



SHIRE OF WYNDHAM | EAST KIMBERLEY

ASSET MANAGEMENT PLAN

2017

Document Control		 			
Rev No	Date	Revision Details	Author	Reviewer	Approver
Version 1	August 2012	Draft issued for review	Core business		
Version 2	June 2013	Addition of new Policy and DLG/RDL Acknowledgement Cross reference of ratios to LTFP and cover page added	Core business		
Version 3	June 2017	Rewritten to IPWEA standards with current data	V Whyte	DK	CA
Version 4	August 2017	Amended with public comments	V Whyte	DK	CA

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1. EXECUTIVE SUMMARY

Context

This document details the planned management of Shire controlled assets and their associated services. It also evidences compliance with the relevant Regulations and outlines the funding required to provide a desired level of service.

The Shire of Wyndham East Kimberley covers over 121,000 square kilometres within the north-eastern portion of the State. The town of Kununurra is the major residential and business area in the Shire.

The major issues affecting the management of Wyndham East Kimberley's assets are:

- Availability of funding for operations, maintenance, upgrade and renewal of assets
- Difficulty in maintaining assets and community expectations in sparsely populated communities.

What are our assets?

For the purpose of this Plan, Shire assets have been grouped into 5 asset categories with a total Asset valuation \$380.4M, detailed below is the breakdown at the current replacement values;

1. Transport and drainage \$294.7M
2. Jetties and Boat ramps \$11.5M
3. Plant, Equipment and Information Technology \$6.6M
4. Buildings and Property \$54.4M
5. Recreation, Parks and other Infrastructure \$13.2M

What does it cost and what is our budget?

The projected outlays and budget necessary to provide the services covered by this Asset Management Plan (AM Plan) includes operations, maintenance, renewal and upgrade of existing assets over a 10 year planning period.

Transport and drainage

The projected 10 year average cost is \$11.6M. The estimated available 10 year average Long Term Financial Plan (LTFP) budget is \$9.2M which is 79% of the cost to provide the service. This is a funding shortfall \$2.4M on average per year.

Jetties and Boat ramps

The projected 10 year average cost is \$496,000. The estimated available 10 year average LTFP budget is \$480,000 which is 97% of the cost to provide the service. This is a funding shortfall \$16,000 on average per year.

Plant, Equipment and Information Technology

The projected 10 year average cost is \$2.6M. The estimated available 10 year average LTFP budget is \$2.1M which is 80% of the cost to provide the service. This is a funding shortfall \$500,000 on average per year.

Buildings

The projected 10 year average cost is \$1.3M. The estimated available 10 year average LTFP budget is \$1.3M which is 100% of the cost to provide the service.

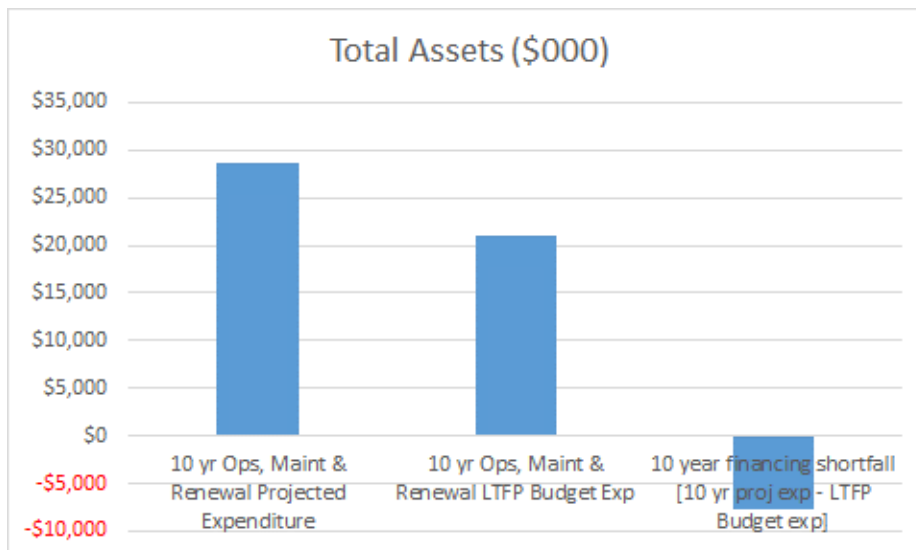
Recreation, Parks and other infrastructure

The projected 10 year average cost is \$6.6M. The estimated available 10 year average LTFP budget is \$5.4M which is 82% of the cost to provide the service. This is a funding shortfall \$1.2M on average per year.

Asset summary (Total)

The projected 10 year average cost is \$28.7M. The estimated available 10 year average LTFP budget is \$20.9M which is 72% of the cost to provide the service. This is a funding shortfall \$7.7M on average per year.

Figure 1.1 - Asset Summary (Total)



What we will do

The Shire plans to provide services for the operation, maintenance, renewal and upgrade of assets to meet minimum required service levels set by a Service Level Agreement that will be developed during 2017/18.

What we cannot do

The Shire does not have access to funding to provide all services at the desired service levels or provide new assets and services.

Managing the Risks

The Shire has identified the following major risks associated with asset management;

- Asset condition decreases due to inadequate renewal program.
- Significant unforeseen increases in maintenance or renewal costs.
- Asset Condition decreases due to flood damage

The Shire will endeavour to manage these risks within available funding by:

- Determining renewal priorities based on risk and lifecycle cost.
- Monitoring costs and adjust long-term plans accordingly.
- Ensuring adequate road drainage in design/construction and maintenance to mitigate risk of flood damage

Alignment with the long term financial plan

It is necessary for the asset management plan to align with the newly developed Long Term Financial Plan.

Based on the current level of asset knowledge and planning, adequate determination of whether the Shire has the financial capacity to maintain its asset base over the next ten years is not yet available. A greater understanding of future grant levels, along with processes for managing the level of maintenance, and determining the remaining useful life of assets is required. This will require a significantly higher understanding of Shire assets and a greater integration of asset management planning and long term financial planning.

Maintaining and updating asset related data to the level necessary to support and influence future decision making is a significant task for the Shire into the future. It will require dedicated resources and will have a financial impact.

Confidence Levels

This Asset Management Plan is based on a medium level of confidence in the information available for the data inputs. Information relating to the age and condition of the Transport assets have been collated utilising data in the Roman 2 (RAMMS) Infrastructure database in conjunction with Plant, Equipment, buildings and miscellaneous asset data obtained from the Finance Directorate.

Historically, assets have been managed based on available funding allocations as part of developing an annual budget with limited formal asset planning or reference to whole of life costs. This plan is the first step in implementing a structured and integrated approach to the management of the Shire's asset base.

Formal consideration of long-term asset costs supports efficient decision making and assists in the planning and delivery of future services. These benefits are maximised as the extent and condition of existing assets are increasingly understood and documented.

The Next Steps

The actions resulting from this asset management plan are:

- Seek funding approval for the programme of works detailed in the budget and reflected in this Asset Management Plan
- Undertake regular asset valuations supported by sound processes and independent checking. Revaluations should be undertaken in accordance with the appropriate financial regulations, as a guide a desktop revaluation is carried out annually and a full revaluation approximately every 4-5 years
- Develop long term renewal profiles for building and road asset based on complete asset registers and condition assessment as these become available
- Develop further the first cut Risk Management Plan and gain buy in from internal stakeholders
- Assess the asset condition with a priority for roads asset group as a key input into the valuation process and renewal decision making processes
- Link finance's spreadsheet system and Infrastructure's Roman 2 (RAMMS) and spreadsheet databases into a consolidated Asset register.

- Establish current service level performance
- Develop a Service Level Statement
- Use the Service Level Statement and Asset Management Plan to develop a Service Level Agreement.
- Measure and monitor service level performance

Questions you may have:

What is an Asset Management Plan?

Asset Management Planning is a comprehensive process to ensure delivery of services are provided in a financially sustainable manner.

An Asset Management Plan details information about Shire assets including actions required to provide an agreed level of service in the most cost effective manner. The plan defines the services to provide, how the services are provided, and what funds are required to provide the services.

Why is there a funding shortfall?

Most of the Shire's road network was constructed over 50 years ago, with some of the Shires roads dating back to the 1800's. Some of the infrastructure network was constructed by government grants, often provided and accepted without consideration of ongoing operations, maintenance and replacement costs. Many of the Shire's assets are approaching the end of their life and require replacement. Services from the assets are decreasing and maintenance costs are increasing. Our present funding levels are insufficient to continue to provide existing services at current levels.

What options do we have?

Resolving the funding shortfall involves several steps:

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

What happens if we do not manage the shortfall?

It is likely that Council will have to reduce service levels in some areas, unless new sources of revenue are found for adequate renewal of assets in a planned manner. For sealed roads and drainage, the service level reduction may include flooded and damaged town roads in the wet season and for unsealed roads, high roughness, rutting and washouts.

What can we do?

We can develop options, costs and priorities for immediate and future renewal programs, consult with the community to plan future services to match the community service needs with ability to pay for services and maximise community benefits against costs.

2. INTRODUCTION

2.1. Background

This Asset Management Plan is the Shire's next step in our management of assets (and services provided from assets), compliance with regulatory requirements, and planning for the funding needed to provide the required levels of service over a 10 year planning period.

The asset management plan follows the format for Asset Management Plans recommended in Section 4.2.6 of the International Infrastructure Management Manual¹. The Asset Management Plan should be read in conjunction with the Shire of Wyndham East Kimberley Asset Management Policy, Asset Management Strategy, Strategic Community Plan 2012 to 2022 and Corporate Business Plan 2016/17 -2019/20.

This Plan is generated in accordance with the Shire of Wyndham East Kimberley Asset Management Policy and forms a component of the Shire's overall Asset Management Strategy. The Plan also sets out the tasks required to achieve continuous improvement in the management of Shire controlled assets. Included are each major asset class based on available asset information and, to the extent permitted, the Plan is prepared in line with the relevant framework and guidelines issued by the Western Australian Department of Local Government and Communities'. The infrastructure assets covered by this asset management plan are shown in Table 2.1.

Table 2.1: Assets covered by this Plan

Asset category	Sub category	Replacement Value
Transport and drainage	Unsealed Roads and drainage	\$96.7
	Sealed Roads and drainage (including curbing, footpaths, carparks & bridges)	\$198M
Jetty's and Boat ramps	Jetty's, pontoons, boat ramps	\$11.5M
Plant and Equipment	Depot equipment, Light and heavy vehicles, machinery, Information Technology	\$6.6M
Buildings and property	Buildings and property – commercial and residential	\$54.4M
Parks, recreation and non-transport infrastructure	Parks, recreational facilities, cemeteries, public lighting, reticulation, waste management	\$13.2M
TOTAL		\$380.4M

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

2.2. Goals and Objectives of Asset Management

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

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

- Providing a defined level of service and monitoring performance,
- Managing the impact of growth through demand management and infrastructure investment,
- Taking a lifecycle approach to developing cost-effective management strategies for the long-term that meet the defined level of service,
- Identifying, assessing and appropriately controlling risks, and
- Having a long-term financial plan which identifies required, affordable expenditure and how it will be financed.

2.3. Plan Framework

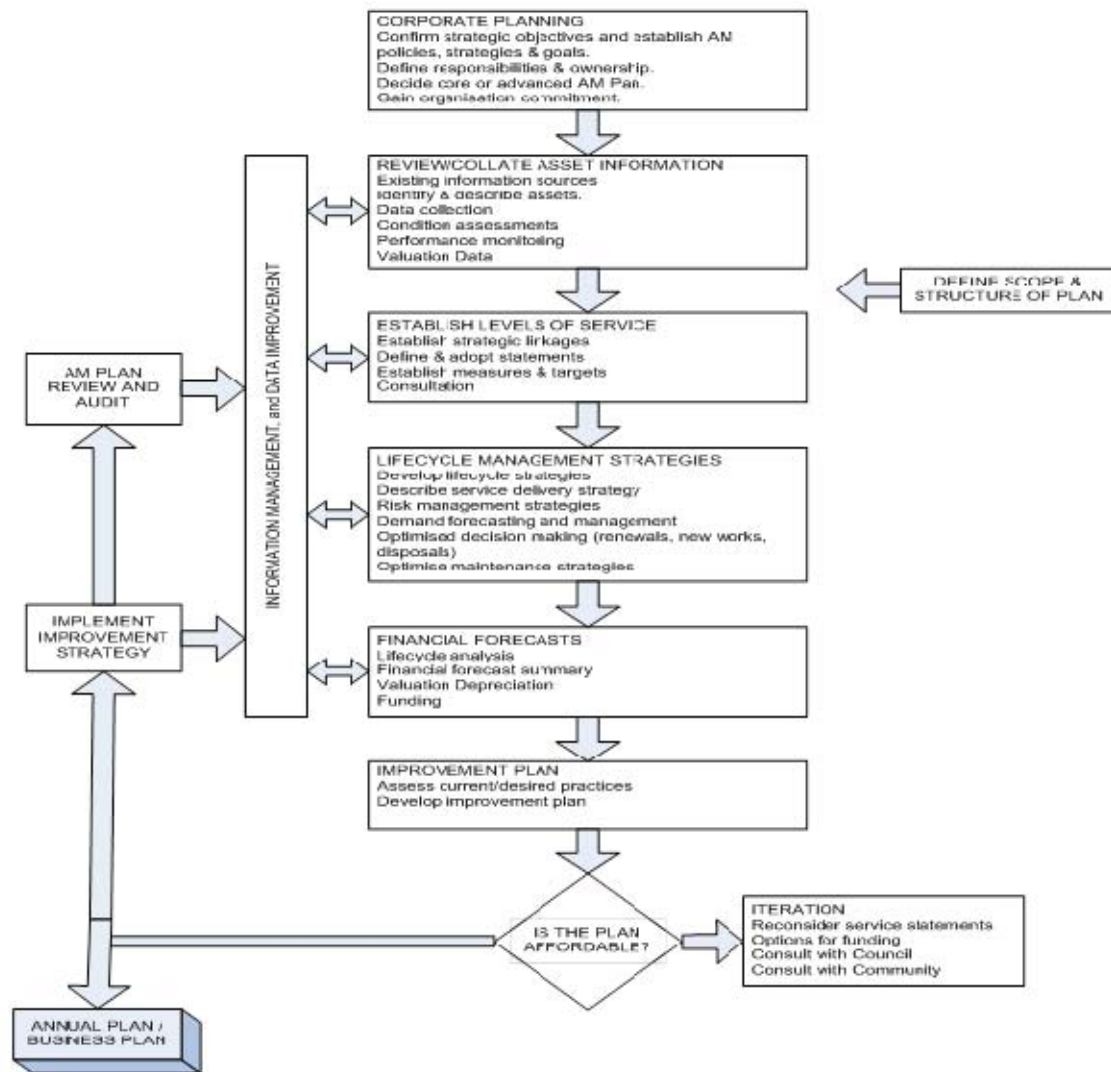
Key elements of the plan are:

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

A road map for preparing an asset management plan is shown in Figure 2.1.

Figure 2.1: Road Map for preparing an Asset Management Plan

Source: IPWEA, 2006, IIMM, Fig 1.5.1



2.5 Community Consultation

This Asset Management Plan is prepared to facilitate consultation initially through the Infrastructure Directorate and then via the Shire of Wyndham East Kimberley executive management team, prior to adoption by the Shire. Future revisions of the asset management plan will incorporate community consultation on service levels and costs of providing the service. This will assist the Council and the community in matching the level of service needed by the community, service risks and consequences with the community's ability and willingness to pay for the service.

3. LEVELS OF SERVICE

3.1 Customer Research and Expectations

A community scorecard survey was undertaken between 14 March and 14 April 2017 using the independent company CATALYSE, allowing a comparison with other local governments for benchmarking purposes.

Table 3.1 includes Community satisfaction levels for infrastructure services. The results indicate that improvement is required in all services areas.

Table 3.1: Community Satisfaction Survey Levels – Infrastructure (assets)

Performance Measure	Satisfaction Level		
	SHIRE OF WYNDHAM EAST KIMBERLEY	Industry Standard	Industry High
Maintenance of sealed roads	30	40	50
Maintenance of un-sealed roads	33	38	46
Footpaths, cycle ways and trails	34	46	58
Streetscapes	36	45	60
Lighting of streets and public places	38	46	60
Storm water drainage	28	44	54
Boat Ramps	59	NA	NA

*Note: Performance measure = index score out of 100 using the formula: (mean score – ¼)*100*

3.2 Strategic and Corporate Goals

This Asset Management Plan is prepared with reference to the Shire's Strategic Community Plan 2012 – 2022, which is a long-term overarching document that sets out our community's vision and aspirations for the future. The Strategic Community Plan also sets out the key strategies and high-level actions required to achieve these aspirations. Relevant organisational goals and objectives and how these are addressed in this asset management plan are presented in table 3.2 below;

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

Shire Goals – Strategic Community Plan 2012 - 2022	Objective/Strategy - Strategic Community Plan 2012 - 2022	Asset Management Plan Actions
Leadership and Governance	O1.4: Business innovation, efficiency and improved	Develop an asset management

Goal 1: Strong leadership and governance that underpins a more strategic approach to community engagement, regional development and organisational sustainability	services	plan (this plan) • Enhance condition assessments for all assets • Assist improve Long Term Financial Plan • Ongoing review and implementation of Asset Management - Identify and assess all assets
Physical and Social Infrastructure Goal 2: Greater returns from regional investment to ensure sustainable provision of appropriate physical and social infrastructure	O2.2: Maintenance of economic diversity and greater community returns from investment in the region O2.3: Facilities are appropriate for their intended purpose and factor in whole of life costing and maintenance S2.3.1: Manage and maintain assets in a strategic and cost effective manner S2.3.2: Plan, design and budget for sustainable infrastructure	• Maintain, renew or upgrade urban road assets • Maintain, renew or upgrade stormwater assets • Maintain, renew or upgrade footpaths, shared paths and cycle way assets • Maintain, renew or upgrade rural road assets • Plant and equipment renewal - Accelerate program to catch up with backlog • Renew or upgrade new Landfill Assets as per Waste Management Strategy • Maintain, renew and upgrade play spaces in accordance with Recreation Space Strategy • Develop Stormwater Management Strategy • Upgrade Wyndham waste water reuse treatment facility
Lifestyle and Environment Goal 3: Protection and enhancement of lifestyle values, community facilities and the environment to provide safe and inviting communities	O3.2: Waste management and protection of environmental values S3.2.1: Provide an integrated approach to waste management S3.3.3: Ensure adequate street lighting O3.4: Protection and enhancement of community facilities S3.4.1: Manage, maintain and upgrade public parks and amenities to ensure they meet community need and are accessible to people of all ages and abilities S3.4.4: Provide and support a more effective range	• Undertake streetlight upgrades • Maintain or enhance parks and gardens • Develop a new Leisure/Aquatic centre • Upgrade Lily Creek Lagoon jetty, boat ramp and car park & Cathodic Protection • Seek funding and prepare project implementation plan for Anton's Landing foreshore revitalisation and upgrade

	of sport and recreation services and facilities including a new leisure and aquatic facility in Kununurra S3.5.3: Increase access to the lake, gulf and rivers, including boat ramps, according to demand usage and safety considerations	
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The organisation will exercise its duty of care to ensure public safety is in accordance with the infrastructure risk management plan prepared in conjunction with this Asset Management Plan. Management of infrastructure risks is covered in Section 5.2

3.3 Legislative Requirements

The organisation is required to meet legislative requirements including Australian and State legislation and State regulations. These include (but not limited to) the following in table 3.3;

Table 3.3: Legislative Requirements

Legislation	Requirement
<i>Local Government Act 1995 (as amended) and associated Regulations.</i>	Sets out role, purpose, responsibilities and powers of local governments including the preparation of a long term financial plan supported by asset management plans for sustainable service delivery.
<i>Main Roads Act 1930 (as amended) and associated Regulations.</i>	Sets out the law relating to and making provision for the construction, maintenance, and supervision of highways, main and secondary roads, and other roads, the control of access to roads and for other relative purposes.
<i>Building Code of Australia 2005.</i>	Sets out the law relating to property.
<i>Occupational Safety and Health Act 1984.</i>	An Act to promote and improve standards for occupational safety and health, to establish the Commission for Occupational Safety and Health, to provide for a tribunal for the determination of certain matters and claims, to facilitate the coordination of the administration of the laws relating to occupational safety and health and for incidental and other purposes.
<i>Planning and Development Act 2005.</i>	Provide for an efficient and effective land use planning system in the State and promote the sustainable use and development of land.
<i>Waste Avoidance and Resource Recovery Act 2007.</i>	The primary objects of this Act are to contribute to sustainability, and the protection of human health and the environment, in Western Australia

The Shire will exercise its duty of care to ensure public safety in accordance with the Infrastructure Risk Management Plan linked to this Asset Management Plan. Management of risks is discussed in Section 5.2.

3.4 Levels of Service

Service levels are defined service levels in two terms, Community levels of service and Technical levels of service.

Community Levels of Service

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

Community levels of service measures used in the asset management plan are:

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

Consultation with the community is required before settling on community levels of service.

Tables 3.4 & 3.5 show Community Levels of Service that may be expected to be provided under this Asset Management Plan for roads and buildings.

Table 3.4: Community Levels of Service for Roads

Community Levels of Service for Roads				
Service attribute	Service Objective	Performance measure process	Current year performance	Expected position in 10 years based on current LTFP
Quality	Sealed roads provide safe and smooth travel	Service requests relating to ride quality	45 / year	Service requests are reducing
		Organisational measure. % of sealed roads in very good / good (1, 2) and poor / very poor (4, 5) functionality & confidence level	20% very good /good 15% poor/very poor Confidence level Medium	15% very good/good 20% poor/very poor Confidence level Medium
Function	Sealed roads meet transport program needs	Service requests relating to usage and availability	10 / year	Service requests are constant
		Organisational measure.% of sealed roads in very good / good (1, 2) and poor / very poor (4, 5) functionality & confidence level		15% very good/good 15% poor/very poor Confidence level Low
Capacity/ Utilisation	Sealed roads are appropriate for usage	Service requests relating to congestion or underuse	2 / year	Service requests are increasing
		Organisational measure. % of sealed roads in very good / good (1, 2) and poor / very poor (4, 5) functionality & confidence level		35 % very good/good 5% poor/very poor Confidence level Low

Table 3.5: Community Levels of Service for Buildings

Community Levels of Service for Buildings				
Service attribute	Service Objective	Performance measure process	Current year performance	Expected position in 10 years based on current LTFP
Quality	Buildings are clean and appropriate for users	Service requests relating to cleanliness & hygiene	45 / year	< 20 / year
		Organisational measure % of facilities in very good / good (1, 2) and poor / very poor (4, 5) condition & confidence level	20% very good/good10% poor/very poor Confidence level Medium	15% very good/good15% poor/very poor Confidence level Low
Function	Facilities meet program delivery needs	Service requests relating to availability and location	2.2 / month average	< 1 / month
		Organisational measure % of facilities in very good / good (1, 2) and poor / very poor (4, 5) condition & confidence level	20% very good/good10% poor/very poor Confidence level Medium	15% very good/good15% poor/very poor Confidence level Low
Capacity/ Utilisation	Facilities are appropriate for usage	Service requests relating to congestion or under use	15 / year	< 10 / year
		Organisational measure.% of facilities in very good / good (1, 2) and poor / very poor (4, 5) condition & confidence level	40% very good/good	40% very good/good10% poor/very poor Confidence level Low

Technical Levels of Service

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

Technical service measures are linked to annual budgets and technical parameters covering:

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

Tables 3.6 & 3.7, show a Technical Level of Service that may be expected to be provided under this Asset Management Plan for roads and buildings.

Table 3.6: Technical Levels of Service for Roads

Technical Levels of Service for Roads				
Operations	Assessed road condition	Condition assessment	Current condition to be maintained	Current level of service
Maintenance	Maintenance undertaken in an efficient manner	Maintenance cost of sealed and unsealed roads	Current costs \$/km does not increase (allowing for inflation)	Current level of service
Renewal	Roads meet users' needs	% of surfaces renewed in a year	Surfaces 5%	Current level of service
Upgrade/New	Road capacity matches usage	Road capacity compared to traffic volumes	95% of roads meet standards	Current level of service

Table 3.7: Technical Levels of Service for Buildings

Technical Levels of Service for Buildings				
Operations	Assessed condition of buildings	Condition assessment as part of annual inspection	Current condition to be maintained	Current level of service
Maintenance	Compliance with safety legislation	Safety inspection as part of annual inspection	100% compliance with safety legislation	Current level of service
Renewal	Facilities meet users' needs	% of buildings in poor / very poor condition	Current condition to be maintained	Current level of service
Upgrade/New	Facilities meet users' needs	% of buildings that meet compliance with Disability Discrimination Act	100% compliance with legislation	Current level of service

4. FUTURE DEMAND

4.1 Demand Drivers

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

4.2 Demand Forecast

Projections for demand drivers that may impact future service delivery and utilisation of Shire assets were identified in the 2013 report *East Kimberley @25K*. More recently the Shire has acquired access to REMPLAN, an Area-Specific Data and Modelling tool for Economic Development and Planning. In the coming months, the Shire will update inputs to REMPLAN that will provide modelling for strategic planning.

For the purpose of this Asset Management Plan, the most reliable growth data for the Shire is provided by the Long term Financial Plan, where the annual growth of rates for the Shire is assumed to be 1%.

4.3 Asset Programs to meet Demand

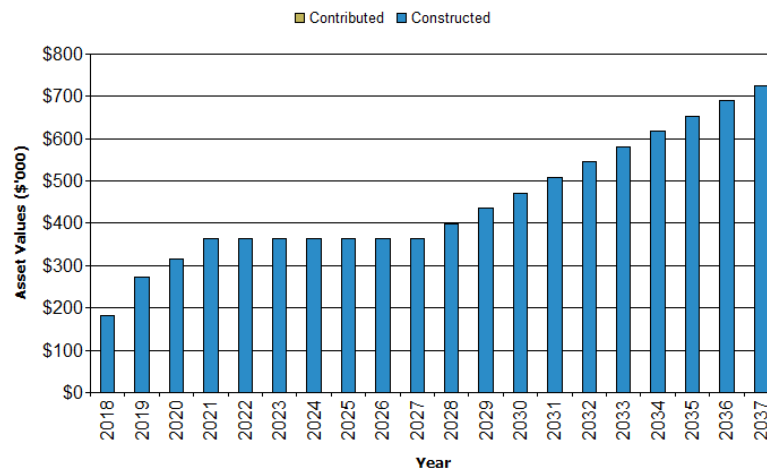
New assets constructed/acquired by the organisation are discussed in Section 5.5.

Figures 4.1 to 4.5 represent the expected value of new assets that will be either contributed or will be constructed based on data provided in the growth section of the planned expenditures.

Data is cumulatively represented with the yellow portion, if applicable, representing new assets attributed to growth and the blue section, if applicable, representing any expenditure committed in the future on new assets or upgrading / expanding current assets.

Figure 4.1: Upgrade and New Assets to meet Demand – Sealed Roads

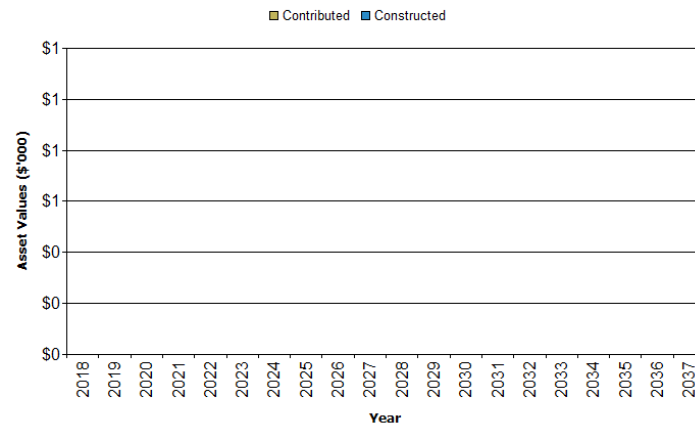
Wyndham-East Kimberley SC - Upgrade & New Assets to meet Demand
(Sealed roads and Drainage_S1_V1)



Note: Forecast increases of new assets noted in the following graphs are based on modelling from current budgets

Figure 4.2: Upgrade and New Assets to meet Demand – Unsealed roads

Wyndham-East Kimberley SC - Upgrade & New Assets to meet Demand
(Unsealed roads and drainage_S1_V1)



Note: Unsealed roads graph values are empty due to no new un-sealed roads forecast to be built

Figure 4.3: Upgrade and New Assets to meet Demand – Plant, Equipment and IT

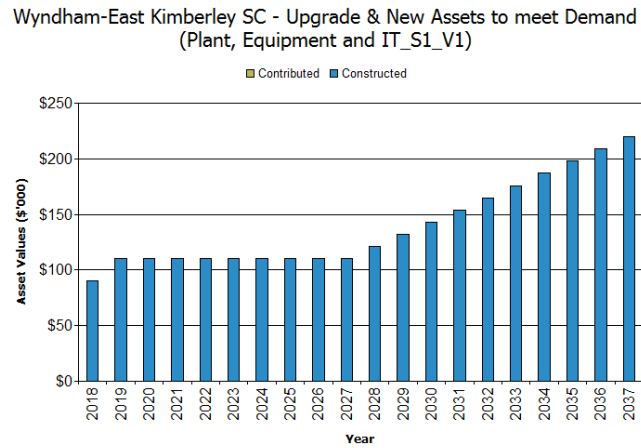


Figure 4.4: Upgrade and New Assets to meet Demand – Recreation, Parks and other

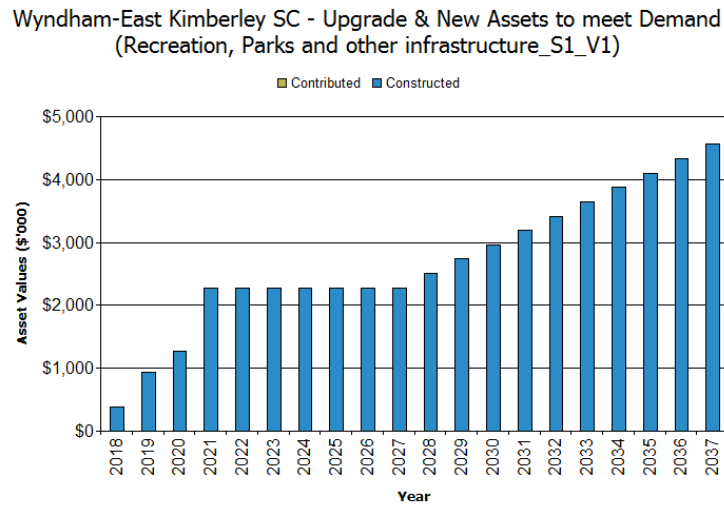
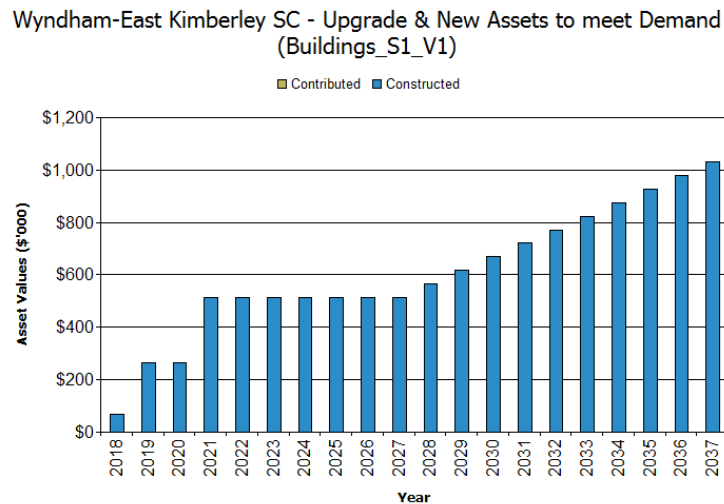


Figure 4.5: Upgrade and New Assets to meet Demand - Buildings



5. LIFECYCLE MANAGEMENT

The lifecycle management plan details how the organisation plans to manage and operate the assets at the agreed levels of service (defined in Section 3) while optimising life cycle costs.

5.1 Background Data

5.1.1. Physical Parameters

The age profile of the assets include in this Asset Management Plan are shown in *Figures 5.1 to 5.6*.

Figure 5.1: Asset Age Profile - Sealed Roads and Drainage

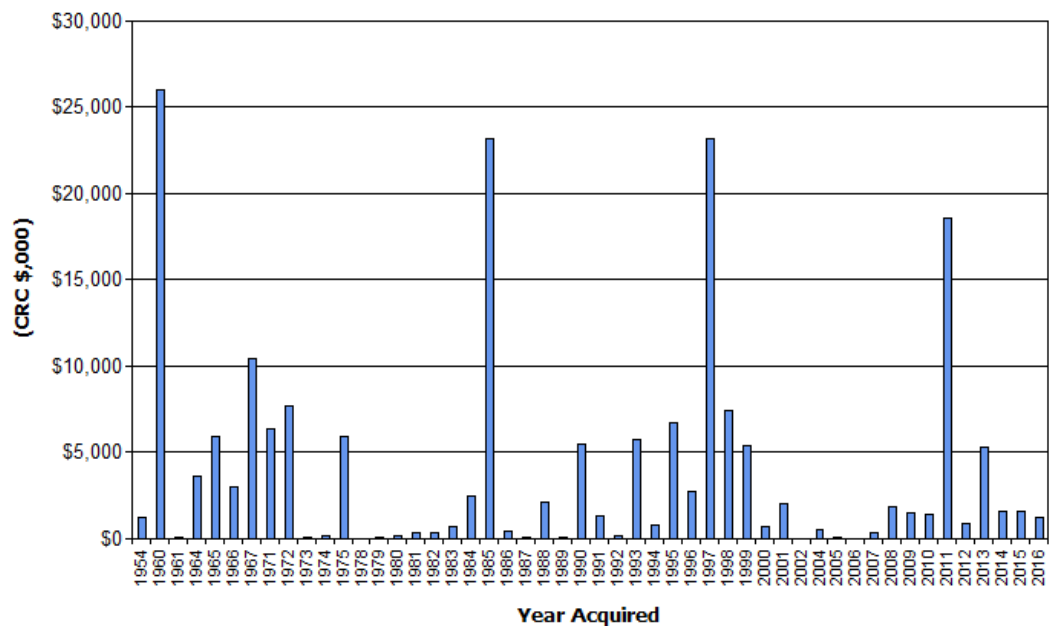


Figure 5.2: Asset Age Profile - Unsealed Roads and Drainage

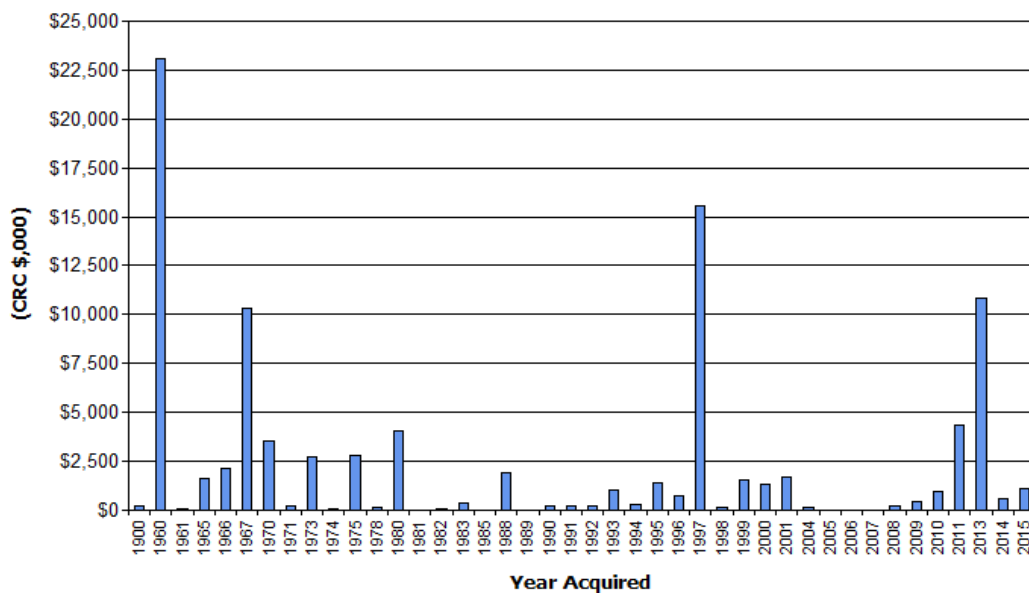


Figure 5.3: Asset Age - Profile Jetties and Boat Ramps

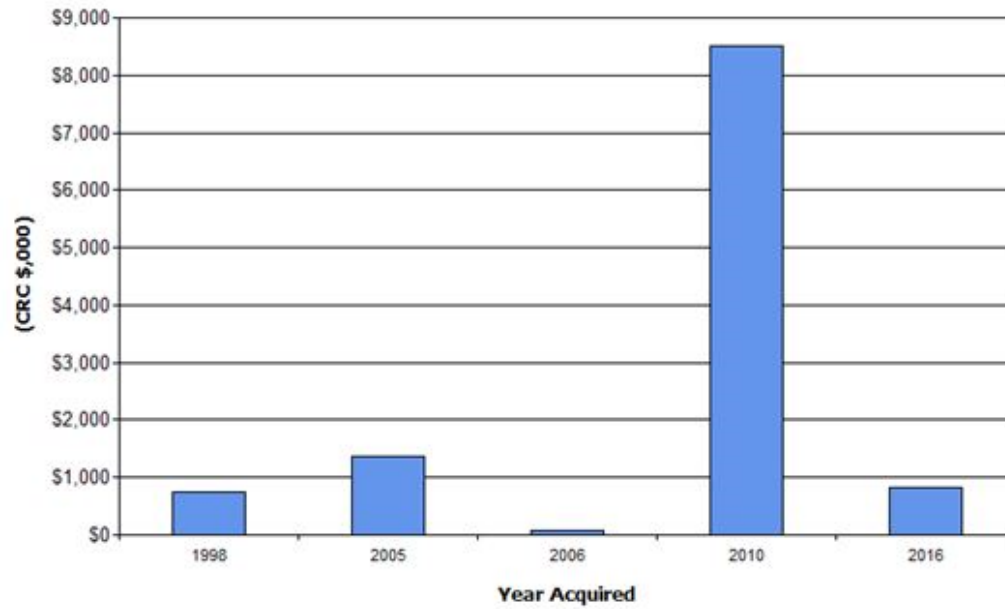


Figure 5.4: Asset Age Profile - Recreation Parks and other Infrastructure

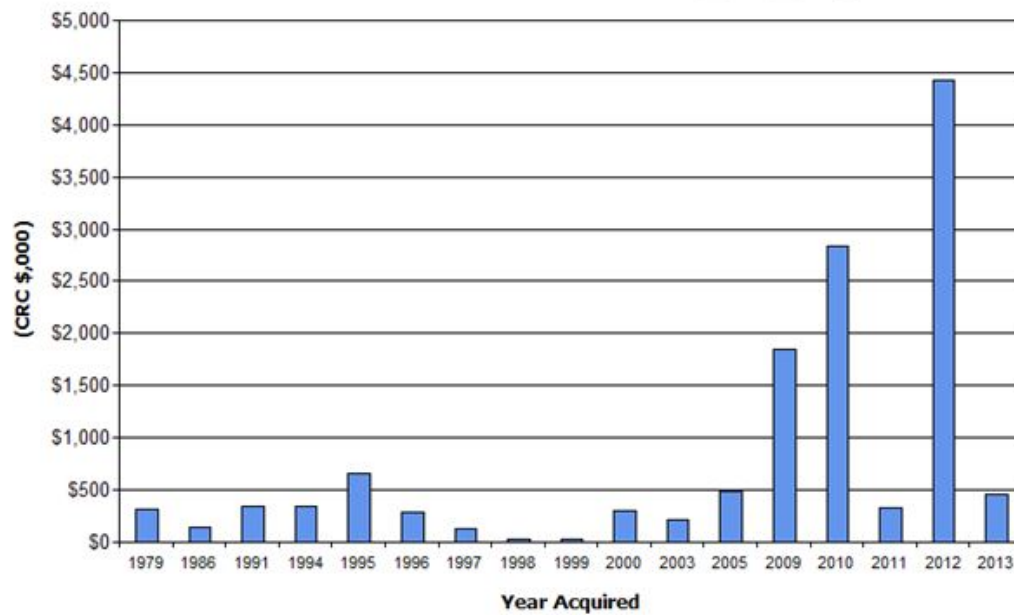


Figure 5.5: Asset Age Profile - Plant, Equipment and IT

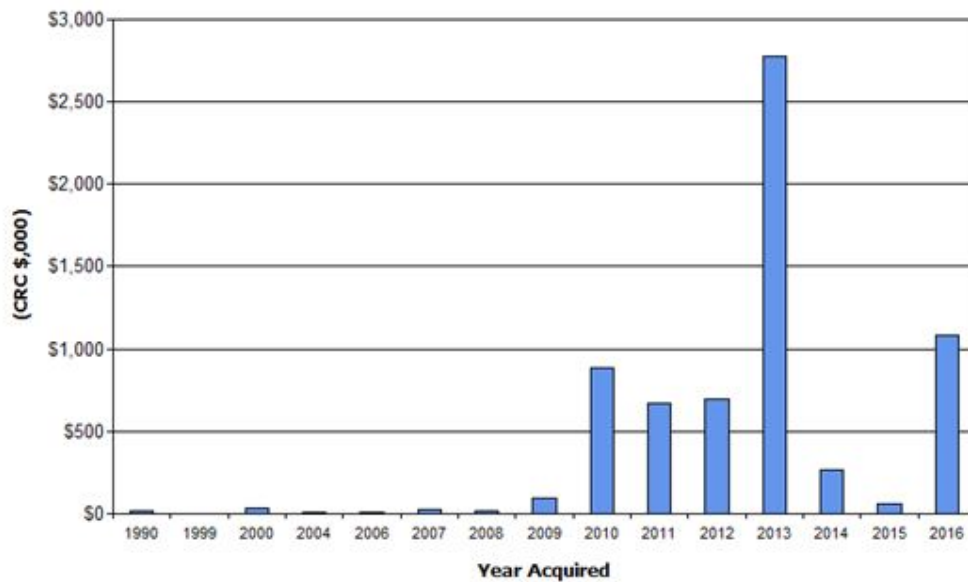
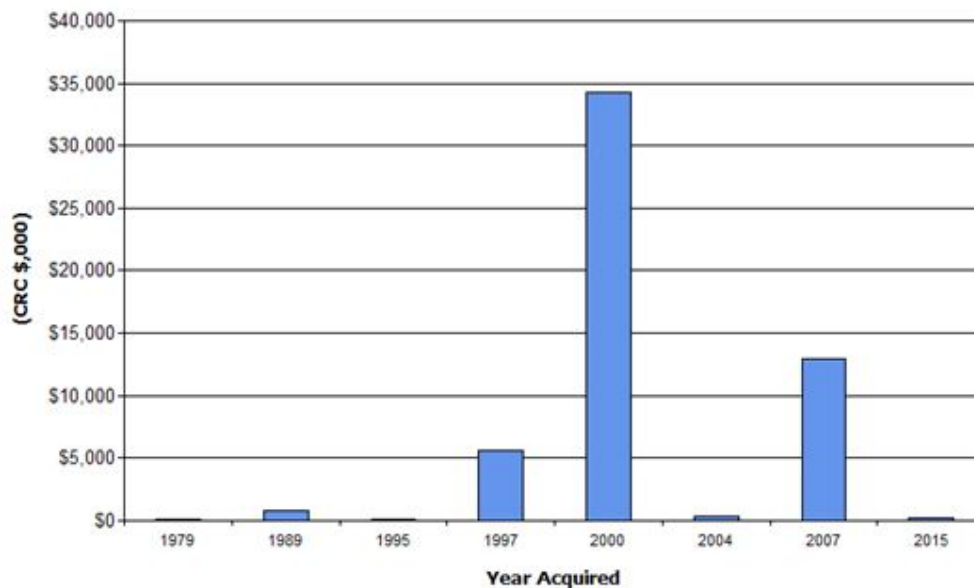


Figure 5.6: Asset Age Profile – Buildings



5.1.2. Asset capacity and performance

The organisation's maintenance services are generally provided to meet standards where these are available.

Customer service requests to the Shire depot were analysed for the 6 months to June 2017, providing quantitative data to identify deficiencies in service performance as detailed in Table 5.1 to 5.3.

Table 5.1: Known Service Performance Deficiencies- Roads & Footpaths

Service Deficiency	% of total customer service requests to operations depot
Drainage Issues	25%
Grading of Roads	4%
Potholes / Road / Kerb Repairs	31%
Removal of graffiti.	4%
Sign Maintenance/Lighting	11%
Tree Pruning & Removal	11%
Road Sweeping	12%

Table 5.2: Known Service Performance Deficiencies- Parks and Gardens

Service Deficiency	% of total customer service requests to operations depot
Gardens	18%
Litter	10%
Reticulation	28%
Play Equipment	3%
Trees	8%
Parks	5%
Mowing/Slashing	28%
Weed & Pest Control	3%

Table 5.3: Known Service Performance Deficiencies- Buildings

Service Deficiency	% of total customer service requests to operations depot
Administration Office	6%
Staff Housing	75%
Youth Centre	6%
Depot	13%

5.1.3. Asset condition

Condition data is currently available for the sealed roads, unsealed roads and Building's asset groups. Condition is measured using a 1 – 5 grading system² as detailed in *Table 5.4*.

Table 5.4: Simple Condition Grading Model

Condition Grading	Description of Condition
1	Very Good: only planned maintenance required
2	Good: minor maintenance required plus planned maintenance
3	Fair: significant maintenance required
4	Poor: significant renewal/rehabilitation required
5	Very Poor: physically unsound and/or beyond rehabilitation

Sealed roads

The sealed roads condition data was collected in November 2014 by the ARRB using RAMM (Roman II) specifications with condition rating between 1 (excellent) to 5 (very poor) moving away from the old Moloney renewal method.

The condition profile of our sealed roads assets is shown in Figure 5.6.

Figure 5.6: Sealed Roads and Drainage Asset Condition Profile



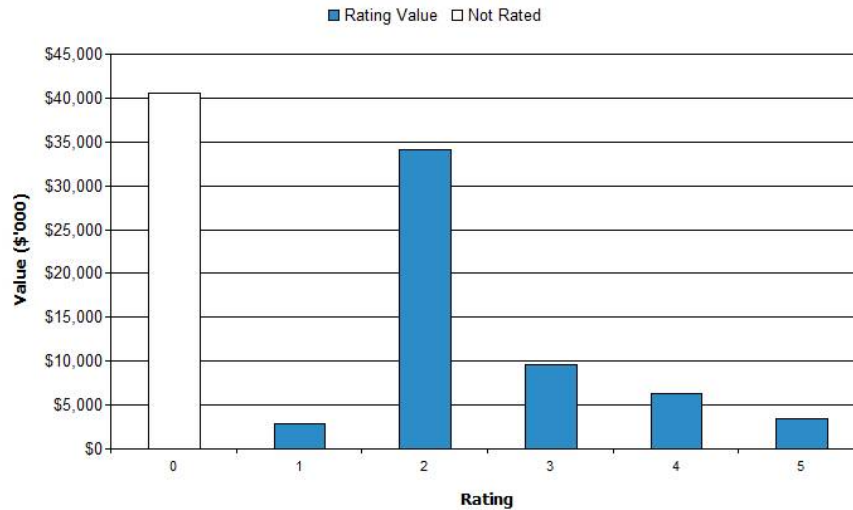
² IPWEA, 2011, IIMM, Sec 2.5.4, p 2|79.

Unsealed roads

The unsealed roads have been inspected in-house and records updated in 2017, most of the data was updated except where inclement weather conditions and resource unavailability did not permit the inspection.

The condition profile of our unsealed roads assets is shown in *Figure 5.7*.

Figure 5.7: Unsealed roads and drainage Asset Condition

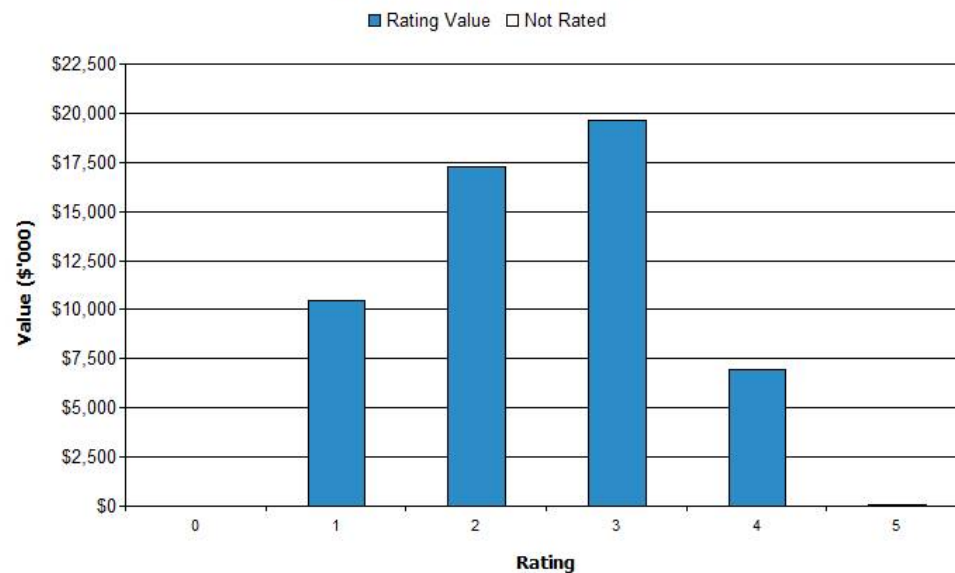


Buildings

Building condition assessment was conducted in May 2017 as part of a comprehensive insurance valuation of all Shire of Wyndham East Kimberley buildings and associated plant.

The condition profile of our buildings assets is shown in *Figure 5.8*.

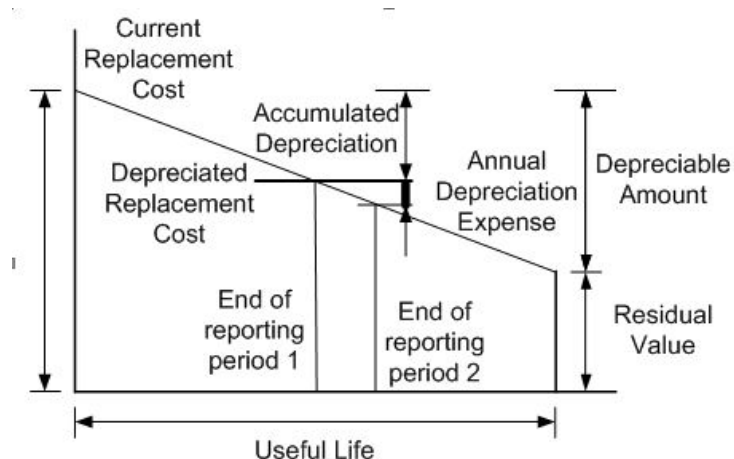
Figure 5.8: Buildings Asset Condition Profile



5.1.4. Asset valuations

Assets were are valued at cost to replace service capacity. An explanation as valuation terminology used in this plan is in Figure 5.9;

Figure 5.9: Valuation terminology



The value of assets recorded in the asset register as at June 2017 covered by this asset management plan are shown in Tables 5.5 to 5.10

Table 5.5: Sealed Roads and Drainage

Current Replacement Cost	\$197.8M
Depreciable Amount	\$197.8M
Depreciated Replacement Cost	\$74.7M
Annual Depreciation Expense	\$1.6M
Rate of Annual Asset Consumption	1.8%
Rate of Annual Asset Renewal	2.9%
Rate of Annual Asset Upgrade	0.1%
Rate of Asset Upgrade (Including Contributed Assets)	0.1%
Asset renewals as percentage of consumption	358.9%
Percentage Increase in asset stock	0.1%

Table 5.6: Unsealed Roads and Drainage

Current Replacement Cost	\$96.8M
Depreciable Amount	\$96.8M
Depreciated Replacement Cost	\$49.1M
Annual Depreciation Expense	\$2.17M
Rate of Annual Asset Consumption	2.2%
Rate of Annual Asset Renewal	11.2%
Rate of Annual Asset Upgrade	0%
Rate of Asset Upgrade (Including Contributed Assets)	0%
Asset renewals as percentage of consumption	497%
Percentage Increase in asset stock	0%

Table 5.7: Jetties and Boat Ramps

Current Replacement Cost	\$11.5M
Depreciable Amount	\$8.2M
Depreciated Replacement Cost	\$8.2M
Annual Depreciation Expense	\$302,000
Rate of Annual Asset Consumption	3.7%
Rate of Annual Asset Renewal	0.8%
Rate of Annual Asset Upgrade	0%
Rate of Asset Upgrade (Including Contributed Assets)	0%
Asset renewals as percentage of consumption	21.5%
Percentage Increase in asset stock	0%

Table 5.8: Plant, Equipment and IT

Current Replacement Cost	\$6.63M
Depreciable Amount	\$3.16M
Depreciated Replacement Cost	\$3.16M
Annual Depreciation Expense	\$379,000
Rate of Annual Asset Consumption	12%
Rate of Annual Asset Renewal	27.9%
Rate of Annual Asset Upgrade	2.8%
Rate of Asset Upgrade (Including Contributed Assets)	2.8%
Asset renewals as percentage of consumption	232.7%
Percentage Increase in asset stock	2.8%

Table 5.9: Recreation, Parks and Other Infrastructure

Current Replacement Cost	\$13.16M
Depreciable Amount	\$6.9M
Depreciated Replacement Cost	\$6.9M
Annual Depreciation Expense	\$476,000
Rate of Annual Asset Consumption	6.8%
Rate of Annual Asset Renewal	8.8%
Rate of Annual Asset Upgrade	5.4%
Rate of Asset Upgrade (Including Contributed Assets)	5.4%
Asset renewals as percentage of consumption	128%
Percentage Increase in asset stock	5.4%

Table 5.10: Buildings

Current Replacement Cost	\$54.4M
Depreciable Amount	\$27.7M
Depreciated Replacement Cost	\$27.7M
Annual Depreciation Expense	\$1.1M
Rate of Annual Asset Consumption	4%
Rate of Annual Asset Renewal	0.3%
Rate of Annual Asset Upgrade	0.3%
Rate of Asset Upgrade (Including Contributed Assets)	0.3%
Asset renewals as percentage of consumption	6.9%
Percentage Increase in asset stock	0.3%

5.2 Infrastructure Risk Management Plan

An assessment of risks associated with service delivery from infrastructure assets has identified critical risks that will result in loss or reduction in service from infrastructure assets or a 'financial shock' to the organisation. The risk assessment process identifies credible risks, the likelihood of the risk event occurring, the consequences should the event occur, develops a risk rating, evaluates the risk and develops a risk treatment plan for non-acceptable risks.

Critical risks, being those assessed as 'Very High' - requiring immediate corrective action and 'High' – requiring prioritised corrective action identified in the Infrastructure Risk Management Plan, together with the estimated residual risk after the selected treatment plan is operational are summarised in Table 5.11. The Shire is in the process of developing an organization wide risk management plan and the following risks will be reported to as part of this process.

Table 5.11: Asset Risk Register

Risk	Consequence	Risk rating	Risk treatment
Asset Condition decreases due to flood damage.	Desired level of service not maintained.	High	Ensure adequate drainage in road design and maintenance to mitigate risk of flood damage.
Significant unforeseen increases in maintenance or renewal costs.	Desired level of service not maintained.	Medium	Monitor costs and adjust long term plans accordingly.
Asset condition decreases due to inadequate renewal program.	Desired level of service not maintained.	Medium	Determine maintenance priorities based on risk and lifecycle cost.
Asset condition decreases due to inadequate maintenance program.	Desired level of service not maintained.	High	Determine maintenance priorities based on risk and lifecycle cost.
Sudden significant increase or decrease in population.	Sudden increase or decrease in level of service requirements.	Low	Monitor population trends and industry developments in the region.
Traffic incident attributable to sub-standard road conditions or road layout	Liability Risk	High	Ensure road network is maintained in compliance with defined standards.
Safety incident attributable to sub-standard asset condition design.	Liability Risk	Low	Ensure assets are maintained in compliance with applicable standards. Close assets which do not meet requirements.
Health and safety incident whilst working on assets causing fatality or serious injury.	Prosecution risk.	Low	Ensure council has compliant H & S policy. Ensure staff and contractors are trained in policy and all procedures are complied with

5.3 Routine Operations and Maintenance summary

Operations include regular activities to provide services such as public health, safety and amenity, e.g. cleansing, street sweeping, grass mowing and street lighting. 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. Summary of future operations and maintenance expenditures

Future operations and maintenance expenditure is forecast to trend in line with the value of the asset stock as shown in Figures 5.10 to 5.15. Note that all costs are shown in current 2017 dollar values (i.e. real values).

Figure 5.10 : Projected Operations and Maintenance - Sealed Roads and Drainage

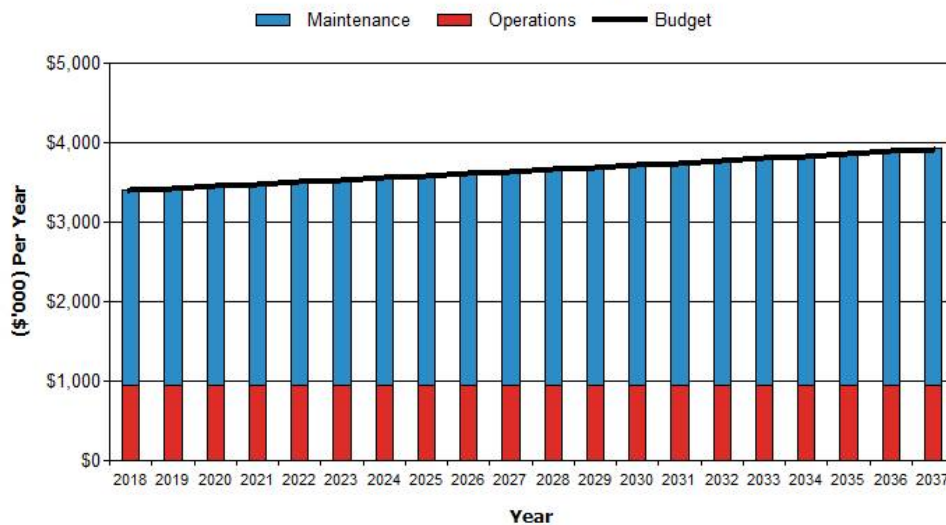


Figure 5.11 : Projected Operations and Maintenance Expenditure – Unsealed Roads and Drainage

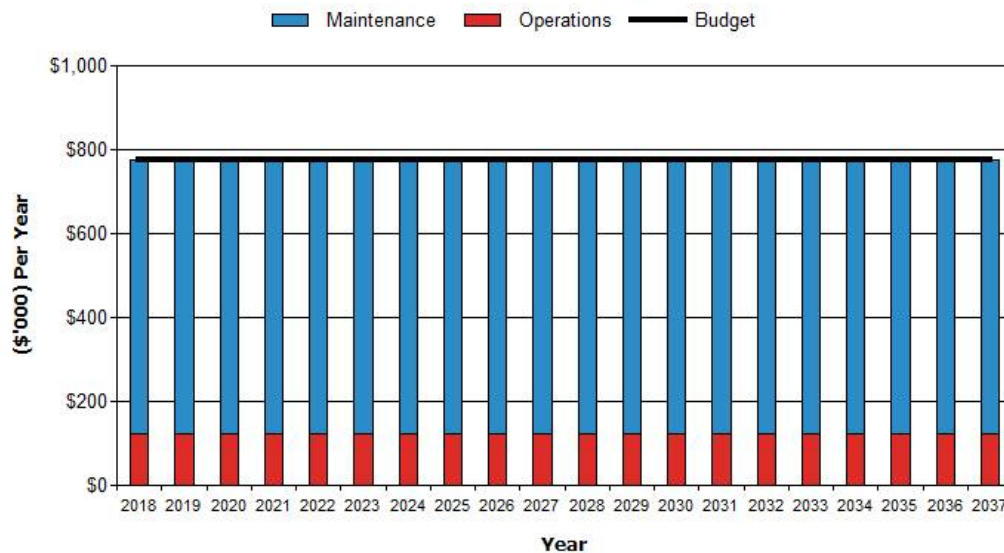


Figure 5.12 : Projected Operations and Maintenance Expenditure – Jetties and Boat Ramps

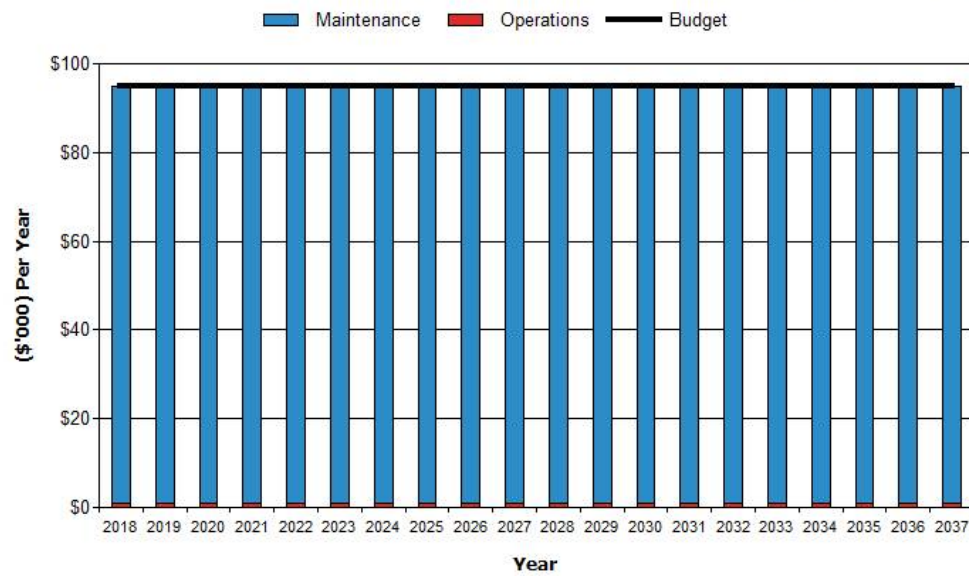


Figure 5.13 : Projected Operations and Maintenance Expenditure – Plant, Equipment and IT

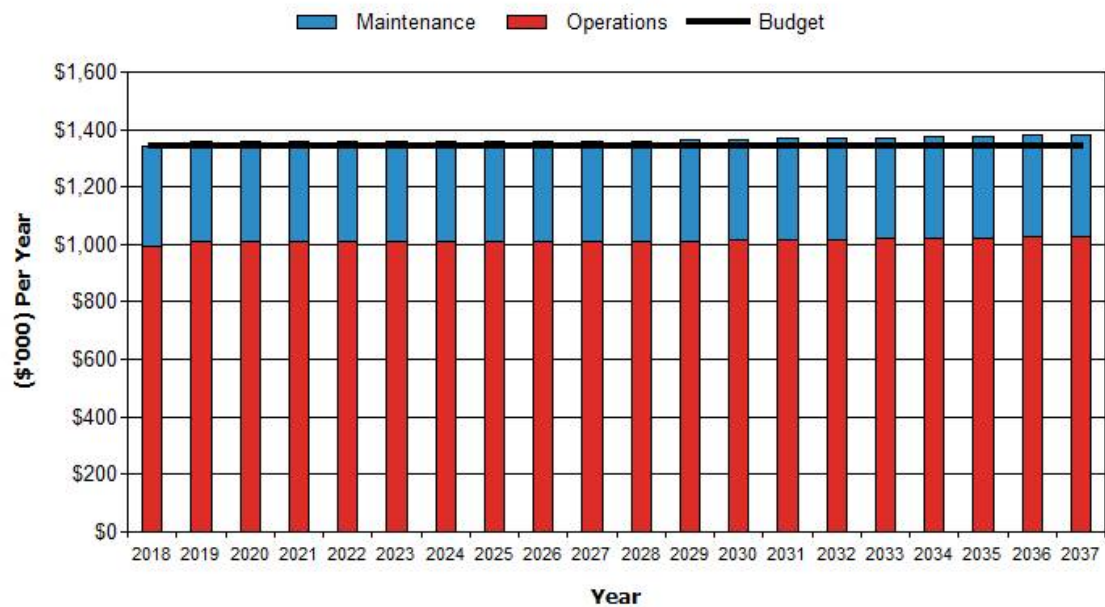


Figure 5.14: Projected Operations and Maintenance Expenditure – Recreation, Parks and other

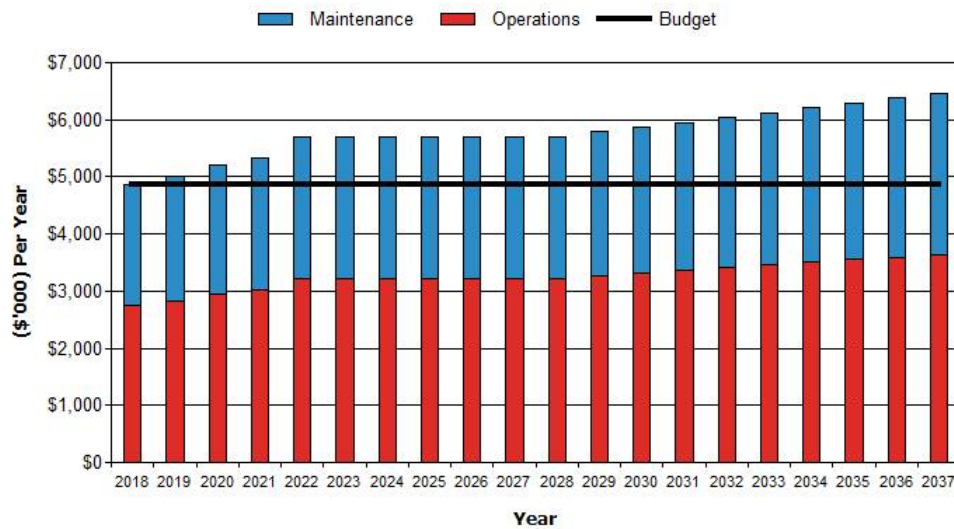
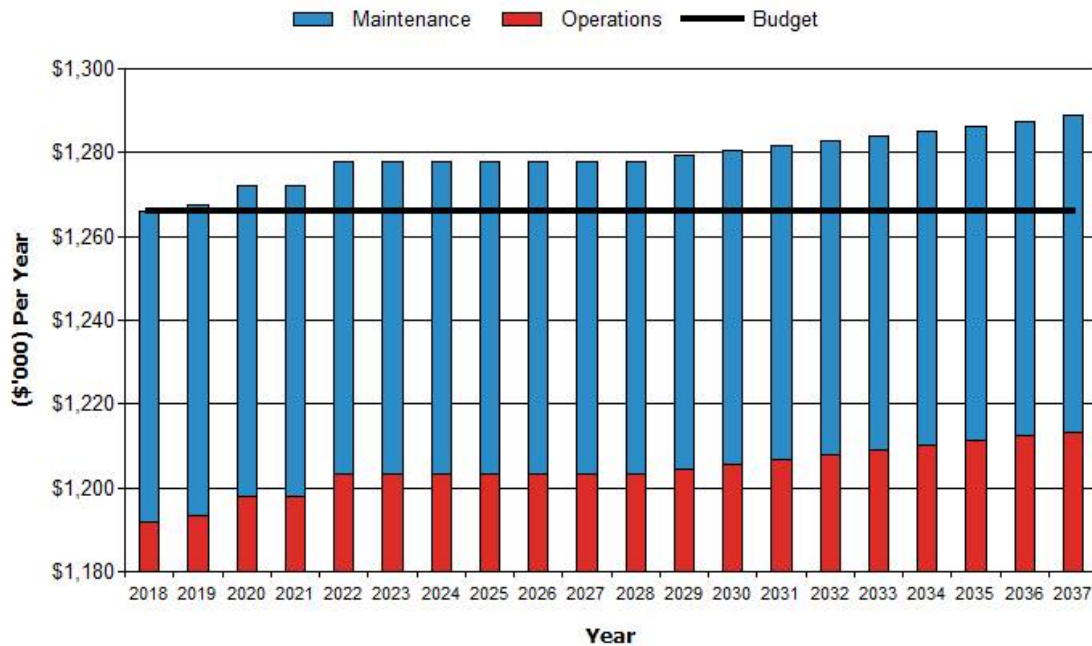


Figure 5.15 : Projected Operations and Maintenance Expenditure – Buildings



5.4. New / Upgrade Summary

New works are those works that create a new asset that did not previously exist, upgrade works improve an existing asset beyond its existing capacity. They may result from growth, social or environmental needs. Assets may also be acquired at no cost to the organisation from land development. These assets from growth are considered in Section 4.3.

5.4.1. Capital Investment Strategies

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

- 1) Planning and scheduling capital upgrade and new projects to deliver the defined levels of service in the most efficient manner,
- 2) Undertaking project scoping for all capital upgrade/new projects to identify:
 - a) The service delivery 'deficiency', present risk and required timeline for delivery of the upgrade/new asset
 - b) The project objectives to rectify the deficiency including value management for major projects
 - c) The range of options, estimated capital and life cycle costs for each options that could address the service deficiency
 - d) Management of risks associated with alternative options
 - e) The options against evaluation criteria adopted by Council and;
 - f) Select the best option to be included in capital upgrade/new programs
- 3) Review current and required skills base and implement training and development to meet required construction and project management needs,
- 4) Review management of capital project management activities to ensure the Shire is obtaining best value for resources used.

5.4.2. Summary of future upgrade/new assets expenditure

Projected upgrade / new asset expenditures are summarised in Figures 5.16 to 5.20. The projected upgrade / new capital works program is shown in Appendix C. All amounts are shown in real values.

Figure 5.16: Projected Capital Upgrade / New Asset Expenditure - Sealed Road and Drainage

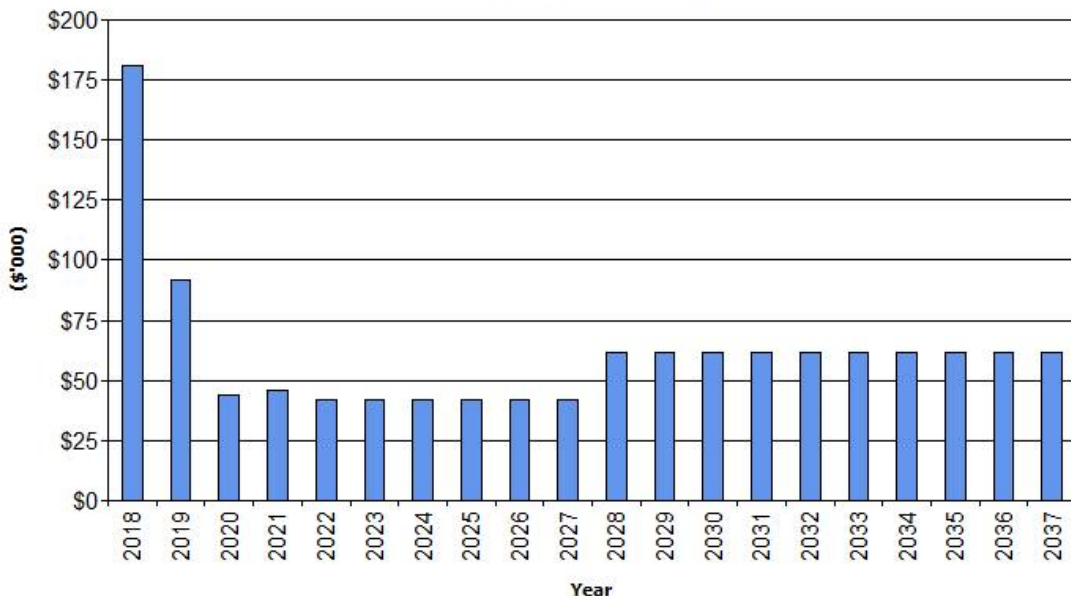


Figure 5.17: Projected Capital Upgrade / New Asset Expenditure – Un-Sealed Roads and Drainage

Note: No new unsealed roads are projected based on current budget and forecasts

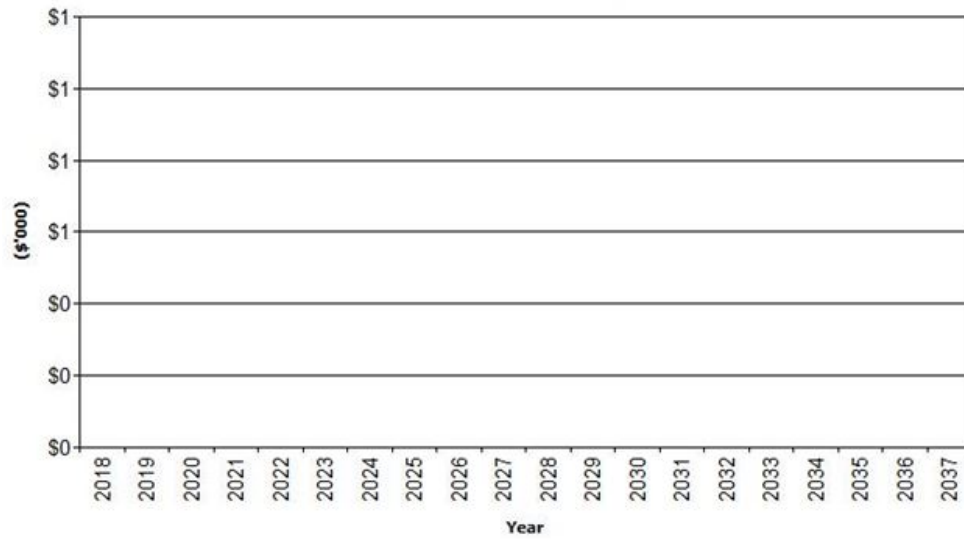


Figure 5.18: Projected Capital Upgrade / New Asset Expenditure – Plant, Equipment and IT

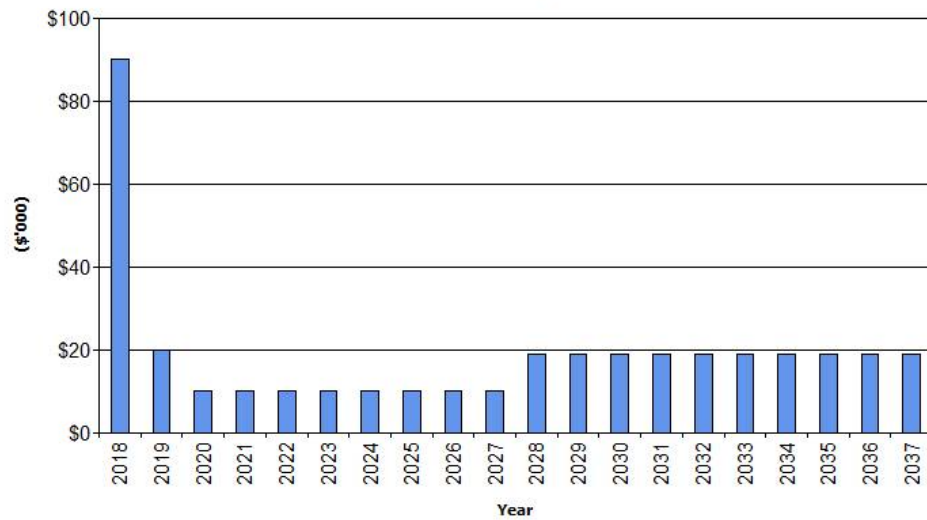


Figure 5.19: Projected Capital Upgrade / New Asset Expenditure – Recreation, Parks and other

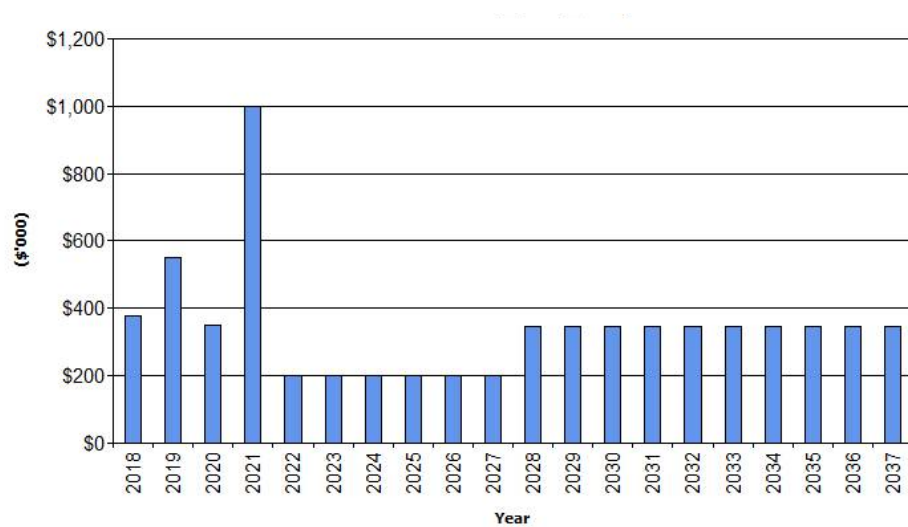
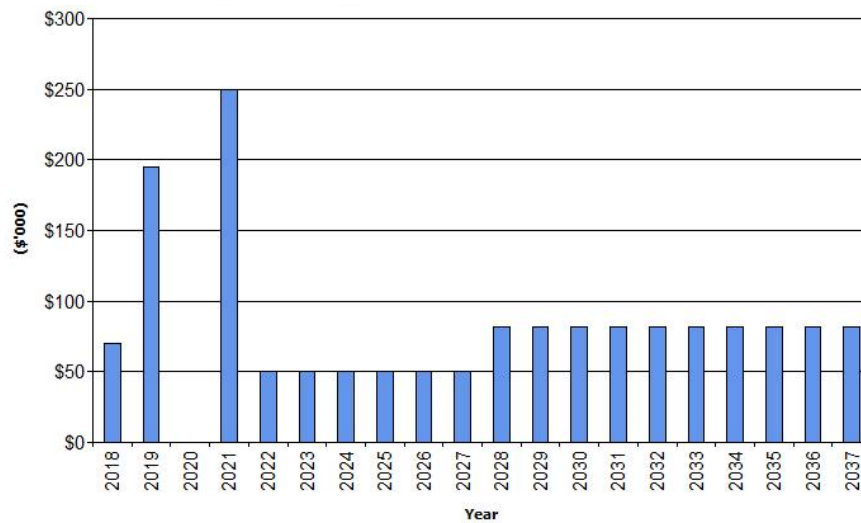


Figure 5.20: Projected Capital Upgrade / New Asset Expenditure –Buildings



Expenditure on new assets and services in the organisation’s capital works program will be accommodated in the long term financial plan. This is further discussed in Section 6.1.2.

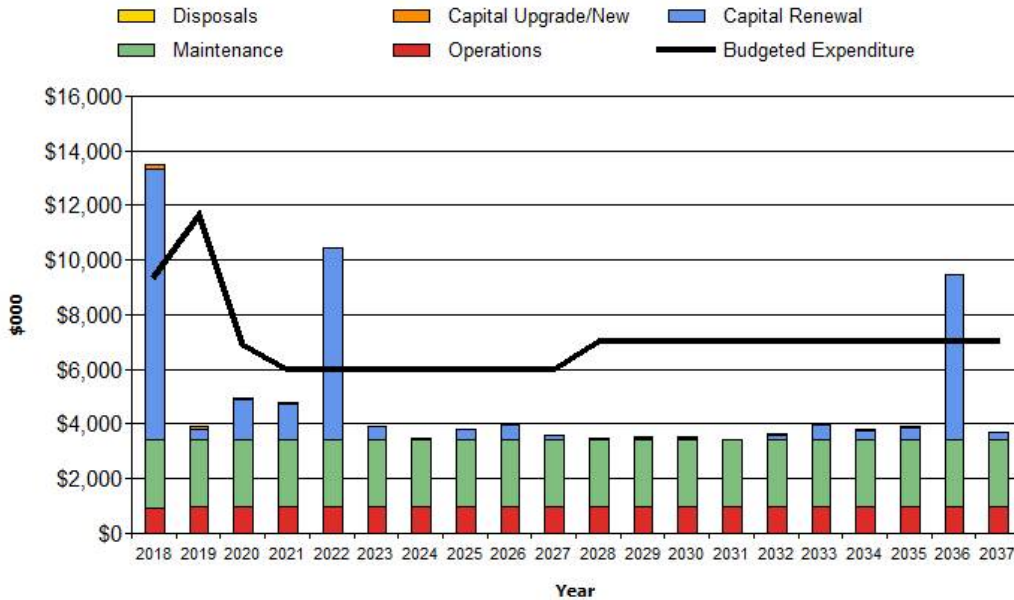
6. FINANCIAL SUMMARY

This section contains the financial requirements resulting from all the information presented in the previous sections of this asset management plan. The financial projections will be improved as further information becomes available on desired levels of service and current and projected future asset performance.

6.1 Financial Statements and Projections

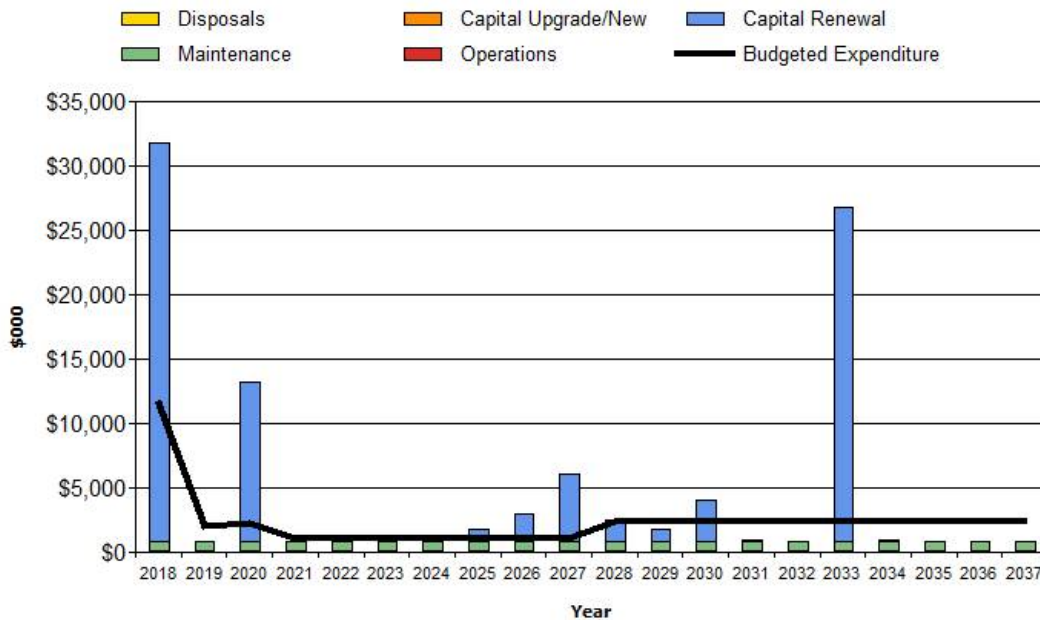
The financial projections are shown in Fig 6.1 – 6.6 for operating (operations and maintenance) and capital expenditure (renewal and upgrade/expansion/new assets). Note that all costs are shown in real values.

Figure 6.1: Projected Operating and Capital Expenditure – Sealed Roads and Drainage



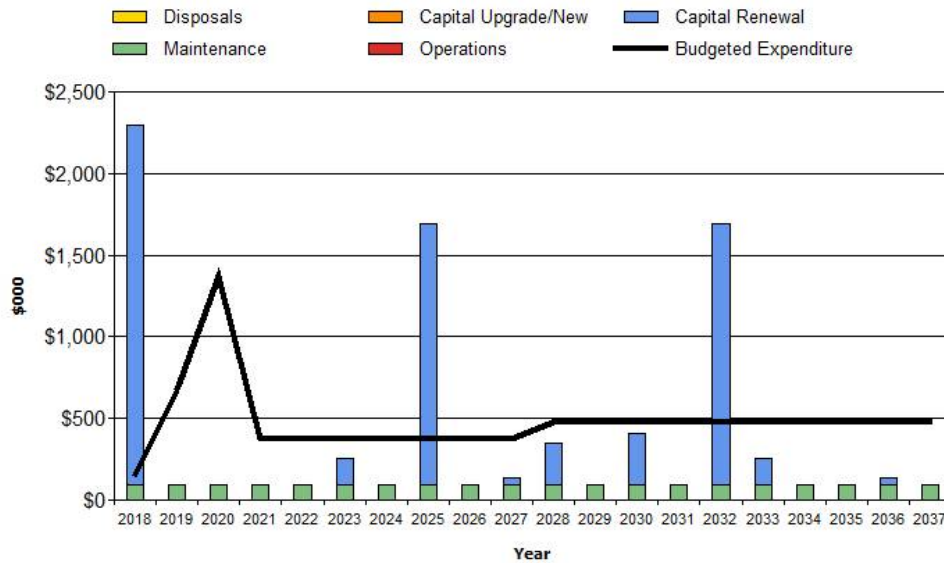
Note: The spike in funding in 2019 is attributable to repairs and upgrades to the town roads and drainage, required to maintain the function of the roads and renew to acceptable standards.

Figure 6.2: Projected Operating and Capital Expenditure – Unsealed Roads and Drainage



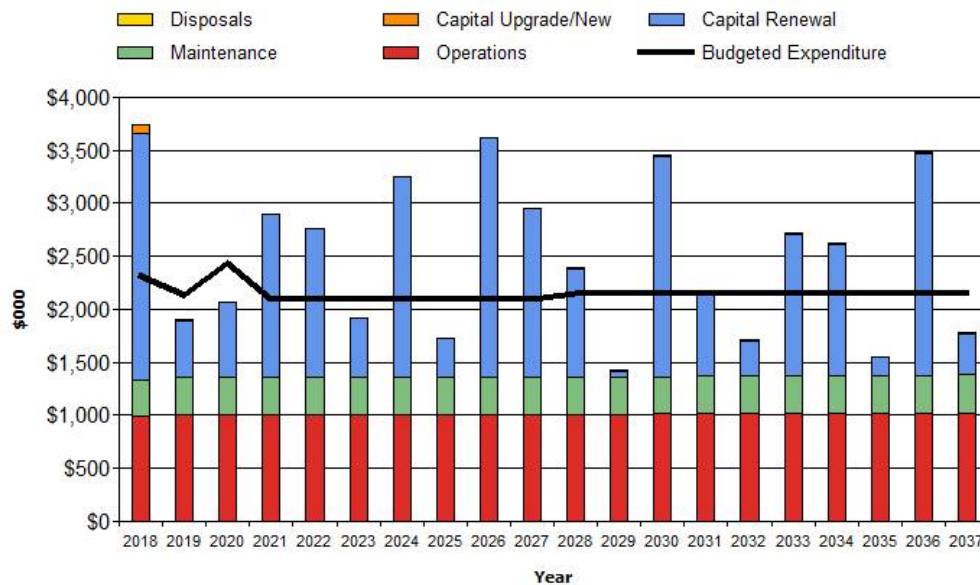
Note: The spike in funding in 2018 is attributable to WANDRA funding from flood events in 2016/2017.

Figure 6.3: Projected Operating and Capital Expenditure – Jetties and Boat Ramps



Note: The spike in funding in 2020 is attributable to required upgrades to the Anthon landing pontoon and jetty

Figure 6.4: Projected Operating and Capital Expenditure – Plant Equipment and IT



Note: The spike in funding in 2020 is attributable to required replacement of Depot trucks and heavy equipment

Figure 6.5: Projected Operating and Capital Expenditure – Recreation, Parks and other Infrastructure

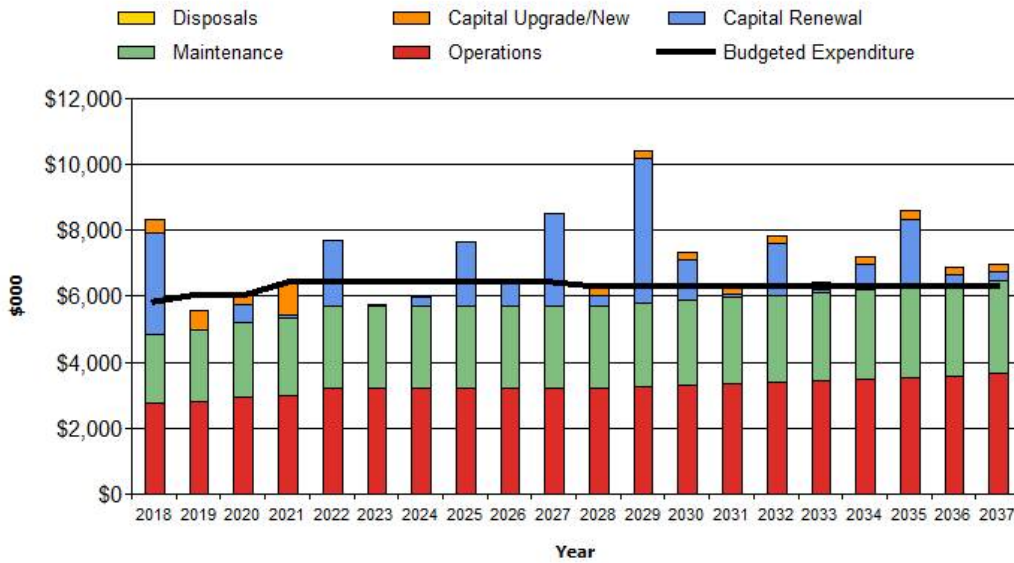
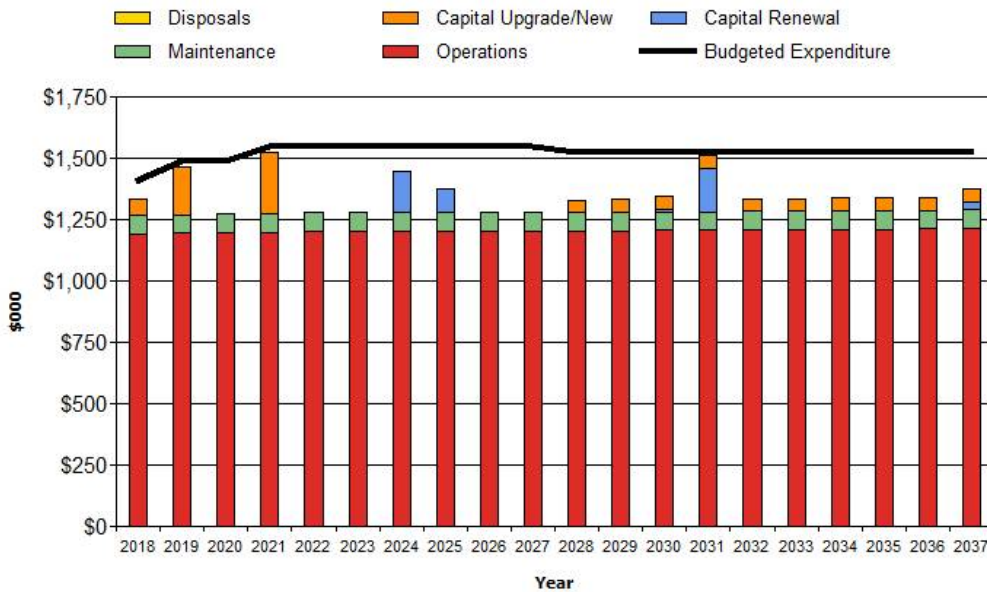


Figure 6.6: Projected Operating and Capital Expenditure – Buildings



6.1.1. Sustainability of service delivery

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

Data contained in the following sections will be compared with the data contained in the corporate business plan and the financial plan with relevant commentary and analysis contained in the next version of this Asset Management Plan 2018.

6.1.1.1. Asset Renewal Funding Ratio

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

Table 6.1: Asset Renewal Funding Ratios

Asset category	Asset Renewal Funding Ratios
Unsealed Roads and drainage	30%
Sealed Roads and drainage	154%
Jetty's and Boat ramps	93%
Plant and Equipment	61%
Buildings and property	146%
Parks, recreation and non-transport infrastructure	54%

Note: the above values may be interpreted that Sealed Roads and Drainage (154%) as well as Buildings (146%) are over funded and the other asset classes are underfunded. High level of budget allocated for sealed roads and drainage is the result of underfunding over a long period of time and urgent work is required on these assets.

6.1.1.2. Long term - Life Cycle Cost

Life cycle costs (or whole of life costs) are the average costs that are required to sustain the service levels over the asset life cycle. Life cycle costs include operations and maintenance expenditure and asset consumption (depreciation expense). Table 6.2 shows the life cycle cost for the services covered in this asset management plan per year (average operations and maintenance expenditure plus depreciation expense projected over 10 years).

Table 6.2: Life cycle costs

Asset category	Life cycle costs [average 10 years projected operations, maintenance expenditure and depreciation.]
Unsealed Roads and drainage	\$2.9M
Sealed Roads and drainage	\$5.1M
Jetty's and Boat ramps	\$397,000
Plant and Equipment	\$1.7M
Buildings and property	\$3.4M
Parks, recreation and non-transport infrastructure	\$5.9M
Total	\$19.4M

6.1.1.3. Life cycle expenditure

Life cycle costs can be compared to life cycle expenditure to give an initial indicator of affordability of projected service levels when considered with age profiles. Life cycle expenditure includes operations, maintenance and capital renewal expenditure. Life cycle expenditure will vary depending on the timing of asset renewals. Table 6.3 shows the life cycle expenditure over the 10 year planning period is per year (average operations and maintenance plus capital renewal budgeted expenditure in LTFP over 10 years).

Table 6.3: Life cycle expenditure

Asset category	Life cycle expenditure[average 10 years LTFP budget operations, maintenance & capital renewal expenditure]
Unsealed Roads and drainage	\$2.3M
Sealed Roads and drainage	\$7M
Jetty's and Boat ramps	\$480,000
Plant and Equipment	\$2.1M
Buildings and property	\$1.3M
Parks, recreation and non-transport infrastructure	\$5.5M
Total	\$18.68M

6.1.1.4. Life cycle gap

A shortfall between life cycle cost and life cycle expenditure is the life cycle gap. Table 6D shows the life cycle gap for services covered by this asset management plan per year (-ve = gap, +ve = surplus).

Table 6.4: Life cycle gap

Asset category	Life cycle gap [life cycle expenditure – life cycle cost (-ve = gap)]
Unsealed Roads and drainage	\$-629,000
Sealed Roads and drainage	\$1.8M
Jetty's and Boat ramps	\$83,000
Plant and Equipment	\$389,000
Buildings and property	\$-1M
Parks, recreation and non-transport infrastructure	\$-464,000
Total	\$179,000

6.1.1.5. Life cycle indicator

Life cycle indicator is a % of life cycle expenditure / life cycle cost

Table 6.5: Life cycle indicator

Asset category	Life cycle indicator (life cycle expenditure / life cycle cost)
Unsealed Roads and drainage	79%
Sealed Roads and drainage	137%
Jetty's and Boat ramps	121%
Plant and Equipment	122%
Buildings and property	55%
Parks, recreation and non-transport infrastructure	92%

The life cycle costs and life cycle expenditure comparison highlights any difference between present outlays and the average cost of providing the service over the long term. If the life cycle expenditure is less than that life cycle cost, it is most likely that outlays will need to be increased or cuts in services made in the future.

Knowing the extent and timing of any required increase in outlays and the service consequences if funding is not available will assist organisations in providing services to their communities in a financially sustainable manner. This is the purpose of the asset management plans and long term financial plan.

6.1.1.6. Long term – 10 year financial planning period

This Asset Management Plan identifies the projected operations, maintenance and capital renewal expenditures required to provide an agreed level of service to the community over a 10 year period. This provides input into 10 year financial and funding plans aimed at providing the required services in a sustainable manner. These projected expenditures may be compared to budgeted expenditures in the 10 year period to identify any funding shortfall. In an Asset Management Plan, a gap is generally due to increasing asset renewals for ageing assets.

Unsealed Roads and drainage

The projected cost (operations, maintenance and capital renewal expenditure required) over the 10 year planning period is \$6M on average per year. The budget available for these works is \$2.3M on average per year giving a 10 year funding shortfall of \$3.7M per year. This indicates that Council expects to have 39% of the projected expenditures needed to provide the services documented in the asset management plan.

Sealed Roads and drainage

The projected cost (operations, maintenance and capital renewal expenditure required) over the 10 year planning period is \$5.6M on average per year. The budget available for these works is \$6.9M on average per year giving a 10 year funding surplus of \$1.3M per year. This indicates that Council expects to have 124% of the projected expenditures needed to provide the services documented in the asset management plan.

Jetty's and Boat ramps

The projected cost (operations, maintenance and capital renewal expenditure required) over the 10 year planning period is \$496,000 on average per year. The budget available for these works is \$480,000 on average per year giving a 10 year funding shortfall of \$16,000 per year. This indicates that Council expects to have 97% of the projected expenditures needed to provide the services documented in the asset management plan.

Plant and Equipment

The projected cost (operations, maintenance and capital renewal expenditure required) over the 10 year planning period is \$2.7M on average per year. The budget available for these works is \$2.2M on average per year giving a 10 year funding shortfall of \$550,000 per year. This indicates that Council expects to have 80% of the projected expenditures needed to provide the services documented in the asset management plan.

Parks, recreation and non-transport infrastructure

The projected cost (operations, maintenance and capital renewal expenditure required) over the 10 year planning period is \$6.6M on average per year. The budget available for these works is \$5.4M on average per year giving a 10 year funding shortfall of \$1.2M per year. This indicates that Council expects to have 83% of the projected expenditures needed to provide the services documented in the asset management plan.

Buildings

The projected cost (operations, maintenance and capital renewal expenditure required) over the 10 year planning period is \$1.3M on average per year. The budget available for these works is \$1.3M on average per year. This indicates that Council expects to have 100% of the projected expenditures needed to provide the services documented in the asset management plan.

6.1.1.7. Medium Term – 5 year financial planning period

Unsealed Roads and drainage

The projected cost (operations, maintenance and capital renewal expenditure required) over the 5 year planning period is \$9.5M on average per year. The budget available for these works is \$3.6M on average per year giving a 5 year funding shortfall of \$5.9M per year. This indicates that Council expects to have 38% of the projected expenditures needed to provide the services documented in the asset management plan.

Sealed Roads and drainage

The projected cost (operations, maintenance and capital renewal expenditure required) over the 5 year planning period is \$7.4M on average per year. The budget available for these works is \$7.9M on average per year giving a 5 year funding surplus of \$500,000 per year. This indicates that Council expects to have 106% of the projected expenditures needed to provide the services documented in the asset management plan.

Jetty's and Boat ramps

The projected cost (operations, maintenance and capital renewal expenditure required) over the 5 year planning period is \$536,000 on average per year. The budget available for these works is \$589,000 on average per year giving a 5 year funding surplus of \$53,000 per year. This indicates that Council expects to have 110% of the projected expenditures needed to provide the services documented in the asset management plan.

Plant and Equipment

The projected cost (operations, maintenance and capital renewal expenditure required) over the 5 year planning period is \$2.6M on average per year. The budget available for these works is \$2.1M on average per year giving a 5 year funding shortfall of \$473,000 per year. This indicates that Council expects to have 82% of the projected expenditures needed to provide the services documented in the asset management plan.

Parks, Recreation and Other Infrastructure

The projected cost (operations, maintenance and capital renewal expenditure required) over the 5 year planning period is \$6.3M on average per year. The budget available for these works is \$5.5M on average per year giving a 5 year funding shortfall of \$800,000 per year. This indicates that Council expects to have 87% of the projected expenditures needed to provide the services documented in the asset management plan.

Buildings

The projected cost (operations, maintenance and capital renewal expenditure required) over the 5 year planning period is \$1.3M on average per year. The budget available for these works is \$1.3M on average per year. This indicates that Council expects to have 100% of the projected expenditures needed to provide the services documented in the asset management plan.

6.1.1.8. Asset management financial indicators

Figures 6.7 – 6.12 show the asset management financial indicators over the 10 year planning period and for the long term life cycle. A comparison is made for the asset management financial indicators over the next 5 and 10 years and over the long-term life cycle of the asset category. Ideally, the financing indicators should be 100% for the first 5 years and close to 100% over the 10 year period. Anything less than this in the 5-10 year period would suggest funding levels below that required to sustain existing service levels

Figure 6.7: Asset Management Financial Indicators – Sealed Roads and Drainage

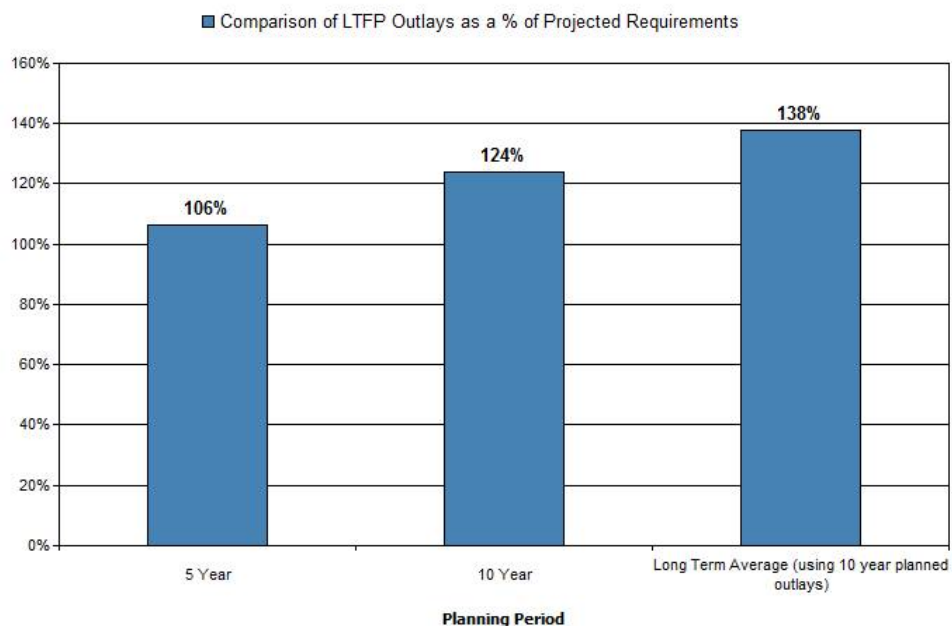


Figure 6.8: Asset Management Financial Indicators – Unsealed Roads and Drainage

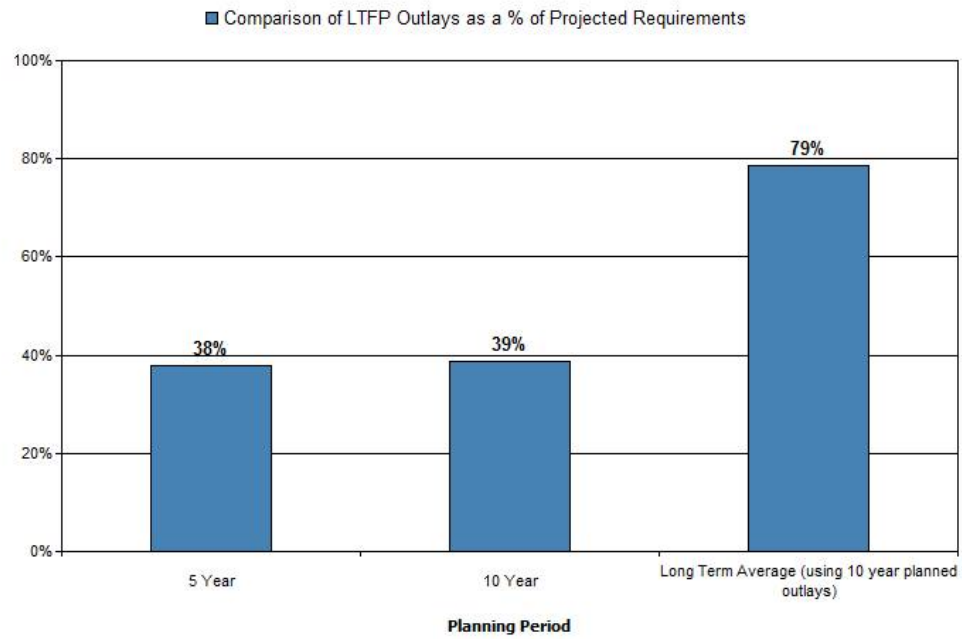


Figure 6.9: Asset Management Financial Indicators – Jetties and Boat Ramps

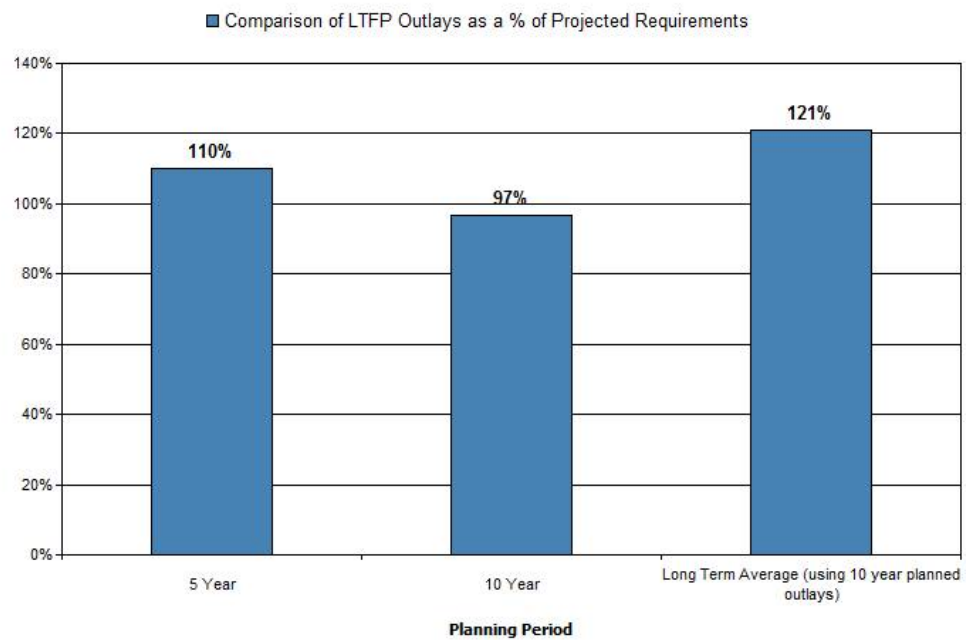


Figure 6.10: Asset Management Financial Indicators – Recreation, Parks and Other Infrastructure

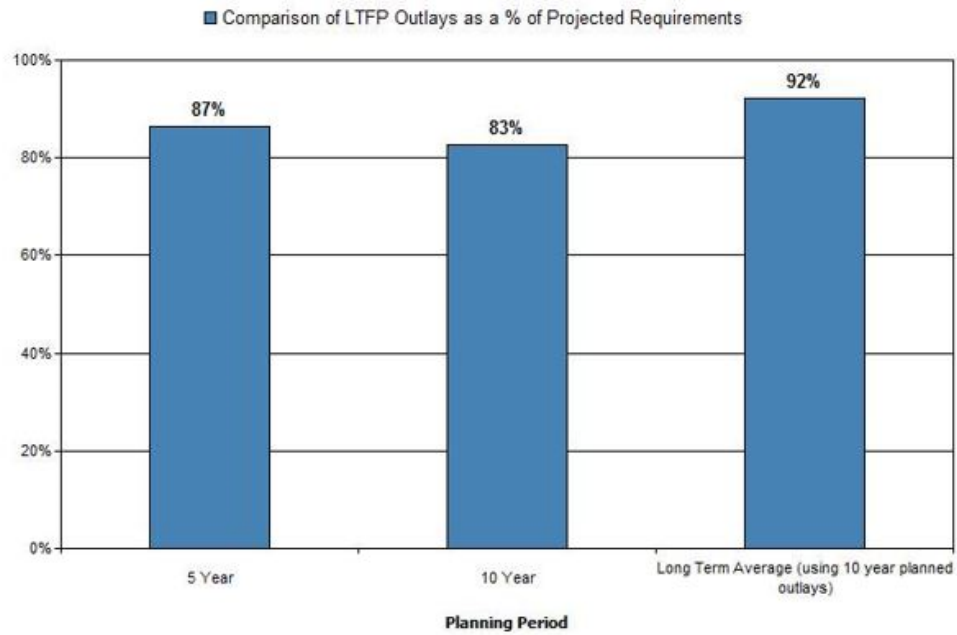


Figure 6.11: Asset Management Financial Indicators – Plant, Equipment and IT

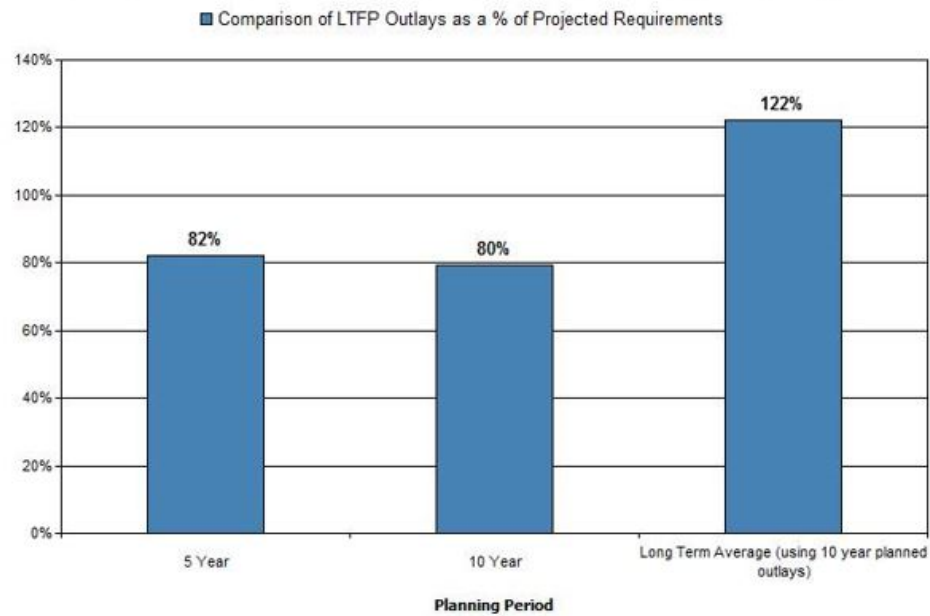
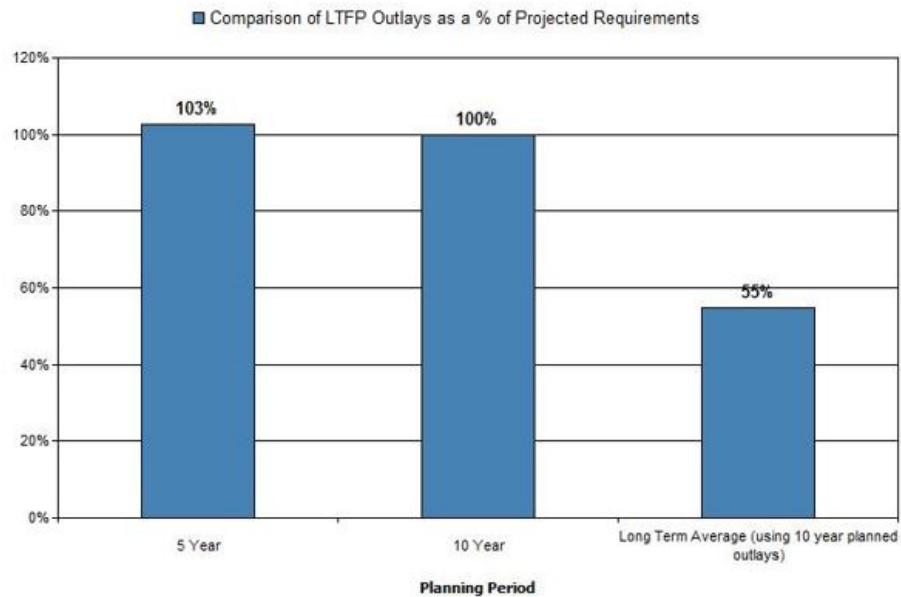


Figure 6.12: Asset Management Financial Indicators – Buildings



6.1.1.9. Asset renewal and replacement expenditure

Providing services from infrastructure in a sustainable manner requires the matching and managing of service levels, risks, projected expenditures and financing to achieve a financial indicator of approximately 1.0 for the first years of the asset management plan and ideally over the 10 year life of the Long Term Financial Plan.

Figures 6.13 to 6.18 show the projected asset renewal and replacement expenditure over the 20 years of the Asset Management Plan. The projected asset renewal and replacement expenditure is compared to renewal and replacement expenditure in the capital works program, which is accommodated in the long term financial plan.

Figure 6.13: Projected and LTFP Budgeted Renewal Expenditure – Sealed Roads and Drainage

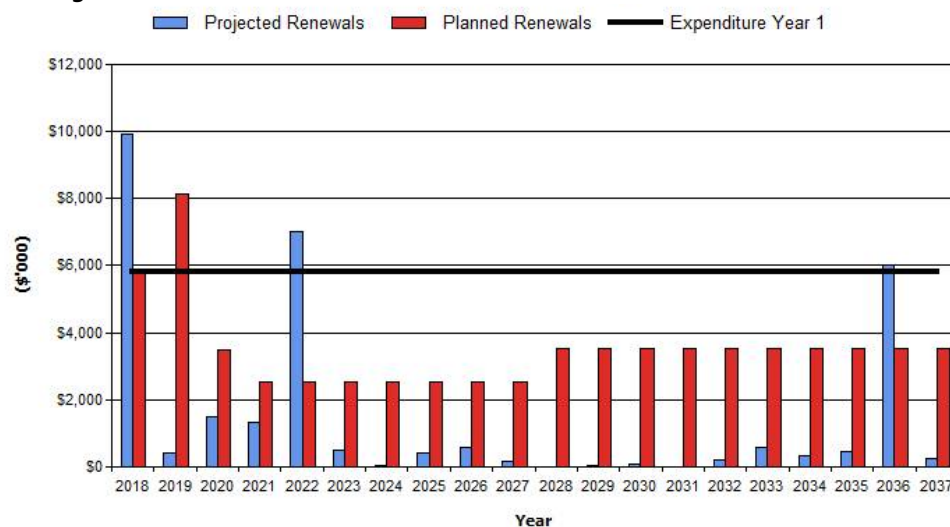


Figure 6.14: Projected and LTFP Budgeted Renewal Expenditure – Unsealed Roads and Drainage

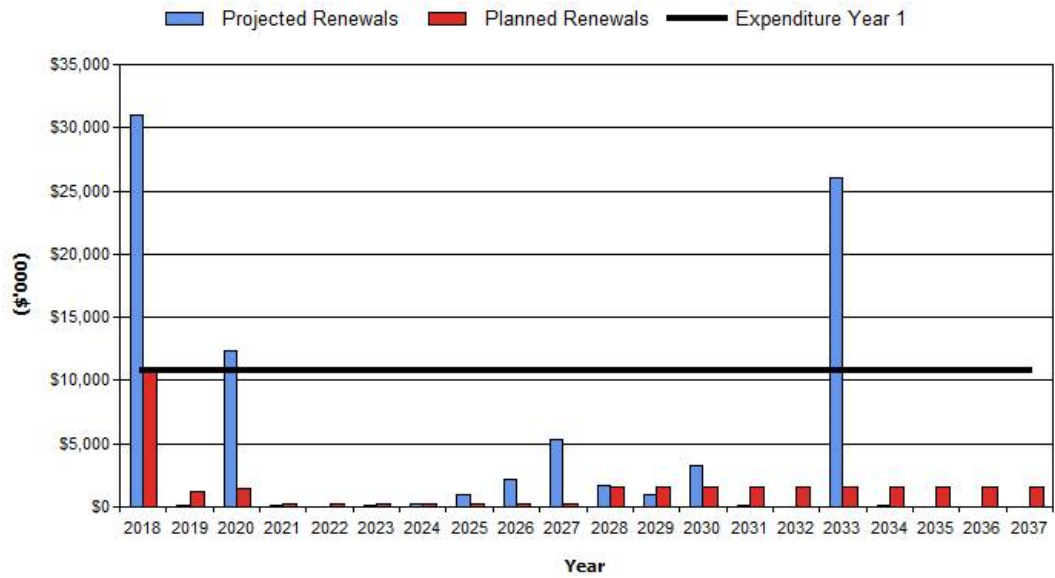


Figure 6.15: Projected and LTFP Budgeted Renewal Expenditure – Jetties and Boat Ramps

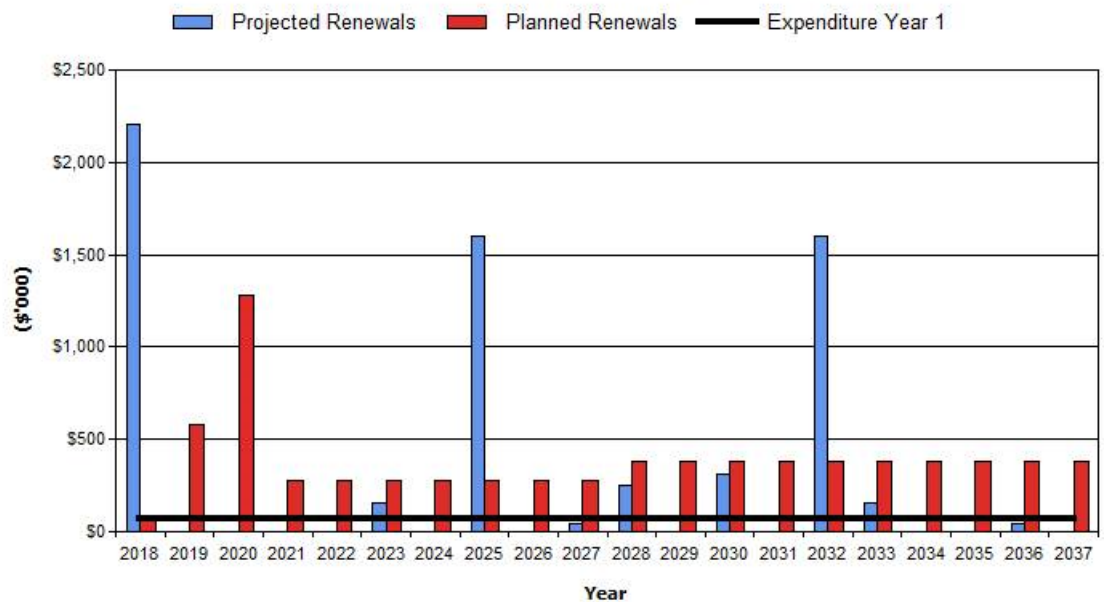


Figure 6.16: Projected and LTFP Budgeted Renewal Expenditure – Recreation, Parks and Other Infrastructure

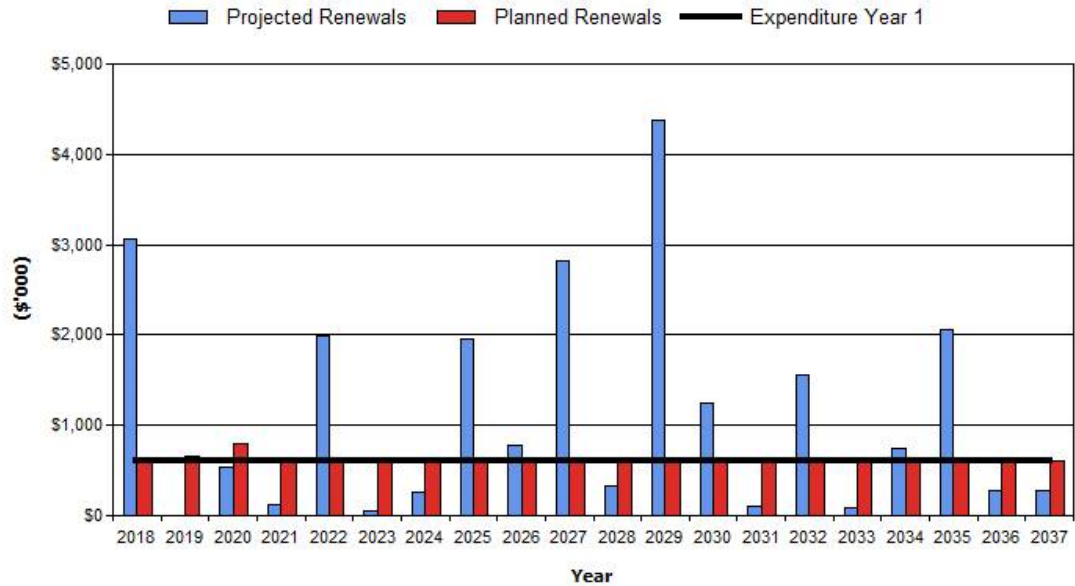


Figure 6.17: Projected and LTFP Budgeted Renewal Expenditure – Plant, Equipment and IT

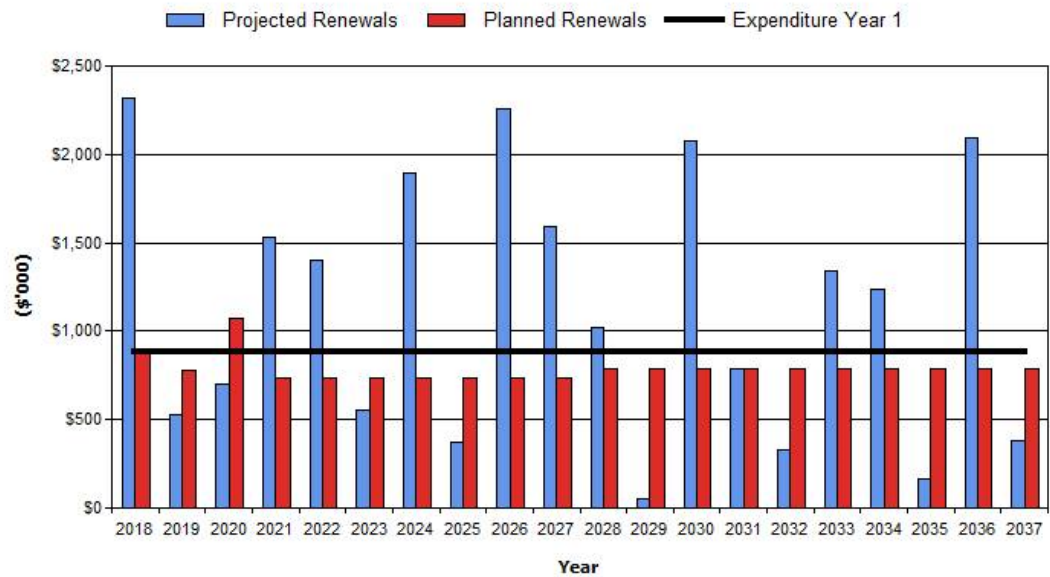
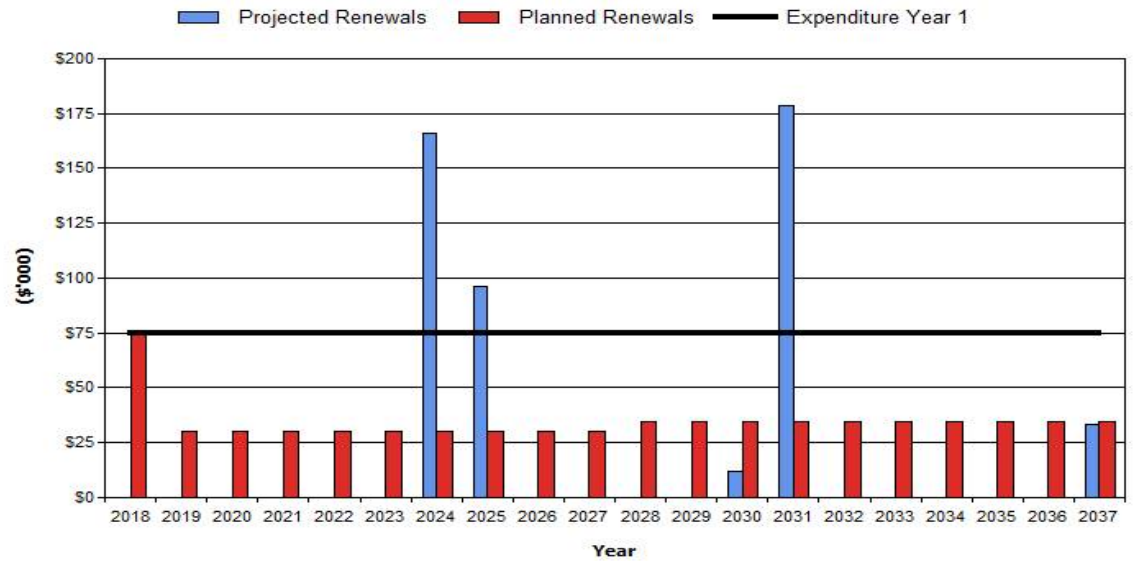


Figure 6.18: Projected and LTFP Budgeted Renewal Expenditure – Buildings



6.1.1.10. Projected and LTFP Budgeted Renewals and Financing Shortfall

Tables 6.6 to 6.11 show the shortfall between projected renewal and replacement expenditures and expenditure accommodated in long term financial plan. (Budget expenditures accommodated in the long term financial plan or extrapolated from current budgets are shown in Appendix A).

Table 6.6: Projected and LTFP Budgeted Renewals and Financing Shortfall - Unsealed Roads and drainage

Year	Projected Renewals (\$000)	LTFP Renewal Budget (\$000)	Renewal Financing Shortfall (\$000) (-ve Gap, +ve Surplus)	Cumulative Shortfall (\$000) (-ve Gap, +ve Surplus)
2018	\$31,020	\$10,814	\$-20,206	\$-20,206
2019	\$69	\$1,203	\$1,134	\$-19,072
2020	\$12,391	\$1,490	\$-10,901	\$-29,973
2021	\$65	\$280	\$215	\$-29,758
2022	\$13	\$280	\$267	\$-29,490
2023	\$101	\$280	\$179	\$-29,311
2024	\$205	\$280	\$75	\$-29,237
2025	\$1,021	\$280	\$-741	\$-29,978
2026	\$2,191	\$280	\$-1,911	\$-31,889
2027	\$5,318	\$280	\$-5,038	\$-36,927
2028	\$1,673	\$1,547	\$-127	\$-37,053

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

Table 6.7: Projected and LTFP Budgeted Renewals and Financing Shortfall - Sealed Roads and drainage

Year	Projected Renewals (\$000)	LTFP Renewal Budget (\$000)	Renewal Financing Shortfall (\$000) (-ve Gap, +ve Surplus)	Cumulative Shortfall (\$000) (-ve Gap, +ve Surplus)
2018	\$9,913	\$5,817	\$-4,096	\$-4,096
2019	\$395	\$8,135	\$7,740	\$3,644
2020	\$1,475	\$3,488	\$2,013	\$5,656
2021	\$1,311	\$2,545	\$1,234	\$6,891
2022	\$7,016	\$2,545	\$-4,471	\$2,419
2023	\$490	\$2,545	\$2,055	\$4,474
2024	\$52	\$2,545	\$2,493	\$6,968
2025	\$421	\$2,545	\$2,124	\$9,091
2026	\$565	\$2,545	\$1,980	\$11,071
2027	\$154	\$2,545	\$2,391	\$13,463
2028	\$11	\$3,526	\$3,514	\$16,977

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

Table 6.8: Projected and LTFP Budgeted Renewals and Financing Shortfall - Jetty's and Boat ramps

Year	Projected Renewals (\$000)	LTFP Renewal Budget (\$000)	Renewal Financing Shortfall (\$000) (-ve Gap, +ve Surplus)	Cumulative Shortfall (\$000) (-ve Gap, +ve Surplus)
2018	\$2,204	\$65	\$-2,139	\$-2,139
2019	\$0	\$576	\$576	\$-1,563
2020	\$0	\$1,276	\$1,276	\$-287
2021	\$0	\$276	\$276	\$-11
2022	\$0	\$276	\$276	\$265
2023	\$160	\$276	\$116	\$381
2024	\$0	\$276	\$276	\$657
2025	\$1,600	\$276	\$-1,324	\$-667
2026	\$0	\$276	\$276	\$-391
2027	\$44	\$276	\$232	\$-159
2028	\$250	\$385	\$135	\$-24

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

Table 6.9: Projected and LTFP Budgeted Renewals and Financing Shortfall - Plant and Equipment

Year	Projected Renewals (\$000)	LTFP Renewal Budget (\$000)	Renewal Financing Shortfall (\$000) (-ve Gap, +ve Surplus)	Cumulative Shortfall (\$000) (-ve Gap, +ve Surplus)
2018	\$2,314	\$882	\$-1,432	\$-1,432
2019	\$531	\$782	\$251	\$-1,181
2020	\$703	\$1,071	\$368	\$-813
2021	\$1,535	\$734	\$-801	\$-1,614
2022	\$1,402	\$734	\$-668	\$-2,282
2023	\$556	\$734	\$178	\$-2,104
2024	\$1,893	\$734	\$-1,159	\$-3,263
2025	\$372	\$734	\$362	\$-2,901
2026	\$2,258	\$734	\$-1,524	\$-4,425
2027	\$1,593	\$734	\$-859	\$-5,284
2028	\$1,021	\$787	\$-234	\$-5,518

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

Table 6.10: Projected and LTFP Budgeted Renewals and Financing Shortfall - Parks, Recreation and Other Infrastructure

Year	Projected Renewals (\$000)	LTFP Renewal Budget (\$000)	Renewal Financing Shortfall (\$000) (-ve Gap, +ve Surplus)	Cumulative Shortfall (\$000) (-ve Gap, +ve Surplus)
2018	\$3,070	\$610	\$-2,460	\$-2,460
2019	\$0	\$655	\$655	\$-1,805
2020	\$535	\$799	\$264	\$-1,541
2021	\$114	\$580	\$466	\$-1,075
2022	\$1,984	\$580	\$-1,404	\$-2,479
2023	\$53	\$580	\$527	\$-1,952
2024	\$263	\$580	\$318	\$-1,634
2025	\$1,959	\$580	\$-1,379	\$-3,014
2026	\$780	\$580	\$-200	\$-3,214
2027	\$2,823	\$580	\$-2,243	\$-5,457
2028	\$323	\$612	\$289	\$-5,167

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

Table 6.11: Projected and LTFP Budgeted Renewals and Financing Shortfall - Buildings and property

Year	Projected Renewals (\$000)	LTFP Renewal Budget (\$000)	Renewal Financing Shortfall (\$000) (-ve Gap, +ve Surplus)	Cumulative Shortfall (\$000) (-ve Gap, +ve Surplus)
2018	\$0	\$75	\$75	\$75
2019	\$0	\$30	\$30	\$105
2020	\$0	\$30	\$30	\$135
2021	\$0	\$30	\$30	\$165
2022	\$0	\$30	\$30	\$195
2023	\$0	\$30	\$30	\$225
2024	\$166	\$30	\$-136	\$89
2025	\$96	\$30	\$-66	\$23
2026	\$0	\$30	\$30	\$53
2027	\$0	\$30	\$30	\$83
2028	\$0	\$35	\$35	\$117

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

Providing services in a sustainable manner will require matching of projected asset renewal and replacement expenditure to meet agreed service levels with the corresponding capital works program accommodated in the long term financial plan.

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

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

6.1.2. Projected expenditures for long term financial plan

Tables 6.12 to 6.17 show the projected expenditures for the 10 year long term financial plan.

Expenditure projections are in 2017 real values.

Table 6.12: Projected Expenditures for Long Term Financial Plan - Unsealed Roads and drainage

Year	Operations (\$000)	Maintenance (\$000)	Projected Capital Renewal (\$000)	Capital Upgrade/ New (\$000)
2018	\$122	\$655	\$31,020	\$0
2019	\$122	\$655	\$69	\$0
2020	\$122	\$655	\$12,391	\$0
2021	\$122	\$655	\$65	\$0
2022	\$122	\$655	\$13	\$0

2023	\$122	\$655	\$101	\$0
2024	\$122	\$655	\$205	\$0
2025	\$122	\$655	\$1,021	\$0
2026	\$122	\$655	\$2,191	\$0
2027	\$122	\$655	\$5,318	\$0
2028	\$122	\$655	\$1,673	\$0

Table 6.13: Projected and LTFP Budgeted Renewals and Financing Shortfall - Sealed Roads and drainage

Year	Operations (\$000)	Maintenance (\$000)	Projected Capital Renewal (\$000)	Capital Upgrade/ New (\$000)
2018	\$952	\$2,453	\$9,913	\$181
2019	\$953	\$2,455	\$395	\$92
2020	\$953	\$2,456	\$1,475	\$44
2021	\$954	\$2,457	\$1,311	\$46
2022	\$954	\$2,458	\$7,016	\$0
2023	\$954	\$2,458	\$490	\$0
2024	\$954	\$2,458	\$52	\$0
2025	\$954	\$2,458	\$421	\$0
2026	\$954	\$2,458	\$565	\$0
2027	\$954	\$2,458	\$154	\$0
2028	\$954	\$2,458	\$11	\$36

Table 6.14: Projected and LTFP Budgeted Renewals and Financing Shortfall - Jetty's and Boat Ramps

Year	Operations (\$000)	Maintenance (\$000)	Projected Capital Renewal (\$000)	Capital Upgrade/ New (\$000)
2018	\$1	\$94	\$2,204	\$0
2019	\$1	\$94	\$0	\$0
2020	\$1	\$94	\$0	\$0
2021	\$1	\$94	\$0	\$0
2022	\$1	\$94	\$0	\$0
2023	\$1	\$94	\$160	\$0
2024	\$1	\$94	\$0	\$0
2025	\$1	\$94	\$1,600	\$0
2026	\$1	\$94	\$0	\$0
2027	\$1	\$94	\$44	\$0
2028	\$1	\$94	\$250	\$0

Table 6.15: Projected and LTFP Budgeted Renewals and Financing Shortfall - Plant and Equipment

Year	Operations (\$000)	Maintenance (\$000)	Projected Capital Renewal (\$000)	Capital Upgrade/ New (\$000)
2018	\$995	\$344	\$2,314	\$90
2019	\$1,009	\$349	\$531	\$20

2020	\$1,012	\$350	\$703	\$0
2021	\$1,012	\$350	\$1,535	\$0
2022	\$1,012	\$350	\$1,402	\$0
2023	\$1,012	\$350	\$556	\$0
2024	\$1,012	\$350	\$1,893	\$0
2025	\$1,012	\$350	\$372	\$0
2026	\$1,012	\$350	\$2,258	\$0
2027	\$1,012	\$350	\$1,593	\$0
2028	\$1,012	\$350	\$1,021	\$11

Table 6.16: Projected and LTFP Budgeted Renewals and Financing Shortfall - Parks, Recreation and Other Infrastructure

Year	Operations (\$000)	Maintenance (\$000)	Projected Capital Renewal (\$000)	Capital Upgrade/ New (\$000)
2018	\$2,743	\$2,118	\$3,070	\$379
2019	\$2,822	\$2,179	\$0	\$550
2020	\$2,937	\$2,268	\$535	\$350
2021	\$3,010	\$2,324	\$114	\$1,000
2022	\$3,218	\$2,485	\$1,984	\$0
2023	\$3,218	\$2,485	\$53	\$0
2024	\$3,218	\$2,485	\$263	\$0
2025	\$3,218	\$2,485	\$1,959	\$0
2026	\$3,218	\$2,485	\$780	\$0
2027	\$3,218	\$2,485	\$2,823	\$0
2028	\$3,218	\$2,485	\$323	\$228

Table 6.17: Projected and LTFP Budgeted Renewals and Financing Shortfall - Buildings and Property

Year	Operations (\$000)	Maintenance (\$000)	Projected Capital Renewal (\$000)	Capital Upgrade/ New (\$000)
2018	\$1,192	\$74	\$0	\$70
2019	\$1,194	\$74	\$0	\$195
2020	\$1,198	\$74	\$0	\$0
2021	\$1,198	\$74	\$0	\$250
2022	\$1,203	\$75	\$0	\$0
2023	\$1,203	\$75	\$0	\$0
2024	\$1,203	\$75	\$166	\$0
2025	\$1,203	\$75	\$96	\$0
2026	\$1,203	\$75	\$0	\$0
2027	\$1,203	\$75	\$0	\$0
2028	\$1,203	\$75	\$0	\$52

6.2 Funding Strategy

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

6.3 Valuation Forecasts

Asset values are forecast to increase as additional assets are added to the asset stock from construction and acquisition by the Shire and from assets constructed by land developers and others and donated to Council.

6.3.1. Asset replacement costs

Figures 6.19 to 6.24 show the projected replacement cost asset values over the planning period in real values.

Figure 6.19: Projected Asset Values - Sealed Roads and Drainage

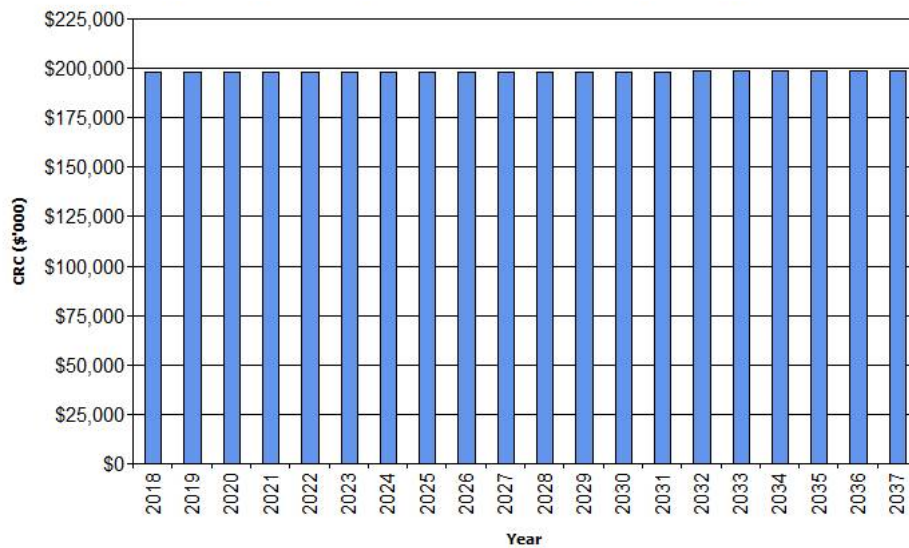


Figure 6.20: Projected Asset Values - Unsealed Roads and Drainage

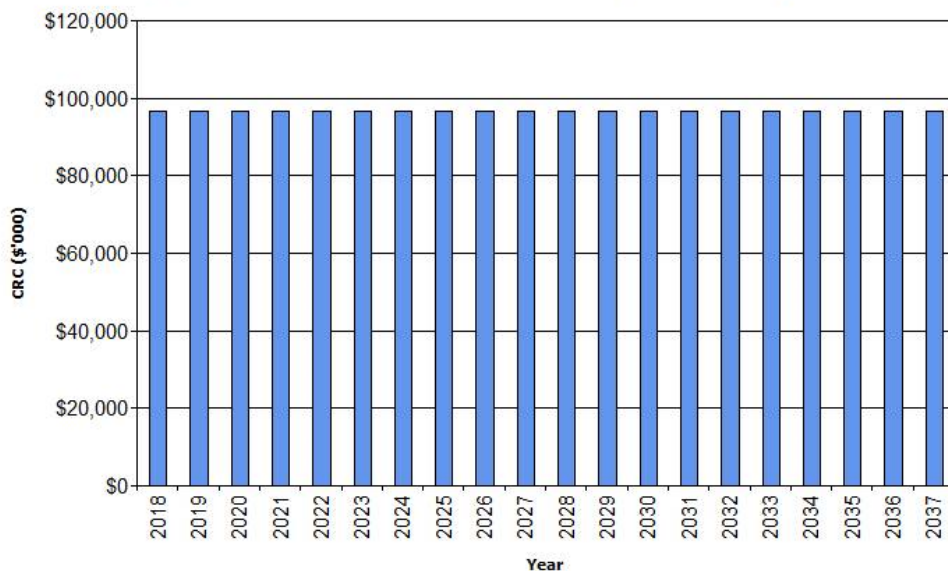


Figure 6.21: Projected Asset Values – Jetties and Boat Ramps

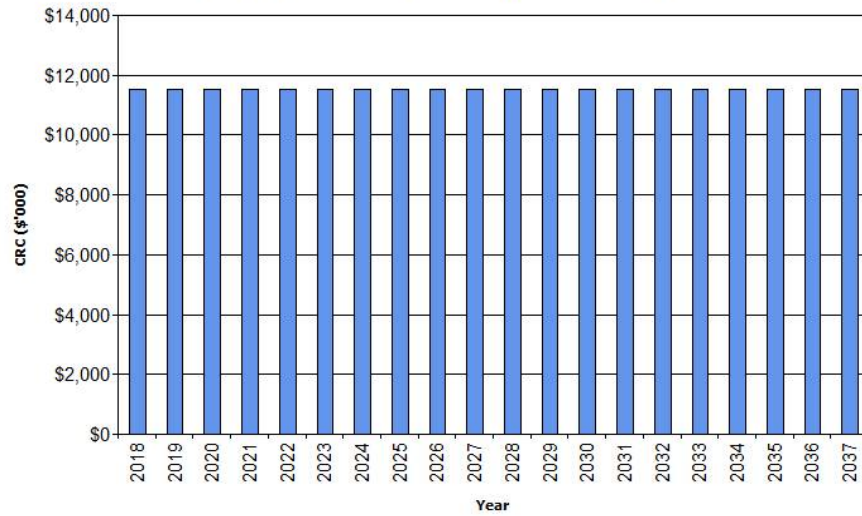


Figure 6.22: Projected Asset Values – Plant, Equipment and IT

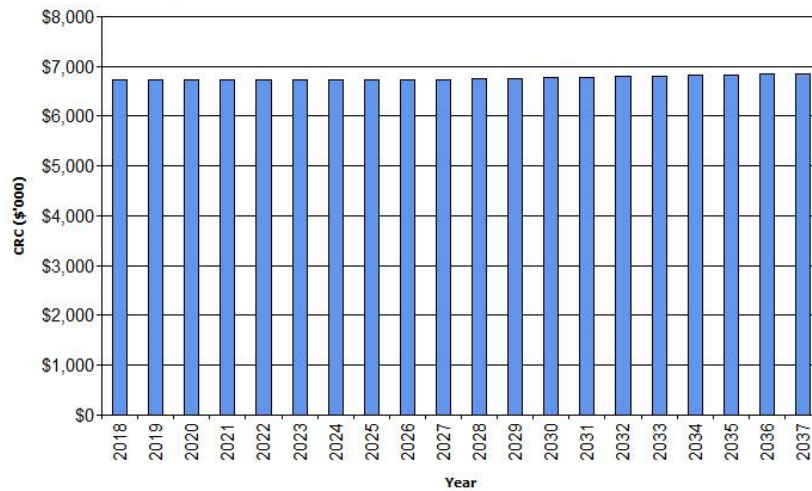


Figure 6.23: Projected Asset Values – Recreation Parks and Other Infrastructure

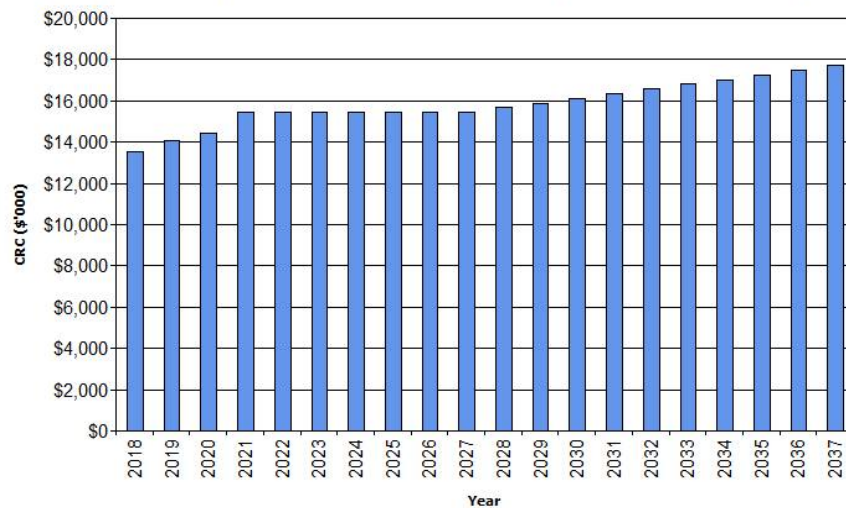
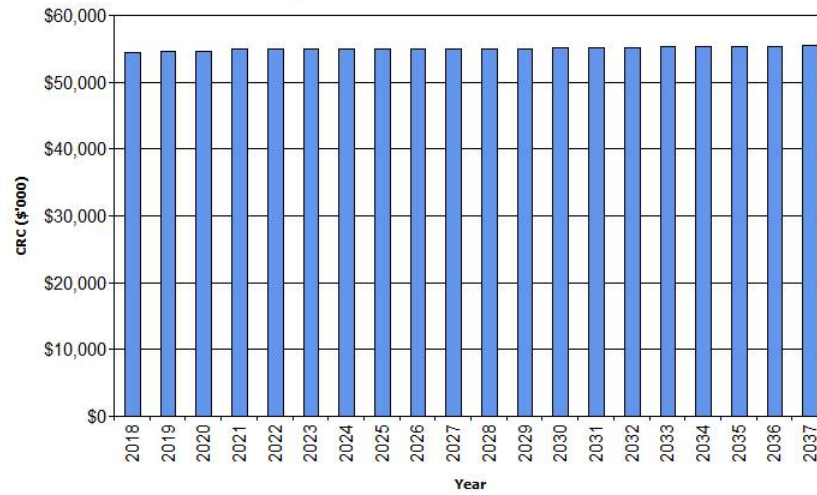


Figure 6.24: Projected Asset Values - Buildings



6.3.2. Depreciation Expenses

Depreciation expense values are forecast in line with asset values as shown in Figures 6.25 to 6.30.

Figure 6.25: Projected Depreciation Expense Sealed Roads and Drainage

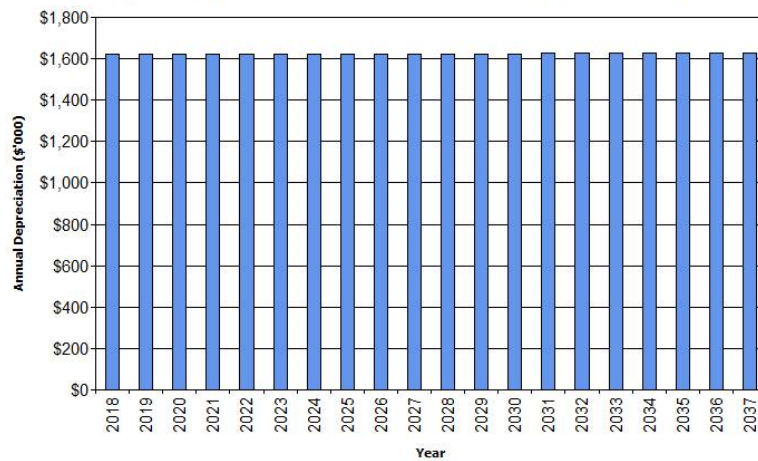


Figure 6.26: Projected Depreciation Expense - Unsealed Roads and Drainage

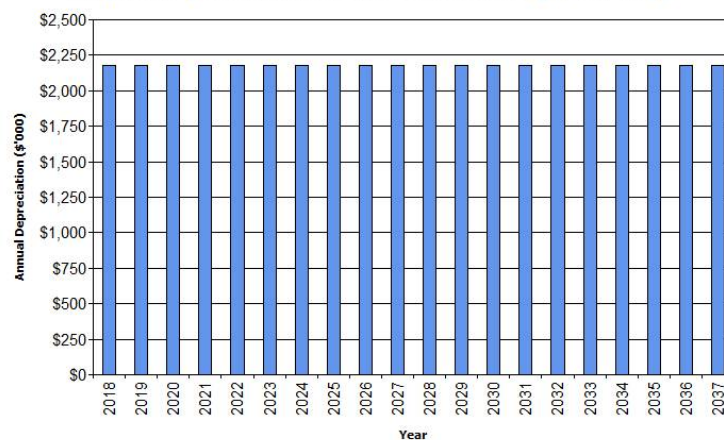


Figure 6.27: Projected Depreciation Expense – Jetties and Boat Ramps

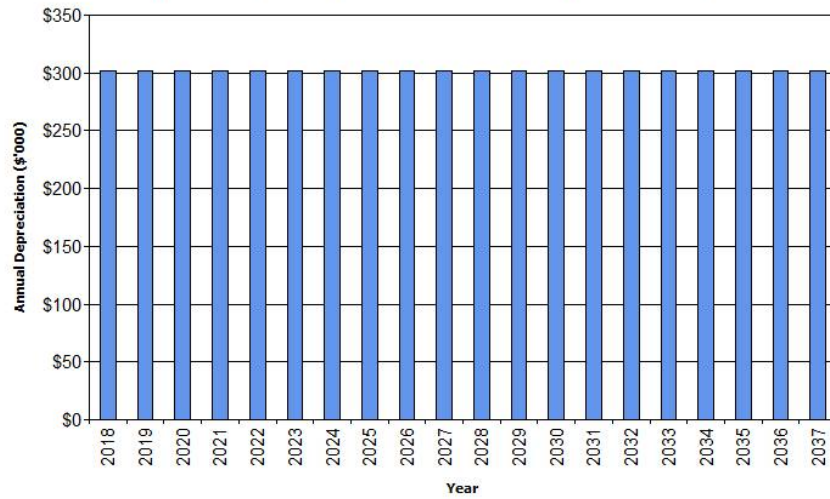


Figure 6.28: Projected Depreciation Expense – Plant, Equipment and IT

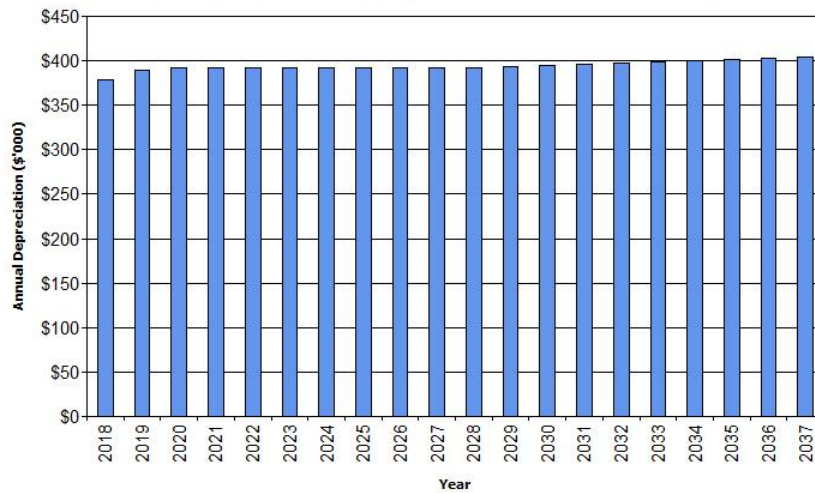


Figure 6.29: Projected Depreciation Expense – Parks, Recreation and Other Infrastructure

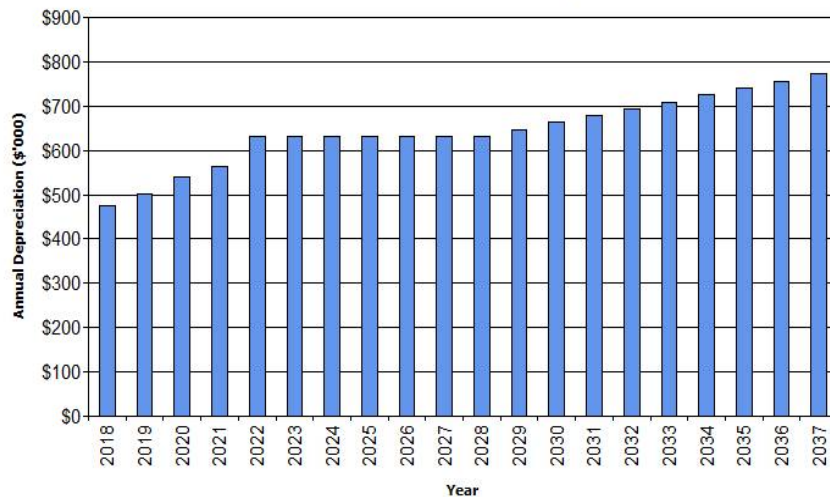
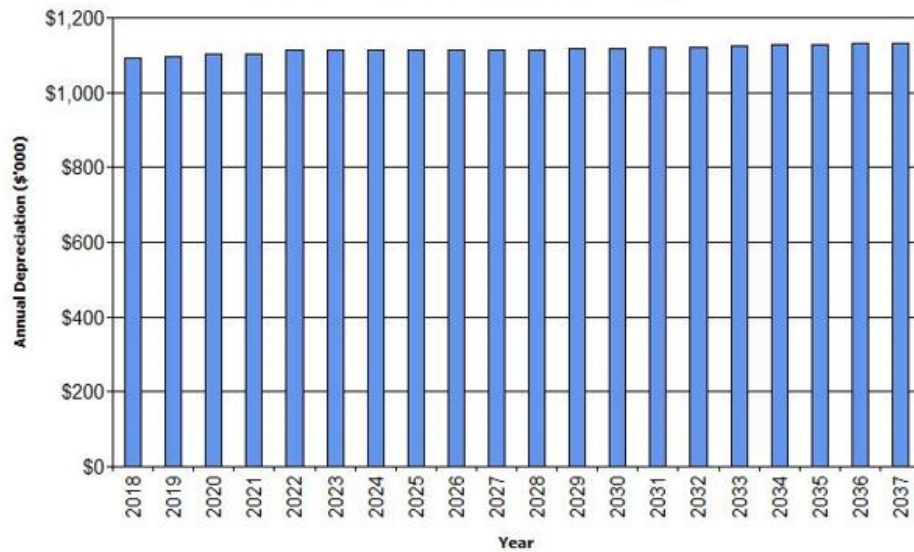


Figure 6.30: Projected Depreciation Expense – Buildings



6.3.3 Depreciated replacement costs

Depreciated replacement cost will vary over the forecast period depending on the rates of addition of new assets, disposal of old assets and consumption and renewal of existing assets. Forecast of the assets depreciated replacement cost is shown in Figure 6.31 to 6.36.

Figure 6.31: Projected Depreciated Replacement Cost Sealed Roads and Drainage

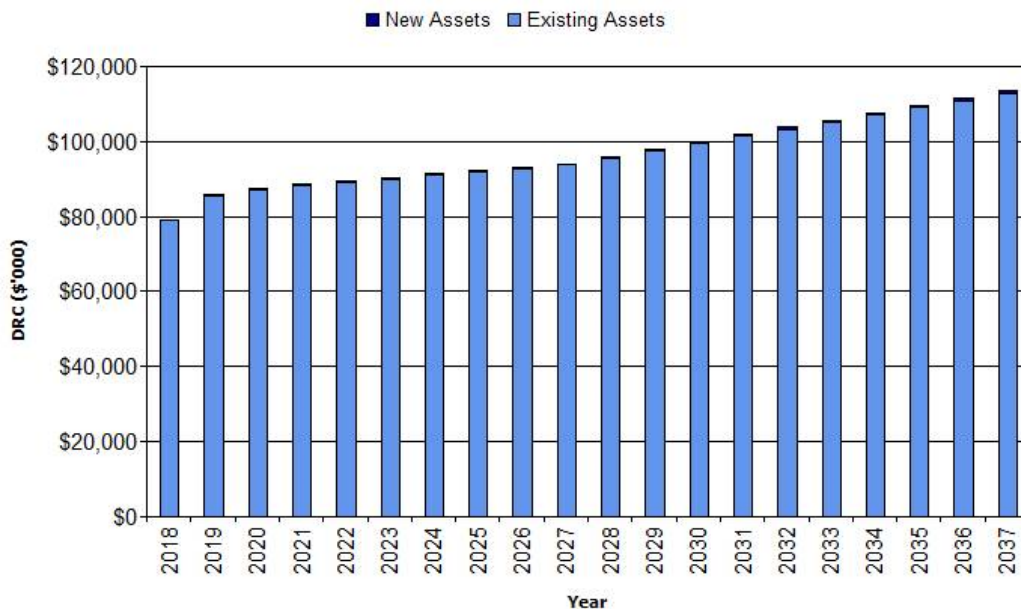


Figure 6.32: Projected Depreciated Replacement Cost - Unsealed Roads and Drainage

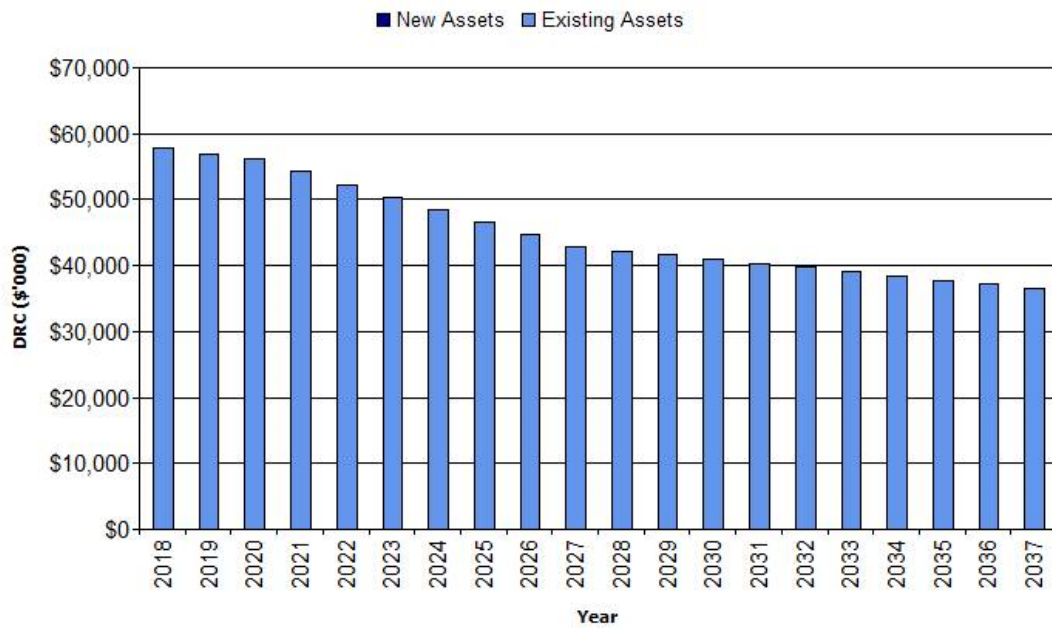


Figure 6.33: Projected Depreciated Replacement Cost – Jetties and Boat Ramps

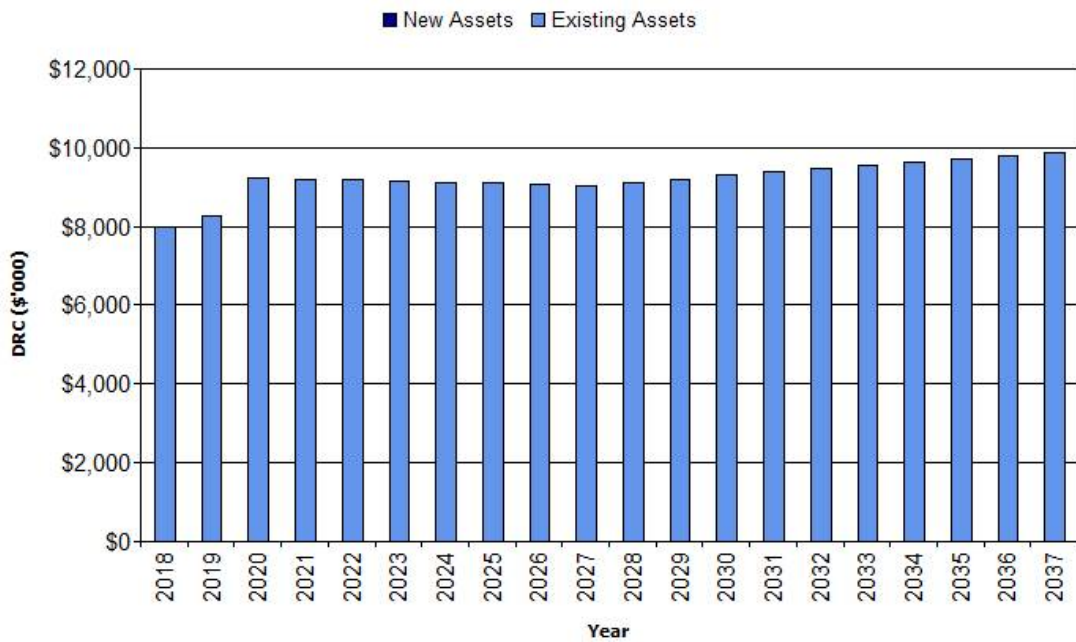


Figure 6.34: Projected Depreciated Replacement Cost –Plant, Equipment and IT

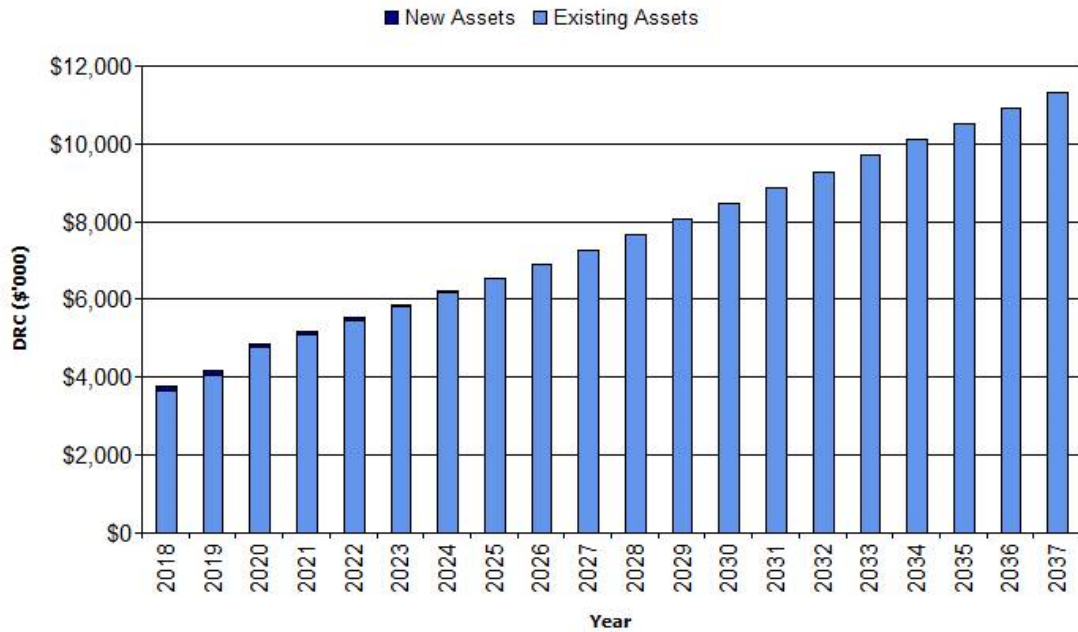


Figure 6.35: Projected Depreciated Replacement Cost Recreation, Parks and Other Infrastructure

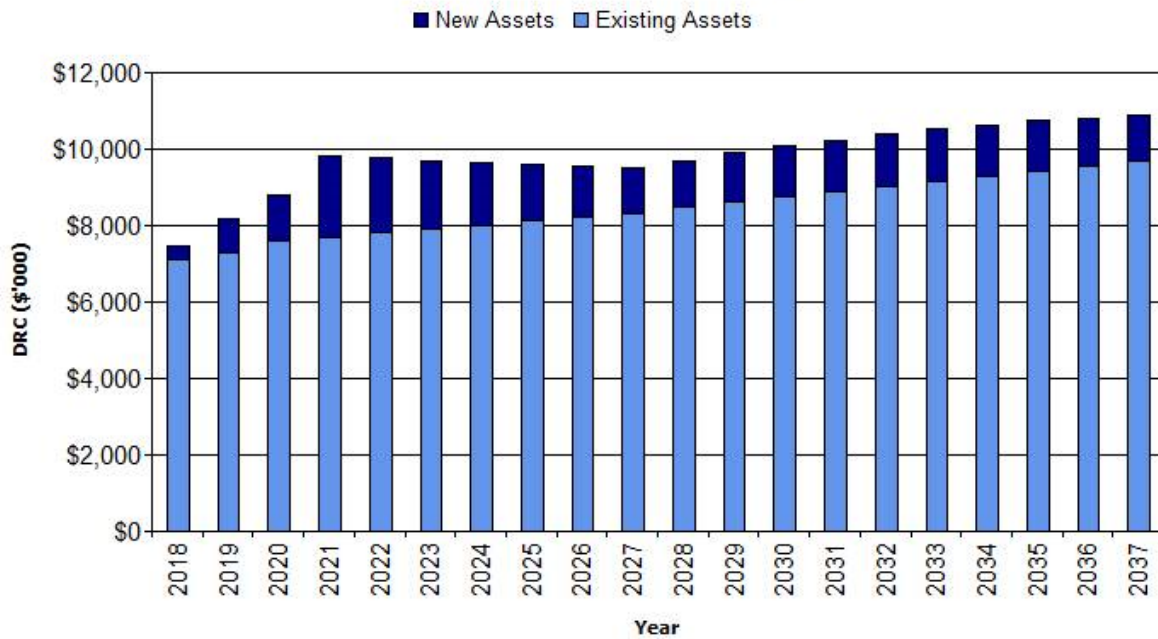
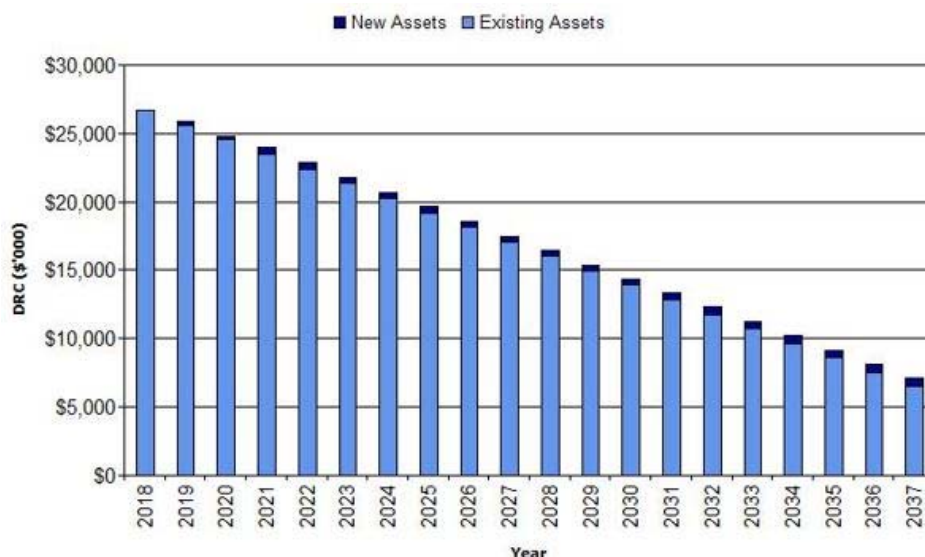


Figure 6.36: Projected Depreciated Replacement Cost - Buildings



6.4 Key Assumptions made in Financial Forecasts

This section details the key assumptions made in presenting the information contained in this asset management plan and in preparing forecasts of required operating and capital expenditure and asset values, depreciation expense and carrying amount estimates. It is presented to enable readers to gain an understanding of the levels of confidence in the data behind the financial forecasts.

Key assumptions made in this asset management plan, and risks that these may change, are shown in Table 6.18

Table 6.18: Key Assumptions made in AM Plan and Risks of Change

Key Assumptions
Revaluation of all transport and drainage assets for the purpose of this 2017 report.
Fair Value valuation method used for - Underground drainage - Bridges - Roads _ Subgrade only
Condition Based valuation methods for all other assets from 2014 with minor updates for new seal.
Underground Pipes based on cost for a 300mm RCP pipe, delivered and installed.
Revaluation of all Buildings assets for the purpose of this 2017 report, based on valuation by Australia Asset Advisory Group 2017 DRAFT
Recreation, parks and Infrastructure assets values taken from the Griffin valuation 2013/2014
Operations, Maintenance and Capital budgeted amounts were derived from the current 2017/2018 budget
Forecast budgeted amounts were taken from the current Corporate Business Plan

6.5 Forecast Reliability and Confidence

The expenditure and valuations projections in this Asset Management Plan are based on best available data. Currency and accuracy of data is critical to effective asset and financial management. Data confidence is classified on a 5 level scale³ in accordance with Table 6.19.

Table 6.19: Data Confidence Grading System

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

The estimated confidence level for and reliability of data used in this Asset Management Plan is shown in Table 6.20.

Table 6.20: Data Confidence Assessment for Data used in AM Plan

Data	Confidence Assessment	Comment
Demand Drivers	B	Based on local corporate knowledge
Growth projections	B	Based on local corporate knowledge
Operations expenditures	A	Council records
Maintenance expenditures	A	Council records
Projected Renewal exps.	B	
- Asset values		Assets revalued in 2017
- Asset residual values	B	Asset residual values not recognised
- Asset useful lives	B	Useful lives based on industry standards
- Condition modelling	B	Condition assessments correlate with previous assessments
- Network renewals	B	Based on asset registers and council cost and resurfacing records
- Defect repairs	B	Developed from planned inspections and council cost/estimating rates

³ IPWEA, 2011, IIMM, Table 2.4.6, p 2|59.

Upgrade/New expenditures	C	Project proposals identified but not fully scoped or estimated
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Over all data sources the data confidence is assessed as Medium confidence level for data used in the preparation of this Asset Management Plan.

7. PLAN IMPROVEMENT AND MONITORING

7.1 Improvement Plan

The improvement plan generated from this asset management plan is shown in Table 7.1.

Table 7.1: Improvement Plan

Task No	Task	Responsibility	Resources Required	Timeline
1	Record capital budget estimates and expenditures as capital renewal and capital upgrade/new expenditure	Director Finance	Staff time	Dec 2017
2	Record capital budget estimates and expenditures into Operations and maintenance expenditure	Director Finance	Staff time	Dec 2017
3	Combine technical asset registers into a single corporate asset register	Asset Manager	Staff time	Dec 2017
4	Investigate and implement works costing systems and maintenance management system to improve works planning and costing systems	Asset Manager/Operations manager/Asset Accountant	Staff time	Dec 2017
5	Investigate condition assessment methodology and develop plan for regular condition assessment	Asset Manager	Staff time	Dec 2017
6	Establish regular meetings of corporate Asset management team	Asset Manager	Staff time	Dec 2017
7	Recording of non-transport facilities usage and utilisation rates	Asset Manager	Staff time	Dec 2017
1	Levels of Service statement	Asset Manager	Staff time	Dec 2017
9.	Levels of Service agreement	Asset Manager	Staff time	June 2018

7.2 Monitoring and Review Procedures

This Asset Management Plan will be reviewed during annual budget planning processes and amended to recognise any material changes in service levels and/or resources available to provide those services as a result of budget decisions. As the quality and accuracy of the data is improved and updated, so will the forecasts generated in this plan be updated and data fed to the Financial plan.

The Asset Management Plan will be reviewed and updated annually to ensure it represents the current service level, asset values, projected operations, maintenance, capital renewal and replacement, capital

upgrade/new and asset disposal expenditures and projected expenditure values incorporated into the organisation's long term financial plan.

7.3 Performance Measures

The effectiveness of the asset management plan can be measured in the following ways:

- The degree to which the required projected expenditures identified in this asset management plan are incorporated into Council's long term financial plan,
- The degree to which 1-5 year detailed works programs, budgets, business plans and organisational structures take into account the 'global' works program trends provided by the asset management plan
- The degree to which the existing and projected service levels and service consequences, risks and residual risks are incorporated into the Council's Strategic Plan and associated plans

8. REFERENCES

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

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

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

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

9. APPENDICES

Appendix A Projected 10 year Capital Renewal, Upgrade/Exp/New 10 year Capital Works Program

Appendix B LTFP Budgeted Expenditures Accommodated in AM Plan

Appendix C Abbreviations

Appendix D Glossary

**Appendix A Projected 10 year Capital Renewal, Upgrade/ New 10
year Capital Works Program (as per the Corporate Business Plan
2016/17 -2019/20)**

Transport

ID	Strategy	Action Title	Action Description	Service	Director	CapX_OpX	renewal, new/upgrade	Budget 17/18	Budget 18/19	Budget 19/20	Budget 20/21
254	2.3.1	Kununurra - Road reseal program	The road reseal program ensures the spray seal provides a new waterproof barrier, preventing failures in the pavement. The new seal also provides a more skid resistant surface, resulting in safer roads. This proactive maintenance program ensures our road	Sealed Roads	Infrastructure	Capital	renewal	\$ 797,862	\$ 500,000	\$ 500,000	\$ 500,000
256	2.3.1	Kununurra Mixed Business Area - Road Reconstruction	Design and undertake staged road and drainage reconstruction of streets within the Kununurra Mixed Business Area. Roads including: Bandicoot Drive; Bloodwood Drive.	Sealed Roads and drainage	Infrastructure	Capital	renewal		\$ 480,000	\$ 635,000	\$ 635,000
257	2.3.1	North Kununurra – Road Reconstruction	Design and undertake staged road and drainage reconstruction of streets within the North Kununurra Weaber Plain Road area, Weaber Plain Road, Kununurra. Roads including: Poinsettia Way, Cocus Way	Sealed Roads and drainage	Infrastructure	Capital	renewal		\$ 200,000	\$ 200,000	\$ 200,000
258	2.3.1	Kununurra Town – Road Reconstruction	Design and undertake staged road and drainage reconstruction of streets within the Kununurra Town area. Roads including: Konkerberry Drive, Leichhardt St, Ironwood Drive and Messmate Way main town drainage pipe replacement	Sealed Roads and drainage	Infrastructure	Capital	renewal	\$ 100,000	\$ 200,000	\$ 600,000	\$ 200,000
		Bandicoot Drive - Road and Drainage upgrade	Design and undertake staged road and drainage reconstruction of streets within the Kununurra Mixed Business Area. Roads including: Bandicoot Drive; Bloodwood Drive.	Sealed Roads and drainage	Infrastructure	Capital	renewal	\$ 400,000			
259	2.3.1	Kununurra Lakeside – Road Reconstruction	Design and undertake staged road and drainage reconstruction of streets within the Kununurra Lakeside. Roads including: Casuarina Way, Hibiscus Dr.	Sealed Roads and drainage	Infrastructure	Capital	renewal		\$ 200,000	\$ 200,000	\$ 200,000
260	2.3.1	Wyndham – Dulverton St reconstruct road pavement	Design and construction	Sealed Roads	Infrastructure	Capital	renewal	\$ 100,000	\$ 600,000	\$ -	\$ -
261	2.3.1	Kununurra - Reconstruct Nutwood and Rosewood Streets	Manage and maintain Shire Infrastructure in a strategic and cost effective manner to provide efficient and sustainable services. Carryover of funds of \$300k from 2015/16. Carry over \$200k from 16/17.	Sealed Roads and drainage	Infrastructure	Capital	renewal	\$ 1,843,807	\$ 400,000	\$ 400,000	\$ -
263	3.3.3	Coolibah Drive - Lighting Upgrade Program Black Spot	Continuation of the current program which was recommendation of a 2012 Road Safety Audit.	Roads - Sealed	Infrastructure	Capital	renewal	\$ -	\$ 150,000	\$ -	\$ -
267	2.3.1	Wyndham - Gambier Street U drainage channel	Carry over \$150,000 from 16/17.	Drainage	Infrastructure	Capital	renewal	\$ 300,000	\$ -	\$ -	\$ -
274	3.3.4	Kununurra Townsite Footpath Upgrade Program	Capital works to improve the 25,648 metres of footpath in the town of Kununurra (\$1.94/m) Priority improvements need to focus on better connections within the CBD for improved safety and disability access.	Footpaths	Infrastructure	Capital	renewal	\$ 100,000	\$ 50,000	\$ 50,000	\$ 50,000
509	2.3.1	Lake Argyle Road Upgrade Program	Lake Argyle Road Program - extend culvert road crossings between Victoria Highway and Spillway Creek bridge to accommodate future 10m road formation width. Continuing program of funding. Manage and maintain Shire Infrastructure in a strategic and cost effective manner.	Sealed Roads and drainage	Infrastructure	Capital	renewal	\$ 1,824,638	\$ 810,000	\$ 753,000	\$ 760,000
559	2.3.1	Wyndham - Shape Street reconstruct intersection		Sealed Roads and drainage	Infrastructure	Capital	renewal	\$ -	\$ 45,000	\$ -	\$ -
252	2.3.1	Wyndham - Road reseal program	The road reseal program ensures the spray seal provides a new waterproof barrier, preventing failures in the pavement. The new seal also provides a more skid resistant surface, resulting in safer roads. This proactive maintenance program ensures our road	Sealed Roads	Infrastructure	Capital	renewal	\$ 150,000	\$ -	\$ 150,000	\$ -
290	2.3.1	Shire Bridge Management Program - Bridge approaches	Ensure Shire bridges assets are maintained at an optimal safe and functional standard fit for purpose in partnership with Main Roads Western Australia (MRWA).	Sealed Roads - Bridges	Infrastructure	Capital	Renewal	\$ 91,074	\$ 4,500,000	\$ -	\$ -
290	2.3.1	Shire Bridge Management Program - Stock route road	Ensure Shire bridges assets are maintained at an optimal safe and functional standard fit for purpose in partnership with Main Roads Western Australia (MRWA).	Sealed Roads - Bridges	Infrastructure	Capital	Renewal	\$ 86,667			
290	2.3.1	Shire Bridge Management Program - research station road	Ensure Shire bridges assets are maintained at an optimal safe and functional standard fit for purpose in partnership with Main Roads Western Australia (MRWA).	Sealed Roads - Bridges	Infrastructure	Capital	Renewal	\$ 23,333			
278	2.3.1	Drovers Road re-construction	reconstruct the road surface on Drovers Road as part of the unsealed roads maintenance program. Council will consider in the future if this road should be spray seal to improve access to the Kununurra Rodeo and horse track.	Roads - unsealed	Infrastructure	Capital	renewal	\$ -	\$ -	\$ 160,000	\$ -
280	2.3.1	Mulligan Lagoon Road Resheet		Roads - unsealed	Infrastructure	Capital	renewal	\$ -	\$ 300,000	\$ -	\$ -
281	2.3.1	King River Road Resheet	King River Road provides access to the prison [Boab] tree and other visitor attractions including Diggers Rest Station and connecting to the Karunjie Track. The route connects to the Gibb River Road providing an alternate route starting in Wyndham around	Roads - Unsealed	Infrastructure	Capital	renewal	\$ -	\$ 200,000	\$ 200,000	\$ -
284	2.3.1	Resheet - Research Station, Arawodi & Oolui Roads	Resheet Research Station intersections with Arawodi & Oolui Roads	Roads - Unsealed	Infrastructure	Capital	renewal	\$ -	\$ 300,000	\$ -	\$ -
285	2.3.1	Resheet - Parry Creek Road		Unsealed Roads	Infrastructure	Capital	renewal	\$ -	\$ -	\$ 850,000	\$ -

286	2.3.1	Duncan Road - re-sheet	Re-sheeting the Duncan Road to the South East of Shire. Road serves two pastoral ratepayers	Roads - Unsealed	Infrastructure	Capital	renewal	\$ -	\$ -	\$ 280,000	\$ 280,000
291	2.3.1	Road Repairs - Wet season flooding disaster	The Shire will act to repair damage caused to roads by flooding by accessing funds from the Western Australia Natural Disaster and Recovery Arrangements (WANDRRA)	Unsealed Roads and Drainage	Infrastructure	Capital	renewal	\$ 9,546,596			
301	2.3.1	Kalumburu Road Renewal / Upgrade	Kalumburu Road is an important access road to the community of Kalumburu. The road also services a number of other smaller communities. The road is an important tourist drive and accesses national parks and nature reserves.	Roads - Unsealed	Infrastructure	Capital	renewal	\$ 1,267,609	\$ 388,000	\$ -	\$ -
563	2.3.1	Wyndham - Realign Afghan Cemetery access road	Realign Afghan Cemetery access road to the west of water course to provide all weather access to the cemetery and gravel pit. Creating new intersection with the Great Northern Highway and 200m of new access road.	Roads - Unsealed	Infrastructure	Capital	renewal	\$ -	\$ 15,000	\$ -	\$ -
								\$ 16,631,586	\$ 9,338,000	\$ 4,978,000	\$ 2,825,000
275	3.3.4	Wyndham Townsite Footpath Upgrade Program	Capital works to improve the 4,440 metres of footpath in the town of Wyndham (\$9.01/m).	Footpaths	Infrastructure	Capital	new/upgrade	\$ 90,000	\$ 42,000	\$ 44,000	\$ 46,000
287	2.3.1	Kununurra - Lakeview Drive traffic devices	Batters erosion undermining sealed pavement and traffic devices required to restrict wide vehicles passing to one lane to mitigate potential for vehicle roll over	Sealed Roads	Infrastructure	Capital	new/upgrade	\$ 20,000	\$ 50,000	\$ -	\$ -
262	2.3.1	Kununurra - Chestnut Ave State Black Spot Safety Improvements	Chestnut Ave Black Spot Safety Improvements MRWA Crash Report Embayment Modification Required to address Main Roads Crash Report. Grant funding to be sought from SBS	Roads - Sealed	Infrastructure	Capital	new/upgrade	\$ 70,800	\$ -	\$ -	\$ -
								\$ 180,800	\$ 92,000	\$ 44,000	\$ 46,000

Jetties and Boat Ramps

ID	Strategy	Action Title	Action Description	Service	Director	CapX_OpX	renewal, new/upgrade or disposal	Budget 17/18	Budget 18/19	Budget 19/20	Budget 20/21
469	3.5.3	Install Cathodic Protection on Lily Creek Lagoon jetty	No Cathodic protection currently installed on the asset, and by installing a system will reduce the steel and concrete repair maintenance costs to the Shire resulting from a marine environment.	Jetties	Infrastructure	Capital	Renewal	\$ 65,000	\$ -	\$ -	\$ -
471	3.5.3	Upgrade Wyndham Boat Ramp & Floating Pontoon	The existing boat launching facility is at the end of its service life, and facility users have raised concerns with its usage and function. Funding from R4R and RBFS has been obtained to conduct planning and concept design studies for the redevelopment of the Wyndham boat launching facility.	Jetties	Infrastructure	Capital	Renewal		\$ 276,300	\$ 276,300	\$ 276,300
330	3.5.3	Anthon's Landing Foreshore - Seek funding and prepare project implementation plan for foreshore revitalisation and upgrade	Revitalisation and upgrade Anthon's Landing foreshore, Develop concept with community consultation, Seek funding and Prepare project implementation plan	Boating	Infrastructure	Capital	Renewal	\$ -	\$ 300,000	\$ 1,000,000	\$ -
								\$ 65,000	\$ 576,300	\$ 1,276,300	\$ 276,300

Parks, Recreation and Waste Management

ID	Strategy	Action Title	Action Description	Service	Director	CapX_OpX	Renewal, New / Upgrade or Disposal	Budget 17/18	Budget 18/19	Budget 19/20	Budget 20/21
310	3.2.1	Rehabilitation and decommission existing liquid waste ponds	Rehabilitation and decommission existing liquid waste ponds in Kununurra, Funded by Loan 126 and Waste Management Reserve. Had difficulties finding a disposal site therefore pursuing Capping is the traditional method for isolating landfill wastes and contaminants. A cap restricts surface water infiltration into the contaminated subsurface to reduce the potential for contaminants	Waste Management	Infrastructure	Capital	Renewal	\$ 20,000	\$ -	\$ -	
305	3.2.1	Kununurra landfill area Capping	Encouraging community groups to promote events by installing new poles with an efficient system for the erection of/removal of banners. Poles will replace existing poles in both Kununurra and Wyndham.	Waste Management	Infrastructure	Capital	Renewal	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000
387	3.3.2	Upgrade Community Banner Poles	Funded by Parks Reserve subject to Minister of Planning approval. Program will be dependent upon community feedback and priorities. Funds carried forward from 2015/16.	Parks and recreational	Community Development	Capital	Renewal	\$ -	\$ 65,000	\$ -	\$ -
311	3.4.1	Renew and upgrade play spaces in accordance with Recreation Space Action Plan	Upgrade aging Reticulation infrastructure in Wyndham to ensure we can maintain parks, gardens and reserves to support our community and enjoy our outdoor lifestyle.	Parks and recreational	Infrastructure	Capital	Renewal	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000
419	3.4.1	Wyndham Parks and Gardens Reticulation Upgrade	Upgrade aging reticulation infrastructure in the Kununurra town to ensure we can maintain parks, gardens and reserves to support our community and enjoy our outdoor lifestyle.	Parks and recreational	Infrastructure	Capital	Renewal	\$ 150,000	\$ 50,000	\$ 50,000	\$ 50,000
420	3.4.1	Kununurra - Parks and Gardens Reticulation Upgrade	Beautification of Cemetery grounds by improving paths, fencing and Reticulation	Parks and recreational	Infrastructure	Capital	Renewal	\$ -	\$ 100,000	\$ 100,000	\$ 50,000
421	3.4.1	Kununurra and Wyndham Cemetery Upgrade & Beautification	Investigate redevelopment and upgrade of the Wyndham Skate Park to improve the recreation available to youth in the town of Wyndham.	Parks and recreational	Infrastructure	Capital	Renewal	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000
454	3.4.4	Wyndham Skate Park - Investigate redevelopment and upgrade	Detailed engineering and consultation, aboriginal heritage survey and environmental impact statement.	Parks and recreational	Community Development	Capital	Renewal	\$ -	\$ -	\$ -	\$ 40,000
472	3.5.3	Anthon's Landing - Boardwalk		Parks and recreational	Infrastructure	Capital	Renewal	\$ -	\$ -	\$ 209,000	\$ -
								\$ 610,000	\$ 655,000	\$ 799,000	\$ 580,000
416	3.4.1	Upgrade Wyndham waste water reuse treatment facility	Provide Chlorine treatment to effluent at Wyndham waste water reuse treatment facility	Waste Management	Infrastructure	Capital	new/upgrade	\$ 178,650	\$ -	\$ -	
379	3.2.1	Acquire new landfill site near Kununurra	Current landfill site nearing capacity and is expected to close in 2022-23. A new site is required to continue operations within the Shire. The new site will incorporate Wyndham refuse disposal.	Waste Management	Infrastructure	Capital	new/upgrade	\$ -	\$ -	\$ 150,000	\$ 1,000,000
395	3.3.4	Create new Shire Trails as outlined in Trails Master plan	The plan sets out to promote community health and recreation, sustainable cultural tourism and life-long educational values.	Parks and recreational	Infrastructure	Capital	new/upgrade	\$ 200,000	\$ 200,000	\$ 200,000	\$ -
430	3.4.1	KLC - Maintain swimming pool temperatures within FINA guidelines	Investigate and install systems to maintain swimming pool temperatures within FINA guidelines of 25°-29°C. Consider the use of solar heating and cooling systems. Increased pool use will make KLC more economically sustainable.	Parks and recreational	Community Development	Capital	new/upgrade		\$ 350,000	\$ -	\$ -
								\$ 378,650	\$ 550,000	\$ 350,000	\$ 1,000,000

Plant, Equipment and IT

ID	Strategy	Action Title	Action Description	Service	Director	CapX_OpX	renewal, new/upgrade or disposal	T_Cost	Budget 17/18	Budget 18/19	Budget 19/20	Budget 20/21	
315	2.3.1	Plant Replacement - Depot - Light Passenger Plant	Plant replacement program for Passenger Plant, establish a modern and safe fleet of light passenger plant.	Plant	Infrastructure	Capital	Renewal	\$ 1,206,170	\$ 305,239	\$ 279,103	\$ 291,196	\$ 330,632	
316	2.3.1	Plant Replacement - Depot - Grounds-care Plant Medium	Plant replacement program for mowers and tractors, establish a modern and safe fleet of heavy and light plant.	Plant	Infrastructure	Capital	Renewal	\$ 293,075	\$ 45,131	\$ 95,064	\$ 100,134	\$ 52,746	
317	2.3.1	Plant Replacement - Depot - Grounds-care plus Attachments	Based on the 10 Yr Plant Replacement Program for Groundscare Plant Depot, establish a modern and safe fleet of plant.	Plant	Infrastructure	Capital	Renewal	\$ 155,550	\$ 155,550	\$ -	\$ -		
318	2.3.1	Plant Replacement - Depot - Trucks & Earthmoving Heavy	Based on the 10 Yr Plant Replacement Program for Trucks & Earthmoving Heavy, establish a modern and safe fleet of plant	Plant	Infrastructure	Capital	Renewal	\$ 1,494,228	\$ 186,017	\$ 391,339	\$ 565,798	\$ 351,074	
453	3.4.4	KLC - Upgrade Gym equipment for Kununurra Leisure Centre	Maintain a good standard of gym equipment at the Kununurra Leisure Centre. Reinstate the gym equipment replacement program.	Equipment	Community Development	Capital	renewal	\$ 30,000	\$ 15,000	\$ -	\$ 15,000	\$ -	
190	1.4.4	ICT - Server and network upgrades	Replacement of UPS, servers and increasing the backup storage. Several sites are complete. Quotes being sought to increase the backup server and improve battery backup times.	Information & Communications Technology	Corporate Services	Capital	Renewal	\$ 50,000	\$ 50,000	\$ -	\$ -	\$ -	
195	1.4.4	ICT - Virtualise desktop computer fleet	Desktop virtualization involves the delivery of an operating system and applications to a device, whose hardware need not have the capacity to run such an information system either due to hardware architecture or operating system incompatibility.	Information & Communications Technology	Corporate Services	Capital	Renewal	\$ 80,000	\$ -	\$ -	\$ 80,000	\$ -	
197	1.4.4	ICT - Laptop & Desktop upgrade Information Technology	Replace physical computer and telecommunications hardware in a manner that ensures security, accessibility and performance	Information & Communications Technology	Corporate Services	Capital	Renewal	\$ 51,450	\$ 15,450	\$ 17,000	\$ 19,000	\$ -	
		Systems Development Capital	Replace audio and visual recording, Intranet, Internet and emailing archiving	Information & Communications Technology	Corporate Services	Capital	Renewal	\$ 110,000	\$ 110,000				
									3470473	882387	782506	1071128	734452

Buildings

ID	Strategy	Action Title	Action Description	Service	Director	CapX_OpX	renewal, new/upgrade	Budget 17/18	Budget 18/19	Budget 19/20	Budget 20/21
335	2.4.1	Improve accessibility to Administration Building entry doors	Requirement to provide accessibility to Shire administration building - Door opening assistance	Buildings	Community Development	Capital	Renewal	\$ 40,000	\$ -	\$ -	\$ -
413	3.3.9	Animal Management Facility Improvements	Bring the Animal Management Facility in line with OHS requirement Create a safer working environment for Staff	Buildings	Infrastructure	Capital	Renewal	\$ 10,000	\$ -	\$ -	\$ -
436	3.4.1	Resurface squash court playing walls at Kununurra Leisure Centre	Walls need resurfacing every 3 to 4 years	Buildings	Community Development	Capital	Renewal	\$ -	\$ 30,000	\$ -	\$ -
		Building upgrade - Kununurra Swimming Complex	Convert the Kununurra Leisure Centre to a 24/7 gym access facility.	Buildings	Community Development	Capital	Renewal	\$ 25,000			
								\$ 75,000	\$ 30,000	\$ -	\$ -
428	3.4.1	Kununurra Town Oval - Construct ablutions and change rooms	Construct public toilets and change room facilities to meet the requirements of oval users	Buildings	Community Development	Capital	new/upgrade	\$ -	\$ -	\$ -	\$ 250,000
463	3.5.2	KLC - Increase storage at Kununurra Leisure Centre for community and sporting groups	Kununurra Leisure Centre (KLC) has limited storage for community and sporting groups. Improved storage will assist programs delivered by community and sporting groups.	Buildings	Community Development	Capital	new/upgrade	\$ -	\$ 65,000	\$ -	\$ -
465	3.5.3	Construct new ablutions at Swim beach	Design and construction of composting toilet block. Manage and maintain Shire Infrastructure in a strategic and cost effective manner to provide efficient and sustainable services.	Buildings	Infrastructure	Capital	new/upgrade	\$ -	\$ 130,000	\$ -	\$ -
431	3.4.1	Wyndham Swimming Pool - Construct dedicated first aid room	Construct dedicated first aid room at Wyndham Swimming Pool. Potential to convert transportable for purpose. Legislative requirement to have dedicated first aid room	Buildings	Community Development	Capital	new/upgrade	\$ 70,000	\$ -	\$ -	\$ -
								\$ 70,000	\$ 195,000	\$ -	\$ 250,000

Appendix B Budgeted Expenditures Accommodated in LTFP

NAMS.PLUS3 Asset Management

Wyndham-East Kimberley SC

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Sealed roads and Drainage_S1_V1

Asset Management Plan



First year of expenditure projections
Sealed roads and Drainage

2018 (financial yr ending)

Asset values at start of planning period

Current replacement cost	\$197,867	(000)
Depreciable amount	\$197,867	(000)
Depreciated replacement cost	\$74,712	(000)
Annual depreciation expense	\$1,621	(000)

Calc CRC from Asset Register

\$197,867 (000)

This is a check for you.

Operations and Maintenance Costs for New Assets

	% of asset value
Additional operations costs	0.48%
Additional maintenance	1.24%
Additional depreciation	0.82%
Planned renewal budget (information only)	

Ex
ca
data

Planned Expenditures from LTFP

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

20 Year Expenditure Projections

Note: Enter all values in current **2018** values

Financial year ending	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000
Expenditure Outlays included in Long Term Financial Plan (in current \$ values)											
Operations											
Operations budget	\$952	\$952	\$952	\$952	\$952	\$952	\$952	\$952	\$952	\$952	\$952
Management budget	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
AM systems budget	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total operations	\$952	\$952	\$952	\$952	\$952	\$952	\$952	\$952	\$952	\$952	\$952
Maintenance											
Reactive maintenance budget	\$2,453	\$2,453	\$2,453	\$2,453	\$2,453	\$2,453	\$2,453	\$2,453	\$2,453	\$2,453	\$2,453
Planned maintenance budget	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Specific maintenance items budget	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total maintenance	\$2,453	\$2,453	\$2,453	\$2,453	\$2,453	\$2,453	\$2,453	\$2,453	\$2,453	\$2,453	\$2,453
Capital											
Planned renewal budget	\$5,817	\$8,135	\$3,488	\$2,545	\$2,545	\$2,545	\$2,545	\$2,545	\$2,545	\$2,545	\$3,526
Planned upgrade/new budget	\$180	\$92	\$44	\$46	\$46	\$46	\$46	\$46	\$46	\$46	\$64
Non-growth contributed asset value	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Asset Disposals											
Est Cost to dispose of assets	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Carrying value (DRC) of disposed assets	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

NAMS.PLUS3 Asset Management

Wyndham-East Kimberley SC

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Unsealed roads and drainage_S1_V1

Asset Management Plan

First year of expenditure projections
Unsealed roads and drainage

2018 (financial yr ending)

Asset values at start of planning period

Current replacement cost	\$96,797 (000)
Depreciable amount	\$96,797 (000)
Depreciated replacement cost	\$49,123 (000)
Annual depreciation expense	\$2,176 (000)

Calc CRC from Asset Register

\$96,797 (000)

This is a check for you.

Operations and Maintenance Costs for New Assets

	% of asset value
Additional operations costs	0.13%
Additional maintenance	0.68%
Additional depreciation	2.25%
Planned renewal budget (information only)	

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

Exi
cal
data i

Planned Expenditures from LTFP

20 Year Expenditure Projections

Note: Enter all values in current **2018** values

Financial year ending	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000
Expenditure Outlays included in Long Term Financial Plan (in current \$ values)											
Operations											
Operations budget	\$122	\$122	\$122	\$122	\$122	\$122	\$122	\$122	\$122	\$122	\$122
Management budget	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
AM systems budget	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total operations	\$122	\$122	\$122	\$122	\$122	\$122	\$122	\$122	\$122	\$122	\$122
Maintenance											
Reactive maintenance budget	\$655	\$655	\$655	\$655	\$655	\$655	\$655	\$655	\$655	\$655	\$655
Planned maintenance budget	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Specific maintenance items budget	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total maintenance	\$655	\$655	\$655	\$655	\$655	\$655	\$655	\$655	\$655	\$655	\$655
Capital											
Planned renewal budget	\$10,814	\$1,203	\$1,490	\$280	\$280	\$280	\$280	\$280	\$280	\$280	\$1,547
Planned upgrade/new budget	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Non-growth contributed asset value	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Asset Disposals											
Est Cost to dispose of assets	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Carrying value (DRC) of disposed assets	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Additional Expenditure Outlays Requirements (e.g from Infrastructure Risk Management Plan)											
Additional Expenditure Outlays required and not included above	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000
Operations	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Maintenance	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Capital Renewal	to be incorporated into Forms 2 & 2.1 (where Method 1 is used) OR Form 2B Defect Repairs (where Method 2 or 3 is used)										
Capital Upgrade	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
User Comments #2											

NAMS.PLUS3 Asset Management

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Jetty's and Boat ramps_S1_V1

Asset Management Plan

First year of expenditure projections
Jetty's and Boat ramps

2018 (financial yr ending)

Asset values at start of planning period

Current replacement cost	\$11,539 (000)
Depreciable amount	\$8,214 (000)
Depreciated replacement cost	\$8,214 (000)
Annual depreciation expense	\$302 (000)

Calc CRC from Asset Register

\$11,539 (000)

This is a check for you.

Operations and Maintenance Costs for New Assets

% of asset value

Additional operations costs	0.01%
Additional maintenance	0.81%
Additional depreciation	3.68%
Planned renewal budget (information only)	

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Planned Expenditures from LTFP

20 Year Expenditure Projections

Note: Enter all values in current **2018** values

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

Financial year ending	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000
Expenditure Outlays included in Long Term Financial Plan (in current \$ values)											
Operations											
Operations budget	\$1	\$1	\$1	\$1	\$1	\$1	\$1	\$1	\$1	\$1	\$1
Management budget	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
AM systems budget	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total operations	\$1	\$1	\$1	\$1	\$1	\$1	\$1	\$1	\$1	\$1	\$1
Maintenance											
Reactive maintenance budget	\$94	\$94	\$94	\$94	\$94	\$94	\$94	\$94	\$94	\$94	\$94
Planned maintenance budget	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Specific maintenance items budget	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total maintenance	\$94	\$94	\$94	\$94	\$94	\$94	\$94	\$94	\$94	\$94	\$94
Capital											
Planned renewal budget	\$65	\$576	\$1,276	\$276	\$276	\$276	\$276	\$276	\$276	\$276	\$385
Planned upgrade/new budget	\$1	\$1	\$1	\$1	\$1	\$1	\$1	\$1	\$1	\$1	\$1
Non-growth contributed asset value	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Asset Disposals											
Est Cost to dispose of assets	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Carrying value (DRC) of disposed assets	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Additional Expenditure Outlays Requirements (e.g from Infrastructure Risk Management Plan)											
Additional Expenditure Outlays required and not included above	2018 \$000	2019 \$000	2020 \$000	2021 \$000	2022 \$000	2023 \$000	2024 \$000	2025 \$000	2026 \$000	2027 \$000	2028 \$000
Operations	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Maintenance	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Capital Renewal											
Capital Upgrade	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
User Comments #2											

to be incorporated into Forms 2 & 2.1 (where Method 1 is used) OR Form 2B Defect Repairs (where Method 2 or 3 is used)

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Recreation, Parks and other infrastructure_S1_V1 Asset Management Plan

Recreation, Parks and other infrastructure First year of expenditure projections **2018** (financial yr ending)

Asset values at start of planning period

Current replacement cost	\$13,161 (000)
Depreciable amount	\$6,969 (000)
Depreciated replacement cost	\$6,969 (000)
Annual depreciation expense	\$476 (000)

Calc CRC from Asset Register

\$13,161 (000)
This is a check for you.

Operations and Maintenance Costs for New Assets

	% of asset value
Additional operations costs	20.84%
Additional maintenance	16.09%
Additional depreciation	6.83%
Planned renewal budget (information only)	

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

Planned Expenditures from LTFP

20 Year Expenditure Projections

Note: Enter all values in current **2018** values

Financial year ending		2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
		\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000
Expenditure Outlays included in Long Term Financial Plan (in current \$ values)												
Operations												
Operations budget		\$2,743	\$2,743	\$2,743	\$2,743	\$2,743	\$2,743	\$2,743	\$2,743	\$2,743	\$2,743	\$2,743
Management budget		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
AM systems budget		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total operations		\$2,743	\$2,743	\$2,743	\$2,743	\$2,743	\$2,743	\$2,743	\$2,743	\$2,743	\$2,743	\$2,743
Maintenance												
Reactive maintenance budget		\$2,118	\$2,118	\$2,118	\$2,118	\$2,118	\$2,118	\$2,118	\$2,118	\$2,118	\$2,118	\$2,118
Planned maintenance budget		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Specific maintenance items budget		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total maintenance		\$2,118	\$2,118	\$2,118	\$2,118	\$2,118	\$2,118	\$2,118	\$2,118	\$2,118	\$2,118	\$2,118
Capital												
Planned renewal budget		\$610	\$655	\$799	\$580	\$580	\$580	\$580	\$580	\$580	\$580	\$612
Planned upgrade/new budget		\$379	\$550	\$350	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$828
Non-growth contributed asset value		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Asset Disposals												
Est Cost to dispose of assets		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Carrying value (DRC) of disposed assets		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

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Plant, Equipment and IT_S1_V1

Asset Management Plan

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

Plant, Equipment and IT

Asset values at start of planning period

Current replacement cost	\$6,632 (000)
Depreciable amount	\$3,162 (000)
Depreciated replacement cost	\$3,162 (000)
Annual depreciation expense	\$379 (000)

Calc CRC from Asset Register

\$6,632 (000)

This is a check for you.

Operations and Maintenance Costs for New Assets

	% of asset value
Additional operations costs	15.00%
Additional maintenance	5.19%
Additional depreciation	11.99%
Planned renewal budget (information only)	

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Planned Expenditures from LTFP

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

20 Year Expenditure Projections

Note: Enter all values in current **2018** values

Financial year ending	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000
Expenditure Outlays included in Long Term Financial Plan (in current \$ values)											
Operations											
Operations budget	\$995	\$995	\$995	\$995	\$995	\$995	\$995	\$995	\$995	\$995	\$995
Management budget	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
AM systems budget	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total operations	\$995	\$995	\$995	\$995	\$995	\$995	\$995	\$995	\$995	\$995	\$995
Maintenance											
Reactive maintenance budget	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Planned maintenance budget	\$344	\$344	\$344	\$344	\$344	\$344	\$344	\$344	\$344	\$344	\$344
Specific maintenance items budget	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total maintenance	\$344	\$344	\$344	\$344	\$344	\$344	\$344	\$344	\$344	\$344	\$344
Capital											
Planned renewal budget	\$882	\$782	\$1,071	\$734	\$734	\$734	\$734	\$734	\$734	\$734	\$787
Planned upgrade/new budget	\$90	\$20	\$20	\$20	\$20	\$20	\$20	\$20	\$20	\$20	\$27
Non-growth contributed asset value	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Asset Disposals											
Est Cost to dispose of assets	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Carrying value (DRC) of disposed assets	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

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Buildings_S1_V1

Asset Management Plan



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

Asset values at start of planning period

Current replacement cost	\$54,417 (000)
Depreciable amount	\$27,680 (000)
Depreciated replacement cost	\$27,680 (000)
Annual depreciation expense	\$1,094 (000)

Calc CRC from Asset Register

\$54,417 (000)

This is a check for you.

Operations and Maintenance Costs for New Assets

	% of asset value
Additional operations costs	2.19%
Additional maintenance	0.14%
Additional depreciation	3.95%
Planned renewal budget (information only)	

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Planned Expenditures from LTFP

20 Year Expenditure Projections

Note: Enter all values in current 2018 values

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

Financial year ending	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000
Expenditure Outlays included in Long Term Financial Plan (in current \$ values)											
Operations											
Operations budget	\$1,192	\$1,192	\$1,192	\$1,192	\$1,192	\$1,192	\$1,192	\$1,192	\$1,192	\$1,192	\$1,192
Management budget	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
AM systems budget	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total operations	\$1,192	\$1,192	\$1,192	\$1,192	\$1,192	\$1,192	\$1,192	\$1,192	\$1,192	\$1,192	\$1,192
Maintenance											
Reactive maintenance budget	\$74	\$74	\$74	\$74	\$74	\$74	\$74	\$74	\$74	\$74	\$74
Planned maintenance budget	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Specific maintenance items budget	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total maintenance	\$74	\$74	\$74	\$74	\$74	\$74	\$74	\$74	\$74	\$74	\$74
Capital											
Planned renewal budget	\$75	\$30	\$30	\$30	\$30	\$30	\$30	\$30	\$30	\$30	\$35
Planned upgrade/new budget	\$70	\$195	\$195	\$250	\$250	\$250	\$250	\$250	\$250	\$250	\$221
Non-growth contributed asset value	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Asset Disposals											
Est Cost to dispose of assets	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Carrying value (DRC) of disposed assets	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Appendix C Abbreviations

AAAC	Average annual asset consumption
AM	Asset management
AM Plan	Asset management plan
ARI	Average recurrence interval
ASC	Annual service cost
BOD	Biochemical (biological) oxygen demand
CRC	Current replacement cost
CWMS	Community wastewater management systems
DA	Depreciable amount
DRC	Depreciated replacement cost
EF	Earthworks/formation
IRMP	Infrastructure risk management plan
LCC	Life Cycle cost
LCE	Life cycle expenditure
LTFP	Long term financial plan
MMS	Maintenance management system
PCI	Pavement condition index

RV	Residual value
SoA	State of the Assets
SS	Suspended solids
vph	Vehicles per hour
WDCRC	Written down current replacement cost

Appendix D Glossary

Annual Service Cost (ASC)

1) Reporting actual cost

The annual (accrual) cost of providing a service including operations, maintenance, depreciation, finance/opportunity and disposal costs less revenue.

2) For investment analysis and budgeting

An estimate of the cost that would be tendered, per annum, if tenders were called for the supply of a service to a performance specification for a fixed term. The Annual Service Cost includes operations, maintenance, depreciation, finance/ opportunity and disposal costs, less revenue.

Asset

A resource controlled by an entity as a result of past events and from which future economic benefits are expected to flow to the entity. Infrastructure assets are a sub-class of property, plant and equipment which are non-current assets with a life greater than 12 months and enable services to be provided.

Asset category

Sub-group of assets within a class hierarchy for financial reporting and management purposes.

Asset class

A group of assets having a similar nature or function in the operations of an entity, and which, for purposes of disclosure, is shown as a single item without supplementary disclosure.

Asset condition assessment

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

Asset hierarchy

A framework for segmenting an asset base into appropriate classifications. The asset hierarchy can be based on asset function or asset type or a combination of the two.

Asset Management (AM)

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

Asset renewal funding ratio

The ratio of the net present value of asset renewal funding accommodated over a 10 year period in a long term financial plan relative to the net present value of projected capital renewal expenditures identified in an asset management plan for the same period [AIFMG Financial Sustainability Indicator No 8].

Average annual asset consumption (AAAC)*

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

Borrowings

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

Capital expenditure

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

Capital expenditure - expansion

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

Capital expenditure - new

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

Capital expenditure - renewal

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

Capital expenditure - upgrade

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

Capital funding

Funding to pay for capital expenditure.

Capital grants

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

Capital investment expenditure

See capital expenditure definition

Capitalisation threshold

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

Carrying amount

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

Class of assets

See asset class definition

Component

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

Core asset management

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

Cost of an asset

The amount of cash or cash equivalents paid or the fair value of the consideration given to acquire an asset at the time of its acquisition or construction, including any costs necessary to place the asset into service. This includes one-off design and project management costs.

Critical assets

Assets for which the financial, business or service level consequences of failure are sufficiently severe to justify proactive inspection and rehabilitation. Critical assets have a lower threshold for action than noncritical assets.

Current replacement cost (CRC)

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

Deferred maintenance

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

Depreciable amount

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

Depreciated replacement cost (DRC)

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

Depreciation / amortisation

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

Economic life

See useful life definition.

Expenditure

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

Expenses

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

Fair value

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

Financing gap

A financing gap exists whenever an entity has insufficient capacity to finance asset renewal and other expenditure necessary to be able to appropriately maintain the range and level of services its existing asset stock was originally designed and intended to deliver. The service capability of the existing asset stock should be determined assuming no additional operating revenue, productivity improvements, or net financial liabilities above levels currently planned or projected. A current financing gap means service levels have already or are currently falling. A projected financing gap if not addressed will result in a future diminution of existing service levels.

Heritage asset

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

Impairment Loss

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

Infrastructure assets

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

Investment property

Property held to earn rentals or for capital appreciation or both, rather than for:

- (a) use in the production or supply of goods or services or for administrative purposes; or
- (b) sale in the ordinary course of business.

Key performance indicator

A qualitative or quantitative measure of a service or activity used to compare actual performance against a standard or other target. Performance indicators commonly relate to statutory limits, safety, responsiveness, cost, comfort, asset performance, reliability, efficiency, environmental protection and customer satisfaction.

Level of service

The defined service quality for a particular service/activity against which service performance may be measured. Service levels usually relate to quality, quantity, reliability, responsiveness, environmental impact, acceptability and cost.

Life Cycle Cost *

1. **Total LCC** The total cost of an asset throughout its life including planning, design, construction, acquisition, operation, maintenance, rehabilitation and disposal costs.
2. **Average LCC** The life cycle cost (LCC) is average cost to provide the service over the longest asset life cycle. It comprises average operations, maintenance expenditure plus asset consumption expense, represented by depreciation expense projected over 10 years. The Life Cycle Cost does not indicate the funds required to provide the service in a particular year.

Life Cycle Expenditure

The Life Cycle Expenditure (LCE) is the average operations, maintenance and capital renewal expenditure accommodated in the long term financial plan over 10 years. Life Cycle Expenditure may be compared to average Life Cycle Cost to give an initial indicator of affordability of projected service levels when considered with asset age profiles.

Loans / borrowings

See borrowings.

Maintenance

All actions necessary for retaining an asset as near as practicable to an appropriate service condition, including regular ongoing day-to-day work necessary to keep assets operating, eg road patching but excluding rehabilitation or renewal. It is operating expenditure required to ensure that the asset reaches its expected useful life.

- **Planned maintenance**

Repair work that is identified and managed through a maintenance management system (MMS). MMS activities include inspection, assessing the condition against failure/breakdown criteria/experience, prioritising scheduling,

actioning the work and reporting what was done to develop a maintenance history and improve maintenance and service delivery performance.

- **Reactive maintenance**
Unplanned repair work that is carried out in response to service requests and management/ supervisory directions.
- **Specific maintenance**
Maintenance work to repair components or replace sub-components that needs to be identified as a specific maintenance item in the maintenance budget.
- **Unplanned maintenance**
Corrective work required in the short-term to restore an asset to working condition so it can continue to deliver the required service or to maintain its level of security and integrity.

Maintenance expenditure *

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

Materiality

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

Modern equivalent asset

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

Net present value (NPV)

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

Non-revenue generating investments

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

Operations

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

Operating expenditure

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

Operating expense

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

Operating expenses

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

Operations, maintenance and renewal financing ratio

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

Operations, maintenance and renewal gap

Difference between budgeted expenditures in a long term financial plan (or estimated future budgets in absence of a long term financial plan) and projected expenditures for operations, maintenance and renewal of assets to achieve/maintain specified service levels, totalled over a defined time (e.g. 5, 10 and 15 years).

Pavement management system (PMS)

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

PMS Score

A measure of condition of a road segment determined from a Pavement Management System.

Rate of annual asset consumption *

The ratio of annual asset consumption relative to the depreciable amount of the assets. It measures the amount of the consumable parts of assets that are consumed in a period (depreciation) expressed as a percentage of the depreciable amount.

Rate of annual asset renewal *

The ratio of asset renewal and replacement expenditure relative to depreciable amount for a period. It measures whether assets are being replaced at the rate they are wearing out with capital renewal expenditure expressed as a percentage of depreciable amount (capital renewal expenditure/DA).

Rate of annual asset upgrade/new *

A measure of the rate at which assets are being upgraded and expanded per annum with capital upgrade/new expenditure expressed as a percentage of depreciable amount (capital upgrade/expansion expenditure/DA).

Recoverable amount

The higher of an asset's fair value, less costs to sell and its value in use.

Recurrent expenditure

Relatively small (immaterial) expenditure or that which has benefits expected to last less than 12 months. Recurrent expenditure includes operations and maintenance expenditure.

Recurrent funding

Funding to pay for recurrent expenditure.

Rehabilitation

See capital renewal expenditure definition above.

Remaining useful life

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

Renewal

See capital renewal expenditure definition above.

Residual value

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

Revenue generating investments

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

Risk management

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

Section or segment

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

Service potential

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

Service potential remaining

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

Specific Maintenance

Replacement of higher value components/sub-components of assets that is undertaken on a regular cycle including repainting, replacement of air conditioning equipment, etc. This work generally falls below the capital/ maintenance threshold and needs to be identified in a specific maintenance budget allocation.

Strategic Longer-Term Plan

A plan covering the term of office of councillors (4 years minimum) reflecting the needs of the community for the foreseeable future. It brings together the detailed requirements in the Council's longer-term plans such as the asset management plan and the long-term financial plan. The plan is prepared in consultation with the community and details where the Council is at that point in time, where it wants to go, how it is going to get there, mechanisms for monitoring the achievement of the outcomes and how the plan will be resourced.

Sub-component

Smaller individual parts that make up a component part.

Useful life

Either:

- (a) the period over which an asset is expected to be available for use by an entity, or
- (b) the number of production or similar units expected to be obtained from the asset by the entity.

It is estimated or expected time between placing the asset into service and removing it from service, or the estimated period of time over which the future economic benefits embodied in a depreciable asset, are expected to be consumed by the Council.

Value in Use

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

Source: IPWEA, 2009, Glossary

Additional and modified glossary items shown *