a consideration but rather condition. • Vehicles and road making equipment – 5 to 10 yrs • Other plant and equipment – 5 to 15 yrs

<table>
<tr><td>Residual Lives</td><td>The residual lives have been reported below as an average.

<table><tr><th>Asset Type</th><th>Total Useful Life (years)</th></tr><tr><td>Vehicles & Road Making Equipment</td><td>5-10 years</td></tr><tr><td>Other plant and equipment</td><td>5-15 years</td></tr><tr><td></td><td></td></tr></table>
With regular maintenance and servicing each year, the useful lives will be extended.</td></tr>
<tr><td>Risk Management</td><td>There is a need to:
Monitor the plant replacement program to ensure that plant and equipment fleet can reliably deliver the capital and operational works programs;
To maintain its plant and equipment with regular servicing and maintenance to ensure that the level of service is maintained; and
To ensure that plant and equipment is replaced at appropriate intervals to ensure that the need for major costly repairs is avoided.</td></tr>
<tr><td>Service Levels</td><td>The service levels considered are:

<u>Community</u>
Community levels of service relate to how the community receives the service in terms of safety, quality, quantity, reliability, responsiveness, cost/efficiency and legislative compliance.

<u>Technical</u>
It is important that vehicles and equipment are maintained to a serviceable standard.</td></tr>
</table>

7. ASSET MANAGEMENT PRACTICES

7.1 Accounting/Financial Systems

Council utilises a standard computerised general ledger system for all its accounting operations. The integrated corporate accounting and financial software used to manage all of Council's accounting operations is the Synergysoft suite of financial modules, which is provided and supported by IT Vision.

The chart of account used within the general ledger is structured to facilitate the ease of data extraction required for various financial reporting requirements, eg. Annual budget and budget revisions, internal management reporting, Annual Financial Statements

The asset register is kept in a set of spreadsheets and is separate and reconciled to the general ledger and records all asset related transaction, such as capital expenditure, depreciation expense, disposals of assets, etc.

All transactions are processed in accordance with Australian Accounting Standards and Council policies.

No changes to the Accounting/Financial systems have been identified as a result of preparing this IAMP.

7.2 Asset Management Systems

Council utilises a set of databases to manage asset related transactions.

- Mex
- Microsoft Access
- ESRI

Asset management software systems have become an essential tool in the management of Council's assets and the implementation of these computer programs will improve Council's asset management practices.

7.3 Information Flow Requirements and Processes

The key information flows *into* this infrastructure and asset management plan are:

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

The key information flows *from* this infrastructure and asset management plan are:

- The assumed Works Program 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 departmental business plans and budgets.

7.4 Asset Recognition and Capitalisation Process

7.4.1 Physical Assets Received Free of Charge

Private land division developments may include roads, footpaths, recreation spaces, stormwater and other infrastructure which at the completion of the project is then handed over to Council. Council requests details in relation to the infrastructure and may include maps, as-built diagrams and/or any relevant documentation, etc.

The asset is added to the asset register and the amount recognised in the general ledger with a journal entry which balances to the asset register. These additions then filter through to the Asset Received Free of Charge section in the Council's Annual Financial Statements.

8. FUTURE DIRECTION

8.1 Where do we want to be?

This plan sets outcomes and strategies to be achieved by the improved management of Council assets:

- Provide and maintain safe and serviceable public facilities and infrastructure including roads, footpaths and storm water assets
- Provide and maintain an efficient wastewater reuse scheme system that provides quality treated water to Council's parks and sporting grounds and provides for future expansion.
- Develop appropriate asset registers and management plans and practices for infrastructure and assets.
- Investigate and pursue opportunities to improve the visual amenity of town entrances, CBD main streets and business areas, parks and open space
- Facilitate improvements to car, bicycle and pedestrian safety
- Identify innovative funding and partnerships to provide for new and upgraded assets and infrastructure
- Implement and maintain developer contribution plans which require appropriate contribution for development impact upon infrastructure so as not to unfairly burden existing ratepayers or future developers.

The demand for Council to provide, upgrade and renew assets is increasing both in number and value according to many factors. The community expects a variety of services to be available, the cost of providing services is continually increasing, the standards of assets is expected to improve and changes in the number and composition of the local and regional population are all contributing factors.

Council will continue to assess demand for assets as part of the ongoing development of our Long Term Financial Plan.

8.2 Performance Measures

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

- The degree to which the required cashflows identified in this plan are incorporated into Council's Long Term Financial Plan and Strategic directions;
- The degree to which 1-5 year detailed works programs, budget, business plans and organizational structures take into account the 'global' works program trends provided by this plan.

Creation of this plan has highlighted areas where obtaining information for these plans was a time consuming task due to how the accounts and cost centres are constructed. As required by the model financial statements council distinguish capital expenditure between New/Upgraded works and Renewal work for capital expenditure. Further enhancements could include reporting maintenance costs via the categories of reactive, planned and cyclic to assist future revisions.

8.3 Monitoring and Review Procedures

This plan will be reviewed during annual budget preparation and amended to recognise any changes in planned service levels, resources available and/or renewal, upgrade or new asset requirements and expenditure to provide those services as a result of the budget decision process.

9. GLOSSARY

Annual service cost (ASC)
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 operating, maintenance, depreciation, finance/opportunity and disposal costs, less revenue.

Asset class
Grouping of assets of a similar nature and use in an entity's operations (AASB 166.37).

Asset condition assessment
The process of continuous or periodic inspection, assessment, measurement and interpretation of the resultant data to indicate the condition of a specific asset so as to determine the need for some preventative or remedial action.

Asset management
The combination of management, financial, economic, engineering and other practices applied to physical assets with the objective of providing the required levels of service in the most cost effective manner.

Assets
Future economic benefits controlled by the entity as a result of past transactions or other past events (AAS 27.12).

Property, plant and equipment including infrastructure and other assets (such as furniture and fittings) with benefits expected to last more than 12 months.

Average annual asset consumption (AAAC)
The amount of an organisation's asset base consumed during a reporting period (generally a year). This may be calculated by dividing the depreciable amount by the useful life (or total future economic benefits/service potential) and totalled for each and every asset OR by dividing the carrying amount (depreciated replacement cost) by the remaining useful life (or remaining future economic benefits/service potential) and totalled for each and every asset in as asset category or class.

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 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

Capital new expenditure
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 renewal expenditure
Expenditure on an existing asset or on replacing an existing asset, which returns the service capability of the asset up to that which it had originally. It is periodically required expenditure, relatively large (material) in value compared with the value of the components or sub-components of the asset being renewed. As it reinstates existing service potential, it generally has no impact on revenue, but may reduce future operations and maintenance expenditure if completed at the optimum time, eg. Resurfacing or resheeting a material part of a road network, replacing a material section of a drainage network with pipes of the same capacity, resurfacing an oval.

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

Carrying amount
The amount at which as 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.

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 on-off design and project management costs.

Current replacement cost (CRC)
The cost the entity would incur to acquire the asset on the reporting date. The cost is measured by reference to the lowest cost at which the gross future economic benefits could be obtained in the normal course of business or the minimum it would cost, to replace the existing asset with a technologically modern equivalent new asset (not a second hand one) with the same economic benefits (gross service potential) allowing for any differences in the quantity and quality of output and in operating costs.

Current replacement cost "As New" (CRC)
The current cost of replacing the original service potential of an existing asset, with a similar modern equivalent asset, ie the total cost of replacing an existing asset with an as NEW or similar asset expressed in current dollar values.

Cyclic maintenance
Replacement of higher value components/sub components of assets that is undertaken on a regular cycle including repainting, building roof replacement, 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.

Depreciable amount
The cost of an asset, or other amount substituted for its cost, less its residual value (AASB 116.6)

Depreciated replacement cost (DRC)
The current replacement costs (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.

Fair value
The amount for which as asset could be exchanged, or a liability settled, between knowledgeable, willing parties, in an arms length transaction.

Greenfield asset values
Asset (re)valuation values based on the cost to initially acquire the asset.

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 it recoverable amount.

Infrastructure assets
Physical assets of the entity or of another entity that contribute to meeting the public's need for access to major economic and social facilities and services, eg roads, drainage, footpaths and cycleways. These are typically large, interconnected networks or portfolios of composite assets. The components of these assets may be separately maintained, renewed or replaced individually so that the required level and standard of service from the network of assets is continuously sustained. Generally the components and hence the assets have long lives. They are fixed in place and often have no 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 (AASB 140.5)

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 operation, 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 actual or planned annual maintenance and capital renewal expenditure incurred in providing the service in a particular year. Life Cycle Expenditure may be compared to Life Cycle Expenditure to give an initial indicator of life cycle sustainability.

Loans/borrowings
Loans result in funds being received which are then repaid over a period of time with interest (an additional cost). Their primary benefit is in 'spreading the burden' of capital expenditure over time. Although loans enable works to be completed sooner, they are only ultimately cost effective where the capital works funded (generally renewals) result in operating and maintenance cost savings, which are greater than the cost of the loan (interest and charges).

Maintenance and renewal gap
Difference between estimated budgets and projected expenditures for maintenance and renewal of assets, totalled over a defined time (eg 5, 10 and 15 years).

Maintenance and renewal sustainability index
Ratio of estimated budget to projected expenditure for maintenance and renewal of assets over a defined time (eg 5, 10 and 15 years).

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

Materiality
An item is material if its omission or misstatement could influence the economic decisions of users taken on the basis of the financial report. Materiality depends on the size and nature of the omission or misstatement judged in the surrounding circumstances.

Modern equivalent asset
A structure similar to an existing structure and having the equivalent productive capacity, which could be built using modern materials, techniques and design. Replacement cost is the basis used to estimate the cost of constructing a modern equivalent asset.

Non-revenue generating investments
Investments for the provision of goods and services to sustain or improve services to the community that are not expected to generate any savings or revenue to the Council. Eg. Parks and playgrounds, footpaths, roads and bridges, libraries, etc.

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

Pavement management system
A systematic process for measuring and predicting the condition of road pavements and wearing surfaces over time and recommending corrective actions.

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.

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
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).

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

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 operating and maintenance expenditure.

Recurrent funding
Funding to pay for recurrent expenditure

Rehabilitation
See capital renewal expenditure definition above

Remaining life
The time remaining until as asset ceases to provide the required service level or economic usefulness. Age plus remaining life is economic life.

Renewal
See capital renewal expenditure definition above

Residual value
The estimated amount that an entity would currently obtain from disposal of the asset, after deducting the estimated costs of disposal, if the asset were already of the age and in the condition expected at the end of its useful life.

Revenue generating investments

Investments for the provision of goods and services to sustain or improve services to the community that are expected to generate some savings or revenue to offset operating costs, eg public halls and theatres, childcare centres, sporting and recreation facilities, tourist information centres, etc

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

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

Service potential
The capacity to provide goods and services in accordance with the entity's objectives, whether those objectives are the generation of net cash inflows or the provision of goods and services of a particular volume and quantity to the beneficiaries thereof.

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

Strategic Management Plan
Documents Council objectives for a specified period (normally the term of office of councillors which is 4 years minimum), the principle activities to achieve the objectives, the means by which that will be carried out, estimated income and expenditure, measures to assess performance and how rating policy relates to the Council's objectives and activities. The plan is prepared in consultation with the community.

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 estimated future cash flows expected to arise from the continuing use of an asset and from its disposal at the end of its useful life. 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 new cash flows, where if deprived of the asset its future economic benefits would be replaced.

Source: IPWEA 2009, AIFMG Glossary

10. ABREVIATIONS

AAAC	Average annual asset consumption	IAMP	Infrastructure & Asset Management Plan
ARI	Average recurrence interval	IRMP	Infrastructure Risk Management Plan
BOD	Biochemical (biological) oxygen demand	MMS	Maintenance management system
CRC	Current replacement cost	PCI	Pavement condition index
DA	Depreciable amount	RV	Residual value
DoH	Department of Health	SS	Suspended solids
EF	Earthworks/formation	VPH	Vehicles per hour

11. REFERENCES, STANDARDS AND GUIDELINES

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

IPWEA, NAMS, PLUS Asset Management – A guided Pathway

Copper Coast Council – Strategic Plan 2015 -2025, Moving Towards 2025

Copper Coast Council, Long Term Financial Plan 2016 – 2026

Copper Coast Council, Annual Business Plan and Budget

12. APPENDICES

APPENDIX A - Capital Works Program
(source LTFP 2015/16 – 2025/2026)

APPENDIX B - Capital Expenditure Commitment

APPENDIX A

Capital Works Program 2017/18 – 2026/27

Inflated Figures

	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	Total
Council Summary (including CWMS)											
Capital - Replacement	$ 5,045,596	$5,307,192	$ 5,492,944	$ 5,685,197	$ 5,884,179	$ 6,200,125	$ 6,939,429	$ 7,182,309	$ 7,433,690	$ 7,693,869	$ 62,864,529
Capital - Upgrade/New	$ 6,298,857	$3,225,817	$ 3,338,721	$ 3,455,576	$ 3,576,521	$ 3,591,700	$ 4,467,409	$ 4,623,768	$ 4,785,600	$ 4,953,096	$ 42,317,066
Total Capital Program	**$ 30,155,270**	**$9,123,000**	**$ 9,477,000**	**$ 7,800,000**	**$ 8,234,000**	**$ 8,691,000**	**$ 9,178,000**	**$ 9,687,000**	**$12,271,000**	**$12,932,000**	**$ 117,548,270**
Estimated Annual Depreciation	$ 8,938,700	$9,501,043	$ 9,530,943	$ 9,560,793	$10,071,781	$10,104,871	$10,139,811	$10,685,526	$10,724,466	$10,765,596	$ 100,023,531
Asset Sustainability Ratio	56%	56%	58%	59%	58%	61%	68%	67%	69%	71%	57%
Capital grants, subsidies and monetary contributions	$1,126,400.0	$325,000.0	$ 225,000.0	$ 225,000.0	$ 225,000.0	$ 225,000.0	$ 225,000.0	$ 225,000.0	$ 225,000.0	$ 225,000.0	
Net Funding Requirement	**$ 29,028,870**	**$8,798,000**	**$ 9,252,000**	**$ 7,575,000**	**$ 8,009,000**	**$ 8,466,000**	**$ 8,953,000**	**$ 9,462,000**	**$12,046,000**	**$12,707,000**	

APPENDIX B

It is important that capital expenditure is separated between 'nondiscretionary' (replacement/renewal of existing assets) and 'discretionary' (construction or purchase of new/upgraded assets) and that, further, priority is always given to funding the 'non-discretionary' component. As a result, priority is given to maintaining Council's *existing* fixed asset stock instead of the acquisition of new assets which Council may not necessarily have sufficient future funding to appropriately maintain.

To this end, it is also important that 'life cycle' costs (such as depreciation, insurance, maintenance, etc) are taken into consideration in the acquisition of new assets so that the impact of such can be considered in the context of Council's long term financial sustainability target.