



City of
Mount Gambier

Infrastructure and Asset Management Plan 2016/17 – 2026/27

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ABBREVIATIONS

AAAC	Average annual asset consumption
ARI	Average recurrence interval
BOD	Biochemical (biological) oxygen demand
CRC	Current replacement cost
CWMS	Community wastewater management systems
DA	Depreciable amount
DoH	Department of Health
EF	Earthworks/formation
IAMP	Infrastructure and asset management plan
IRMP	Infrastructure risk management plan
MMS	Maintenance management system
PCI	Pavement condition index
RV	Residual value
SS	Suspended solids
vph	Vehicles per hour
LTFP	Council's Long Term Financial Plan

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 level 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 (AAS27.12).

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 a local government's asset base consumed during a year. This may be calculated by dividing the Depreciable Amount (DA) by the Useful Life and totalled for each and every asset OR by dividing the Fair Value (Depreciated Replacement Cost) by the Remaining Life and totalled for each and every asset in an asset category or class.

Brownfield asset values**

Asset (re)valuation values based on the cost to replace the asset including demolition and restoration costs.

Capital expansion expenditure

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

Capital expenditure

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 to the community that did not exist beforehand. As it increases service potential it may impact revenue and will increase future operating and maintenance expenditure.

Capital renewal expenditure

Expenditure on an existing asset which returns the service potential, or the life 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 has no impact on revenue, but may reduce future operating 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. Where capital projects involve a combination of renewal, expansion and/or upgrade expenditures, the total project cost needs to be allocated accordingly.

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 operating and maintenance expenditure in the future because of the increase in Council'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. Where capital projects involve a combination of renewal, expansion and/or upgrade

expenditures, the total project cost needs to be allocated accordingly.

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

An individual part of an asset which contributes to the composition of the whole and can be separated from or attached to an asset or a system.

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, plus any costs necessary to place the asset into service. This includes one-off design and project management costs.

Current replacement cost (CRC)

The cost Council 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, i.e. 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 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.

Fair value

The amount for which an 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 its recoverable amount.

Infrastructure assets

Physical assets of Council or of another entity that contribute to meeting the public 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 against which service performance may be measured (service levels usually relate to quality, quantity, reliability, responsiveness, environmental, acceptability and cost).

Life Cycle Cost **

The life cycle cost (LCC) is the average cost to provide the service over the longest asset life cycle. It comprises annual maintenance and asset consumption expense, represented by depreciation expense. 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 excluding maintenance and depreciation, eg power, fuel, staff, plant, equipment, on-costs and overheads.

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*

A measure of average annual consumption of assets (AAAC) expressed as a percentage of the depreciable amount (AAAC/DA). Depreciation may be used for AAAC.

Rate of annual asset renewal*

A measure of the rate at which assets are being renewed per annum 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 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 an 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 net amount which an entity expects to obtain for an asset at the end of its useful life after deducting the expected costs of disposal.

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 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 remaining life of assets expressed as a percentage of economic life. 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 (DRC/DA).

Strategic Management Plan (SA)**

Documents Council objectives for a specified period (3-5 years), 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 Council's objectives and activities.

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 Council. It is the same as the economic life.

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: DVC 2006, Glossary

Note: Items shown * modified to use DA instead of CRC
Additional glossary items shown **

EXECUTIVE SUMMARY

What Council Provides

Council provides a road network in partnership with State and Federal Governments to enable a high level of safety, accessibility and amenity for Mount Gambier. Council's commitment to maintaining this road network is in line with current best practices and to the standards expected by its ratepayers.

Council further provides an extensive range of buildings and structures which are used by the community for many and varied purposes (including a regional landfill facility).

Council also owns and operates an extensive plant and equipment fleet to allow it to provide infrastructure and services to meet the needs of the Mount Gambier community.

ROADS AND DRAINAGE INFRASTRUCTURE SUMMARY

Asset	Quantity	Units	Replacement Cost	Net Fair Value	Annual Depreciation	Accumulated Depreciation
Road Sub Pavement	248,733	m ²	\$843,792	\$709,885	\$6,615	\$133,906
Road Pavement	2,321,188	m ²	\$44,426,254	\$33,347,886	\$687,315	\$11,078,368
Road Seals	2,085,610	m ²	\$14,700,088	\$11,279,725	\$971,239	\$3,420,364
Kerb & Channel	447,636	m	\$28,203,197	\$21,428,727	\$406,525	\$6,774,471
Footpaths (constructed)	308,627	m ²	\$14,277,284	\$12,191,808	\$241,658	\$2,085,475
Traffic Lights	18	Sets	\$2,008,500	\$1,529,550	\$66,950	\$478,950
Carparks	72,940	m ²	\$9,955,125	\$7,904,648	\$248,878	\$2,050,477
Stormwater Infrastructure			\$6,952,500	\$5,164,714	\$99,321	\$1,787,786
TOTALS			\$121,366,740	\$93,556,943	\$2,728,501	\$27,809,797

Note: costs of all grass nature strips is included within the total costs of Footpaths (constructed), but area is not show in this table. Grass nature strips have not been depreciated.

BUILDING AND STRUCTURE INFRASTRUCTURE SUMMARY

Asset	Quantity	Replacement Cost	Net Fair Value	Annual Depreciation	Accumulated Depreciation
Buildings	102	\$87,178,098	\$62,165,451	\$1,833,670	\$25,012,647
Structures	228	\$19,701,314	\$13,349,501	\$466,330	\$6,351,813
TOTALS		\$106,879,412	\$75,514,952	\$2,300,000	\$31,364,460

Note: building and structure data compiled by Opteon (South Australia) Pty Ltd

Asset	Quantity	Net Fair Value	Annual Depreciation	Accumulated Depreciation
Caroline Landfill Existing	1	\$1,283,185	-	\$1,283,185
Caroline Landfill Cell 3	1	\$602,012	\$199,000	\$262,100
Caroline Landfill Cap Cell 3	1	\$2,100,000	\$278,222	\$315,000
TOTALS		\$3,985,197	\$477,222	\$1,860,285

PLANT AND EQUIPMENT INFRASTRUCTURE SUMMARY

Asset	Quantity	At Cost	Residual Value	Written Down Value	Annual Depreciation	Accumulated Depreciation
Plant and Equipment	102	\$6,159,880	\$2,369,017	\$4,682,282	\$625,940	\$1,477,598
TOTALS		\$6,159,880	\$2,369,017	\$4,682,282	\$625,940	\$1,477,598

PART 1 – ROADS AND DRAINAGE INFRASTRUCTURE

1. SUMMARY

A summary of the road assets used to provide this service are:

- Sealed road area of 2,085,610m² (2,321,188m² of road pavement)
- Kerb and Channel length of 447 km
- Constructed footpath area of 308,627m²
- Carpark area of 72,940m²
- Traffic Light Sets at 18 locations
- Approximately 465 drainage bores and associated drainage pipes.

What does it Cost?

The total dollar value of the annual consumption of the road and drainage asset category is \$2,728,501 (i.e. annual depreciation expense for 2017/18). Council's goal for annual expenditure is to match this value so that no gap exists between the annual depreciation cost and the actual budget expenditure.

It is significant to note that this Plan links directly with Council's Long Term Financial Plan (LTFP) and attention is drawn to the CBD Renewal Project that is scheduled to continue into the 2017/18 financial year. The annual expenditure for this project as set out in the LTFP significantly reduces the funding gap between annual depreciation (i.e. \$2,728,501) and the annual asset renewal budget of \$2,399,300 – of which \$500,000 of this amount in 2016/17 is for the CBD Renewal Project (with a further, and final, allocation of \$300,000 projected for 2017/18).

Council needs to continue to seek additional funding sources through Government grants to ensure any funding gap is manageable in the long term.

Plans for the Future

Council plans to operate and maintain the road network to achieve the following strategic objectives.

- Ensure the road network is maintained at a safe and functional standard as set out in this Infrastructure and Asset Management Plan. Council has undertaken a structural review in 2016 and this has resulted in a reduction in funding for asset maintenance and it is likely that this will likely result in a slight reduction in road maintenance standards from 2017 onwards.
- Provide for renewed infrastructure and access standards that meet the demands and expectations of the community in a financially sustainable environment.
- Maintain integration and functionality of local roads with state roads to ensure continuity of freight networks.
- Require service standards for newly created infrastructure acquired through land development and residential expansion to be complimentary with existing asset standards, again noting the reduction in funding available from 2017 for asset maintenance across all classes of assets.

Quality

Roads assets will be maintained in a reasonably usable condition. Defects found or reported that are outside our service standard will be repaired. See our maintenance response service levels for further details.

Function

Our intent is that a 'fit for purpose' road network is maintained in partnership with other levels of government and stakeholders.

Road asset attributes will be maintained (subject to funding) at a safe level and associated signage and equipment be provided as needed to ensure public safety. We need to ensure the key functional objectives are met, i.e.:

- Council will endeavour to provide free flowing and unrestricted travel between destinations and locations to all recognised modes of transport and associated user groups.
- Ensure accidents are minimised and only minor consequences occur from accidents.

The main functional consequence of the road network not being able to cater for free flowing and unrestricted traffic is delays to industry and the local community and this is likely to decrease quality of life and increase the potential for accidents to occur through driver frustration. As a consequence this is likely to impose additional financial and social burdens onto the community.

Safety

We inspect all roads regularly and prioritise and repair defects in accordance with our inspection schedule to ensure they are safe.

The Next Steps

The actions resulting from this Infrastructure and Asset Management Plan are:

- Ensure the road network is regularly inspected and any defects rectified in a timely manner to ensure public safety and to mitigate against public risk.
- To provide for renewal of assets and the creation of new road assets and associated infrastructure in a sustainable manner.
- To plan for growth of the City in a manner that is supported by a fit for purpose road network.

2. INTRODUCTION

2.1 Background

This Infrastructure and Asset Management Plan is designed to:

- Provide responsive management of assets (and services provided from assets);
- Ensure compliance with regulatory requirements;
- Assist in securing funding required to provide agreed levels of service.

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

- City of Mount Gambier Community Plan
- City of Mount Gambier Long Term Financial Plan
- Council's Development Plan
- Council's Business Plan and Annual Budget

This Infrastructure and Asset Management Plan covers the entire road network and associated traffic control devices within the City of Mount Gambier including local roads, collector roads and boundary roads. Whilst it references and links to assets owned by both state and federal governments, it does not include these assets in the Plan.

Table 2.1. Assets covered by this Plan
(as at 1st July 2016)

Asset category	Dimension	Replacement Value (\$)
Road surface (seal)	2,085,610m ²	\$14,700,088
Road pavement	2,321,188m ²	\$44,426,254
Road sub pavement	248,733m ²	\$843,792
Kerb and channel	447,636m	\$28,203,197
Constructed footpaths	308,627m ²	\$14,277,284
Drainage	465 bores, silt pits & associated pipes	\$6,952,500
Carparks	72,940m ²	\$9,955,125
Traffic Lights	18 sets	\$2,008,500
TOTAL		\$121,366,740

Key stakeholders in the preparation and implementation of this Infrastructure and Asset Management Plan are:

- City of Mount Gambier
- Ratepayers and tenants
- Transport Industry
- District Council of Grant and its community
- Tourism sector
- Business Sector
- State and Federal Government (funding partners and regulators)

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. Council has acquired infrastructure assets by 'purchase', by contract, construction by Council staff and by transfer of assets constructed by developers and others.

Council's goal in managing infrastructure assets is to meet the agreed level of service in the most cost effective manner for present and future consumers. The key elements of infrastructure asset management are:

- Taking a life cycle approach,
- Developing cost-effective management strategies for the long term,
- Providing a defined level of service and monitoring performance,
- Understanding and meeting the demands of growth through demand management and infrastructure investment,
- Managing risks associated with asset failures,
- Sustainable use of physical resources,
- Continuous improvement in asset management practices.¹

This Infrastructure and Asset Management Plan is prepared under the direction of Council's strategic objective:

Mount Gambier, a perfectly centred place where people aspire to live, work, visit and invest (City of Mount Gambier Community Plan – The Futures Paper 2016-2020)

Accordingly, this Infrastructure and Asset Management Plan has been prepared in line with Council's Community Plan – The Futures Paper 2016-2020, and the objectives contained within the Plan.

2.3 Plan Framework

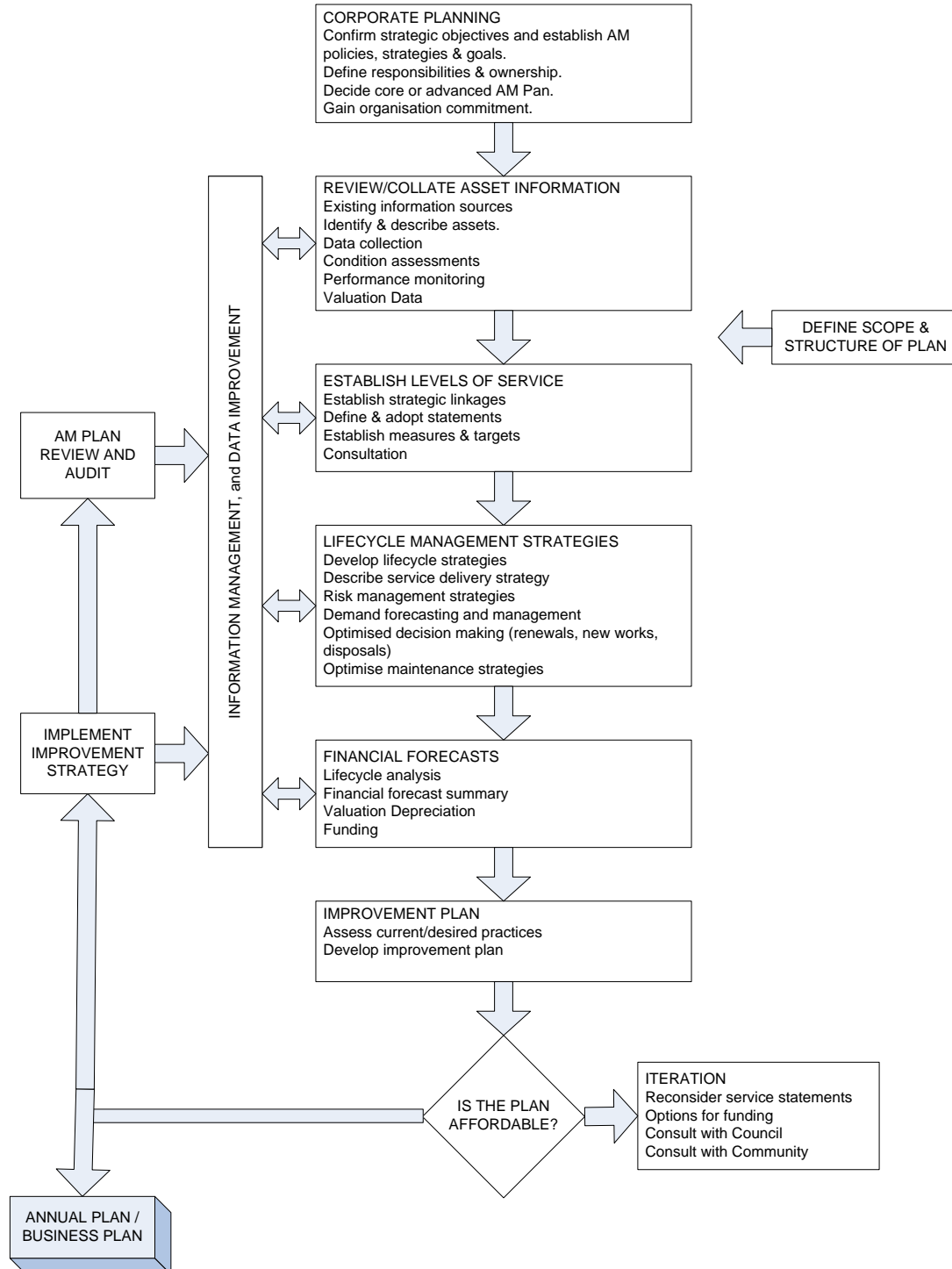
Key elements of the Plan are

- Levels of service – specifies the services and levels of service to be provided by Council.
- Future demand – how this will impact on future service delivery and how this is to be met.
- Life cycle management – how Council will manage its existing and future assets to provide the required services.
- Financial summary – what funds are required to provide the required services.
- Asset management practices.
- Monitoring – how the Plan will be monitored to ensure it is meeting Council's objectives.
- Asset management improvement plan.

¹ IIMM 2006 Sec 1.1.3, p 1.3

A road map for preparing an Infrastructure and Asset Management Plan is shown below.

Road Map for preparing an Infrastructure and Asset Management Plan
 Source: IIMM Fig 1.5.1, p 1.11

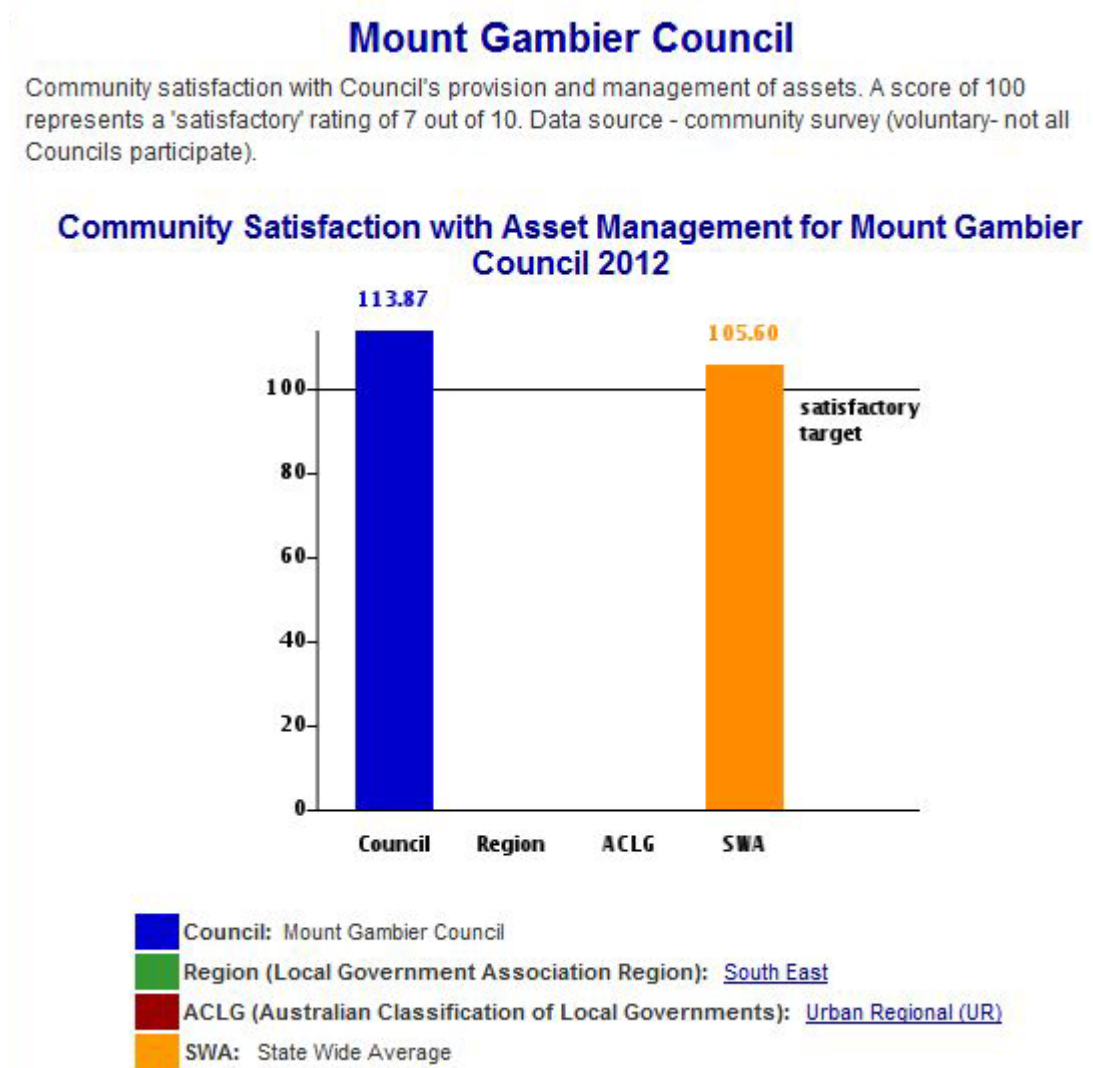


3. LEVELS OF SERVICE

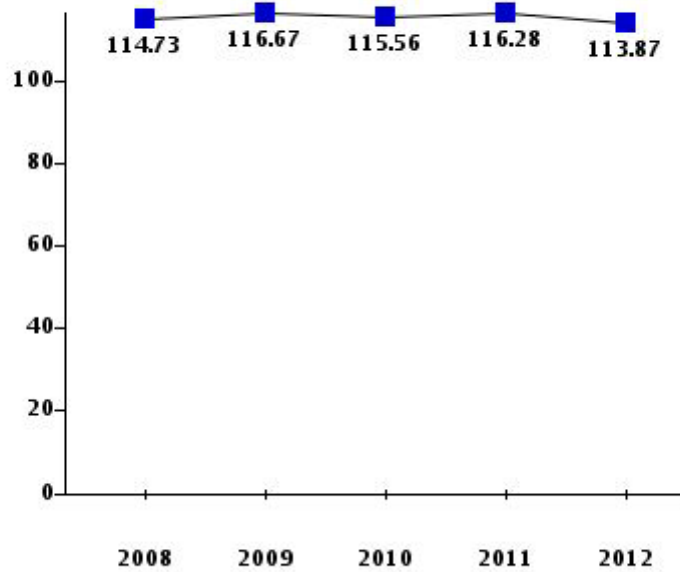
3.1 Customer Research and Expectations

Council participates in the Local Government Association of South Australia Comparative Performance Measures in Local Government Customer Satisfaction survey. This telephone survey polls a sample of residents on their level of satisfaction with Council's services. Unfortunately this survey has not been carried out in recent years and Council is left with assessing anecdotal evidence to gauge how effective the road management task has been completed, however, the most recent customer satisfaction survey reported:

Table 3.1. Community Satisfaction Survey Levels



Variation in Community Satisfaction with Asset Management for Previous 5 Years



Council's anecdotal evidence (primarily based on the number of complaints received) suggests that current service levels are seen by the community as acceptable.

3.2 Legislative Requirements

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

Table 3.2. Legislative Requirements

Legislation	Requirement
Local Government Act	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.
Road Traffic Act	Provides Councils the power to install, maintain, operate, alter or remove traffic control devices on roads under their care and control

3.3 Current Levels of Service

Council has defined service levels in two terms.

Community Levels of Service relate to how the community receives the service in terms of safety, quality, function, quantity, reliability, responsiveness, cost/efficiency and legislative compliance.

Supporting the community service levels are operational or technical measures of performance developed to ensure that the minimum community levels of service are met. These technical measures relate to service criteria such as:

<p>Service Criteria</p> <ul style="list-style-type: none"> Quality Quantity Availability Safety 	<p>Technical measures may relate to</p> <ul style="list-style-type: none"> Smoothness of roads Area of parks per resident Distance from a dwelling to a sealed road Number of injury accidents
--	---

Council's current service levels are detailed in Table 3.3.

Table 3.3. Current Service Levels

Key Performance Measure	Level of Service	Performance Measure Process	Performance Target	Current Performance
COMMUNITY LEVELS OF SERVICE				
Quality	Provide a smooth ride on a surface that is clearly delineated	Customer service requests	Less than 5 per month per road segment	Less than 5 per month on any one segment
Function	Ensure that the road meets user requirements for travel time and availability	Customer complaints relating to travel time and availability	Less than 2 per month	Less than 2 per month
Safety	Provide safe suitable roads free from hazards	Number of injury accidents	Less than 3 per annum per location	Less than 3 per annum per location
TECHNICAL LEVELS OF SERVICE				
Condition	Carry out routine maintenance on potholes	Number of pothole complaints	Less than 5 per month	Less than 5 per month
Accessibility	Provide unrestricted access to residential, commercial and industrial sectors of the City	Limit property access from road works and maintenance works	Less than 60 minutes for minor maintenance works. Less than 2 days for major reconstruction works	70 minutes for minor works and 2.5 days for major works
Safety	Provide clear safety signage and line marking	Annual defect and condition survey	Less than 5% of signs defective. Less than 5% of line marking not clearly visible	Less than 5% of signs defective 10% of line marking not clearly visible

3.4 Desired Levels of Service

At present, indications of desired levels of service are obtained from various sources including the LGASA Customer Satisfaction survey, residents' feedback to Councillors and staff, service requests and correspondence. Council has still to quantify all desired levels of service. This will be incorporated in future revisions of this Infrastructure and Asset Management Plan.

4. FUTURE DEMAND

4.1 Demand Forecast

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

Demand factor trends and impacts on service delivery are summarised in Table 4.1.

Table 4.1. Demand Factors, Projections and Impact on Services

Demand factor	Present position	Projection	Impact on services
Population	26,348 (30 th June 2015)	1% growth	Moderate residential growth. Increased traffic on collector roads
Demographics	Ageing population	2 to 3% growth	Increase in aged care accommodation
Climate change	Substantial bicycle network	Significant growth in bicycle network and associated infrastructure	Increase in bike paths, dedicated bus lanes and crossing facilities in road network
	Adequate public transport systems	Increased public transport	

4.2 Changes in Technology

Technology changes are forecast to have an effect on the delivery of services covered by this Plan (eg. road reconstruction methodology), and will also likely improve customer feedback and advice to Council (eg. Web based communication to Council, smart phone technology).

4.3 Demand Management Plan

Demand for new services will be managed through a combination of managing existing assets, upgrading of existing assets and providing new assets to meet demand and demand management. Demand management practices include non-asset solutions, insuring against risks and managing failures.

Opportunities identified to date for demand management are shown in Table 4.3. Further opportunities will be developed in future revisions of this Infrastructure and Asset Management Plan.

Table 4.3. Demand Management Plan Summary

Service Activity	Demand Management Plan
Traffic control devices (roundabouts, signals)	Revise traffic management plan every 5 years (major revision), and annual update
Improve boundary roads and collector roads	Continue with boundary roads program Upgrade designated collector roads

4.4 New Assets from Growth

Where new assets are required for growth, these will be constructed by developers and donated to Council or constructed / acquired by Council. The growth financial model forecasts asset values acquired from developers or constructed by Council over the next 20 years.

Acquiring these new assets will commit Council to fund ongoing operations and maintenance costs for the period that the service provided from the assets is required and also capital renewal costs for assets required beyond their useful life. These future costs are identified and considered in developing forecasts of future operating and maintenance costs.

5. LIFECYCLE MANAGEMENT PLAN

The Lifecycle Management Plan details how 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 Infrastructure and Asset Management Plan are shown below:

- Road sub pavement
- Road surface (seal)
- Constructed footpaths / nature strips
- Traffic control devices
- Road pavement
- Kerb and channel
- Drainage
- Carparks

Generally the road assets mentioned above are in good condition although asset ages vary considerably across the City. Council has limited data on the age profile of its asset stock but does have up to date condition data for most road asset categories. Council uses the condition data to set future works programs and also to prepare risk control strategies.

Note: Comprehensive condition or age data currently does not exist for Council's drainage assets but is currently being developed.

5.1.2 Asset Capacity and Performance

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

5.1.3 Asset Condition

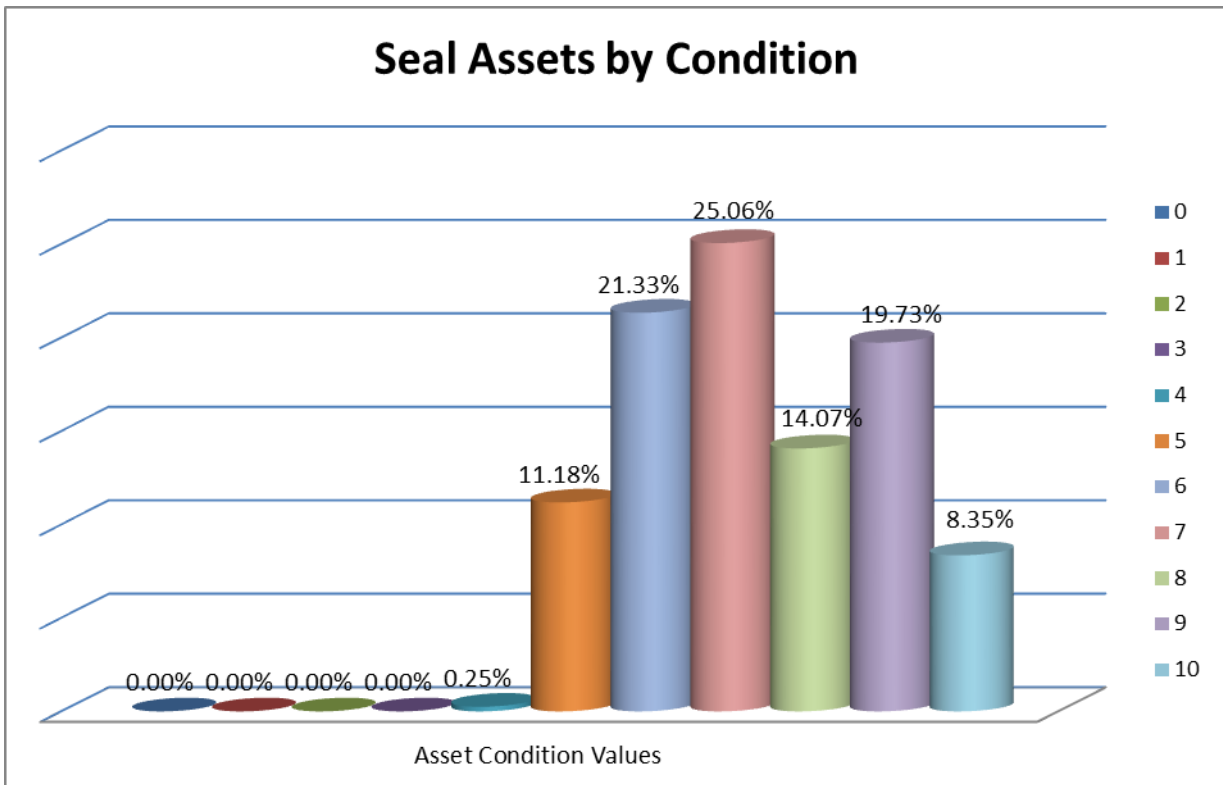
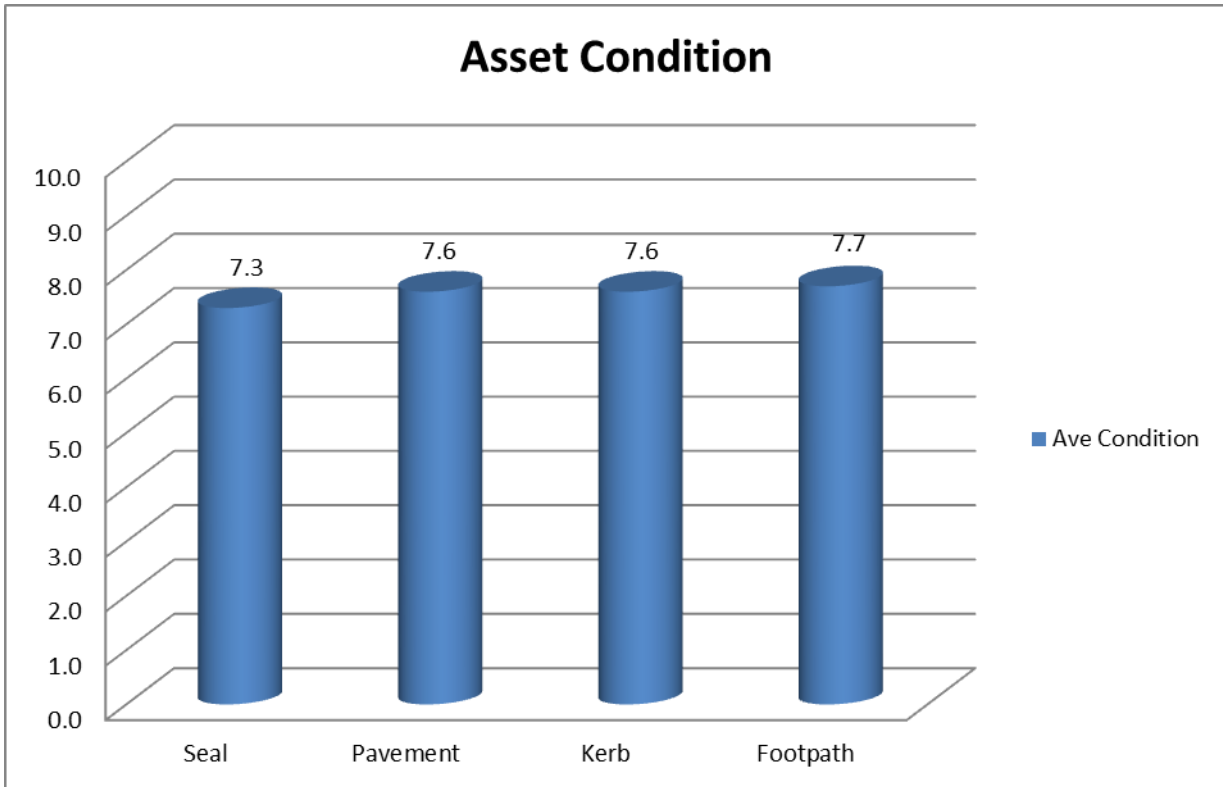
The condition profile of Council's road assets is shown below.

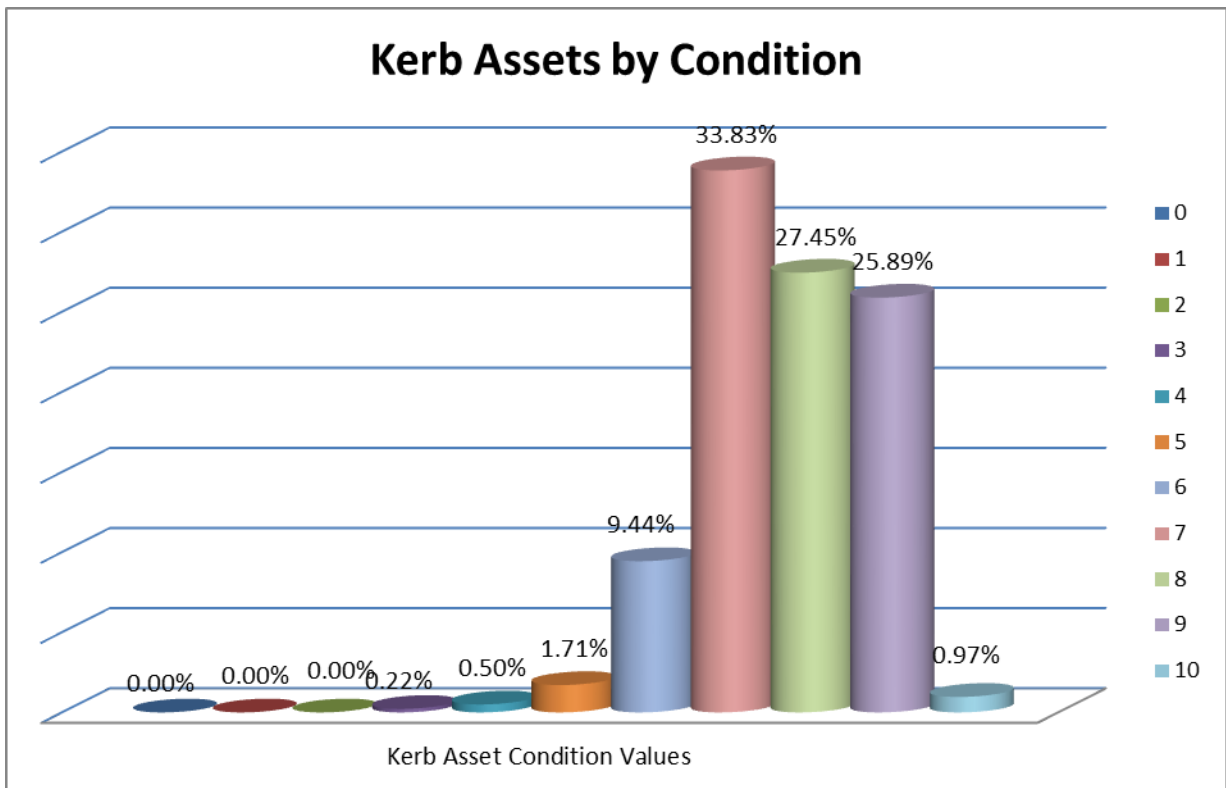
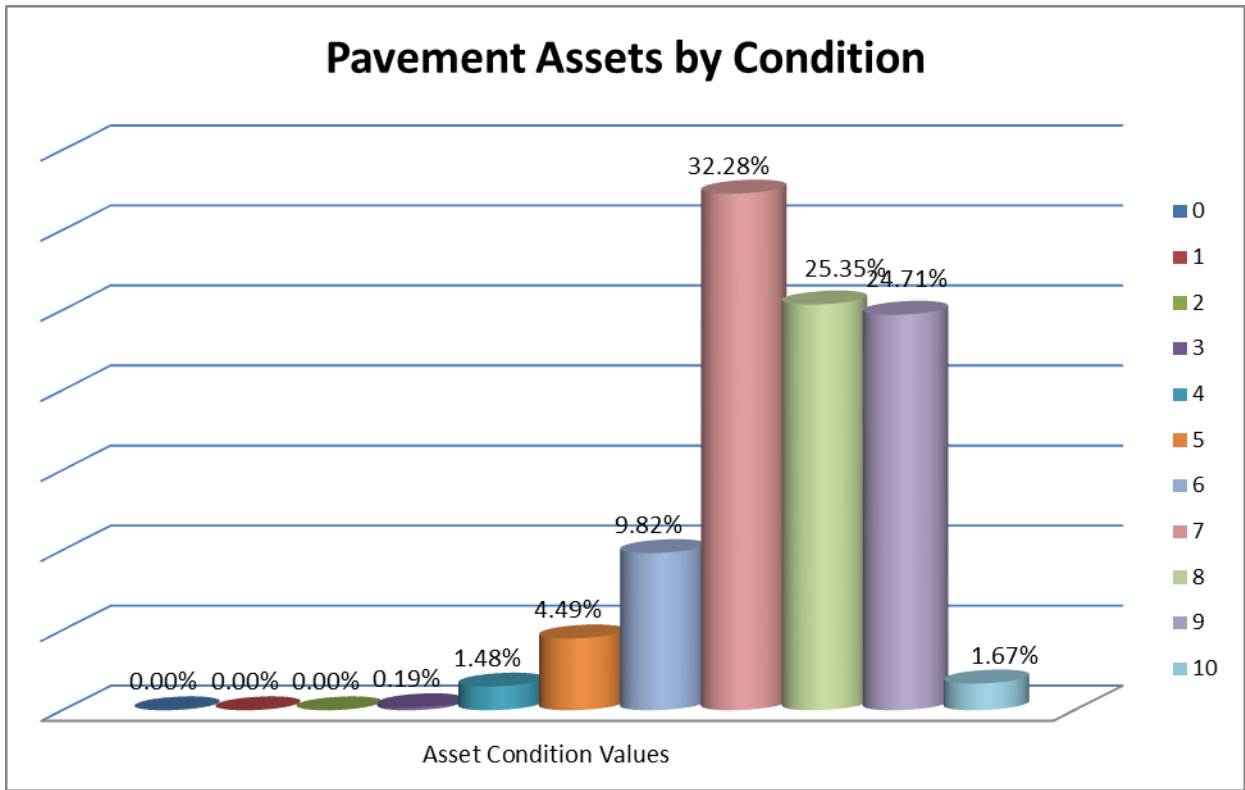
Condition is measured using a 0 – 10 rating system.²

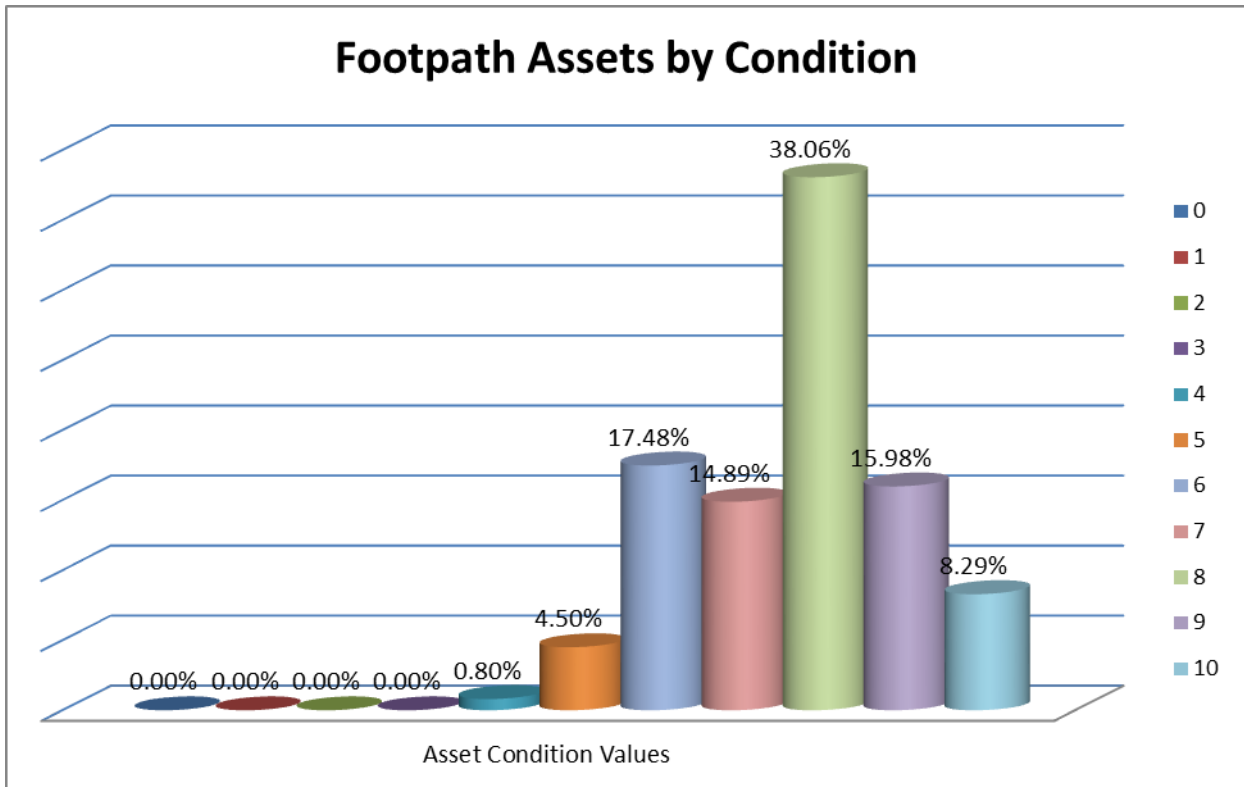
Rating	Description of Condition
10	Excellent condition: Only planned maintenance required. New asset.
8	Very good: Minor maintenance required plus planned maintenance.
6	Good: Significant maintenance required.
5	Average condition. Significant maintenance required.
4	Failing: Significant renewal/upgrade required (start of rapid deterioration).
<2	Poor: Unserviceable. Asset renewal or disposal required.

² IIMM 2006, Appendix B, p B:1-3 ('cyclic' modified to 'planned')

Fig 3. Asset Condition Profile







5.1.4 Asset Valuations

The value of assets as at 1st July 2016 covered by this Infrastructure and Asset Management Plan is summarised below. Assets are valued at green field rates.

- Current Replacement Cost \$121,366,740
- Net Fair Value \$93,556,943
- Annual Depreciation \$2,728,501
- Accumulated Depreciation \$27,809,797

Council’s sustainability reporting reports the rate of annual asset consumption and compares this to asset renewal and asset upgrade and expansion.

Asset Consumption	2.25%	$(\$2,728,501 \div \$121,366,740 \times 100)$
Asset Renewal	1.98%	$(\$2,399,300 \div \$121,366,740 \times 100)$ includes \$500,000 for CBD renewal 2016/17

If CBD renewal does not occur as per the LTFP then the asset renewal calculation for 2017 becomes
\$1,899,300 / \$121,366,740 x 100 = 1.56%

This has significant implications for long term asset management

Annual Upgrade/expansion	0.50%	<i>(assets account for land transferred as a result of land divisions and also note the general 'slowing down' of the economy and very low levels of residential development in Mount Gambier in the past 3 years.)</i>
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5.2 Risk Management Plan

An assessment of risks associated with service delivery from infrastructure assets identifies critical risks to 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.

Council's risk assessment for roads did not uncover any risks in either the high or very high risk category with only 6 out of 11 identified risks as being in the medium risk category. The remaining 5 risks were considered low. (Refer to Council's Risk Management Plan for details)

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. This function is essential to the long term sustainability of the network and is one of several maintenance functions **should receive priority in Council's annual budget.**

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). MMS activities include inspection, assessing the condition against failure/breakdown experience, prioritising, scheduling, actioning the work and reporting what was done to develop a maintenance history and improve maintenance and service delivery performance.

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

Maintenance expenditure trends are shown in Table 5.3.1 and Fig 4

TABLE 5.3.1

REACTIVE MAINTENANCE EXPENDITURE TRENDS

** 10 year forecasts for future funding are based on a 2.5% growth rate **

Account	Description	Actuals							Budget 2016/17	Draft 2017/18 Budget	Forward Works Program						
		2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16			2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
6420.0900	Drainage - General Maintenance	\$111,959.16	\$321,143.51	\$121,981.45	\$65,394.96	\$116,902.74	\$110,266.63	\$95,136.35	\$120,000.00	\$110,000.00	\$112,750.00	\$115,568.75	\$118,457.97	\$121,419.42	\$124,454.90	\$127,566.28	\$130,755.43
6730.1230	Footpath - General Maintenance	\$289,493.68	\$298,748.75	\$287,169.94	\$172,551.39	\$307,086.82	\$282,319.99	\$320,005.76	\$340,000.00	\$310,000.00	\$317,750.00	\$325,693.75	\$333,836.09	\$342,182.00	\$350,736.55	\$359,504.96	\$368,492.58
6730.1231	Kerb / Watertable - General Maintenance	\$21,393.07	\$20,545.27	\$27,372.03	\$19,093.05	\$28,339.04	\$24,333.20	\$46,541.37	\$30,000.00	\$30,000.00	\$30,750.00	\$31,518.75	\$32,306.72	\$33,114.39	\$33,942.25	\$34,790.80	\$35,660.57
6720.1220	Bridge - Maintenance	\$0.00	\$7,887.62	\$241.41	\$0.00	\$0.00	\$0.00	\$0.00	\$1,000.00	\$1,000.00	\$1,025.00	\$1,050.63	\$1,076.89	\$1,103.81	\$1,131.41	\$1,159.69	\$1,188.69
6740.1240	Roads - General Maintenance	\$113,081.01	\$149,331.29	\$131,645.85	\$107,523.05	\$159,387.61	\$168,498.11	\$148,990.18	\$168,000.00	\$160,000.00	\$164,000.00	\$168,100.00	\$172,302.50	\$176,610.06	\$181,025.31	\$185,550.95	\$190,189.72
6135.0600	Carpark Maintenance	\$3,164.88	\$16,091.78	\$4,420.25	\$4,585.40	\$5,581.08	\$7,618.53	\$4,869.27	\$7,000.00	\$7,000.00	\$7,175.00	\$7,354.38	\$7,538.23	\$7,726.69	\$7,919.86	\$8,117.85	\$8,320.80
6780.1280	Traffic - General Maintenance (70%)	\$76,436.86	\$117,021.64	\$97,504.93	\$69,930.40	\$113,701.67	\$90,619.29	\$153,272.93	\$112,000.00	\$98,000.00	\$100,450.00	\$102,961.25	\$105,535.28	\$108,173.66	\$110,878.00	\$113,649.95	\$116,491.20
TOTALS		\$615,528.66	\$930,769.86	\$670,335.86	\$439,078.25	\$730,998.96	\$683,655.75	\$768,815.86	\$778,000.00	\$716,000.00	\$733,900.00	\$752,247.50	\$771,053.69	\$790,330.03	\$810,088.28	\$830,340.49	\$851,099.00

BUDGET ALLOCATIONS																	
Account	Description	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
6420.0900	Drainage - General Maintenance	\$110,000.00	\$194,000.00	\$140,000.00	\$145,000.00	\$145,000.00	\$150,000.00	\$132,000.00	\$120,000.00								
6730.1230	Footpath - General Maintenance	\$260,000.00	\$280,000.00	\$290,000.00	\$300,000.00	\$310,000.00	\$320,000.00	\$299,000.00	\$340,000.00								
6730.1231	Kerb / Watertable - General Maintenance	\$19,000.00	\$19,000.00	\$20,000.00	\$18,000.00	\$22,000.00	\$23,000.00	\$15,000.00	\$30,000.00								
6720.1220	Bridge - Maintenance	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$2,000.00	\$1,000.00								
6740.1240	Roads - General Maintenance	\$140,000.00	\$140,000.00	\$140,000.00	\$160,000.00	\$170,000.00	\$175,000.00	\$168,000.00	\$168,000.00								
6135.0600	Carpark Maintenance	\$30,000.00	\$20,000.00	\$10,000.00	\$8,000.00	\$8,000.00	\$8,000.00	\$7,000.00	\$7,000.00								
6780.1280	Traffic - General Maintenance (70%)	\$112,000.00	\$103,600.00	\$108,500.00	\$112,000.00	\$115,500.00	\$119,000.00	\$116,200.00	\$112,000.00								
TOTALS		\$673,000.00	\$758,600.00	\$710,500.00	\$745,000.00	\$772,500.00	\$797,000.00	\$739,200.00	\$778,000.00								

PLANNED MAINTENANCE EXPENDITURE TRENDS

*** 10 year forecasts for future funding are based on a 2.5% growth rate ***

Account	Description	Actuals							Budget 2016/17	Draft 2017/18 Budget	Forward Works Program						
		2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16			2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
6420.0901	Settlement Pit Maintenance	\$12,784.71	\$136.58	\$28,015.59	\$13,532.15	\$6,658.08	\$9,659.95	\$17,957.37	\$10,000.00	\$10,000.00	\$10,250.00	\$10,506.25	\$10,768.91	\$11,038.13	\$11,314.08	\$11,596.93	\$11,886.86
6420.0902	Stormwater Monitoring	\$6,664.50	\$6,882.00	\$7,087.50	\$7,317.50	\$7,535.00	\$7,740.50	\$8,116.00	\$10,000.00	\$10,000.00	\$10,250.00	\$10,506.25	\$10,768.91	\$11,038.13	\$11,314.08	\$11,596.93	\$11,886.86
6780.1280	Planned Traffic Management	\$32,758.66	\$50,152.14	\$41,787.83	\$29,970.18	\$48,729.30	\$38,836.84	\$65,688.40	\$48,000.00	\$42,000.00	\$43,050.00	\$44,126.25	\$45,229.41	\$46,360.14	\$47,519.14	\$48,707.12	\$49,924.80
TOTALS		\$119,218.73	\$154,150.50	\$147,478.00	\$114,842.83	\$114,869.58	\$56,237.29	\$91,761.77	\$68,000.00	\$62,000.00	\$63,550.00	\$65,138.75	\$66,767.22	\$68,436.40	\$70,147.31	\$71,900.99	\$73,698.52

Account	Description	Budget Allocations																
		2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	
6420.0901	Settlement Pit Maintenance	\$14,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00									
6420.0902	Stormwater Monitoring	\$18,000.00	\$13,000.00	\$16,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$15,000.00	\$10,000.00									
6780.1280	Planned Traffic Management	\$48,000.00	\$44,400.00	\$46,500.00	\$48,000.00	\$49,500.00	\$51,000.00	\$49,800.00	\$48,000.00									
TOTALS		\$159,000.00	\$123,400.00	\$151,500.00	\$163,000.00	\$166,500.00	\$71,000.00	\$74,800.00	\$68,000.00									

Current maintenance expenditure levels are considered to be marginally below adequate to maintain current service levels. Future maintenance and asset renewal expenditure is expected to grow at a rate of 2.5% per annum. Future revision of this Infrastructure and Asset Management Plan will include linking required maintenance expenditures with required service levels as a means to further manage assets in a sustainable manner.

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

5.3.2 Standards and Specifications

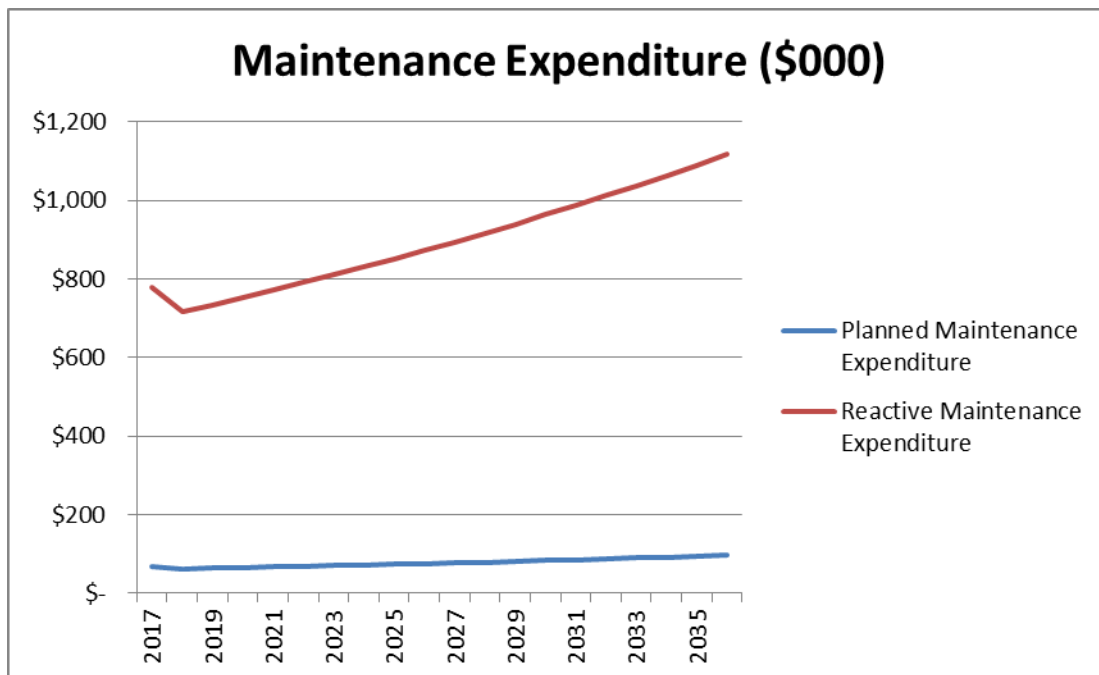
Maintenance work is carried out in accordance with the following Standards and Specifications:

- Current Australian and Industry Standards
- Council Reinstatement Policy (revised 2014)
- Land Division Policy
- Civil Contractors Federation Guidelines
- Work Health Safety Act and Regulations

5.3.3 Summary of Future Maintenance Expenditures

Future maintenance expenditure is forecast to trend in line with the value of the asset stock as shown in Fig 4. Note that all costs are shown in 2016 dollar values.

Fig 4. Maintenance Expenditure



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

Maintenance is funded from Council's operating budget. This is further discussed in Section 6.2.

5.4 Renewal / Replacement Plan

Renewal 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 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 through the *'Renewal Model'*. Candidate proposals are inspected to verify accuracy of remaining life estimate 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 based on asset condition and is then adopted ultimately by Council.

Renewal will be undertaken using 'low-cost' renewal methods where practical. The aim of 'low-cost' renewals is to restore the service potential or future economic benefits of the asset by renewing the assets at a cost less than replacement cost.

Examples of low cost renewal include footpath asphalt overlay versus complete reconstruction of a bitumen footpath. This method provides a better level of service than currently available at a smaller renewal cost than complete reconstruction, and also provides an extended asset life which matches current service levels.

5.4.2 Renewal Standards

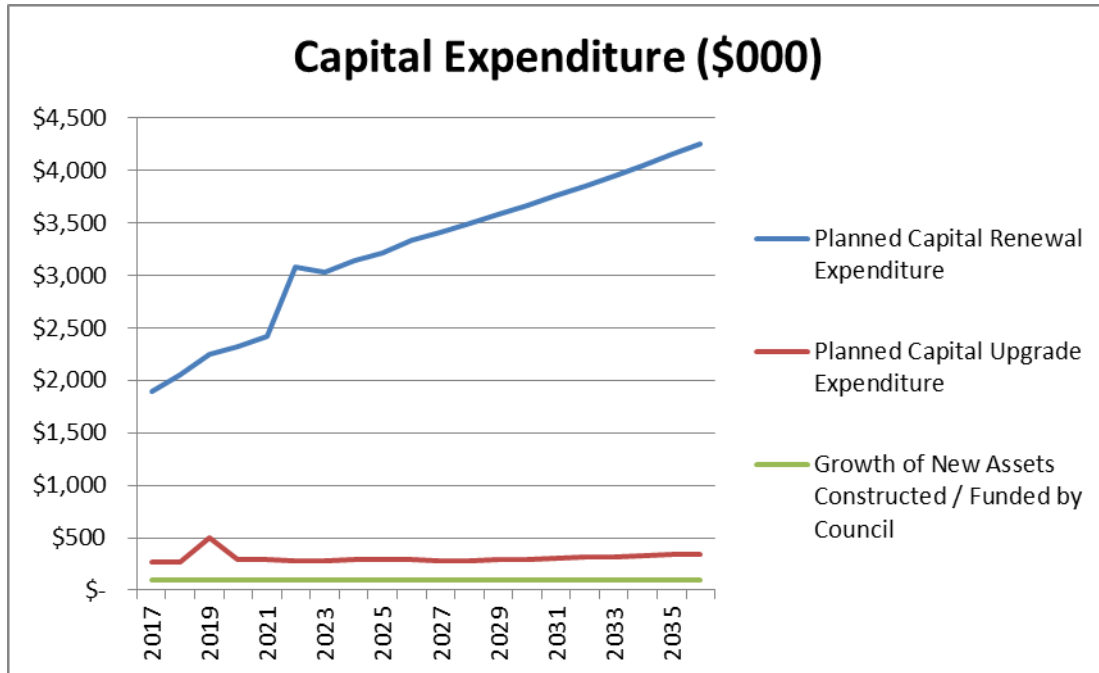
Renewal work is carried out in accordance with the following Standards and Specifications.

- Current Australian and Industry Standards
- Council's Reinstatement Policy (reviewed 2014)
- Council's Land Division Policy
- Civil Contractors Federation Guidelines
- Work Health Safety Act and Regulations

5.4.3 Summary of Future Renewal Expenditure

Projected future renewal expenditures are forecast to increase over time as the asset stock ages. The costs are summarised in Fig 5. Note that all costs are shown in 2016 dollar values.

Fig 5. Projected Capital Expenditure



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

Renewals are to be funded from Council’s capital works program and grants where available. This is further discussed in Section 6.2.

Note: The flat line trend for “Growth of new assets” depicted by the green line above, means that Council does not currently have enough detailed information about future costs associated with new assets. Over time it is expected that as more detailed information becomes available, this line will change to reflect these costs more accurately.

5.5 Creation / Acquisition / Upgrade Plan

New works are those works that create a new asset that did not previously exist, or works which upgrade or improve an existing asset beyond its existing capacity. They may result from growth, social or environmental needs. Assets may also be acquired at no cost to the 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 community requests, proposals identified by strategic plans or partnerships with other organisations. Candidate proposals are inspected to verify need and to develop a preliminary renewal estimate. Verified proposals are ranked by priority and available funds and scheduled in future works programmes. Council ultimately makes the decision on priority ranking of new assets based on this information.

5.5.2 Standards and Specifications

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

5.5.3 Summary of Future Upgrade / New Assets Expenditure

New assets and services are to be funded from Council's capital works program and grants where available. This is further discussed in Section 6.2.

5.6 Disposal Plan

Currently there are no assets in the road category that are listed for disposal.

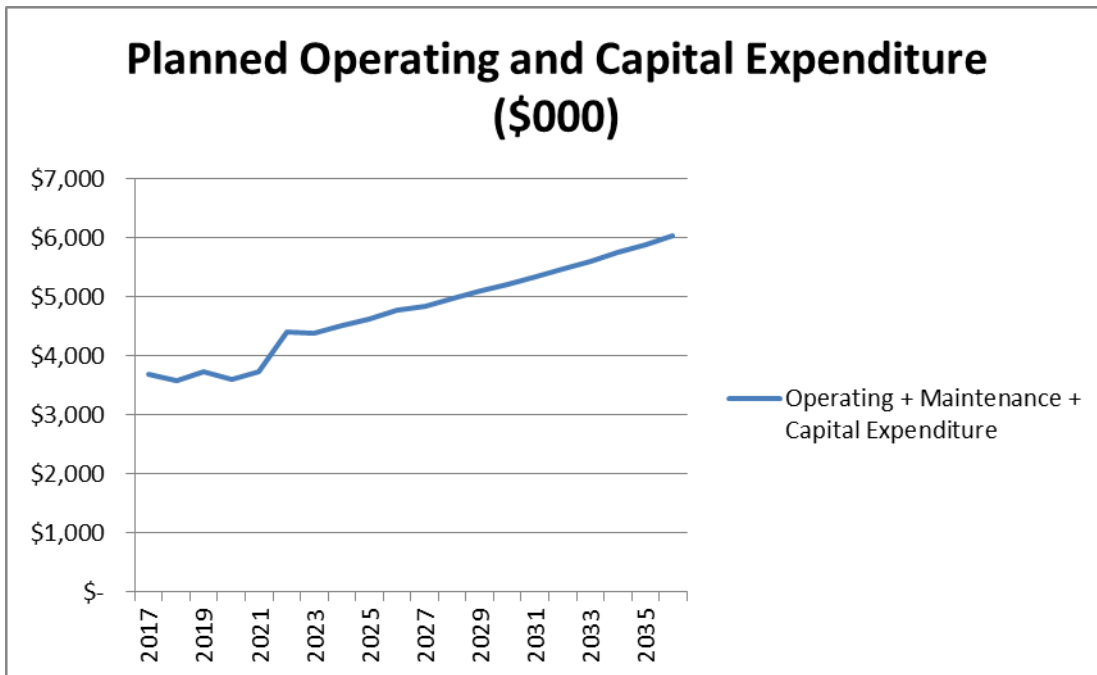
6. FINANCIAL SUMMARY

This section contains the financial requirements resulting from all the information presented in the previous sections of this Infrastructure and 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 6 for planned operating (operations and maintenance) and capital expenditure (renewal and upgrade/expansion/new assets).

Fig 6. Planned Operating and Capital Expenditure



Note that all costs are shown in current 2016 dollar values.

6.1.1 Sustainability of Service Delivery

There are two key indicators for financial sustainability that have been considered in the analysis of the services provided by this asset category, these being long term life cycle costs and medium term costs over the 10 year financial planning period.

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 longest asset life. Life cycle costs include maintenance and asset consumption (depreciation expense). The annual life cycle cost for the services covered in this Infrastructure and Asset Management Plan is \$2,728,501.

Life cycle costs can be compared to life cycle expenditure to give an indicator of sustainability in service provision. Life cycle expenditure includes maintenance plus capital renewal expenditure. Life cycle expenditure will vary depending on the timing of asset renewals. The life cycle expenditure at the start of the plan (2017) is \$2,399,300. **However, after 2017 (conclusion of CBD Renewal Project) Council will need to sustain forecast levels of expenditure on asset renewal as indicated in Table 6.1.1 to ensure the cumulative gap remains close to zero.**

It should also be noted that in the 2016/17 Budget Council made a decision to fund asset replacement at 80% of the required target amount (due to the overall excellent quality of the road network and lack of identified projects that need replacement in the short term). This reduced asset replacement target is planned to remain for 5 years and this will generate a funding gap. Council will need to closely monitor the size of the gap and be prepared to allocate additional funding in future years to respond to the prevailing road conditions. This is a short term strategy that delays expenditure, freeing up funds for other projects in the short term, but it does not eliminate the future need to expend these funds.

A gap between life cycle costs and life cycle expenditure gives an indication as to whether present consumers are paying their share of the assets they are consuming each year. The purpose of this Infrastructure and Asset Management Plan is to identify levels of service that the community needs and can afford and develop the necessary long term financial plans to provide the service in a sustainable manner.

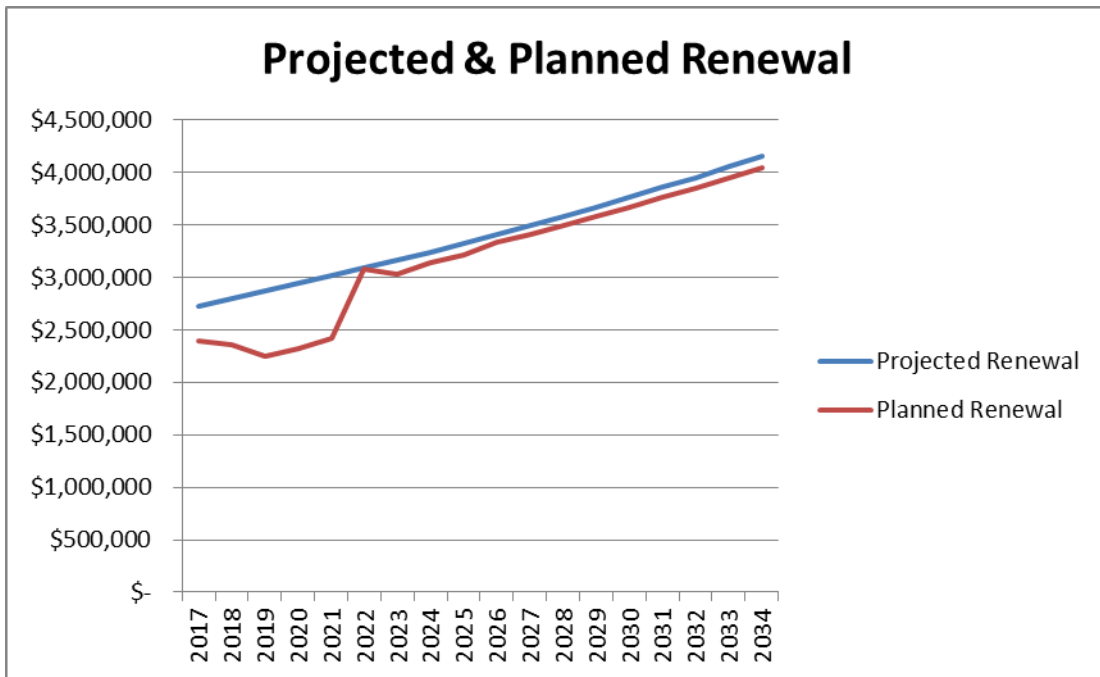
Medium term – 10 Year Financial Planning Period

This Infrastructure and Asset Management Plan identifies the estimated maintenance and capital expenditures required to provide an agreed level of service to the community over a 20 year period for input into a 10 year financial plan and funding plan to provide the service in a sustainable manner.

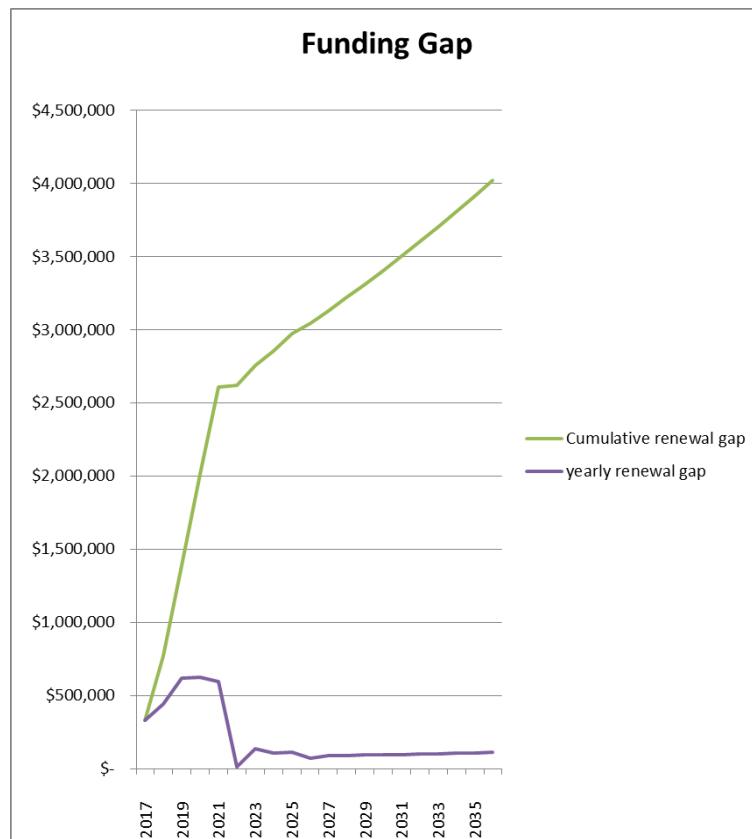
This may be compared to existing or planned expenditures in the 20 year period to identify any gap. In a core Infrastructure and Asset Management Plan, a gap is generally due to increasing asset renewals or underfunding of capital renewal programs.

Fig 7 shows the projected asset renewals in the 20 year planning period from the asset register. The projected asset renewals are compared to planned renewal expenditure in the capital works program and capital renewal expenditure in year 1 of the planning period as shown in Fig 7. Table 6.1.1 shows the annual and cumulative funding gap between projected and planned renewals.

Fig 7. Projected and Planned Renewals and Expenditure Gap



This chart shows the difference between Projected funding (funding required to maintain assets to agreed service levels) and Planned funding (actual funding from council budget and forward works programs). Ideally, there should be no funding gap between these two lines.



This chart shows the difference (in \$'s) between Projected and Planned funding. This difference is referred to as the "Yearly renewal gap". The cumulative renewal gap is the accumulation of yearly renewal gaps and is equal to the total amount of shortfall in funding at any point in time.

Table 6.1.1 Projected and Planned Renewals and Expenditure Gap

Year	Projected Renewals	Planned Renewals	Renewal Funding Gap	Cumulative Gap
2017	\$2,728,501	\$2,399,300	\$329,201	\$329,201
2018	\$2,796,714	\$2,353,300	\$443,414	\$772,615
2019	\$2,866,631	\$2,250,300	\$616,331	\$1,388,946
2020	\$2,938,297	\$2,316,000	\$622,297	\$2,011,243
2021	\$3,011,755	\$2,417,000	\$594,755	\$2,605,998
2022	\$3,087,048	\$3,074,000	\$13,048	\$2,619,046
2023	\$3,164,225	\$3,031,000	\$133,225	\$2,752,271
2024	\$3,243,330	\$3,139,000	\$104,330	\$2,856,601
2025	\$3,324,414	\$3,210,000	\$114,414	\$2,971,015
2026	\$3,407,524	\$3,338,000	\$69,524	\$3,040,539
2027	\$3,492,712	\$3,405,000	\$87,712	\$3,128,251
2028	\$3,580,030	\$3,490,125	\$89,905	\$3,218,156
2029	\$3,669,531	\$3,577,378	\$92,152	\$3,310,308
2030	\$3,761,269	\$3,666,813	\$94,456	\$3,404,764
2031	\$3,855,300	\$3,758,483	\$96,818	\$3,501,582
2032	\$3,951,683	\$3,852,445	\$99,238	\$3,600,820
2033	\$4,050,475	\$3,948,756	\$101,719	\$3,702,539
2034	\$4,151,737	\$4,047,475	\$104,262	\$3,806,801
2035	\$4,255,530	\$4,148,662	\$106,869	\$3,913,670
2036	\$4,361,919	\$4,252,378	\$109,540	\$4,023,210

Average Funding Gap = \$211,489

Note: Projected renewals (based on assumed inflation figures) assumed to increase in value by 2.5% per annum until 2036

Planned renewals (based on assumed Budget figures) assumed to increase by 2.5%

100% asset renewal funding to be restored in 2021/22

Providing services in a sustainable manner will require matching of projected asset renewals to meet agreed service levels with planned capital works programs and available revenue.

A gap between projected asset renewal expenditure and actual (planned) expenditure indicates that further work is required to manage required service levels and future planned expenditure funding needs to eliminate any funding gap.

Council will manage the 'gap' by developing this Infrastructure and Asset Management Plan to provide guidance on future service levels and resources required to provide these services, and to ensure that the gap does not grow to an uncontrollable level.

6.2 Funding Strategy

Projected expenditure identified in Section 6.1 is to be funded from Council's operating and capital budgets. The funding strategy is detailed in the Council's Long Term Financial Plan.

Achieving the financial strategy will require a commitment from Council in further budget considerations to make up the gap between projected and planned expenditure. As can be seen in Table 6.1 and the chart of Projected Renewals V's Planned Renewals, if this gap isn't managed then over a 20 year period there is likely to be a cumulative shortfall in funds of \$4,023,210. This table can be used to determine what effect future budget adjustments are likely to have on long term asset sustainability and also what injection of funds will be required to close the gap.

Council is relying on external funding sources such as Special Local Roads programs and Roads to Recovery programs to maintain this gap to a manageable level, otherwise there will be increased pressure on rate revenue to maintain asset stocks at current service levels.

6.3 Valuation Forecasts

Asset values are forecast to increase as additional assets are added to the asset stock from construction and acquisition by Council and from assets constructed by land developers and others. Depreciation expense values are forecast in line with asset values based on asset condition depreciation and will be adjusted in accordance with asset revaluations which will occur from time to time taking into account condition assessments and additional asset age data.

The depreciated replacement cost (current replacement cost less accumulated depreciation) 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. However, it is expected that limited asset disposal will occur in the road asset category.

6.4 Key Assumptions made in Financial Forecasts

This section details the key assumptions made in presenting the information contained in this Infrastructure and Asset Management Plan and in preparing forecasts of required operating and capital expenditure and asset values. 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 Infrastructure and Asset Management Plan are:

- Asset condition and age has been determined based on engineering knowledge, best available data and previous asset deterioration rates. Some asset categories such as road seals have more accurate data available than other asset categories such as drainage infrastructure. However, current asset age can be reasonably determined by reverse engineering from total asset life and current asset condition. Example, a road seal is rated as being in a condition of 7/10, and has a total life of say 15 years. Therefore the asset still has 70% of its useful life remaining and 30% of its life has been used. The current asset age is therefore 30% of 15 years, i.e. 5 years old.
- Straight line depreciation of asset condition has been assumed but in reality the asset condition tends to drop off significantly towards the end of the asset life. This sharp drop off will impact on funding requirements needed to maintain asset stock in a reasonable condition and therefore Council's approach is to renew assets before this sharp drop in asset condition. i.e. Council intends to continue with its asset renewal plans before assets reach the end of their serviceable life. This Plan includes a residual value of the unit, being set out at a uniform 10% of the replacement value. This assumption reflects that a road asset (albeit in poor condition) is still useful.

- This Infrastructure and Asset Management Plan was put together based on the information at hand at the time of preparing the Plan. As asset information is updated and more accurate information becomes available, the Infrastructure and Asset Management Plan will become more accurate. However, Council has very detailed asset information on most asset categories covered under this Plan and is therefore confident that this Plan accurately reflects Council's current asset position.
- It is assumed at this point in time that there will be minimal effect to asset service and delivery from future technological changes.
- With respect to Table 6.1.1 projected renewals are assumed to increase in value at a rate of 2.5% per annum. Any variation from 2.5% can affect the cumulative gap significantly (the data presented in this report is very sensitive to this assumption).

Accuracy of future financial forecasts may be improved in future revisions of this Infrastructure and Asset Management Plan by the following actions:

- More accurate data on actual asset life for all asset categories.
- Full cost attribution on future works programs through more sophisticated accounting measures.
- Improved data collection and condition assessment of assets and recording of this data in AIM program.



Road and Drainage Infrastructure and Asset Management Plan

First year of expenditure projections 2017 (yr ending 30 June 2017)

Road Asset values as at 1st July 2016

Current replacement cost	\$121,367 (000)
Net Fair Value	\$93,557 (000)
Annual depreciation expense	\$2,728 (000)

Calc CRC from Asset Register
 \$0 (000)
 This is a check for you.

Operations and Maintenance Costs from New Assets

Additional operations costs	0.06%
Additional maintenance	0.70%
Additional depreciation	2.25%

% of asset value	0.06%
	0.70%
	2.25%

Existing %ages calculated from data in worksheet	0.06%
	0.70%
	2.25%

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

20 Year Expenditure Projections Note: Enter all values in current 2016 values

Year ending June	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	
	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	
Operations																					
Management	2.5%	\$61.8	\$63.3	\$64.9	\$66.6	\$68.2	\$69.9	\$71.7	\$73.5	\$75.3	\$77.2	\$79.1	\$81.1	\$83.1	\$85.2	\$87.3	\$89.5	\$91.7	\$94.0	\$96.4	\$98.8
AM systems	2.5%	\$13.2	\$13.5	\$13.9	\$14.2	\$14.6	\$14.9	\$15.3	\$15.7	\$16.1	\$16.5	\$16.9	\$17.3	\$17.8	\$18.2	\$18.7	\$19.1	\$19.6	\$20.1	\$20.6	\$21.1
Total operations		\$75.0	\$76.9	\$78.8	\$80.8	\$82.8	\$84.9	\$87.0	\$89.2	\$91.4	\$93.7	\$96.0	\$98.4	\$100.9	\$103.4	\$106.0	\$108.6	\$111.3	\$114.1	\$117.0	\$119.9
Maintenance																					
Reactive maintenance	2.5%	\$778.0	\$716.0	\$733.9	\$752.2	\$771.1	\$790.3	\$810.1	\$830.3	\$851.1	\$872.4	\$894.2	\$916.5	\$939.5	\$962.9	\$987.0	\$1,011.7	\$1,037.0	\$1,062.9	\$1,089.5	\$1,116.7
Planned maintenance	2.5%	\$68.0	\$62.0	\$63.6	\$65.1	\$66.8	\$68.4	\$70.1	\$71.9	\$73.7	\$75.5	\$77.4	\$79.4	\$81.3	\$83.4	\$85.5	\$87.6	\$89.8	\$92.0	\$94.3	\$96.7
Total maintenance		\$846.0	\$778.0	\$797.5	\$817.4	\$837.8	\$858.8	\$880.2	\$902.2	\$924.8	\$947.9	\$971.6	\$995.9	\$1,020.8	\$1,046.3	\$1,072.5	\$1,099.3	\$1,126.8	\$1,154.9	\$1,183.8	\$1,213.4
Capital																					
Planned Renewal	2.5%	\$1,899.3	\$2,053.3	\$2,250.3	\$2,316.0	\$2,417.0	\$3,074.0	\$3,031.0	\$3,139.0	\$3,210.0	\$3,338.0	\$3,405.0	\$3,490.1	\$3,577.4	\$3,666.8	\$3,758.5	\$3,852.4	\$3,948.8	\$4,047.5	\$4,148.7	\$4,252.4
CBD Redevelopment		\$500.0	\$300.0																		
Planned New	2.5%	\$273.0	\$272.0	\$498.0	\$289.0	\$287.0	\$283.0	\$285.0	\$289.0	\$288.0	\$297.0	\$277.0	\$283.9	\$291.0	\$298.3	\$305.8	\$313.4	\$321.2	\$329.3	\$337.5	\$345.9
Growth Assets Const/Funded by Council		\$100.0	\$100.0	\$100.0	\$100.0	\$100.0	\$100.0	\$100.0	\$100.0	\$100.0	\$100.0	\$100.0	\$100.0	\$100.0	\$100.0	\$100.0	\$100.0	\$100.0	\$100.0	\$100.0	\$100.0
Total Planned Upgrade/New		\$2,772.3	\$2,725.3	\$2,848.3	\$2,705.0	\$2,804.0	\$3,457.0	\$3,416.0	\$3,528.0	\$3,598.0	\$3,735.0	\$3,782.0	\$3,874.1	\$3,968.4	\$4,065.1	\$4,164.2	\$4,265.8	\$4,370.0	\$4,476.7	\$4,586.2	\$4,698.3
		\$3,693.3	\$3,580.2	\$3,724.5	\$3,603.2	\$3,724.6	\$4,400.6	\$4,383.2	\$4,519.4	\$4,614.2	\$4,776.6	\$4,849.6	\$4,968.4	\$5,090.1	\$5,214.8	\$5,342.7	\$5,473.8	\$5,608.1	\$5,745.8	\$5,887.0	\$6,031.6
Planned Disposals		\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0

PART 2 – BUILDINGS AND STRUCTURES INFRASTRUCTURE

1. SUMMARY

A summary of the buildings and structure assets (as valued by Opteon (South Australia) Pty Ltd unless otherwise specified):

- 430 Land Parcels - \$50,541,140
- 102 Buildings - \$87,178,098
- 228 Structures - \$19,701,314
- 1 Landfill - \$3,985,197 (valued by Council)

What does it Cost?

The total dollar value of the annual consumption of this category is \$2,777,222 (i.e. annual depreciation expense). Council's goal for annual expenditure is to match this value so that no gap exists between the annual depreciation cost and the actual budget expenditure.

Plans for the Future

Council plans to operate, maintain and enhance the building and structures assets to achieve the following strategic objectives:

- Ensure the building and structure assets are maintained at a safe and functional standard as set out in this Infrastructure and Asset Management Plan.
- Provide for renewed infrastructure and access standards that meet the demands and expectations of the community and applicable legislation (eg. Disability Discrimination Act requirements), this may include demolition of any assets deemed to be redundant.
- Critically review building assets stock to ensure it is still required and review appropriate service standards.
- Negotiate with lease holders to ensure that individual lease holders are responsible for the ongoing maintenance and upkeep of the building asset.

Quality

Building and structure assets will be maintained in a reasonably usable condition. Defects found or reported that are outside our service standard will be repaired. See our maintenance response service levels for further details.

Function

It is Council's intention to maintain an appropriate number of buildings and structures to meet the needs of the community and to maintain these buildings and structures in a manner to ensure they are fit for purpose. This Plan recognises the clear need for Council to direct its available funds towards asset maintenance and asset renewal rather than the provision of new or expanded buildings and structures, the notable exception being the necessary expansion and systematic "close" of cells of the Caroline Landfill.

Given the large gap between asset renewal and asset consumption (expressed as annual depreciation costs) Council must seriously look at its total number of building and structures assets and determine what is an appropriate and affordable amount to retain. Community groups and lease holders will need to become more responsible for building maintenance and renewal in the future.

Safety

At the time of preparation of this Plan Council has condition rated all of its building and structures assets identifying and prioritising works to ensure buildings and structures are safe in the first instance and then remain fit for purpose for the remainder of their economic life.

The Next Steps

The actions resulting from this Infrastructure and Asset Management Plan are:

- Ensure the building and structure assets are regularly inspected and any defects rectified in a timely manner to ensure public safety and to mitigate against public risk.
- To provide for renewal of assets and the creation of new building and structure assets and associated infrastructure in a sustainable manner.
- To plan for growth of the City in a manner that is supported by fit for purpose building and structure assets.

2. INTRODUCTION

2.1 Background

This part of the Infrastructure and Asset Management Plan is to be read with the following associated planning documents:

- City of Mount Gambier Community Plan
- City of Mount Gambier Long Term Financial Plan
- Council's Development Plan
- Council's Business Plan and Annual Budget
- Building Code of Australia (BCA) and National Construction Code
- Disability Discrimination Act requirements (DDA)

This Infrastructure and Asset Management Plan covers all Council owned buildings and structures within the City of Mount Gambier as indicated in the following summary:

**Table 2.1. Building and Structures covered by this Plan
(as at 1st July 2016)**

Asset Category	Number of	Replacement Value (\$)
Land Parcels	430	\$50,541,140
Buildings	102	\$87,178,098
Structures	228	\$19,701,314
TOTAL		\$157,420,552

Note: Land is not depreciated but does have to be maintained

Asset Category	Number of	Net Fair Value (\$)
Caroline Landfill Existing	1	\$1,283,185
Caroline Landfill Cell 3	1	\$602,012
Caroline Landfill Cap Cell 3	1	\$2,100,000
TOTAL		\$3,985,197

Key stakeholders in the preparation and implementation of this Infrastructure and Asset Management Plan are:

- City of Mount Gambier
- Ratepayers and tenants
- Sporting and Community Groups
- License and Leaseholders
- Tourism sector
- Business Sector
- State and Federal Government (funding partners and regulators)

2.2 Goals and Objectives of Asset Management

The Council exists to provide services to its community. Some of these services are provided by building and structure assets.

Council's goal in managing building and structure assets is to meet the agreed level of service in the most cost effective manner for present and future consumers. The key elements of building and structure asset management are:

- Taking a life cycle approach,
- Developing cost-effective management strategies for the long term,
- Providing a defined level of service and monitoring performance,
- Understanding and meeting the demands of growth through demand management and infrastructure investment,
- Managing risks associated with asset failures,
- Sustainable use of physical resources,
- Continuous improvement in asset management practices.³

This Infrastructure and Asset Management Plan is prepared under the direction of Council's strategic objective:

Mount Gambier, a perfectly centred place where people aspire to live, work, visit and invest (City of Mount Gambier Community Plan – The Futures Paper 2016-2020)

Accordingly, this Infrastructure and Asset Management Plan has been prepared in line with Council's Community Plan and the objectives contained within the Plan.

2.3 Plan Framework

Key elements of the Plan are

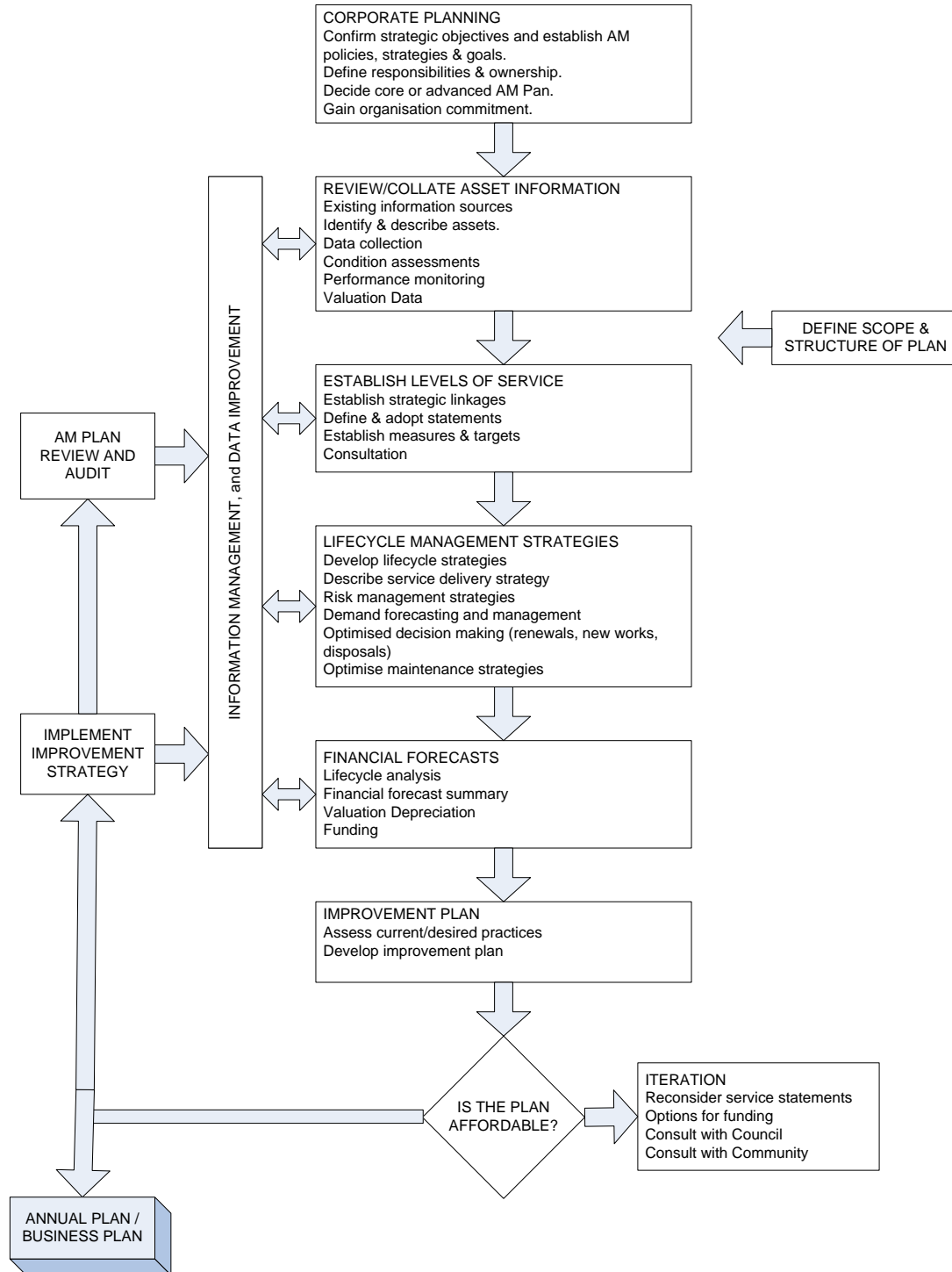
- Levels of service – specifies the services and levels of service to be provided by Council.
- Future demand – how this will impact on future service delivery and how this is to be met.
- Life cycle management – how Council will manage its existing and future assets to provide the required services.
- Financial summary – what funds are required to provide the required services.
- Asset management practices.
- Monitoring – how the Plan will be monitored to ensure it is meeting Council's objectives.
- Asset management improvement plan.

³ IIMM 2006 Sec 1.1.3, p 1.3

A road map for preparing an Infrastructure and Asset Management Plan is shown below.

Road Map for preparing an Infrastructure and Asset Management Plan

Source: IIMM Fig 1.5.1, p 1.11

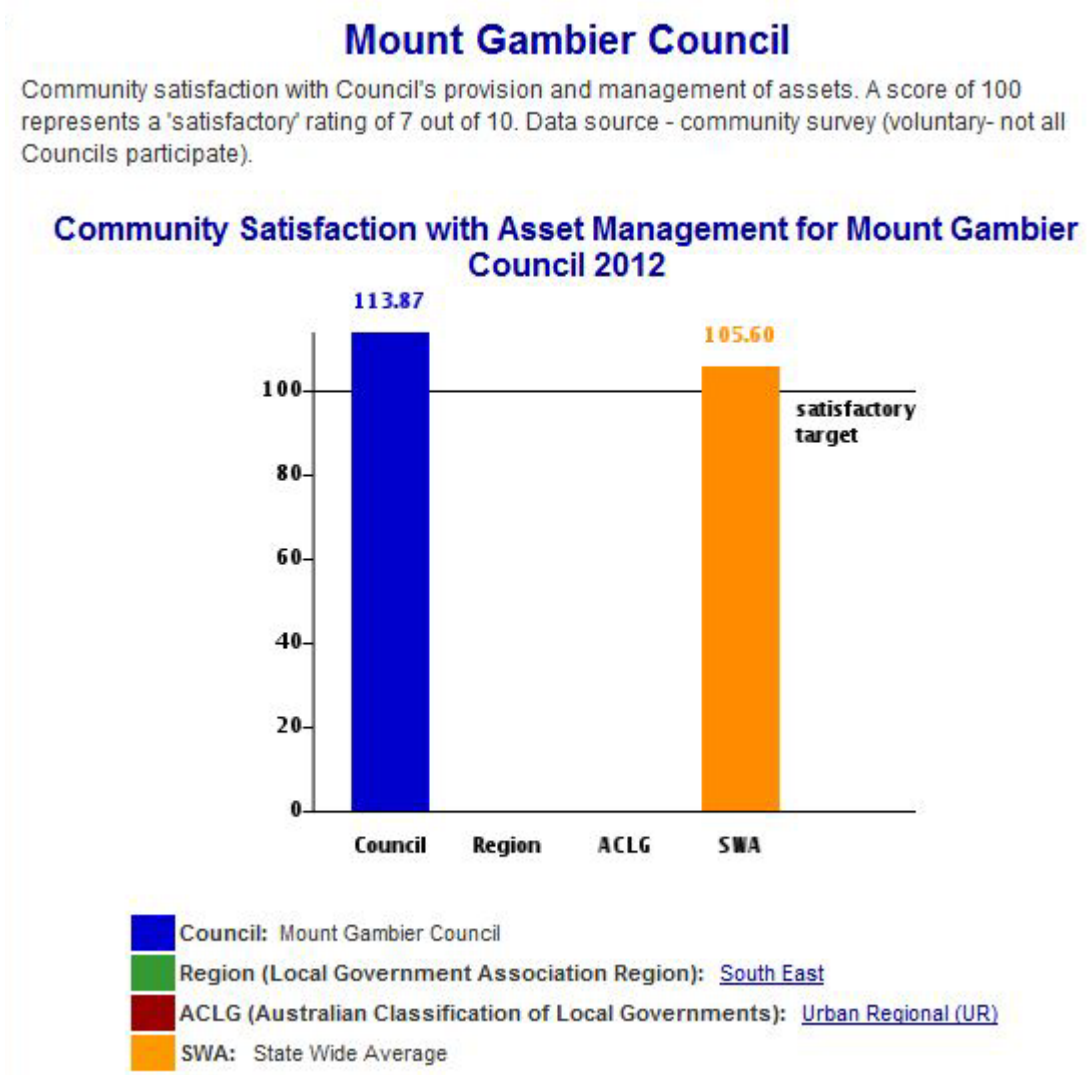


3. LEVELS OF SERVICE

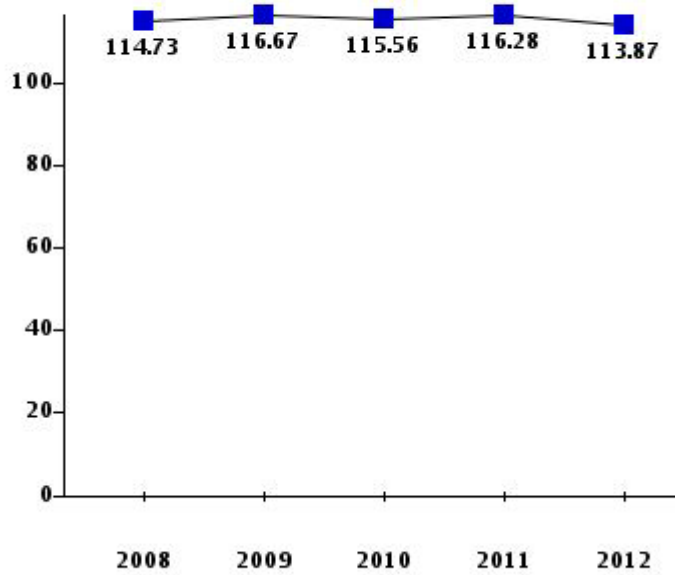
3.1 Customer Research and Expectations

Council participates in the Local Government Association of South Australia Comparative Performance Measures in Local Government Customer Satisfaction survey. This telephone survey polls a sample of residents on their level of satisfaction with Council's services. Unfortunately this survey has not been carried out in recent years and Council is left with assessing anecdotal evidence to gauge how effective the buildings and structures management task has been completed, however the most recent customer satisfaction survey reported:

Table 3.1. Community Satisfaction Survey Levels



Variation in Community Satisfaction with Asset Management for Previous 5 Years



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

3.2 Legislative Requirements

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

Table 3.2. Legislative Requirements

Legislation	Requirement
Local Government Act	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.
Development Act and subordinate legislation (example Development Plan and Building Code)	Provides Council with the legislative framework to guide the preservation and enhancement of its buildings and structures.
Environment Protection Act	To guide the development and operation of Caroline Landfill

3.3 Current Levels of Service

Council has defined service levels in two terms.

Community Levels of Service relate to how the community receives the service in terms of safety, quality, function, quantity, reliability, responsiveness, cost/efficiency and legislative compliance.

Supporting the community service levels are operational or technical measures of performance developed to ensure that the minimum community levels of service are met. These technical measures relate to service criteria such as:

Service Criteria	Technical measures may relate to
Quality	Maintaining the asset condition below Condition Rating 4
Quantity	Sufficient buildings and structures to meet community needs and expectations
Safety	Number of injury incidents

Council's current service levels are detailed in Table 3.3.

Table 3.3. Current Service Levels

Key Performance Measure	Level of Service	Performance Measure Process	Performance Target	Current Performance
COMMUNITY LEVELS OF SERVICE				
Quality	Provide buildings that are fit for habitation	Customer service requests	Less than 2 per month for any particular building or structure	Less than 2 per month for any particular building or structure
Function	Buildings and structures are available for intended use at all times (apart from during times of maintenance)	Customer complaints relating to unavailability of building or structure	Less than 2 per month for any particular building or structure	Less than 2 per month for any particular building or structure
Safety	Provide buildings that comply with the principles of the BCA and DDA	Number of injury incidents relating to health, safety and disability for Council owned buildings and structures	Less than 3 per month per building or structure	Less than 3 per month per building or structure
TECHNICAL LEVELS OF SERVICE				
Condition	Carry out routine maintenance on buildings and structures	Number of complaints relating to minor maintenance matters	Less than 5 per month for any particular building or structure	Less than 5 per month for any particular building or structure
Accessibility	Provide DDA compliance to Council buildings and structures	Review all Council owned buildings for DDA compliance	<ul style="list-style-type: none"> • Council assesses 50 buildings per annum for DDA compliance • Develop and implement annual works program to address identified DDA issues 	Currently not being addressed in any structured manner
Safety	Condition assessment surveys to identify any issue relating to occupier safety	Building and structure condition assessments to be carried out on a one in three year cycle	Identify safety issues are documented and included in works program for the following financial year budget	Issues addressed as they are identified, assessment frequency not currently stipulated

3.4 Desired Levels of Service

At present, indications of desired levels of service are obtained from various sources including the LGASA Customer Satisfaction survey, residents' feedback to Councillors and staff, service requests and correspondence. Council has still to quantify all desired levels of service. This will be incorporated in future revisions of this Infrastructure and Asset Management Plan.

4. FUTURE DEMAND

4.1 Demand Forecast

Factors affecting demand include population change, changes in demographics, seasonal factors, consumer preferences and expectations, economic factors, environmental awareness, changing legislative requirements, risk management practices, etc.

Demand factor trends and impacts on service delivery are summarised in Table 4.1.

Table 4.1. Demand Factors, Projections and Impact on Services

Demand factor	Present position	Projection	Impact on services
Population	26,348 (30 th June 2015)	1% growth	Moderate residential growth. Increased traffic on collector roads
Demographics	Ageing population	2 to 3% growth	Increase in aged care accommodation
Climate change	Substantial bicycle network	Demand for end of trip facilities	Increase in public facilities for end of trip for bike riders
	More demand for indoor recreation facilities	Demand for indoor multi purpose recreation facilities	New indoor recreation facilities
Legislative changes	Compliance with BCA but not 100% compliance with DDA	Increasing legislative and governance demands for full DDA compliance, long term financial sustainability, environmental sustainability for the existing building stock as well as pressure for additional buildings	Demand for retrofitting buildings for DDA, environmental sustainability etc. and impact on financial resources in the provision of new buildings

4.2 Changes in Technology

Technology changes are forecast to have little effect on the delivery of services covered by this Plan, but will likely improve customer feedback and advice to Council (eg. Web based communication to Council, smart phone technology).

Council will face increasing community pressure to retrofit existing buildings with technology that will improve the overall environmental sustainability of a particular building.

4.3 Demand Management Plan

Demand for new services will be managed through a combination of managing existing assets, upgrading of existing assets and providing new assets to meet demand and demand management. Demand management practices include non-asset solutions, insuring against risks and managing failures.

Opportunities identified to date for demand management are shown in Table 4.3. Further opportunities will be developed in future revisions of this Infrastructure and Asset Management Plan.

Table 4.3. Demand Management Plan Summary

Service Activity	Demand Management Plan
DDA provision improvements	To enact works programs developed as part of the accessibility assessment identified in Table 3.3.
Financial and environmental sustainability	Use Triple Bottom Line analysis (refer CHAT) to assess whether any identified project is to proceed. Council will need to ensure that the community is aware of this Plan and understands the long term financial implications.

5. LIFECYCLE MANAGEMENT PLAN

The Lifecycle Management Plan details how 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 Infrastructure and Asset Management Plan are shown below:

- Land Parcels
- Buildings
- Structures
- Caroline Landfill

Generally the building and structure assets mentioned above are in fair to good condition although asset ages vary considerably across the City. Council has limited data on the age profile of its Asset stock but does have an increasing understanding of the condition data for building and structure asset categories. Council uses the condition data to set future works programs and also to prepare risk control strategies.

5.1.2 Asset Capacity and Performance

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

5.1.3 Asset Condition

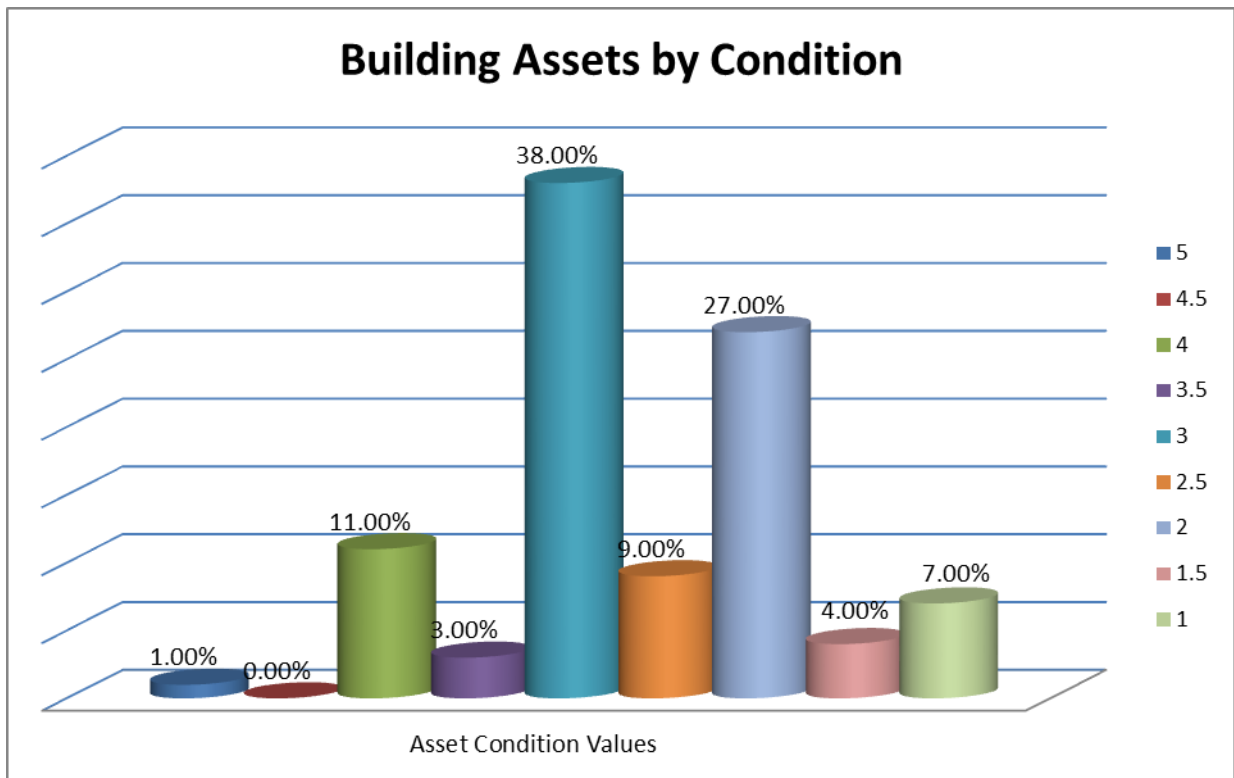
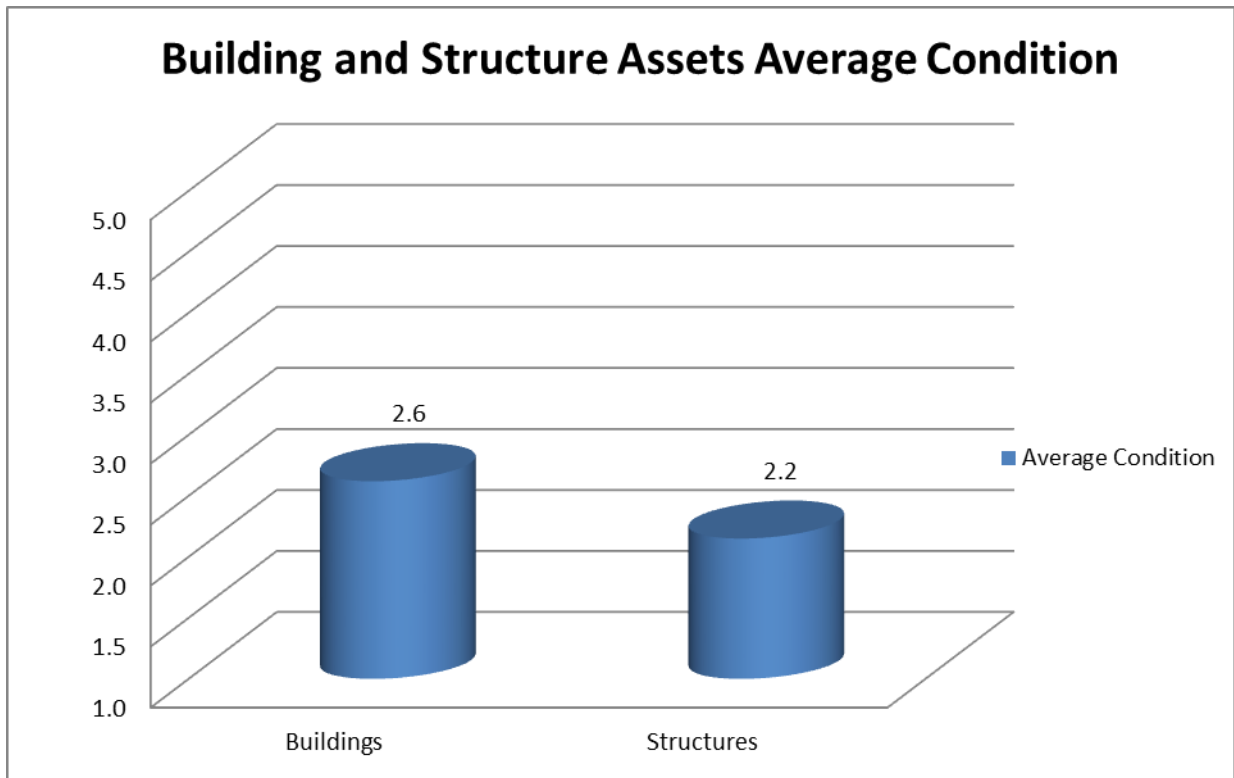
The condition profile of Council's building and structure assets is shown below.

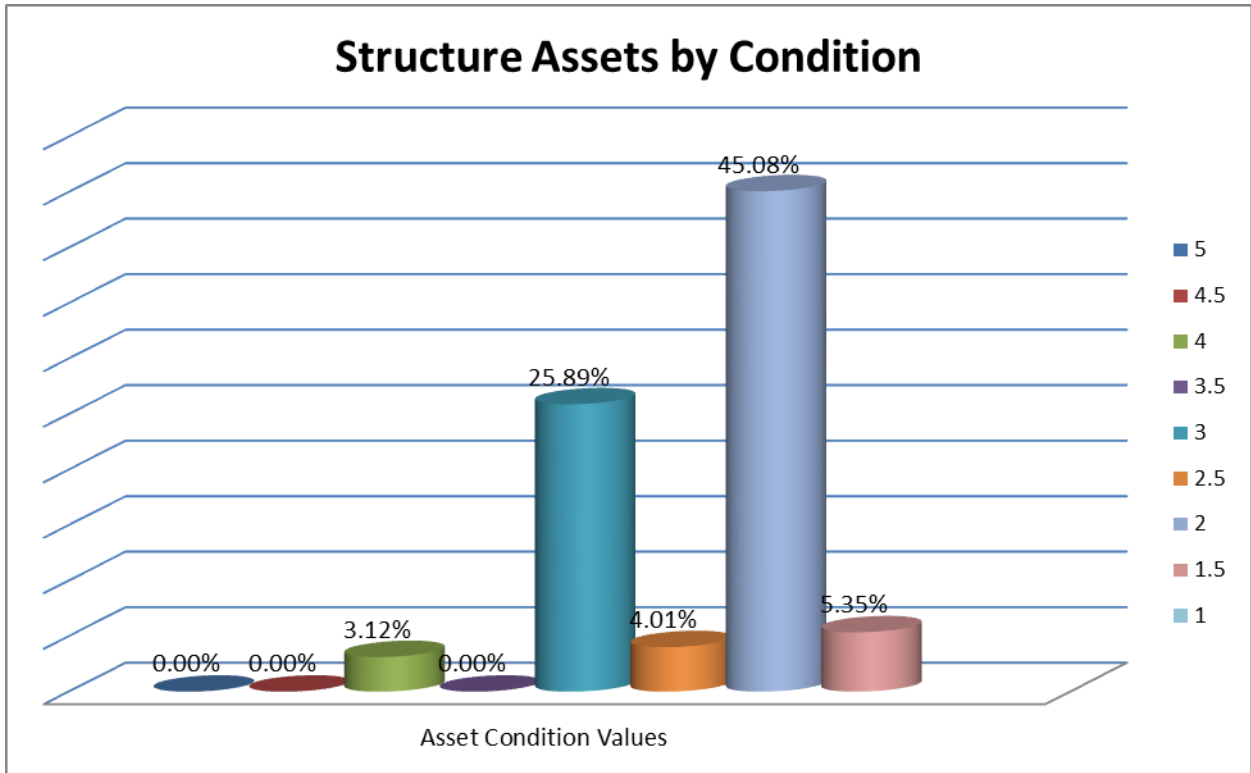
Condition is measured using a 0 – 5 rating system.⁴

Rating	Description of Condition
1	Excellent condition: Only planned maintenance required. New asset
2	Very good: Minor maintenance required plus planned maintenance.
2.5	Good: Significant maintenance required.
3	Average condition. Significant maintenance required
4	Failing: Significant renewal/upgrade required.(start of rapid depreciation)
>4.5	Poor: Unserviceable. Asset renewal or disposal required.

⁴ Opteon (SA) Pty Ltd Condition Assessment Method

Fig 3. Building and Structure Asset Condition Profile





5.1.4 Asset Valuations

The value of Building and Structure (excluding Caroline Landfill) assets as at July 2016 covered by this Infrastructure and Asset Management Plan is summarised below. Building and Structure assets were last re-valued at 1st July 2016 by Opteon (South Australia) Pty Ltd. Assets are valued at green field rates.

- Current Replacement Cost \$106,879,412
- Net Fair Value \$79,500,149
- Annual Depreciation \$2,300,000
- Accumulated Depreciation \$33,224,745

Council’s sustainability reporting reports the rate of annual asset consumption and compares this to asset renewal and asset upgrade and expansion.

Asset Consumption	2.15%	$(\$2,300,000 \div \$106,879,412 \times 100)$
Asset Renewal	1.03%	$(\$1,106,000 \div \$106,879,412 \times 100)$

Note: Asset Renewal includes a one off spend of \$600,000 (which equates to 50% of the total cost) for Civic Centre GRC Panels

This calculation indicates that theoretically Council needs to increase its annual expenditure on building and structure renewal by a factor of:

$2.15 \div 1.03 = 2.1 \text{ times}$

(without the GRC Panels the equation becomes $2.15 \div 0.47 = 4.6 \text{ times}$)

5.2 Risk Management Plan

An assessment of risks associated with service delivery from infrastructure assets identifies critical risks to 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.

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). MMS activities include inspection, assessing the condition against failure/breakdown experience, prioritising, scheduling, actioning the work and reporting what was done to develop a maintenance history and improve maintenance and service delivery performance.

Cyclic maintenance is replacement of higher value components/sub-components of assets that is undertaken on a regular cycle and may include painting, re-roofing, replace occasional window etc.

Maintenance expenditure trends are shown in Fig 1.

Even with the introduction of a dedicated building maintenance crew within the field staff structure (which will be fully operational by 1 July 2017), current and anticipated maintenance expenditure levels are inadequate to maintain current service levels.

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

5.3.2 Standards and Specifications

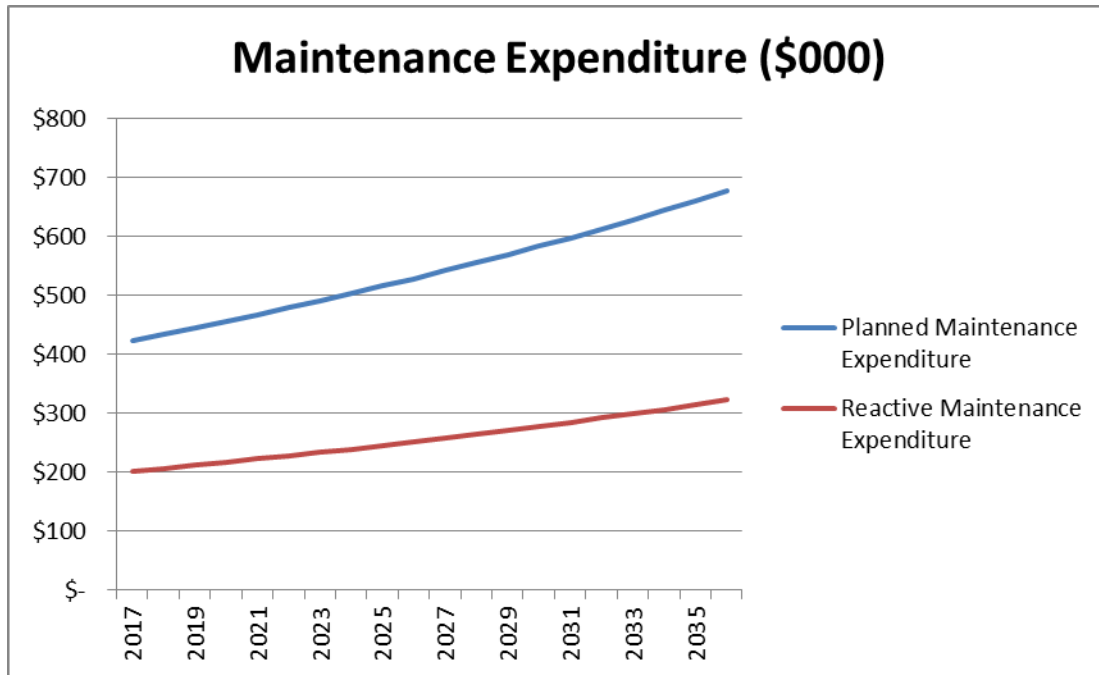
Maintenance work is carried out in accordance with the following Standards and Specifications:

- Current Australian and Industry Standards
- Work Health Safety Act and Regulations

5.3.3 Summary of Future Maintenance Expenditures

Future maintenance expenditure is forecast to trend in line with the value of the asset stock as shown in Fig 1. Note that all costs are shown in current 2016 dollar values.

Fig 1. Maintenance Expenditure



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

Maintenance is funded from Council's operating budget and grants where available. This is further discussed in Section 6.2.

5.4 Renewal / Replacement Plan

Renewal 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 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 through the 'Renewal Model'. Candidate proposals are inspected to verify accuracy of remaining life estimate 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 based on asset condition and is then adopted ultimately by Council.

Renewal will be undertaken using 'low-cost' renewal methods where practical. The aim of 'low-cost' renewals is to restore the service potential or future economic benefits of the asset by renewing the assets at a cost less than replacement cost.

5.4.2 Renewal Standards

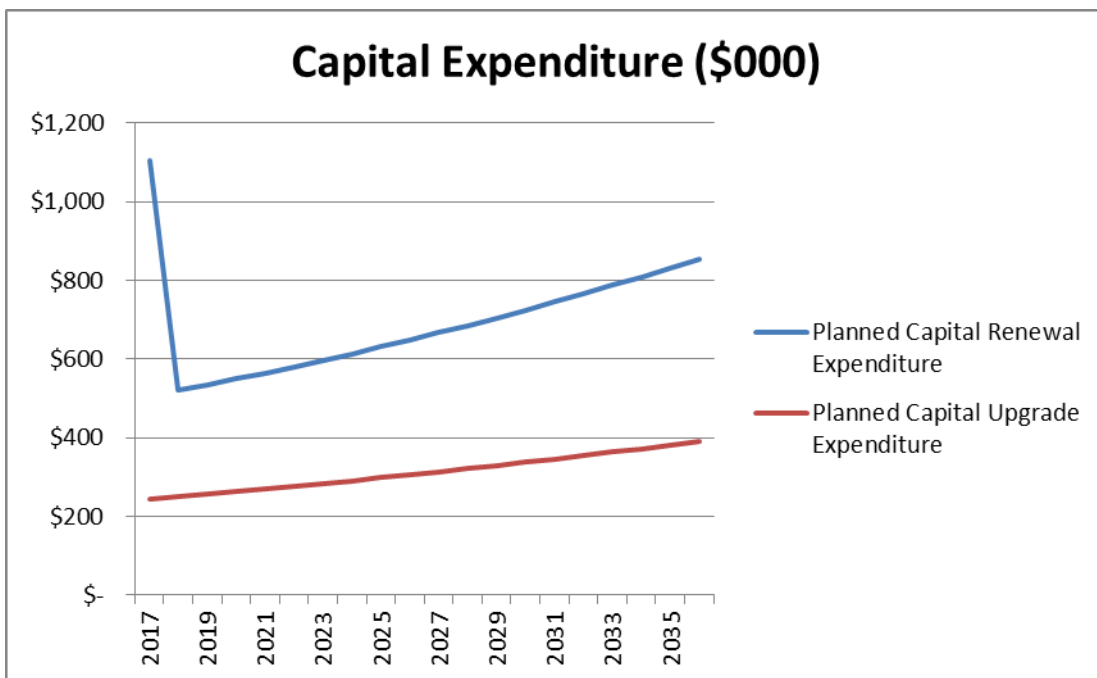
Renewal work is carried out in accordance with the following Standards and Specifications:

- Current Australian and Industry Standards
- Work Health Safety Act and Regulations
- Best Industry Practice Standards.

5.4.3 Summary of Future Renewal Expenditure

Projected future renewal expenditures are forecast to increase over time as the asset stock ages. The costs are summarised in Fig 2. Note that all costs are shown in 2016 dollar values.

Fig 2. Projected Capital Expenditure



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

Renewals are to be funded from Council's capital works program and grants where available. This is further discussed in Section 6.2.

Note: The flat line trend for "Growth of new assets" depicted by the green line above, means that Council does not currently have enough detailed information about future costs associated with new assets. Over time it is expected that as more detailed information becomes available, this line will change to reflect these costs more accurately.

5.5 Creation / Acquisition / Upgrade Plan

New works are those works that create a new asset that did not previously exist, or works which upgrade or improve an existing asset beyond its existing capacity. They may result from growth, social or environmental needs. Assets may also be acquired at no cost to the 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 community requests, proposals identified by strategic plans or partnerships with other organisations. Candidate proposals are inspected to verify need and to develop a preliminary renewal estimate. Verified proposals are ranked by priority and available funds and scheduled in future works programmes. Council ultimately makes the decision on priority ranking of new assets based on this information.

5.5.2 Standards and Specifications

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

5.5.3 Summary of Future Upgrade / New Assets Expenditure

New assets and services are to be funded from Council's capital works program and grants where available. This is further discussed in Section 6.2.

5.6 Disposal Plan

Currently there are no assets in the buildings and structures category that are listed for disposal, but Council is considering demolition of the former SA Ambulance and St Johns building on Penola Road and has acquired the CWA building in Lawrence Street and intends to demolish this building to allow for carpark expansion and street widening.

Note 38 and 40 James Street, the Red Cross building and the old Mini Golf office have been removed at the time of adoption of this report.

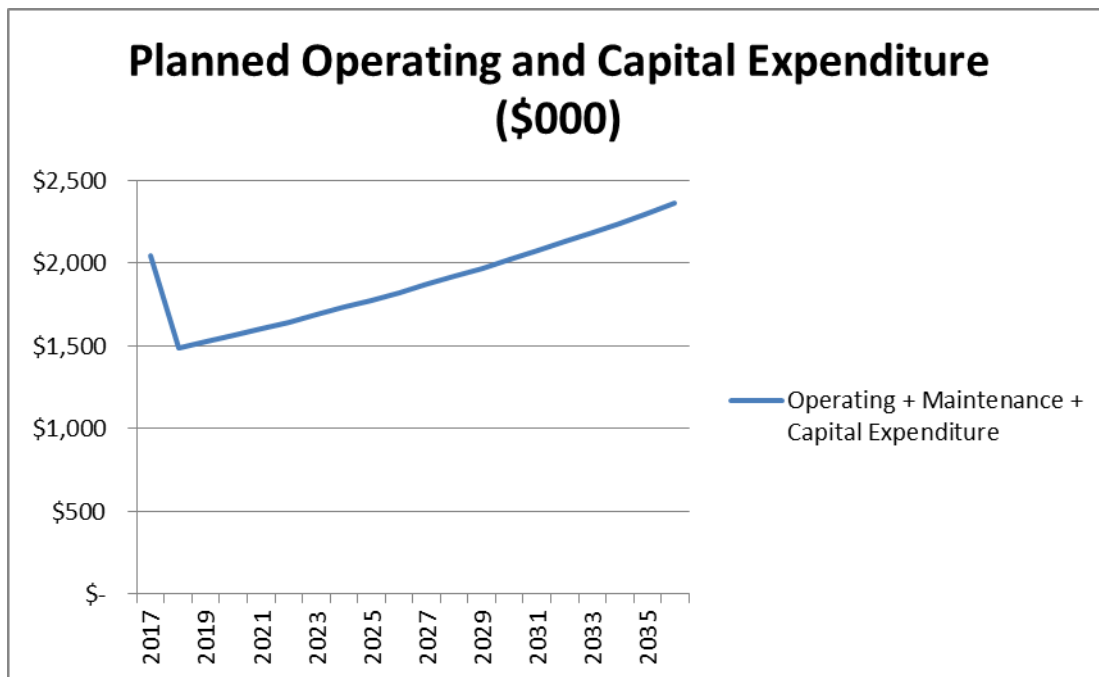
6. FINANCIAL SUMMARY

This section contains the financial requirements resulting from all the information presented in the previous sections of this Infrastructure and 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 3 for planned operating (operations and maintenance) and capital expenditure (renewal and upgrade/expansion/new assets).

Fig 3. Planned Operating and Capital Expenditure



Note that all costs are shown in 2016 dollar values.

6.1.1 Sustainability of Service Delivery

There are two key indicators for financial sustainability that have been considered in the analysis of the services provided by this asset category, these being long term life cycle costs and medium term costs over the 10 year financial planning period.

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 longest asset life. Life cycle costs include maintenance and asset consumption

(depreciation expense). The buildings and structures annual life cycle cost for the services covered in Part 2 of this Infrastructure and Asset Management Plan is \$2,300,000.

Life cycle costs can be compared to life cycle expenditure to give an indicator of sustainability in service provision. Life cycle expenditure includes maintenance plus capital renewal expenditure. Life cycle expenditure will vary depending on the timing of asset renewals. The life cycle expenditure at the start of the plan (2017) is \$1,731,200.

The average renewal gap between required expenditure, i.e. annual depreciation and proposed expenditure is \$2,241,438.

A gap between life cycle costs and life cycle expenditure gives an indication as to whether present consumers are paying their share of the assets they are consuming each year. The purpose of this Infrastructure and Asset Management Plan is to identify levels of service that the community needs and can afford and develop the necessary long term financial plans to provide the service in a sustainable manner.

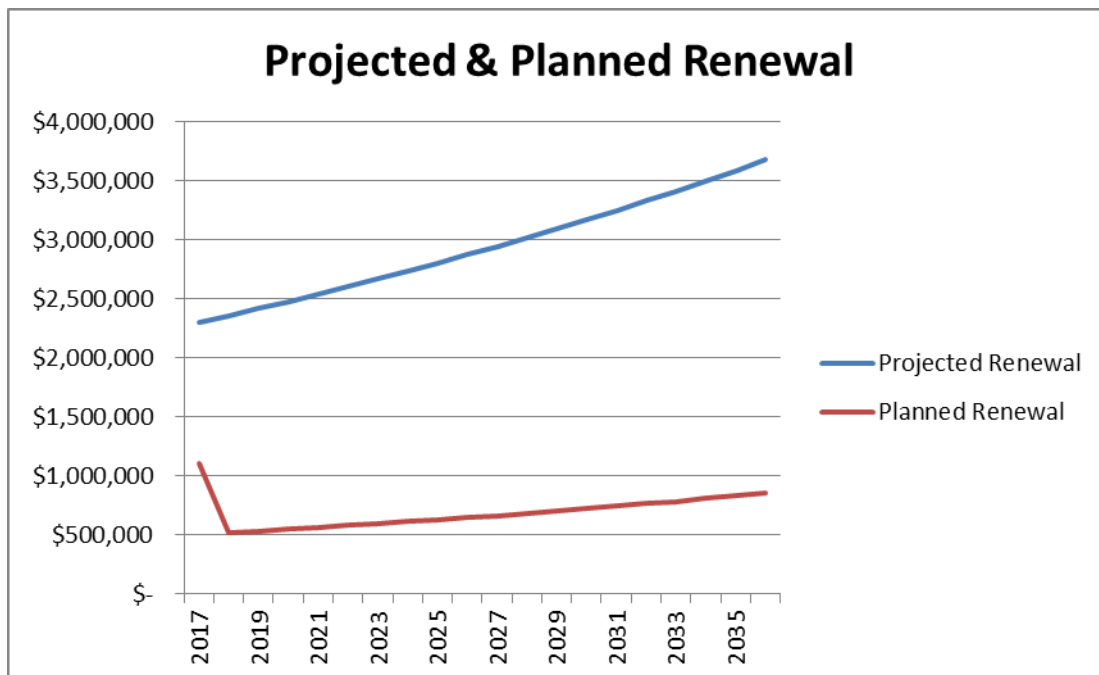
Medium term – 10 Year Financial Planning Period

This Infrastructure and Asset Management Plan identifies the estimated maintenance and capital expenditures required to provide an agreed level of service to the community over a 20 year period for input into a 10 year financial plan and funding plan to provide the service in a sustainable manner.

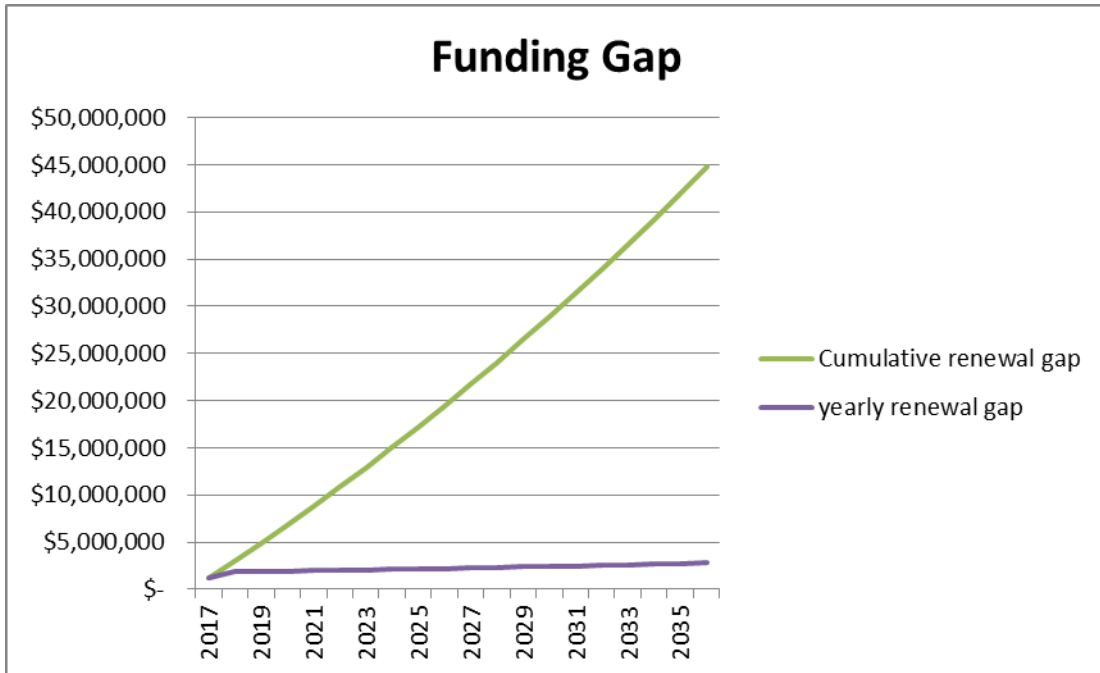
This may be compared to existing or planned expenditures in the 20 year period to identify any gap. In a core Infrastructure and Asset Management Plan, a gap is generally due to increasing asset renewals or underfunding of capital renewal programs.

Fig 4 shows the projected asset renewals in the 20 year planning period from the asset register. The projected asset renewals are compared to planned renewal expenditure in the capital works program and capital renewal expenditure in year 1 of the planning period as shown in Fig 4. Table 6.1.1 shows the annual and cumulative funding gap between projected and planned renewals.

Fig 4. Projected and Planned Renewals and Expenditure Gap



This chart shows the difference between Projected funding (funding required to maintain assets to agreed service levels) and Planned funding (actual funding from council budget and forward works programs). Ideally, there should be no funding gap between these two lines.



This chart shows the difference (in \$'s) between Projected and Planned funding. This difference is referred to as the "Yearly renewal gap". The cumulative renewal gap is the accumulation of yearly renewal gaps and is equal to the total amount of shortfall in funding at any point in time.

Table 6.1.1 Projected and Planned Renewals and Expenditure Gap

Year	Projected Renewals	Planned Renewals	Renewal Funding Gap	Cumulative Gap
2017	\$2,300,000	\$1,106,000	\$1,194,000	\$1,194,000
2018	\$2,357,500	\$520,200	\$1,837,300	\$3,031,300
2019	\$2,416,438	\$534,766	\$1,881,672	\$4,912,972
2020	\$2,476,848	\$549,739	\$1,927,109	\$6,840,081
2021	\$2,538,770	\$565,132	\$1,973,638	\$8,813,719
2022	\$2,602,239	\$580,955	\$2,021,283	\$10,835,003
2023	\$2,667,295	\$597,222	\$2,070,073	\$12,905,075
2024	\$2,733,977	\$613,944	\$2,120,033	\$15,025,108
2025	\$2,802,327	\$631,135	\$2,171,192	\$17,196,300
2026	\$2,872,385	\$648,807	\$2,223,578	\$19,419,878
2027	\$2,944,194	\$666,973	\$2,277,221	\$21,697,100
2028	\$3,017,799	\$685,648	\$2,332,151	\$24,029,250
2029	\$3,093,244	\$704,847	\$2,388,398	\$26,417,648
2030	\$3,170,575	\$724,582	\$2,445,993	\$28,863,641
2031	\$3,249,840	\$744,871	\$2,504,969	\$31,368,610
2032	\$3,331,086	\$765,727	\$2,565,359	\$33,933,969
2033	\$3,414,363	\$787,167	\$2,627,196	\$36,561,165
2034	\$3,499,722	\$809,208	\$2,690,514	\$39,251,679
2035	\$3,587,215	\$831,866	\$2,755,349	\$42,007,028
2036	\$3,676,895	\$855,158	\$2,821,737	\$44,828,765

Average Funding Gap = \$2,241,438

Note: Projected renewals assumed to increase in value by 2.5% per annum until 2036

Providing services in a sustainable manner will require matching of projected asset renewals to meet agreed service levels with planned capital works programs and available revenue.

A gap between projected asset renewal expenditure and actual (planned) expenditure indicates that further work is required to manage required service levels and future planned expenditure funding needs to eliminate any funding gap.

Council will need to manage the ‘gap’ by developing this Infrastructure and Asset Management Plan to provide guidance on future service levels and resources required to provide these services, and to ensure that the gap closes to a controllable level.

6.2 Funding Strategy

Projected expenditure identified in Section 6.1 is to be funded from Council's operating and capital budgets. The funding strategy is detailed in the Council's Long Term Financial Plan.

Achieving the financial strategy will require a commitment from Council in further budget considerations to make up the gap between projected and planned expenditure. As can be seen in Table 6.1 and the chart of Projected Renewals V's Planned Renewals, if this gap isn't managed then over a 20 year period

there is likely to be a cumulative shortfall in funds of \$44,828,765. This table can be used to determine what effect future budget adjustments are likely to have on long term asset sustainability and also what injection of funds will be required to close the gap.

Council needs to explore external funding sources to reduce this gap to a manageable level, otherwise it is highly likely that increased pressure on rate revenue alone will not maintain asset stocks at current service levels let alone reduce the gap significantly.

6.3 Valuation Forecasts

Asset values are forecast to increase as additional assets are added to the asset stock from construction and acquisition by Council and from assets constructed by land developers and others. Depreciation expense values are forecast in line with asset values based on asset condition depreciation and will be adjusted in accordance with asset revaluations which will occur from time to time taking into account condition assessments and additional asset age data.

The depreciated replacement cost (current replacement cost less accumulated depreciation) 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. However, Council will need to explore the option for limited asset disposal of buildings and structures whilst still maintaining a reasonable and acceptable level of service to the community.

6.4 Key Assumptions made in Financial Forecasts

This section details the key assumptions made in presenting the information contained in this Infrastructure and Asset Management Plan and in preparing forecasts of required operating and capital expenditure and asset values. 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 Infrastructure and Asset Management Plan are:

- Asset condition and valuation has been determined by Opteon (South Australia) Pty Ltd.
- Straight line depreciation of asset condition has been assumed but in reality the asset condition tends to drop off significantly towards the end of the asset life. This sharp drop off will impact on funding requirements needed to maintain asset stock in a reasonable condition and therefore Council's approach is to renew assets before this sharp drop in asset condition. i.e. Council intends to continue with its asset renewal plans before assets reach the end of their serviceable life. Opteon (South Australia) Pty Ltd have determined the residual value for buildings and structures assets.
- This Infrastructure and Asset Management Plan was put together based on the information at hand at the time of preparing the Plan. As asset information is updated and more accurate information becomes available, the Infrastructure and Asset Management Plan will become more accurate.
- With respect to Table 6.1.1 projected renewals are assumed to increase in value at a rate of 2.5% per annum. Any variation from 2.5% can affect the cumulative gap significantly (the data presented in this report is very sensitive to this assumption).

Accuracy of future financial forecasts may be improved in future revisions of this Infrastructure and Asset Management Plan by the following actions:

- Full cost attribution on future works programs through more sophisticated accounting measures.
- Improved data collection and condition assessment of assets and recording of this data in AIM program.



Buildings & Structures Infrastructure and Asset Management Plan

First year of expenditure projections **2017** (yr ending 30 June 2017)

Asset values as at 1st July 2016

Current replacement cost	\$106,879 (000)
Net Fair Value	\$75,515 (000)
Annual depreciation expense	\$2,300 (000)

Calc CRC from Asset Register
 \$0 (000)
 This is a check for you.

Operations and Maintenance Costs from New Assets

Additional operations costs	0.07%
Additional maintenance	0.58%
Additional depreciation	2.15%

Existing %ages calculated from data in worksheet

0.07%
0.58%
2.15%

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

20 Year Expenditure Projections Note: Enter all values in current 2016 values

Year ending June	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	
	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	
Operations																					
Management	2.5%	\$58.8	\$60.3	\$61.8	\$63.3	\$64.9	\$66.5	\$68.2	\$69.9	\$71.6	\$73.4	\$75.3	\$77.2	\$79.1	\$81.1	\$83.1	\$85.2	\$87.3	\$89.5	\$91.7	\$94.0
AVM systems	2.5%	\$12.6	\$12.9	\$13.2	\$13.6	\$13.9	\$14.3	\$14.6	\$15.0	\$15.4	\$15.7	\$16.1	\$16.5	\$16.9	\$17.4	\$17.8	\$18.2	\$18.7	\$19.2	\$19.7	\$20.1
Total operations		\$71.4	\$73.2	\$75.0	\$76.9	\$78.8	\$80.8	\$82.8	\$84.9	\$87.0	\$89.2	\$91.4	\$93.7	\$96.0	\$98.4	\$100.9	\$103.4	\$106.0	\$108.6	\$111.4	\$114.1
Maintenance																					
Reactive maintenance	2.5%	\$201.8	\$206.8	\$212.0	\$217.3	\$222.7	\$228.3	\$234.0	\$239.9	\$245.9	\$252.0	\$258.3	\$264.8	\$271.4	\$278.2	\$285.1	\$292.3	\$299.6	\$307.1	\$314.7	\$322.6
Planned maintenance	2.5%	\$423.4	\$434.0	\$444.8	\$456.0	\$467.4	\$479.0	\$491.0	\$503.3	\$515.9	\$528.8	\$542.0	\$555.5	\$569.4	\$583.7	\$598.3	\$613.2	\$628.5	\$644.3	\$660.4	\$676.9
Total maintenance		\$625.2	\$640.8	\$656.9	\$673.3	\$690.1	\$707.4	\$725.0	\$743.2	\$761.7	\$780.8	\$800.3	\$820.3	\$840.8	\$861.8	\$883.4	\$905.5	\$928.1	\$951.3	\$975.1	\$999.5
Capital																					
Planned Renewal	2.8%	\$1,106.0	\$520.2	\$534.8	\$549.7	\$565.1	\$581.0	\$597.2	\$613.9	\$631.1	\$648.8	\$667.0	\$685.6	\$704.8	\$724.6	\$744.9	\$765.7	\$787.2	\$809.2	\$831.9	\$855.2
Planned upgrade/new	2.5%	\$245.0	\$251.1	\$257.4	\$263.8	\$270.4	\$277.2	\$284.1	\$291.2	\$298.5	\$306.0	\$313.6	\$321.5	\$329.5	\$337.7	\$346.2	\$354.8	\$363.7	\$372.8	\$382.1	\$391.7
Total Planned upgrade/New		\$1,351.0	\$771.3	\$792.2	\$813.6	\$835.6	\$858.2	\$881.3	\$905.2	\$929.6	\$954.8	\$980.6	\$1,007.1	\$1,034.3	\$1,062.3	\$1,091.0	\$1,120.6	\$1,150.9	\$1,182.0	\$1,214.0	\$1,246.8
Planned Disposals		\$2,047.6	\$1,485.3	\$1,524.0	\$1,563.7	\$1,604.5	\$1,646.3	\$1,689.2	\$1,733.2	\$1,778.4	\$1,824.7	\$1,872.3	\$1,921.1	\$1,971.2	\$2,022.6	\$2,075.3	\$2,129.4	\$2,185.0	\$2,242.0	\$2,300.4	\$2,360.4
Planned Disposals		\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0

PART 3 – PLANT AND EQUIPMENT INFRASTRUCTURE

1. SUMMARY

Plant and equipment owned by Council is summarised as follows, 102 units of plant ranging from large earthmoving equipment, refuse collection vehicles, work utilities and small trucks, mowers, office vehicles, and specialised equipment such as footpath sweeping machine and paver laying machine, and the total at cost value of all Council owned plant and equipment is \$6.16 million.

What does it Cost?

The total dollar value of the annual consumption of the plant and equipment asset category is \$625,940 (i.e. annual depreciation expense). Council's goal for annual expenditure is to match this value so that no gap exists between the annual depreciation cost and the actual budget expenditure.

Plans for the Future

Council plans to own and maintain its plant and equipment fleet to achieve the following strategic objectives.

- Ensure the fleet is maintained at a safe and functional standard.
- Provide for plant and equipment renewal in accordance with Council Policy C375 (as amended from time to time).
- A ten year plant replacement program is attached to this Plan as Appendix D (values have been included based on anticipated dollar value at the time of purchase).
- Council has historically only owned plant and equipment to satisfy 'core function' activities and has sub-contracted or contracted specialist equipment on an as needs basis (e.g. excavators, backhoes, bobcats, asphalt laying equipment).
- Council will continue to review plant ownership to identify an surplus equipment or equipment that becomes available of a specialist nature which will help provide and/or improve efficient service delivery to the community.

Income and Expenditure

With the exception of office vehicles, Council plant and equipment that is capitalised effectively earns an income when it is used in Council's operations. With reference to the 2016/17 Budget at Account 6860.1700 it is estimated that the income from internal plant hire for the year will be \$1.654 million.

Maintenance and repairs for plant and equipment is estimated at \$500,000, fuels and oils \$330,000 and registrations and insurances \$120,000.

Relationship to Long Term Financial Plan and Annual Budgets

Plant and equipment purchases are not uniform in value and annual budget allocations can vary significantly from year to year. This Infrastructure and Asset Management Plan includes at Appendix D the project cost of purchase for the next ten years which will inform both the Annual Budget and the Long Term Financial Plan. It is also important to note that yearly expenditure on plant maintenance, fuels and oils and registrations and insurances are relatively constant (typically increasing in line with inflationary costs).

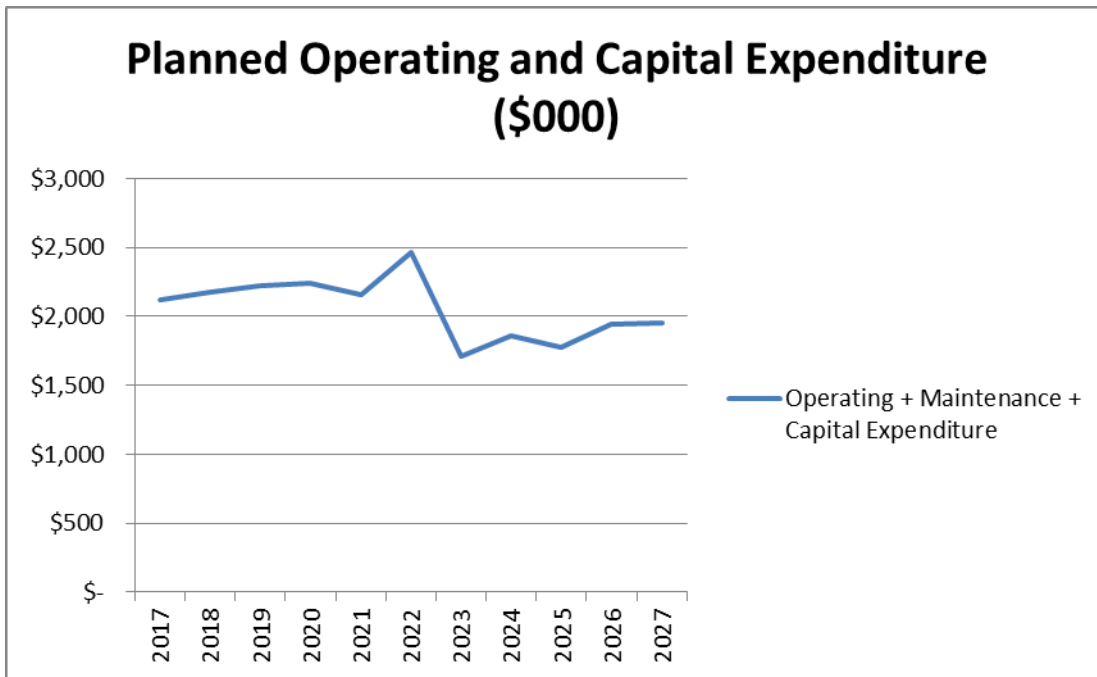
2. FINANCIAL SUMMARY

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

2.1 Financial Statements and Projections

The financial projections are shown in Fig 1 for planned operating (operations and maintenance) and capital expenditure (renewal and upgrade/expansion/new assets).

Fig 1. Planned Operating and Capital Expenditure



Note that all costs are shown in current 2016 dollar values.

2.1.1 Sustainability of Service Delivery

There are two key indicators for financial sustainability that have been considered in the analysis of the services provided by this asset category, these being long term life cycle costs and medium term costs over the 10 year financial planning period.

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 longest asset life. Life cycle costs include maintenance and asset consumption (depreciation expense). The annual life cycle cost for the services covered in Part 3 of this Infrastructure and Asset Management Plan is \$625,940.

Life cycle costs can be compared to life cycle expenditure to give an indicator of sustainability in service provision. Life cycle expenditure includes maintenance plus capital renewal expenditure. Life cycle expenditure will vary depending on the timing of asset renewals. The life cycle expenditure at the start of the plan (2016) is \$1,079,000.

The average renewal gap between required expenditure, i.e. annual depreciation and proposed expenditure is -\$181,554.

A gap between life cycle costs and life cycle expenditure gives an indication as to whether present consumers are paying their share of the assets they are consuming each year. The purpose of this Infrastructure and Asset Management Plan is to identify levels of service that the community needs and can afford and develop the necessary long term financial plans to provide the service in a sustainable manner.

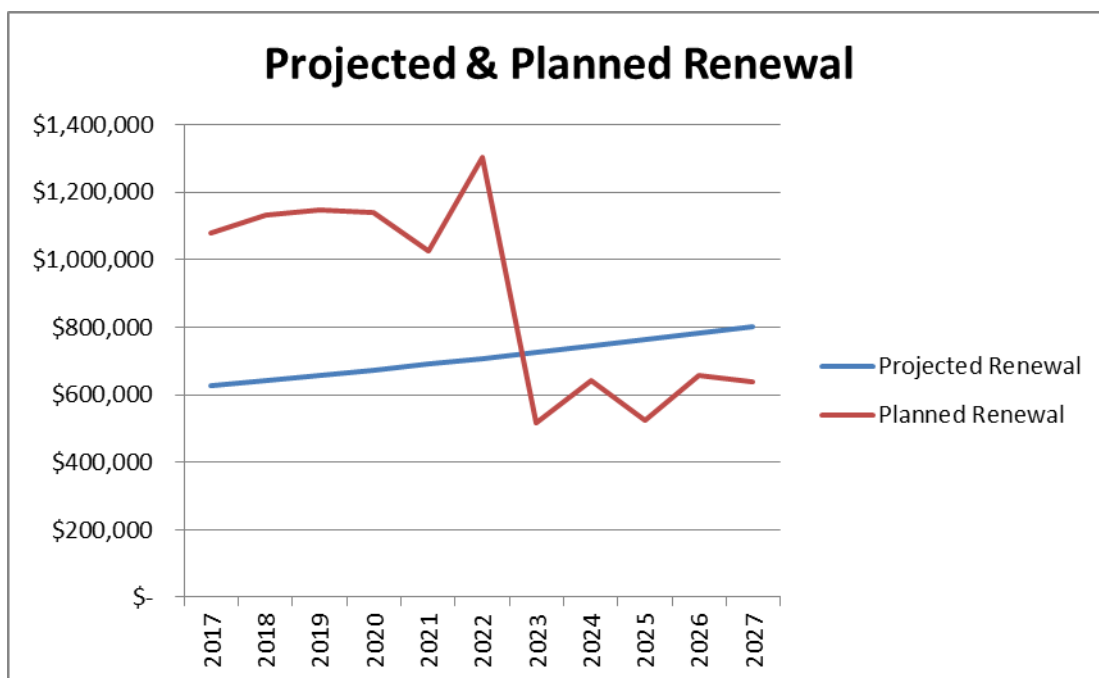
Medium term – 10 Year Financial Planning Period

This Infrastructure and Asset Management Plan identifies the estimated maintenance and capital expenditures required to provide an agreed level of service to the community over a 10 year period for input into a 10 year financial plan and funding plan to provide the service in a sustainable manner.

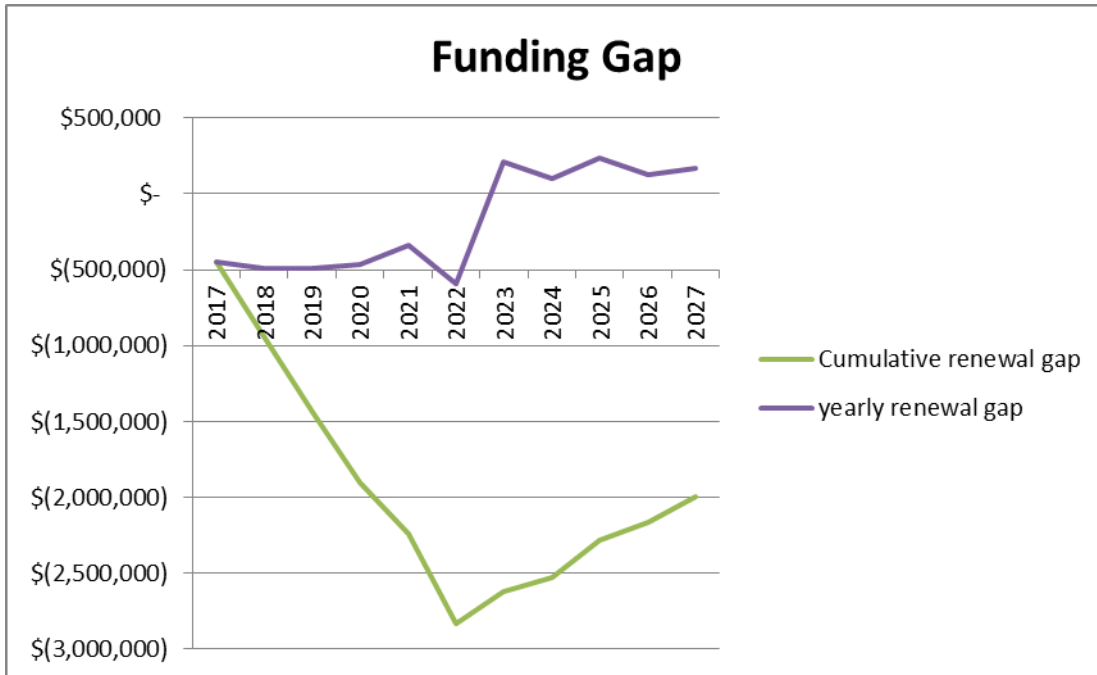
This may be compared to existing or planned expenditures in the 10 year period to identify any gap. In a core Infrastructure and Asset Management Plan, a gap is generally due to increasing asset renewals or underfunding of capital renewal programs.

Fig 2 shows the projected asset renewals in the 10 year planning period from the asset register. The projected asset renewals are compared to planned renewal expenditure in the capital works program and capital renewal expenditure in year 1 of the planning period as shown in Fig 8. Table 6.1.1 shows the annual and cumulative funding gap between projected and planned renewals.

Fig 2. Projected and Planned Renewals and Expenditure Gap



This chart shows the difference between Projected funding (funding required to maintain assets to agreed service levels) and Planned funding (actual funding from council budget and forward works programs). Ideally, there should be no funding gap between these two lines.



This chart shows the difference (in \$'s) between Projected and Planned funding. This difference is referred to as the "Yearly renewal gap". The cumulative renewal gap is the accumulation of yearly renewal gaps and is equal to the total amount of shortfall in funding at any point in time.

Table 2.1.1 Projected and Planned Renewals and Expenditure Gap

Year	Projected Renewals	Planned Renewals	Renewal Funding Gap	Cumulative Gap
2017	\$625,940	\$1,079,000	-\$453,060	-\$453,060
2018	\$641,589	\$1,132,000	-\$490,412	-\$943,472
2019	\$657,628	\$1,149,000	-\$491,372	-\$1,434,843
2020	\$674,069	\$1,141,000	-\$466,931	-\$1,901,774
2021	\$690,921	\$1,028,000	-\$337,079	-\$2,238,854
2022	\$708,194	\$1,303,000	-\$594,806	-\$2,833,660
2023	\$725,898	\$517,000	\$208,898	-\$2,624,762
2024	\$744,046	\$643,000	\$101,046	-\$2,523,716
2025	\$762,647	\$526,000	\$236,647	-\$2,287,069
2026	\$781,713	\$656,000	\$125,713	-\$2,161,355
2027	\$801,256	\$637,000	\$164,256	-\$1,997,099

Average Funding Gap = -\$181,554

Providing services in a sustainable manner will require matching of projected asset renewals to meet agreed service levels with planned capital works programs and available revenue.

A gap between projected asset renewal expenditure and actual (planned) expenditure indicates that further work is required to manage required service levels and future planned expenditure funding needs to eliminate any funding gap.

Council will need to manage the 'gap' by developing this Infrastructure and Asset Management Plan to provide guidance on future service levels and resources required to provide these services, and to ensure that the gap closes to a controllable level.

2.2 Funding Strategy

Projected expenditure identified in Section 2.1 is to be funded from Council's operating and capital budgets. The funding strategy is detailed in the Council's Long Term Financial Plan.

2.3 Valuation Forecasts

Asset values are forecast to increase as additional assets are added to the asset stock from construction and acquisition by Council and from assets constructed by land developers and others. Depreciation expense values are forecast in line with asset values based on asset condition depreciation and will be adjusted in accordance with asset revaluations which will occur from time to time taking into account condition assessments and additional asset age data.

The depreciated replacement cost (current replacement cost less accumulated depreciation) 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. However, Council will need to explore the option for limited asset disposal of buildings and structures whilst still maintaining a reasonable and acceptable level of service to the community.



Plant & Equipment Infrastructure and Asset Management Plan

First year of expenditure projections **2017** (yr ending 30 June 2017)

Asset values as at 1st July 2016

Current replacement cost	\$6,160 (000)	Calc CRC from Asset Register	\$0 (000)
Net Fair Value	\$4,682 (000)	This is a check for you.	
Annual depreciation expense	\$626 (000)		

Operations and Maintenance Costs from New Assets

	% of asset value	Existing %ages calculated from data in worksheet
Additional operations costs	1.16%	1.16%
Additional maintenance	15.42%	15.42%
Additional depreciation	10.16%	10.16%

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

10 Year Expenditure Projections Note: Enter all values in current 2017 values

Year ending June		2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
		\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000
Operations												
Management	2.5%	\$58.8	\$60.3	\$61.8	\$63.3	\$64.9	\$66.5	\$68.2	\$69.9	\$71.6	\$73.4	\$75.3
AM systems	2.5%	\$12.6	\$12.9	\$13.2	\$13.6	\$13.9	\$14.3	\$14.6	\$15.0	\$15.4	\$15.7	\$16.1
Total operations		\$71.4	\$73.2	\$75.0	\$76.9	\$78.8	\$80.8	\$82.8	\$84.9	\$87.0	\$89.2	\$91.4
Maintenance												
Reactive maintenance	2.8%	\$250.0	\$257.0	\$264.2	\$271.6	\$279.2	\$287.0	\$295.1	\$303.3	\$311.8	\$320.5	\$329.5
Planned maintenance	2.5%	\$700.0	\$717.5	\$735.4	\$753.8	\$772.7	\$792.0	\$811.8	\$832.1	\$852.9	\$874.2	\$896.1
Total maintenance		\$950.0	\$974.5	\$999.6	\$1,025.4	\$1,051.9	\$1,079.0	\$1,106.8	\$1,135.4	\$1,164.7	\$1,194.7	\$1,225.6
Capital												
Planned Renewal		\$1,079.0	\$1,132.0	\$1,149.0	\$1,141.0	\$1,028.0	\$1,303.0	\$517.0	\$643.0	\$526.0	\$656.0	\$637.0
Planned upgrade/new		\$24.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Total Planned upgrade/New		\$1,103.0	\$1,132.0	\$1,149.0	\$1,141.0	\$1,028.0	\$1,303.0	\$517.0	\$643.0	\$526.0	\$656.0	\$637.0
		\$2,124.4	\$2,179.7	\$2,223.6	\$2,243.3	\$2,158.7	\$2,462.8	\$1,706.6	\$1,863.3	\$1,777.7	\$1,939.9	\$1,954.0
Planned Disposals		\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0

ASSET MANAGEMENT PRACTICES

1. Accounting / Financial Systems

- Local Government authorities in South Australia are established under the provisions of the Local Government Act, 1999.
- Financial and Accounting practices and procedures are required to be in accordance with the Local Government Act 1999, Local Government (Financial Management) Regulations and the Australian Accounting Standard.
- Council's financial and accounting function is subject to a comprehensive Internal Control Policy and has reporting responsibilities to Council's Audit Committee whose membership is derived from persons both internal and external of the organisation.
- Council's audit regime includes the required annual statutory audit required by legislation and also a periodic 'procedural' audit. This process is also completed on an annual basis.
- Council's accounting and financial systems utilise the Civica local government enterprise software solution entitled 'AUTHORITY'.
- The 'AUTHORITY' software solution enables integration of all Council operations including the Accounting and Asset Management functions.

2. Asset Management Systems

Council uses the Civica software "AIM" program as its core asset management program. This program records all asset classes owned by Council together with all the relevant information on each asset. It allows assets to be linked to inspection and condition assessments as well as the historical information about the asset.

The AIM program allows the linking of Capital Value Records (CVR) for all assets and for the posting of actual costs for either planned work or maintenance work on assets through the work order system. The system also allows for the general ledger information to be directly linked and reported from within the AIM program

Civica have developed a link with GIS products to allow easier navigation to various assets that Council owns. This also makes the product more user friendly to browser users as well as assisting field staff undertake inspections, condition assessments and the recording of new assets in the field.

The program allows for the exporting of all data into excel spreadsheets for easier reporting and data manipulation purposes as it is limited in being able to undertake detailed asset management tasks such as asset consumption forecasts.

3. Information Flow Requirements and Processes

The key information that flows into this Infrastructure and 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;
- Projections of various factors affecting future demand for services;
- Correlations between maintenance and renewal, including decay models;
- 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 on the Long Term Financial Plan, Community Plan, Annual Budget and departmental business plans and budgets.

PLAN IMPROVEMENT AND MONITORING

1. 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 Infrastructure and Asset Management Plan are incorporated into Council’s LTFP and Community 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 Infrastructure and Asset Management Plan.

2. Improvement Plan

The asset management improvement plan generated from this Infrastructure and Asset Management Plan is shown in Table 8.2.

Table 8.2 Improvement Plan

Task No	Task	Responsibility	Resources Required	Timeline
1.	Development of 10 year forward works program	DOS	Time	Achieved
2.	Employment of Asset Maintenance Officer	DOS	\$\$\$	Achieved
3.	Detailed investigation / design on major road work projects leading to higher quality & efficiencies	EM	Time	?
4.	Increase hotmix overlay programs for footpaths and roads to extend useful life	EM	\$\$\$	Ongoing
5.	Improved maintenance practices to increase efficiencies	EM	Time	Ongoing
6.	Replacement of small footpath pavers to large format pavers to reduce trip hazards	EM	\$\$\$	Ongoing
7.	Improved long term financial planning and forecasting	Council	Time	Ongoing
8.				
9.				
10.				

3. Monitoring and Review Procedures

This Infrastructure and Asset Management Plan will be reviewed during annual budget preparation and amended to recognise any changes in service levels and/or resources available to provide those services as a result of the budget decision process.

The Plan has a life of 4 years and is due for revision and updating within 2 years of each Council election.

REFERENCES

City of Mount Gambier Community Plan – The Futures Paper 2016-2020

City of Mount Gambier Annual Report and Budget

DVC, 2006, 'Asset Investment Guidelines', 'Glossary', Department for Victorian Communities, Local Government Victoria, Melbourne

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

APPENDICES

Appendix A Maintenance Response Levels of Service

Appendix B Projected 10 year Capital Renewal Works Program

Appendix C Input Schedule for Road and Drainage Assets

Appendix D Plant Replacement Program 2016/17- 2026/27

LEVELS OF SERVICE

APPENDIX A

The following table outlines standard levels of service for all council assets. Refer to Infrastructure and Asset Management Plan for information of class specific exceptions, how well the assets are performing and how Target Performance will be sought.

Key Performance Indicator	Level of Service	Performance Measurement Process	Target Performance
Community Utility			
Legislative Compliance	to ensure compliance with relevant acts and legislative requirements	audit and review of compliance requirements	full compliance
Safety	to provide safe access and amenity	audit and review of compliance requirements	full compliance
Customer Satisfaction	to provide assets that meet customer requirements and expectations in relation to accessibility, form and function	conduct customer survey in relation to asset provision	customers to provide an average satisfaction level of good to excellent (greater than 7 on scale 0-10)
Operating or Technical			
Condition	to provide the asset base in a condition that is safe, asesthetic, fit for purpose and meets customer expectations	to complete city wide progressive condition audit and risk assessment audit every two years	90% of assets to have a condition rating of fair to excellent
Responsiveness	to respond to customer requests consistent with corporate standards and service agreements	periodic reports on customer request turn around times and customer satisfaction feedback forms level of overall customer requests monitored	90% of customer requests to be processed within the agreed timeframes 10% reduction in reactive customer requests per annum
Performance	to ensure the assets perform cost effectively and provide adequate service to the community	performance analysis level of service reviews and audits	individual asset groups to meet identified needs
Design and Capacity	level to provide assets that meet required service levels and standards, design standards and specifications	endorsed service standards and specifications for the building and maintenance of assets	100% compliance
Cost Effectiveness	to provide and maintain the assets according to best value over the lifecycle while meeting Council objectives	lifecycle cost in conjunction with intervention and deterioration modelling	reduction of lifecycle costs to equivalent of benchmarked best practice

ROAD RECONSTRUCTION PROGRAM (ASSET RENEWAL)

(refer also to Infrastructure and Asset Management Plan - 2016/17 - 2026/27)

Year 1 - 2017/18										
Asset Renewal:			Roads to Recovery - R2R4			Year 4 \$ 339,304.00		Boundary Roads - Annual Allocation (Renewals) \$ 60,000.00		
Priority	Location	Cost	Location	Cost	Location	Cost	Location	Cost	Cost	Cost
1	Commercial St West (Avey Rd to Oak St)	\$ 160,000.00	Doughty St (Clezy Cres to End)	\$ 120,000.00	Grant Ave - Asphalt 'braking' areas of intersections	\$ 11,000.00	Wireless Rd West / Wandilo Rd - Kerb and repair intersection	\$ 7,000.00	Attamurra Rd / Houston Dr - Asphalt intersection	\$ 4,000.00
2	Crouch St North (Commercial St to John St)	\$ 147,000.00	Webber St (Pressey St to End)	\$ 49,304.00	Hawkins Rd - seal to drain west side	\$ 14,000.00	McCormick Rd - Grade shoulder and repairs to intersection	\$ 6,000.00	Tollner Rd - Reseal from Mount Percy Rd to Avey Rd	\$ 18,000.00
3	North Tce (Byrne St to Dalkeith Dr)	\$ 230,000.00	Bailey St (End to Wimmera St)	\$ 50,000.00						
4	Blackall Lane (Seal and Drainage)	\$ 35,000.00	Caldwell St (Elizabeth St to Gray St)	\$ 120,000.00						
5	Commercial St East (Davison St to 105m east)	\$ 90,000.00								
6	Kilsby Pl (full length)	\$ 35,000.00								
7	Railway Tce (Elizabeth St to Bay Rd)	\$ 170,000.00								
8	Sturt St (Anthony St to Mark St)	\$ 118,000.00								
9	CBD Renewal Project (Final Stage)	\$ 300,000.00								
	Totals: \$	1,285,000.00								
	Road Reseals	\$ 420,000.00								
	Footpath Reseals	\$ 76,000.00								
	Carpark Resurfacing / Renewal	\$ 30,000.00								
	Hotmix Intersections	\$ 53,000.00								
	Stormwater	\$ 90,000.00								
	Totals: \$	669,000.00								
	New Assets:									
	Footpath Construction	\$ 260,000.00								
	Pram Crossings	\$ 12,000.00								
	Totals: \$	272,000.00								
Sustainability Note:										
Council's 2017/18 financial target for asset renewal to achieve financial sustainability is \$2,710,102.00 80%										
Planned Budgeted expenditure for asset renewals is (includes \$300,000 City Centre) \$2,353,304.00 \$ 2,168,081.60										
Difference = \$ 185,222.40										
Cumulative difference \$ 501,572.60										
			Caroline Landfill Costs:	\$ 1,000,000.00	Operational Cost					
			Total Planned Expend (all)	\$ 3,625,304.00						
			Planned Exp in 15/16 6/2015 report	\$ 3,080,000.00						
						Theoretical Cumulative Gap (includes gap carried over from 2016/17) =	\$	546,458.00		

Year 2 - 2018/19										
Asset Renewal:			Roads to Recovery - R2R4			Year 5 \$ 339,304.00		Boundary Roads - Annual Allocation (Renewals) \$ 60,000.00		
Priority	Location	Cost	Location	Cost	Location	Cost	Location	Cost	Cost	Cost
1	Kenney Ave Widening (Wireless Rd to Bishop Rd)	\$ 220,000.00	Heaver Dr (Wilga Rd to Suttontown Rd)	\$ 216,000.00	Hawkins Rd - Reseal Jubilee Hwy to Terrell Rd	\$ 10,000.00	McCormick Rd - Reseal full length	\$ 39,000.00		
2	Lark Pl (Swallow Dr to Cuddesac)	\$ 88,000.00	Robin St (Brolga St to Finch St)	\$ 66,000.00	Pinehall Ave - Reseal Vivienne Ave to Penola Rd	\$ 11,000.00				
3	Elizabeth St (Commercial St to Jane St)	\$ 111,000.00	Laurie St (Shepherdson Rd to Millard St)	\$ 57,304.00						
4	Argyle Pl (Lake Tce to Lake Tce)	\$ 34,000.00								
5	Finch St (Swallow Dr to Lake Tce East)	\$ 69,000.00								
6	Helen St (Elizabeth St to Gray St)	\$ 115,000.00								
7	Wireless Rd West (Acacia St to Matthew Flinders Way)	\$ 194,000.00								
8	Sturt St Resurface (Bay Rd to Compton St)	\$ 230,000.00								
9	Remove Hay Dr Bridge, fill and replace road	\$ 165,000.00								
	Totals: \$	1,226,000.00								
	Road Reseals	\$ 440,000.00								
	Footpath Reseals	\$ 60,000.00								
	Carpark Resurfacing / Renewal	\$ 10,000.00								
	Hotmix Intersections	\$ 30,000.00								
	Stormwater	\$ 85,000.00								
	Totals: \$	625,000.00								
	New Assets:									
	Footpath Construction	\$ 271,000.00								
	Pram Crossings	\$ 12,000.00								
	Kennedy Ave Widening (Wireless Rd to Bishop Rd)	\$ 215,000.00								
	Totals: \$	498,000.00								
			Caroline Landfill Costs:	\$ 720,000.00	Capital Cost					
			Total Planned Expend (all)	\$ 3,468,304.00						
			Planned Exp in 15/16 6/2015 report	\$ 2,924,000.00						
						Theoretical Cumulative Gap (includes gap carried over from 2017/18) =	\$	1,074,008.00		
Sustainability Note:										
Council's 2018/19 financial target for asset renewal is \$2,777,854.00 80%										
Planned Budgeted expenditure is \$2,250,304.00 \$ 2,222,283.20										
Difference = \$ 28,020.80										
Cumulative difference \$ 529,593.40										

Year 3 - 2019/20

Asset Renewal:			Roads to Recovery - funding unknown		Assume	\$	280,000.00	Boundary Roads - Annual Allocation (Renewals)		\$	60,000.00
Priority	Location	Cost	Location	Cost				Location	Cost		
1	Kurrajong St (Vansittart Rd to Heath St)	\$ 104,000.00	Lake Tce East (Pick Ave to Schinkel St) - part	\$ 280,000.00				Pinehall Ave - Reseal Sturm Rd to Wehl St	\$ 29,000.00		
2	Stone Ave (full length)	\$ 99,000.00						Pinehall Ave - Reseal Wehl St to Vivienne Ave	\$ 15,000.00		
3	Alexander St (Keegan St to Crouch St)	\$ 90,000.00						Periodic Reseals	\$ 16,000.00		
4	Earl St (Lacepede St to End)	\$ 87,000.00						Totals: \$	60,000.00		
5	Wireless Rd West (Honon St to Wehl St)	\$ 154,000.00									
6	Strangways St (full length)	\$ 69,000.00									
7	Acacia St (Banksia St to Kurrajong St)	\$ 39,000.00									
8	Lake Tce East (Pick Ave to Schinkel St)	\$ 210,000.00									
9	Truman St (Palamountain St to Bond St)	\$ 52,000.00									
10	Daniel St (Shepherdson Rd to Millard St)	\$ 61,000.00									
11	Rivoli St (Earl St to Webb St)	\$ 48,000.00									
12	Kain St (McGregor St to Suttontown Rd)	\$ 147,000.00									
	Totals: \$	1,160,000.00									
	Road Reseals	\$ 465,000.00									
	Footpath Reseals	\$ 80,000.00									
	Carpark Resurfacing / Renewal	\$ 20,000.00									
	Hotmix Intersections	\$ 56,000.00									
	Allowance to plane and asphalt roundabouts	\$ 100,000.00									
	Stormwater	\$ 95,000.00									
	Totals: \$	816,000.00									
	New Assets:										
	Footpath Construction	\$ 277,000.00									
	Pram Crossings	\$ 12,000.00									
	Totals: \$	289,000.00									
			Caroline Landfill Costs:	\$ 720,000.00	Operational Cost						
			Total Planned Expend (all)	\$ 3,325,000.00							
			Planned Exp in 15/16 6/2015 report	\$ 2,782,000.00	excluded R2R						
			Sustainability Note: Council's 2019/20 financial target for asset renewal is \$2,847,301.00 \$ 80% 2,277,840.80 Planned Budgeted expenditure is \$2,316,000.00 \$ 2,316,000.00 Difference = \$ 38,159.20 Cumulative difference \$ 567,752.60 Theoretical Cumulative Gap (includes gap carried over from 2018/19) = \$ 1,605,309.00								

Year 4 - 2020/21

Asset Renewal:			Roads to Recovery - funding unknown		Assume	\$	280,000.00	Boundary Roads - Annual Allocation (Renewals)		\$	60,000.00
Priority	Location	Cost	Location	Cost				Location	Cost		
1	George St (Bertha St to Wehl St)	\$ 97,000.00	Wehl St South (Lake Tce to Margaret St) part	\$ 280,000.00				Wandilo Rd - Reseal Jubilee Hwy to Wireless Rd	\$ 27,000.00		
2	Winston Tce (Bond St to Bertha St)	\$ 87,000.00						Pinehall Ave - Reseal O'Leary Rd to Suttontown Rd (part only)	\$ 33,000.00		
3	Lasiandra Cres (Weigelia St to Kurrajong St)	\$ 76,000.00						Totals: \$	60,000.00		
4	Anthony St (Jubilee Hwy to North Tce)	\$ 134,000.00									
5	Amor St (full length)	\$ 115,000.00									
6	Wehl St South (Lake Tce to Margaret St) part	\$ 185,000.00									
7	Corry St (Hutley Tce to Lake Tce East)	\$ 28,000.00									
8	Acacia St (Jubilee Hwy to Vansittart Rd)	\$ 125,000.00									
9	Lawrence St (Penola Rd to End)	\$ 60,000.00									
10	Keegan St (Percy St to Alexander St)	\$ 35,000.00									
11	Elder St (McGregor St to Suttontown Rd)	\$ 150,000.00									
12	Percy St (Penola Rd to Mitchell St)	\$ 115,000.00									
13	Nelson St (Werona St to Allawah St)	\$ 90,000.00									
	Totals: \$	1,297,000.00									
	Road Reseals	\$ 480,000.00									
	Footpath Reseals	\$ 60,000.00									
	Carpark Resurfacing / Renewal	\$ 10,000.00									
	Hotmix Intersections	\$ 40,000.00									
	Allowance to plane and asphalt roundabouts	\$ 100,000.00									
	Stormwater	\$ 90,000.00									
	Totals: \$	780,000.00									
	New Assets:										
	Footpath Construction	\$ 274,000.00									
	Pram Crossings	\$ 13,000.00									
	Totals: \$	287,000.00									
			Caroline Landfill Costs:	\$ 1,000,000.00	Capital Cost						
			Total Planned Expend (all)	\$ 3,704,000.00							
			Planned Exp in 15/16 6/2015 report	\$ 2,851,000.00							
			Sustainability Note: Council's 2020/21 financial target for asset renewal is \$2,918,483.00 \$ 80% 2,334,786.40 Planned Budgeted expenditure is \$2,417,000.00 \$ 2,417,000.00 Difference = \$ 82,213.60 Cumulative difference \$ 649,966.20 Theoretical Cumulative Gap (includes gap carried over from 2019/20) = \$ 2,106,792.00								

Year 5 - 2021/22 Note: back to 100% funding Infrastructure Asset Replacement

Asset Renewal:			Roads to Recovery - funding unknown		Assume		Boundary Roads - Annual Allocation (Assumed)	
Priority	Location	Cost	Location	Cost	\$	280,000.00	\$	160,000.00
1	Cardinia St (Davison St to Henty St)	\$ 130,000.00	Lake Tce West (Wehl St to Goss St)	\$ 65,000.00	\$	280,000.00	Asset Renewal	\$ 160,000.00
2	Murdie St (Newton Cres to Douglas St)	\$ 50,000.00	Crouch St South (John Watson Dr to Lake Tce East)	\$ 215,000.00	\$	280,000.00		
3	Howard St (Ruwooldt St to Pressey St)	\$ 110,000.00			Totals:	\$ 280,000.00		Totals: \$ 160,000.00
4	Ruwooldt St (Howard St to End)	\$ 21,000.00						
5	Crouch St South (Griffiths St to Gwendoline St)	\$ 115,000.00						
6	Lake Tce West (Bertha St to Wehl St)	\$ 115,000.00						
7	Banksia St (Heath St to Acacia St)	\$ 89,000.00						
8	Locke St (Canavan Rd to Shaughnessy Crt)	\$ 82,000.00						
9	Grevillia St (Acacia St to Stafford St)	\$ 30,000.00						
10	Rotary Ave (Lake Tce to Culdesac)	\$ 97,000.00						
11	Francis St (Wyatt St to Jubilee Highway)	\$ 95,000.00	Caroline Landfill Costs:	\$ 720,000.00				
12	Herbert St (Sutton Ave to Charles St)	\$ 100,000.00						
13	Eustace St (North Tce to Canavan Rd)	\$ 190,000.00						
14	Commercial St West (Allan Dr to Cave Rd)	\$ 70,000.00	Total Planned Expend (all)	\$ 4,077,000.00				
15	Birdwood Ave (Monash Cres to Wimmera St)	\$ 152,000.00	Planned Exp in 15/16 6/2015 report	\$ 2,945,000.00				
16	Wimmera St (Birdwood Ave to Boothey St)	\$ 25,000.00						
17	Elizabeth St (Jane St to Jubilee Hwy)	\$ 165,000.00						
	Agnes St (Ehret St to Victoria Tce)	\$ 88,000.00						
		Totals: \$ 1,724,000.00						
	Road Reseals	\$ 530,000.00						
	Footpath Reseals	\$ 85,000.00						
	Carpark Resurfacing / Renewal	\$ 56,000.00						
	Hotmix Intersections	\$ 59,000.00						
	Stormwater	\$ 80,000.00						
	Allowance to plane and asphalt roundabouts	\$ 100,000.00						
		Totals: \$ 910,000.00						
	New Assets:							
	Footpath Construction	\$ 270,000.00						
	Pram Crossings	\$ 13,000.00						
		Totals: \$ 283,000.00						

Sustainability Note:

Council's 2021/22 financial target for asset renewal is \$2,991,445.00

Planned Budgeted expenditure is \$3,074,000.00

Difference = \$ (82,555.00)

Theoretical Cumulative Gap (includes gap carried over from 2020/21) = \$ 2,024,237.00

Year 6 - 2022/23

Asset Renewal:			Roads to Recovery - funding unknown		Assume		Boundary Roads - Annual Allocation (Assumed)	
Priority	Location	Cost	Location	Cost	\$	280,000.00	\$	160,000.00
1	Lake View Rd (Davison Dr to Davison Dr)	\$ 45,000.00	Hay Dr (Potters Point to Lake Tce West)	\$ 190,000.00	\$	280,000.00	Asset Renewal	\$ 160,000.00
2	Hosking Ave (Hutley Tce to Lake Tce)	\$ 42,000.00	Chute St (Ehret St to Victoria Tce)	\$ 90,000.00	\$	280,000.00		
3	Kooringa St (Buronga Ave to Culdesac)	\$ 80,000.00			Totals:	\$ 280,000.00		Totals: \$ 160,000.00
4	Dutton St (Boandik Tce to Cockburn St)	\$ 154,000.00						
5	Boandik Tce (Crouch St to Warren St)	\$ 86,000.00						
6	Commercial St (Wehl St to Crouch St)	\$ 1,250,000.00						
		Totals: \$ 1,657,000.00						
	Road Reseals	\$ 549,000.00	Caroline Landfill Costs:	\$ 720,000.00				
	Footpath Reseals	\$ 87,000.00						
	Carpark Resurfacing / Renewal	\$ 57,000.00	Total Planned Expend (all)	\$ 4,036,000.00				
	Hotmix Intersections	\$ 61,000.00	Planned Exp in 15/16 6/2015 report	\$ 3,084,000.00				
	Stormwater	\$ 80,000.00						
	Allowance to plane and asphalt roundabouts	\$ 100,000.00						
		Totals: \$ 934,000.00						
	New Assets:							
	Footpath Construction	\$ 271,000.00						
	Pram Crossings	\$ 14,000.00						
		Totals: \$ 285,000.00						

Sustainability Note:

Council's 2022/23 financial target for asset renewal is \$3,066,231.00

Planned Budgeted expenditure is \$3,031,000.00

Difference = \$ 35,231.00

Theoretical Cumulative Gap (includes gap carried over from 2021/22) = \$ 2,059,468.00

Year 7 - 2023/24

Asset Renewal:			Roads to Recovery - funding unknown	Assume \$ 280,000.00	Boundary Roads - Annual Allocation (Assumed)	\$ 160,000.00
Priority	Location	Cost	Location	Cost	Location	Cost
1	Burcham St (Fidler St to Trevorrow St)	\$ 75,000.00	Ferrers St (Lake Tce to Commercial St) - part	\$ 280,000.00	Asset Renewal	\$ 160,000.00
2	Ferrers St (Lake Tce to Commercial St) - part	\$ 345,000.00				
3	Rymill Pl (Mawson Ave to Culdesac)	\$ 35,000.00				
4	Margaret St (full length)	\$ 432,000.00				
5	Henty St (Sturt St to Cardinia St)	\$ 36,000.00				
6	Curran St (Miller St to Telford St)	\$ 34,000.00				
7	McDonald St (North Tce to Canavan Rd)	\$ 184,000.00				
8	Banksia St (Jubilee Hwy to Vansittart Rd)	\$ 118,000.00				
9	Millard St (White Ave to End)	\$ 118,000.00				
10	Ayers St (Boandik Tce to Playford St)	\$ 95,000.00				
11	Chester Pl (Crouch St to Culdesac)	\$ 42,000.00				
12	Dundee St (Burton St to Culdesac)	\$ 45,000.00				
13	Sturt St (Mark St to Henty St)	\$ 280,000.00				
	Totals:	\$ 1,839,000.00		Totals: \$ 280,000.00		Totals: \$ 160,000.00
	Road Reseals	\$ 564,000.00	Caroline Landfill Costs:	\$ 720,000.00	Operational Cost	
	Footpath Reseals	\$ 90,000.00				
	Carpark Resurfacing / Renewal	\$ 59,000.00	Total Planned Expend (all)	\$ 3,988,000.00		
	Hotmix Intersections	\$ 62,000.00	Planned Exp in 15/16 6/2015 report	\$ 3,128,000.00		
	Stormwater	\$ 85,000.00				
	Totals:	\$ 860,000.00				
	New Assets:					
	Footpath Construction	\$ 275,000.00				
	Pram Crossings	\$ 14,000.00				
	Totals:	\$ 289,000.00				
						Difference = \$ 3,887.00
						Theoretical Cumulative Gap (includes gap carried over from 2022/23) = \$ 2,063,355.00

Sustainability Note:
 Council's 2023/24 financial target for asset renewal to achieve financial sustainability is **\$3,142,887**
 Planned Budgeted expenditure is **\$3,139,000**

Year 8 - 2024/25

Asset Renewal:			Roads to Recovery - funding unknown	Assume \$ 280,000.00	Boundary Roads - Annual Allocation (Assumed)	\$ 160,000.00
Priority	Location	Cost	Location	Cost	Location	Cost
1	Victor St (Lansell St to Gwendoline St)	\$ 180,000.00	Anzac St (Ferrers St to Reginald St)	\$ 75,000.00	Asset Renewal	\$ 160,000.00
2	Laird St (Acacia St to Barrett Ave)	\$ 178,000.00	Reginald St (Lansell St to Gwendoline St)	\$ 205,000.00		
3	Lake Tce East (Bay Rd to Crouch St)	\$ 492,000.00				
4	Ellard St (Sutton Ave to Charles St)	\$ 94,000.00				
5	DeGaris St (Truman St to Shepherdson Rd)	\$ 90,000.00				
6	Cave Rd (Wattle St to Blackwood St)	\$ 65,000.00				
7	Robinson St (Sunnyside Dr to Lake Tce East)	\$ 105,000.00				
8	Queens Ave (Powell St to Penola Rd)	\$ 280,000.00				
9	Reginald St (Gwendoline St to Heriot St)	\$ 104,000.00				
10	Brownes Rd (White Ave to Wilson St) (stage 1)	\$ 280,000.00				
	Totals:	\$ 1,868,000.00		Totals: \$ 280,000.00		Totals: \$ 160,000.00
	Road Reseals	\$ 580,000.00	Caroline Landfill Costs:	\$ 1,000,000.00	Capital Cost	
	Footpath Reseals	\$ 92,000.00				
	Carpark Resurfacing / Renewal	\$ 61,000.00	Total Planned Expend (all)	\$ 4,498,000.00		
	Hotmix Intersections	\$ 64,000.00	Planned Exp in 15/16 6/2015 report	\$ 3,408,000.00		
	Stormwater	\$ 105,000.00				
	Totals:	\$ 902,000.00				
	New Assets:					
	Footpath Construction	\$ 274,000.00				
	Pram Crossings	\$ 14,000.00				
	Totals:	\$ 288,000.00				
						Difference = \$ 11,459.00
						Theoretical Cumulative Gap (includes gap carried over from 2023/24) = \$ 2,074,814.00

Sustainability Note:
 Council's 2024/25 financial target for asset renewal to achieve financial sustainability is **\$3,221,459**
 Planned Budgeted expenditure is **\$3,210,000**

Year 9 - 2025/26										
Asset Renewal:			Roads to Recovery - funding unknown			Assume \$ 280,000.00		Boundary Roads - Annual Allocation (Assumed) \$ 160,000.00		
1	Mulga St (Underwood Ave to Wilga Rd)	\$ 135,000.00	Location			Cost		Location		
2	Newton Cres (Pick Ave to Pressey St)	\$ 130,000.00	Noojee St (Canavan Rd to Extension)			\$ 100,000.00	Asset Renewal			\$ 160,000.00
3	Brownes Rd (White Ave to Wilson St) Stage 2	\$ 400,000.00	Shepherdson Rd (Bertha St to Wehl St Sth)			\$ 165,000.00				
4	John St (Crouch St to Crennan St)	\$ 149,000.00	Paull St (Pearce Cres to End)			\$ 17,000.00				
5	Lake Tce East (Crouch St to Pick Ave)	\$ 895,000.00								
6	Keegan St (Alexander St to Jardine St)	\$ 156,000.00								
7	Bertha St (Franklin Tce to Shepherdson Rd)	\$ 110,000.00								
Totals: \$		1,975,000.00				Totals: \$	282,000.00	Totals: \$ 160,000.00		
Road Reseals		\$ 600,000.00	Caroline Landfill Costs:			\$ 720,000.00	Operational Cost			
Footpath Reseals		\$ 95,000.00	Total Planned Expend (all)			\$ 4,355,000.00				
Carpark Resurfacing / Renewal		\$ 63,000.00	Planned Exp in 15/16 6/2015 report			n/a				
Hotmix Intersections		\$ 63,000.00								
Stormwater		\$ 100,000.00								
Totals: \$		921,000.00								
New Assets:										
Footpath Construction		\$ 283,000.00							Difference = \$ (36,004.00)	
Pram Crossings		\$ 14,000.00								
Totals: \$		297,000.00							Theoretical Cumulative Gap (includes gap carried over from 2024/25) = \$ 2,038,810.00	

Sustainability Note:
 Council's 2025/26 financial target for asset renewal to achieve financial sustainability is **\$3,301,996**
 Planned Budgeted expenditure is **\$3,338,000**

Year 10 - 2026/27										
Asset Renewal:			Roads to Recovery - funding unknown			Assume \$ 280,000.00		Boundary Roads - Annual Allocation (Assumed) \$ 160,000.00		
1	Peters St (Penola Rd to Culdesac)	\$ 130,000.00	Location			Cost		Location		
2	Shelton St (Commercial St West to Nicholas St)	\$ 116,000.00	Wilson St (Commercial St West to End)			\$ 280,000.00	Asset Renewal			\$ 160,000.00
3	Walter St (Reginald St to End)	\$ 48,000.00				\$ -				
4	Wehl St South (Margaret St to Helen St)	\$ 210,000.00				\$ -				
5	West St (Sutton Ave to Umpherston St)	\$ 145,000.00								
6	Blackall St (Hayes Cres to Hayes Cres - part)	\$ 60,000.00								
7	Heriot St (Bay Rd to Ferrers St)	\$ 165,000.00								
8	Banksia St (Vansittart Rd to Coolabah St)	\$ 37,000.00								
9	Wehl St North (Fartch St to Fidler St)	\$ 210,000.00								
10	Cunningham St (Commercial St West to Saint St)	\$ 122,000.00								
11	Commercial St West (Charles St to Wilson St)	\$ 410,000.00								
12	William St (Bertha St to Wehl St Sth)	\$ 100,000.00								
13	Arbor St (Bertha St to Wehl St Sth)	\$ 120,000.00	Caroline Landfill Costs:			\$ 720,000.00	Operational Cost			
14	Barrett Ave (Laird St to Phillip St)	\$ 40,000.00	Total Planned Expend (all)			\$ 4,402,000.00				
15	Marara St (Cedar St to Kurrajong St)	\$ 85,000.00	Planned Exp in 15/16 6/2015 report			n/a				
16	Bertha St (Lake Tce to Franklin Tce)	\$ 46,000.00								
Totals: \$		2,044,000.00								
Road Reseals		\$ 600,000.00								
Footpath Reseals		\$ 95,000.00								
Carpark Resurfacing / Renewal		\$ 63,000.00								
Hotmix Intersections		\$ 63,000.00								
Stormwater		\$ 100,000.00								
Totals: \$		921,000.00								
New Assets:										
Footpath Construction		\$ 263,000.00							Difference = \$ (20,454.00)	
Pram Crossings		\$ 14,000.00								
Totals: \$		277,000.00							Theoretical Cumulative Gap (includes gap carried over from 2025/26) = \$ 2,018,356.00	

Sustainability Note:
 Council's 2026/27 financial target for asset renewal to achieve financial sustainability is **\$3,384,546**
 Planned Budgeted expenditure is **\$3,405,000**

INPUT SCHEDULE FOR ROAD AND DRAINAGE INFRASTRUCTURE

APPENDIX C

SUB PAVEMENT

	life expectancy (yrs)	Replacement cost \$/m ²
LS	120	2.03

PAVEMENT - Collector, Industrial and Boundary Roads

	life expectancy (yrs)	Replacement cost \$/m ²	
CR	60	21.60	Crushed Rock (this assumes 100mm layer of existing pavement is salvaged and reused in the new pavement - reduces pavement construction costs by \$1.50 per m2)
CRLS	60	19.5	Crushed Rock/Limestone (this assumes 100mm layer of existing pavement is salvaged and reused in the new pavement - reduces pavement construction costs by \$1.50 per m2)
CSL	30	22.05	Cement Stabilised Limestone
FBCR	30	24.15	Foam Bitumen Crushed Rock
FBL	30	22.05	Foam Bitumen Limestone
FDA	30	17.70	50mm Asphalt
FDA100	30	35.39	100mm Asphalt
FDA75	30	26.55	75mm Asphalt
LS	60	18.75	Limestone
LSCR	30	24.15	Lime Stabilised Crushed Rock
NO	0	0	None
PSCR	30	24.15	Polymer Stabilised - Crushed Rock
PSL	30	22.05	Polymer Stabilised - Limestone

Note: 30mm of FDA pavements valuation included in Seal value (\$19.95)

PAVEMENT - Local Roads

	life expectancy (yrs)	Replacement cost \$/m ²	
CR	75	21.60	Crushed Rock (this assumes 100mm layer of existing pavement is salvaged and reused in the new pavement - reduces pavement construction costs by \$1.50 per m2)
CRLS	75	19.5	Crushed Rock/Limestone (this assumes 100mm layer of existing pavement is salvaged and reused in the new pavement - reduces pavement construction costs by \$1.50 per m2)
CSL	37.5	22.05	Cement Stabilised Limestone
FBCR	37.5	24.15	Foam Bitumen Crushed Rock
FBL	37.5	22.05	Foam Bitumen Limestone
FDA	37.5	17.70	50mm Asphalt
FDA100	37.5	35.39	100mm Asphalt
FDA75	37.5	26.55	75mm Asphalt
LS	75	18.75	Limestone (this assumes 100mm layer of existing pavement is salvaged and reused in the new pavement - reduces pavement construction costs by \$1.20 per m2)
LSCR	37.5	24.15	Lime Stabilised Crushed Rock
NO	0	0	None
PSCR	37.5	24.15	Polymer Stabilised - Crushed Rock
PSL	37.5	22.05	Polymer Stabilised - Limestone

Note: 30mm of FDA pavements valuation included in Seal value (\$19.00)

SEALS

	life expectancy (yrs)	Replacement cost \$/m ²	
AC	20	19.95	Asphalt
AO	20	19.95	Asphalt Overlay
CO	15	17.64	Cold Overlay
F	12	4.50	Fourteen
FS	14	7.70	Fourteen Seven
FT	14	8.20	Fourteen Ten
GFS	14	12.13	Geo Fourteen Seven
NO	0	0.00	None
PA	40	136.50	Paver
S	12	3.80	Seven
T	12	3.80	Ten
TS	14	7.50	Ten Seven

KERBING

life expectancy (yrs)	Replacement cost \$/m		life expectancy (yrs)	Replacement cost \$/m			
LHSDU	60	63.00	Double upright	RHSDU	60	63.00	Double upright
LHSM	70	63.00	Mountable	RHSM	70	63.00	Mountable
LHSMK	60	63.00	Median Kerb	RHSMK	60	63.00	Median Kerb
LHSNO	0	0.00	None	RHSNO	0	0.00	None
LHSSD	60	73.50	Spoon Drain	RHSSD	60	73.50	Spoon Drain
LHSU	70	63.00	Upright	RHSU	70	63.00	Upright

FOOTPATHS

life expectancy (yrs)	Replacement cost \$/m ²		life expectancy (yrs)	Replacement cost \$/m ²	
LHS Asphalt	25	17.33	RHS Asphalt	25	17.33
LHS Bitumen	20	7.50	RHS Bitumen	20	7.50
LHS Concrete	70	70.35	RHS Concrete	70	70.35
LHS Grass	20	2.10	RHS Grass	20	2.10
LHS Gravel Surface	10	7.88	RHS Gravel Surface	10	7.88
LHS None	0	0.00	RHS None	0	0.00
LHS Pavers	70	136.50	RHS Pavers	70	136.50

STORMWATER

life expectancy (yrs)
70

TRAFFIC LIGHTS

life expectancy (yrs)
30

PLANT REPLACEMENT PROGRAM 2017/27

Change Over (net estimated after trade in and GST)

Table with 7 columns: Unit No., Description, Reg No, Purchase Date, Purchase Price, Economic Life, Replacement Year

Utilities & Vans:

Table with 7 columns: Unit No., Description, Reg No, Purchase Date, Purchase Price, Economic Life, Replacement Year. Lists various vehicles like Ford PX Ranger Ute, Toyota Hi Lux, etc.

Small Tipplers:

Table with 7 columns: Unit No., Description, Reg No, Purchase Date, Purchase Price, Economic Life, Replacement Year. Lists vehicles like Fuso 210 Canter, Hino 300 Crew Cab, etc.

Large Tipplers:

Table with 7 columns: Unit No., Description, Reg No, Purchase Date, Purchase Price, Economic Life, Replacement Year. Lists vehicles like Hino, Isuzu, Hino Ranger, etc.

Miscellaneous Trucks:

Table with 7 columns: Unit No., Description, Reg No, Purchase Date, Purchase Price, Economic Life, Replacement Year. Lists vehicles like International water cart, Hino Water Cart, etc.

Rollers:

Table with 7 columns: Unit No., Description, Reg No, Purchase Date, Purchase Price, Economic Life, Replacement Year. Lists vehicles like Bomag, Caterpillar, etc.

retain to scrap

Summary table with 11 columns: estimated costs 2016/17 to 2026/27

Large grid table for Change Over (net estimated after trade in and GST) with 11 columns for estimated costs from 2016/17 to 2026/27 and multiple rows for different items.

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