



SHIRE OF CHRISTMAS ISLAND

GENERAL ASSETS MANAGEMENT PLAN -2012



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If you seek further information or have any questions relating to this Plan please contact:

*The Shire of Christmas Island
PO Box 863
Christmas Island WA 6798
Ph: 08 9164 8300
Fax: 08 9164 8304
Email: shikin@shire.gov.cx
www.christmas.shire.gov.cx*

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EXECUTIVE SUMMARY

1.1 CONTEXT

Christmas Island is situated 2,900 km north-west of Perth in the Indian Ocean. The Shire of Christmas Island manages and maintains a wide range of infrastructure and equipment for the benefit of the community ranging from beachside barbeque facilities to rubbish trucks. The focus of this Plan is all assets other than transport and building infrastructure which are, due to their relative size and importance, the subject of separate asset management plans.

1.2 SCOPE

This Plan is generated in accordance with the Shire of Christmas Island Asset Management Policy and forms a component of an overall Asset Management Strategy which addresses the Shire's current asset management processes and sets out the steps required to continuously improve the management of Shire controlled assets.

The Shire has land under its control but does not own any land in freehold, however the land under its control is not expected to have any future cash flow implications for the Shire and, as such, has been excluded from this Plan.

1.3 STRATEGIC ISSUES

One of the greatest strategic challenges faced by the Shire is the limited availability of land suitable for waste landfill and the current condition of the existing landfill site. Planning for waste management infrastructure is critical to sustaining the Island current population and catering for temporary visitors.

Another major strategic asset management issue is the highly corrosive tropical coastal environment which results in a reduced lifecycle for metal based infrastructures and contributes to an unavoidably high maintenance and renewal costs for these assets.

The condition and location of a number of community infrastructure assets is not well documented. The remaining useful lives of minor infrastructure assets in the tropical environment is highly dependent on the level and timing of future maintenance and makes lifecycle forecasting problematic. The establishment and maintenance of an information system to record the current condition of assets combined with an asset maintenance record would facilitate generation of a planned maintenance program and contribute to achieving the maximum asset service life.

EXECUTIVE SUMMARY

1.4 ASSET EXPENDITURE AND PROJECTIONS

The Shire had the following general assets recorded within its asset register as at 30 June 2012.

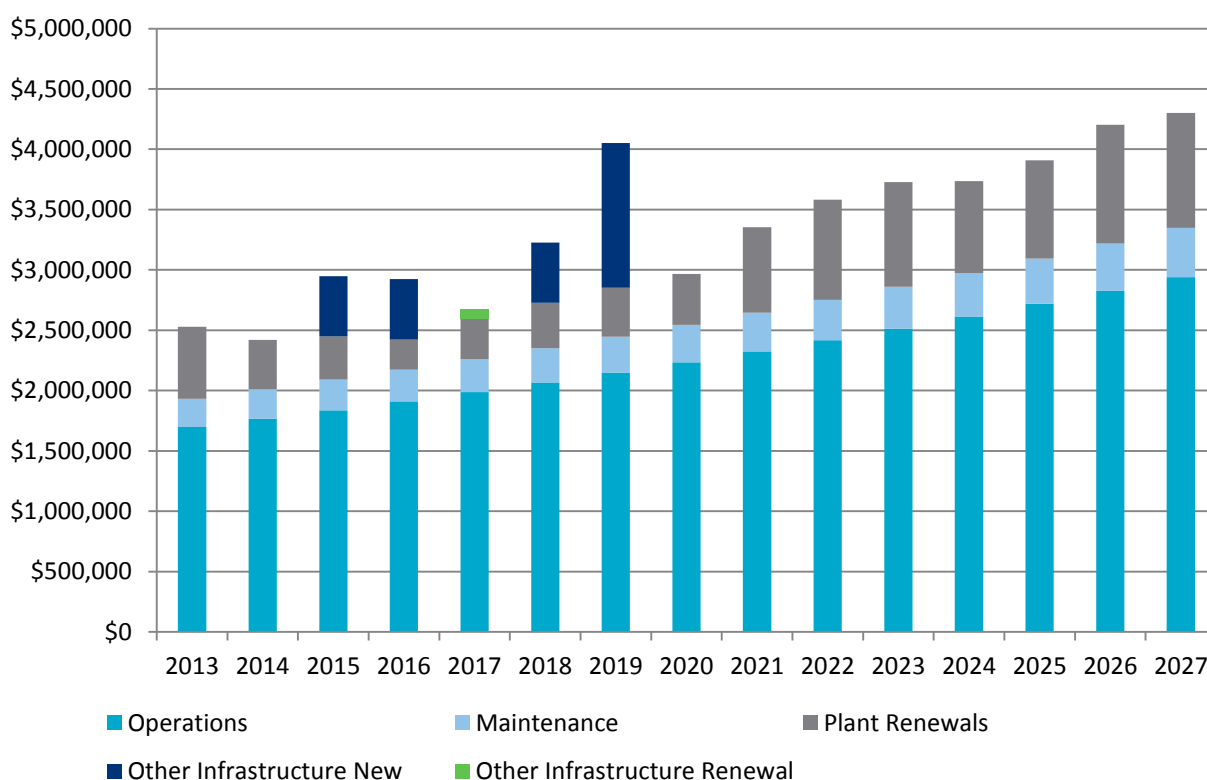
Asset Type	Number of assets	Historic Cost	Accumulated Depreciation	Net Book Value
Furniture and Equipment	691	\$1,679,857	\$1,045,746	\$634,111
Drainage	5	\$1,356,048	\$1,014,861	\$341,187
Other Infrastructure	49	\$3,449,342	\$1,083,405	\$2,365,937
Plant and Equipment	101	\$4,836,018	\$2,668,949	\$2,167,069
Grand Total	846	\$11,321,265	\$5,812,961	\$5,508,304

Within the asset register, 341 of the 846 assets (with a total historic cost of \$2,140,404) have been fully depreciated.

The projected cost for operations, maintenance and renewal of the above asset categories over the 15 year planning period is \$50,550,455. The renewal expense for these assets is projected to be \$9,262,588 over the same period with \$2,700,000 required for new assets and upgrades.

Projected maintenance and operating expenditure of \$38,707,597 is also required to continue to provide the existing services to the community. The composition of the projected asset expenditure is shown in Table 1.4 (a) below

Table 1.4 (a) Projected Annual Expenditure



1.4 ASSET EXPENDITURE AND PROJECTIONS (Continued)

The projected costs are initial estimates based on the available asset inventory data and using the current renewal methodologies employed by the Shire. It should be noted, actual costs are subject to future events and may vary significantly from the cost projections.

Future asset condition assessments will not impact on the need to renew these assets, or the cost of doing so; however they may provide a more accurate indication of the required timing and cost of renewals.

The overall condition of the assets is considered appropriate for the current levels of service with no renewal backlog present.

Historically, new asset expenditure and asset renewals expenditure have not been budgeted or recorded separately in the accounting system or capital works budgets. Unfortunately this has made it difficult to examine and present historical asset renewal expenditure.

1.5 FINANCIAL CAPACITY AND TIMING

The limited property rate revenue base results in a high reliance on Federal Government funding for future renewals and acquisition of new assets. Renewal of items of heavy plant for road maintenance has, in the past, been partly funded by the Federal Government under the Service Delivery Agreement with Main Roads WA.

The environment, location and limited natural resources constrain the potential for population growth on the Island. This restricts long term employment opportunities and commercial property development and in turn growth in revenue from property rates and results in a heavy reliance on external government funding to achieve major road plant renewals and new purchases. Failure to receive this funding would likely result in a postponement of asset renewal and a reduction in the service potential of the Shire's asset base. A reliable pool of heavy plant is considered essential to maintaining the Shire's road network and local emergency response capability.

The receipt of external funding for the decommissioning of the existing waste facility and establishment of a new waste facility is critical to the long term management of waste on the Island.

EXECUTIVE SUMMARY

1.6 MANAGING THE RISKS

There are inherent risks associated with providing services without access to the financial capacity to complete all identified asset maintenance and renewal activities and projects. We have identified major risks as:

- Environmental Contamination from Waste Facilities;
- Storm damage occurring due to severe storm activity;
- Sudden and unforeseen loss of grant funding; and
- Loss of current levels of service and failure to meet community expectations.

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

- Develop a new waste facility site and rehabilitate existing site;
- Conduct routine maintenance and renewals to maintain assets in good condition to minimise impact of years where funding is unavailable; and
- Continuing to seek external funding.

1.7 THE NEXT STEPS

As a priority, the Shire should review its Asset Management practices in relation to the currency, quality and maintenance of its asset data systems. This would involve undertaking an updated asset condition assessment to provide the basis for improvements to future Asset Management plans and permit the development of a detailed planned maintenance program. Other recommended actions are detailed in Section 14.0



Aged Waste removal truck (October 2012)

INTRODUCTION

2.1 BACKGROUND

The purpose of this Plan is to demonstrate the planned management of the relevant assets and their associated services, compliance with the relevant regulations and to communicate the funding needed to provide the required levels of service.

The Plan should be read in conjunction with the Shire's:

- *Asset Management Policy;*
- *Asset Management Strategy; and*
- *The Strategic Community Plan 2012.*

The infrastructure assets covered by this Plan (shown below in Table 2.1 (a)), have been extracted from the information in the Shire's Financial Asset Register.

Table 2.1 (a) Relevant Assets Classes

Asset Type
Furniture and Equipment
<ul style="list-style-type: none">• Household Furniture• IT Equipment• Office Furniture• Air Conditioners• Light Machinery• Sundry Plant and equipment
Other Infrastructure
<ul style="list-style-type: none">• Bus Shelters• Retaining Walls• Parks and Community Facilities• Fencing• New Tip Site• Carpark• Sports Facilities• Cemeteries
Drainage
<ul style="list-style-type: none">• Storm water drainage
Plant and Equipment
<ul style="list-style-type: none">• Light Vehicles• Heavy Plant• Waste Management Equipment

Whilst the above asset classes are covered by this plan, where insufficient data is available from the Shire's records the renewal and maintenance of the assets have not been considered.

INTRODUCTION

2.2 LINKAGE TO STRATEGIC COMMUNITY PLAN

The Shire's vision, mission, goals and objectives as set out in the adopted Strategic Plan titled *"Our Future, Christmas Island 2018 Plan"*. The vision being:

"A place for everyone, without exception"¹.

A major review of the Strategic Plan is currently underway which includes engagement and consultation with the community. Reference to relevant strategic objectives and actions and how these are addressed in this asset management plan will be undertaken on completion of the reviewed plan.

2.3 GOALS AND OBJECTIVES OF ASSET MANAGEMENT

The Shire provides services to the community utilising assets such as plant and equipment, furniture and equipment as well as providing other minor community infrastructure. To meet this objective, the Shire aims to manage these assets over their lifecycle taking into consideration the service expectations of the community.

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 life cycle approach to developing cost-effective management strategies for the long term that meet defined level of service;
- identifying, assessing and appropriately controlling risks; and
- having a long term financial plan which identifies required expenditure and how it will be funded²



Community Facilities – Foreshore Flying Fish Cove

¹ Shire of Christmas Island, 2011, *Our Future, Christmas Island: 2018 Plan*.

² IPWEA, 2011, *IIMM* Sec 1.2.1, p 1.7.



ABOUT ASSET MANAGEMENT

3.1 PLAN FRAMEWORK

The Plan's content is based on the Department of Local Government Asset Management Framework and Guidelines and the format aligns to Asset Management for Small, Rural or Remote Communities Practice Note (AM4SRRC) and framework released by the Institute of Public Works Engineering Australia.

Key elements of the planning framework are:

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

3.2 CORE AND ADVANCED ASSET MANAGEMENT

This Plan is prepared as an initial 'core' asset management plan in accordance with the International Infrastructure Management Manual 2011 and the Department of Local Government Asset Management Framework and Guidelines.

It is prepared to meet minimum legislative and organisational requirements for sustainable service delivery and long term financial planning and reporting. Core asset management relies on the use of an asset register, maintenance management systems, top-down condition assessment, simple risk assessment and a defined level of service, in order to establish a long-term cash flow projection.

Users of this plan should recognise the Shire is currently at a basic level of asset management maturity and the progressive nature of its journey toward higher levels of asset management.

The Shire may decide, by future revisions of this plan, to move towards advanced asset management which employs predictive modelling, risk management and optimised decision-making techniques to establish asset lifecycle treatment options and related long term cash flow predictions.

3.3 LEGISLATIVE REQUIREMENTS

As part of the provision of community assets and infrastructure the Shire must meet numerous legislative requirements including Australian and State Legislation. For reference, the most relevant legislation is shown below in Table 3.3 (a).

Table 3.3 (a) Legislative Requirements

Legislation	Requirement
Local Government Act (CI) 1995 (as amended) and associated regulations.	Sets out the role, purpose, responsibilities and powers of local governments including the preparation of Strategic Community Plans and Corporate Business Plans informed by Long Term Financial Plans and Asset Management Plans.
Environmental Protection Act 1986	An Act to provide for an Environmental Protection Authority, for the prevention, control and abatement of pollution and environmental harm, for the conservation, preservation, protection, enhancement and management of the environment and for matters incidental to or connected with the foregoing.
Waste Avoidance and Resource Recovery Act 2007	The primary objects of this Act are to contribute to sustainability, and the protection of human health and the environment, in Western Australia and the move towards a waste-free society by — (a) promoting the most efficient use of resources, including resource recovery and waste avoidance; and (b) reducing environmental harm, including pollution through waste; and (c) the consideration of resource management options against the following hierarchy — (i) avoidance of unnecessary resource consumption; (ii) resource recovery (including reuse, reprocessing, recycling and energy recovery); and (iii) disposal.
Occupational Safety and Health Act 1984	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.

LEVELS OF SERVICE

4.1 DESIRED LEVELS OF SERVICE

A description of 'levels of service' seeks to document the outputs or objectives a Shire intends to deliver to the community and customers. There are two measures of level of service as follows:

- **Community Levels of Service** - relate to the service outcomes the community seeks in terms of safety, quality, quantity, reliability, responsiveness, cost effectiveness and legislative compliance. These are generally contained in public documents and should be aimed at communicating to a layperson.³ Community Levels of Service measures may be tangible or intangible.
- **Technical Levels of Service** – technical levels of service are operational or technical measures of performance. These support customer measures and tend to be used internally to measure performance against service levels.⁴



Community Barbeque Facilities – Flying Fish Cove

³ IPWEA, 2011. *IIMM* Sec 2.2.1, p 2.18.

⁴ IPWEA, 2011. *IIMM* Sec 2.2.1, p 2.18.

LEVELS OF SERVICE

4.2 COMMUNITY FEEDBACK ON LEVELS OF SERVICE

At present, indications of desired levels of service are obtained from residents' feedback to Councillors and staff as well as service requests, correspondence and complaints.

A documented process to obtain community feedback in relation to the level of importance and level of satisfaction with Shire assets and services is required to improve the level of community feedback on levels of service.

4.3 CURRENT COMMUNITY LEVELS OF SERVICE

Current community service levels are detailed in Table 4.3 (a).

Table 4.3 (a) Current Community Service Levels –Other Assets

Key Performance Measure	Level Of Service Measure	Performance Measurement Process	Target Performance Measure	Current Performance Measure
Quality	Well maintained Community facilities	Number of complaints received by Shire relating to quality of facility	No increase in current number received per year.	To be confirmed
	Community Satisfaction with asset	Community Survey Results	Mean satisfaction rating maintained	Average unknown for all non road infrastructure and facilities where 1= Low Satisfaction 3= High Satisfaction
Function	Fit for purpose	Number of complaints received by Shire relating to ability to meet purpose	No increase in current number received per year	To be confirmed
	Community Importance with asset	Community Survey Results	Current Mean Importance Rating is maintained	Average unknown for all non-road infrastructure and facilities where 1= Low Satisfaction 3= High Satisfaction
Safety	Safe design and management of asset	No. of injuries/accidents.	No injuries or accidents	To be confirmed

LEVELS OF SERVICE

4.4 CURRENT TECHNICAL LEVELS OF SERVICE

Current technical service levels are detailed below in Table 4.4 (a).

Table 4.4 (a) Current Technical Service Levels -Sealed And Unsealed Roads

Key Performance Measure	Level Of Service Measure	Performance Measurement Process	Target Performance Measure	Current Performance Measure
Condition	Assessed condition.	Condition Assessment	Current average condition to be maintained.	Good.
Function	Ability of asset to meet required function.	Function assessment	Current average function rating to be maintained.	Good.
Safety	Safe design and management of asset.	No. of injuries/accidents	No injuries or accidents.	To be confirmed.
Sustainability	Asset consumption ratio (ACR).	Depreciated replacement cost divided by current replacement cost.	Ratio can be identified and is 50% or greater.	To be determined.
	Asset sustainability ratio (ASR).	Capital expenditure on replacement or renewal of assets divided by the depreciation expense.	Ratio can be calculated and ratio is 90% or greater.	To be determined.
	Asset renewal funding ratio.	Net Present Value of planned capital expenditure over 10 years divided by the net present value of the required expenditure renewal over the same period.	Ratio can be identified and is between 75% and 95%.	To be determined.

DEMAND MANAGEMENT

5.1 DEMAND FORECAST

The factors affecting demand include population change, changes in demographics, seasonal factors, vehicle ownership, consumer preferences and expectations, economic factors, agricultural practices and environmental awareness. Demand factor trends and impacts on service delivery are summarised in Table 5.1 (a).

Table 5.1 (a) Demand Factors, Projections And Impact On Services

Demand Factor	Consideration	Present Position	Projection	Impact On Services
Population	Impact of projected population numbers on services or assets provided by the Shire.	The estimated resident population of the Shire of Christmas Island is 2072 in 2011. 1465 Males and 607 Females. ⁵	No increase expected by 2020.	Services considered steady state.
Demographics	Impact of projected population numbers on services or assets provided by the Shire.	Work aged persons between 15 and 65 represented 83.5% of the estimated resident population in 2009. Persons over the age of 65 represented 3.8% of the population. ⁶	No significant changes in demographics are currently expected.	Services considered steady state.
Legislative	Forecast changes to local, state or federal government laws, regulations or standard impacting on the type of assets or need for assets.		None known	None known
Governance	Impact of any proposed changes to the organisation, policies or practice affecting the need for or use of assets? Government directives or policies that impact on assets.	Currently Implementing Integrated Planning and reporting Framework.	Implementation of planned Asset Management.	Potential for improved level of service.
Community Expectations	Projected impact on assets or services provided by the Shire due to changes in community expectations.	Community expectations regarding the level of service provided by the Shire have increased over recent years.	An increase in expectations is likely to continue.	The impact on services may be varied dependent on which services the expectations relate.
Technology	Are there any changes to technology that will impact on the type of assets or services provided by the Shire?	Present internet & mobile phone system is basic.	National Broadband Network connection in 2015 (via satellite) will have a major positive impact., particularly on education and eCommerce services	Major improvements expected in data processing and communications.

⁵ Australian Bureau of Statistics, Basic Community Profile Code 910052009, 2011.

⁶ Australian Bureau of Statistics, Basic Community Profile Code 910052009, 2011.

Table 5.1 (a) Demand Factors, Projections And Impact On Services

Demand Factor	Consideration	Present Position	Projection	Impact On Services
Industries	Are there any new industries that impact on the Shire?	None known. Increase in tourism possible, but no impact on Shire assets.	Possible decrease in mining activity due to expiry of licences and limited resources. Detention centre related activities may suddenly vary significantly. .	Possible changes in demand on waste and other municipal services. Possible decrease in demand for unsealed roads.
Tourism	Tourism trends projected to impact on assets or services provided by the Shire.	Tourism is actively promoted by the Shire.	Increase in the number of visitors and visitor vehicles to the Shire.	Increase in demand on waste services.
Global Warming	Will global warming and rising sea levels impact the Shire assets?	The Shire is within a Cyclone region 'B'. Most Shire assets located well above sea level.	Increase in the frequency and ferocity of storms. Potential undercutting of limestone shoreline by rising sea levels	Design specifications for buildings may increase. Risk of major loss of property increasing.
Furniture and Equipment	Introduction of National Broad Band Network :	Current Internet connections are limited.	Increased internet access and speeds may require changes to IT Equipment.	Increase in services able to be provided using IT Environment.
Plant and Equipment	Are there any changes likely to impact the services provided.	Unsealed roads are utilised by heavy mine vehicles	Possible decrease in mining activity due to expiry of licences and limited resources.	Possible decrease in demand for unsealed roads and associated equipment.
Infrastructure	Will global warming and rising sea levels impact the Shire assets?	Infrastructure not designed to withstand cyclone conditions. Beachside facilities are unprotected.	Increase in the frequency and ferocity of storms. Rising sea levels will necessitate increased foreshore protection.	Continued increase in demand for sea defences. Beachside recreation facilities may be lost.

5.2 CHANGES IN TECHNOLOGY

Rapid technology changes are likely to affect the use and delivery of IT services in particular improvements in communication speeds will impact IT services. These changes, which have not been specifically identified, have the potential to change the nature and level of demand for IT services. At present no changes in technology are forecast for other asset classes.

5.3 DEMAND MANAGEMENT PLAN

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

Opportunities identified to date for demand management are shown in Table 5.3 (a). Further opportunities will be developed in future revisions of this Plan.

Table 5.3 (a) Demand Management Plan Summary

Service Activity	Demand Management Plan
Waste Management	Upgrade of waste management facilities.
IT Technology	Provision of high speed server capable of utilising improved communication bandwidth.

5.4 NEW ASSETS AND GROWTH

No increase in the permanent population is forecast; however the recent arrival of asylum seekers to the Island has caused an increase in the temporary population placing additional demand on waste management facilities. Such sudden and large increases in population are extremely difficult to forecast.

The waste handling facilities on the island require significant investment to align the processing of waste with modern practices. The effect of the sudden increases in population has increased the need for immediate investment in this Service.



Vehicle Bodies – Christmas Island Waste Facility (Oct 2012)

In this section how the Shire plans to manage and operate the assets at the agreed levels of service (defined in Section 4.0) while optimising life cycle costs are considered.

6.1 BACKGROUND DATA

All relevant assets are located on Christmas Island. Significant disposal costs are incurred for large assets (such as heavy plant) on replacement due to the costs of transporting assets off the island and the relatively low resale value of assets sourced from tropical environs. The use of on island waste disposal areas for disposal of these item has a high long term environmental cost.

6.2 PHYSICAL PARAMETERS

Physical parameters are not recorded for the relevant asset classes. The number of assets in each asset class is reflected in Table 6.2 (a) below.

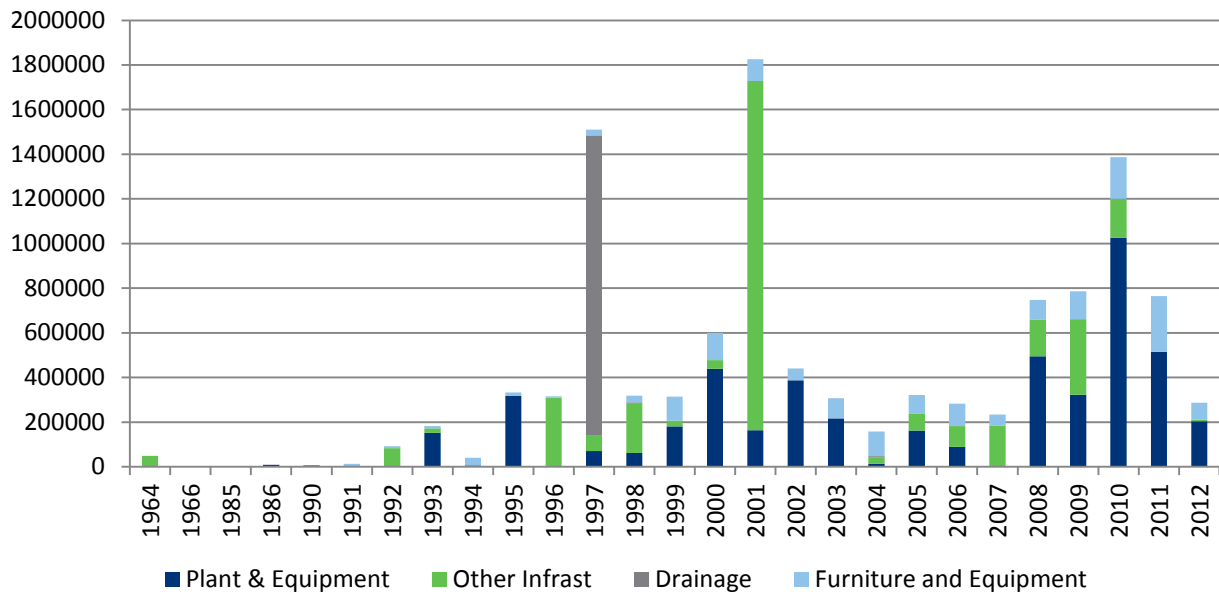
Table 6.2 (a) Other Assets

Asset Type	Number of Assets
Furniture and Equipment	
• Household Furniture	
• IT Equipment	
• Office Furniture	691
• Air Conditioners	
• Light Machinery	
• Sundry Plant and equipment	
Other Infrastructure	
• Bus Shelters	
• Retaining Walls	
• Parks and Community Facilities	
• Fencing	49
• New Tip Site	
• Carpark	
• Sports Facilities	
• Cemeteries	
Drainage	
• Storm water drainage	5
Plant and Equipment	
• Light Vehicles	
• Heavy Plant	101
• Waste Management Equipment	

6.3 HISTORICAL COSTS

The historical cost of asset acquisition (shown by year) for the relevant assets recorded in the asset register are shown below in Table 6.3 (a)

Table 6.3 (a) Historical Costs Of Assets By Acquisition Date



The chart reflects the predominately new state of most of the relevant assets on the island. Construction of storm water drainage in 1997 along with the East Coast Recreation Park and vertical compost unit in 2001 dominates the earlier acquisitions. In 2010, ten vehicles were purchased resulting in a peak in this year.

6.4 ASSET CAPACITY AND PERFORMANCE

According to Shire staff, no specific design standards have been used for the construction or maintenance of the relevant assets.

Locations where deficiencies in service performance are known are detailed in Table 6.4 (a)

Table 6.4 (a) Known Service Performance Deficiencies

Asset Type	Service Deficiency
Waste Management Infrastructure	Current landfill facility requires decommissioning and new facility to be opened.



6.5 ASSET CONDITION

No condition assessment has been undertaken for the relevant assets. The relatively new state of most assets has resulted in the assets being rated in reasonable to good condition, though a formal assessment against a documented standard is necessary to confirm the condition of each asset.

6.6 ASSET VALUATIONS

The assets have not been subject to any formal revaluation and are currently valued at historical cost within the Annual Financial Report. Table 6.6 (a) below shows the written down values of each class of other asset as at 30 June 2012.

Table 6.6 (a) Other Asset Values

Component	Historic Cost	Accumulated Depreciation	Written Down Value
Furniture and Equipment	\$1,679,857	\$1,045,746	\$634,111
Other Infrastructure	\$2,100,756	\$727,447	\$1,373,309
Plant and Equipment	\$6,595,344	\$3,160,000	\$3,435,344
Drainage	\$1,356,048	\$1,014,861	\$341,187
Total	\$11,732,005	\$5,948,054	\$5,783,951

Regulation 17A (3) of the *Local Government (Financial Management) Regulations 1996* requires each local government to show assets at fair value in the years ended 30 June of the year shown in Table 6.6 (b)

Table 6.6 (b) Year To Be Stated At Fair Value

Component	Year to be fair value
Plant and Equipment	2013
Infrastructure or Land and Buildings	2014
Infrastructure or Land and Buildings	2015
All Other Assets	2016

All assets will subsequently be required to be valued periodically every three years after their initial valuation.

RISK MANAGEMENT

7.1 IDENTIFIED RISKS

Risk management planning seeks to assess the risks associated with infrastructure assets to identify critical risks that may result in the loss or reduction in services or a result in 'financial shock' to the organisation when seeking to maintain current service level.

The risk assessment process identifies credible risks, a risk rating, the likelihood and consequences of any occurrence and then evaluates the risk and develops a risk treatment plan.

Identified risks have been rated within the Infrastructure Risk Management Plan using the following ratings:

- Extreme/Exceptional; (requiring immediate corrective action);
- High (requiring prioritised corrective action)
- Medium (requiring planned action); or
- Low (managed by routine procedures).

The consequences of the risk event and plan for treating the risk are reflected in Table 7.1 (a) below along with the rating for each identified risk.

Table 7.1 (a) Critical Risks And Treatment Plans

Risk	Consequence	Risk Rating	Risk Treatment Plan
Asset Condition decreases due to Storm damage.	Desired level of service not maintained.	High	Determine most cost effective design to mitigate risk of storm 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 lifecycle cost.
Asset condition decreases due to inadequate maintenance program.	Desired level of service not maintained.	Low	Determine maintenance priorities based risk assessment and lifecycle cost.
Sudden significant changes in population.	Sudden changes in level of service requirements.	Low	Monitor population trends and industry developments in the region.
Safety incident attributable to sub-standard asset condition design.	Liability Risk.	Low	Ensure other 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.

8.1 MAINTENANCE PLAN

Maintenance includes reactive or planned maintenance either routine or specific.

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

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

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

Specific maintenance is replacement of higher value components/sub-components of assets that is undertaken on a regular cycle including verge mowing, brush cutting, clearing of drains, road sweeping, minor crack repairs etc. This work generally falls below the capital/maintenance threshold but may require a specific budget allocation.



Plant at Shire Depot

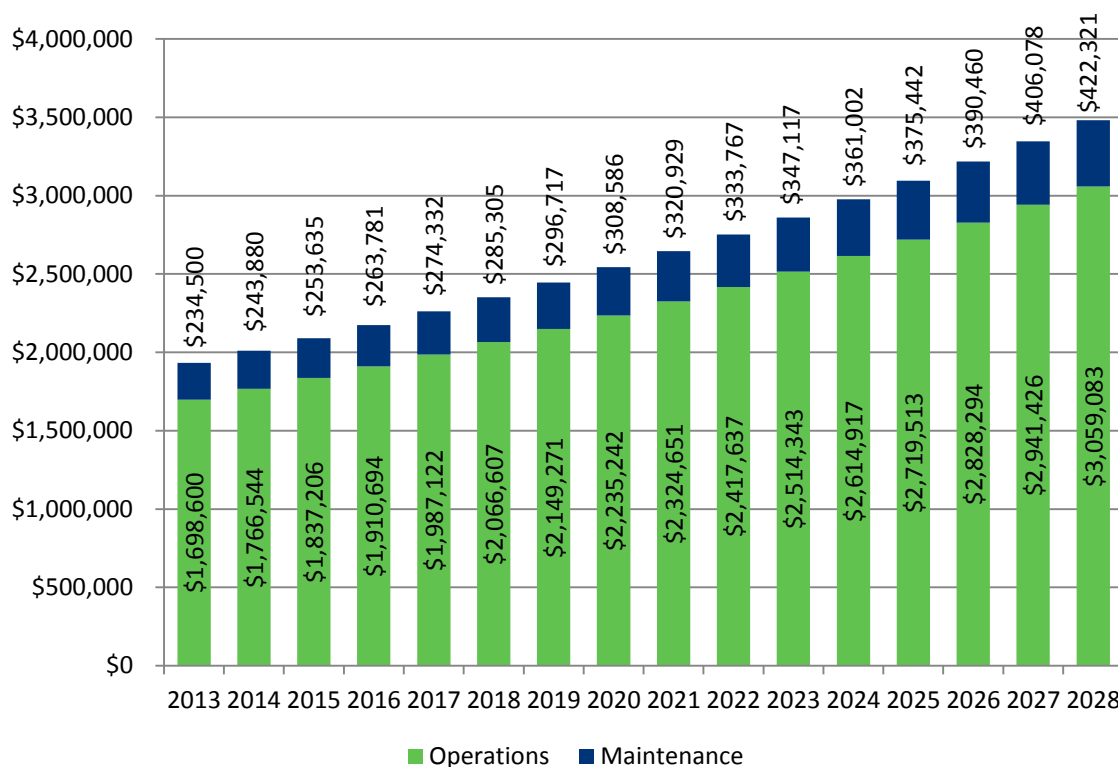
8.2 MAINTENANCE STANDARDS AND SPECIFICATIONS

According to Shire staff, documented standards and specifications are utilised for the conducting of maintenance of plant and equipment. Where standards exist for other assets, maintenance is conducted in line with these standards.

8.3 PROJECTED OPERATIONS AND MAINTENANCE EXPENDITURES

Future asset operations and maintenance expenditure is forecast to trend in line with historical levels, with Shire funds and Federal funding combining to ensure adequate maintenance to continue current levels of service.

Table 8.3 (a) Projected Operations And Maintenance Expenditure



Maintenance is funded from the Shire's annual operating budget.

8.4 ASSET RENEWAL/REPLACEMENT PLAN

Renewal expenditure is major work which does not increase the asset's design capacity or level of service but restores, rehabilitates, replaces or renews an existing asset to its original service potential. Work over and above restoring an asset to original service potential is upgrade/expansion or new works expenditure.

Major plant and equipment is planned to be replaced based on age in line with the plant replacement program at Appendix A. Information Technology (IT) Equipment is also scheduled for replacement on an age basis as reflected in Appendix B.

Small plant items, furniture and equipment, infrastructure and other infrastructure are not current scheduled for renewal or replacement. An annual provision is made for replacement of these minor items which are replaced when their condition makes them unserviceable or unsafe.



Community bench requiring renewal

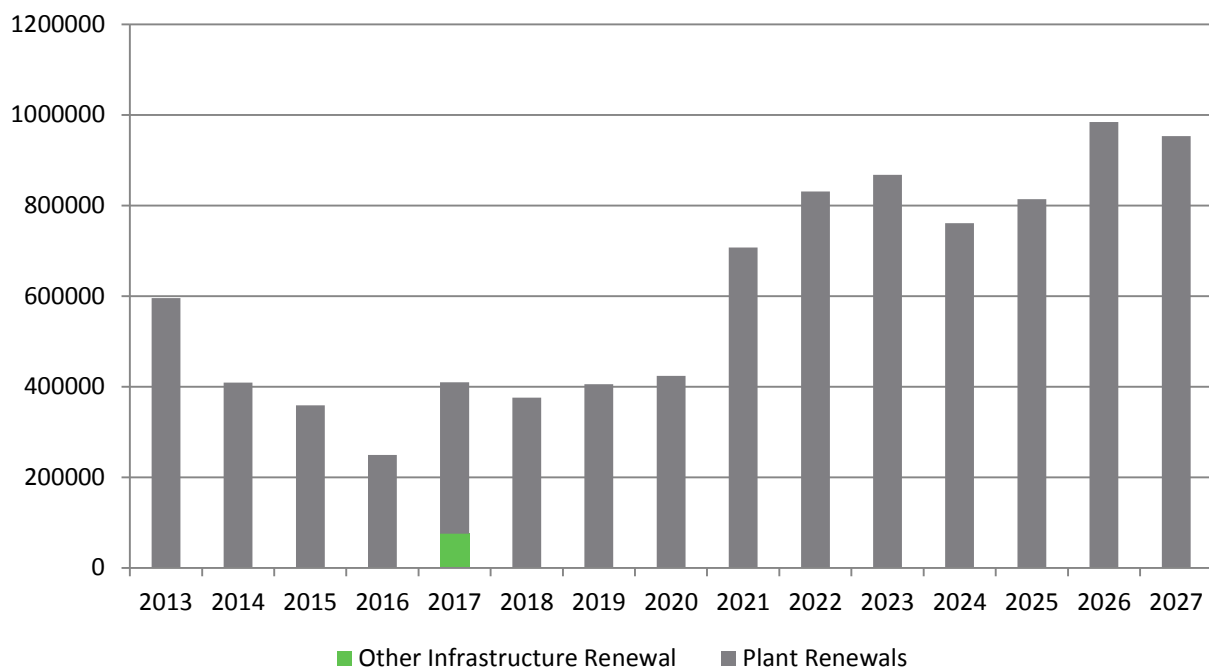
8.5 RENEWAL STANDARDS AND SPECIFICATIONS

Renewal works are not carried out in accordance with any documented standards or specifications.

8.6 SUMMARY OF PROJECTED RENEWAL EXPENDITURE

The cost of renewal and replacement of plant and equipment in addition to furniture and equipment is based on current estimated replacement costs less current estimated disposal costs with an inflation factor of 4% per annum. The estimated net renewal costs are reflected in Table 8.6 (a) below.

Table 8.6 (a) Planned Renewal Costs



Replacement of Plant and Equipment is based on existing plant replacement programs which require review and rationalisation to determine the optimum timing of plant replacement on the Island. Currently only one other infrastructure asset is planned for renewal, inadequate condition and remaining useful life data is available to forecast renewals of these assets.

8.7 CREATION/ACQUISITION/UPGRADE PLAN

New works are defined as works which create a new asset (not previously existing), or works which upgrade or improve an existing asset beyond its existing service capacity. Assets acquired at no cost to the Council from land development or from other government agencies are also considered new work.

The need for new assets and upgrade/expansion of existing assets is identified from various sources such as councillor or community requests, proposals identified in strategic plans or partnerships with other organisations.

Lifecycle costs should be determined when making decisions relating to the procurement of major new assets to ensure an understanding of the long term operating and renewal cost are considered.

8.8 NEW ASSETS STANDARDS AND SPECIFICATIONS

Standards and specifications for new assets and for upgrade/expansion of existing assets are determined on a project by project basis.

8.9 SUMMARY OF PROJECTED UPGRADE/NEW ASSETS EXPENDITURE

Projected upgrade/new asset expenditures are summarised below in Table 8.9 (a). All costs are shown in current 2012 dollar values.

Table 8.9 (a) Projected Capital Upgrade/New Asset Expenditure

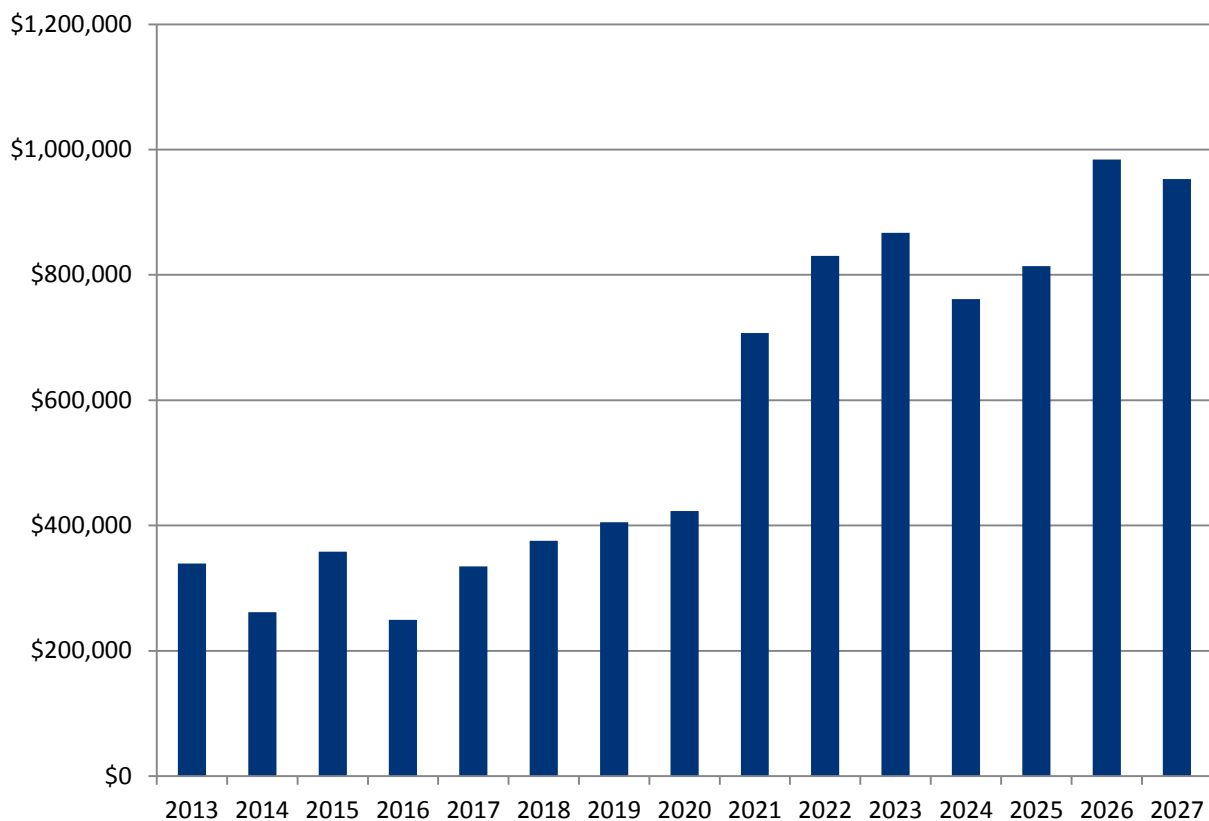
New Asset	Funding	Forecast Capital Cost
2014-15		
Organic Waste System	Fully funded by Federal Government	\$500,000
2015-16		
Wastewater Sludge System	Fully funded by Federal Government	\$500,000
2017-18		
RRC for recyclable waste	Fully funded by Federal Government	\$500,000
2018-19		
Foodwaste/Sludge/Weeds System	Fully funded by Federal Government	\$1,200,000

8.10 DISPOSAL PLAN

Asset disposal includes any activity associated with disposal or decommissioned an asset including sale, demolition or relocation.

Plant and Equipment will be disposed when changeover occurs. The forecast cost of disposed plant and equipment is reflected in Table 8.10 (a) below. The proceeds on disposal will be utilised to fund purchase of replacement plant and equipment.

Table 8.10 (a) Planned Costs of Disposal of Plant and Equipment



As discussed in Section 8.6 (above) the timing and costs of plant replacement is based on existing plant replacement programs which require review and rationalisation and may significantly impact the costs and proceeds of disposal of assets.



FUNDING

9.1 FUNDING STRATEGY

Projected expenditure on the relevant assets is expected to be funded from future operating and capital budgets along with an external contribution of funds from the Federal Government. The funding strategy has been incorporated into the Shire's 15 year Long Term Financial Plan.

9.2 FUNDING GAPS/ALTERNATIVE DELIVERY SOLUTIONS

No funding gaps are currently forecast based on the assumption external funding will be available to maintain the current level of service. The Shire is almost total reliant on this funding for the purchase of new assets and the renewal of major road plant assets. Should future external grant funds not be available the Shire will need to consider alternative service delivery solutions and strategies to address the resultant funding gaps.

If funding gaps occur each event will need to be considered on a case by case basis and the lack of an alternative funding source will necessitate consideration of one or more of the following alternatives:

- Delayed acquisition of new assets;
- Decrease in level of service for existing assets not renewed; and
- Increased lifecycle cost of providing the existing level of service through continued maintenance of an asset beyond its best economic life.

Should a funding gap arise, in most cases, the continued use of assets beyond their optimal replacement point will be selected provided it is safe to undertake this action.

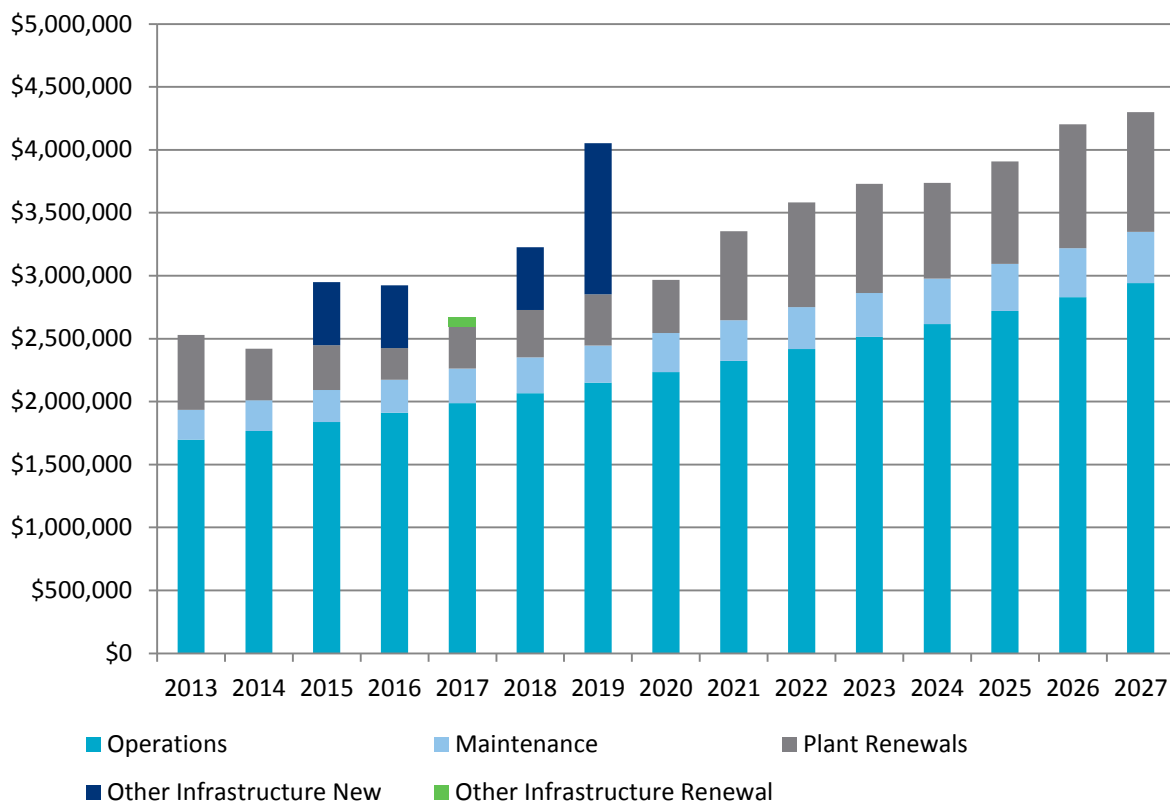
FINANCIAL PROJECTIONS

10.1 PROJECTED EXPENDITURE

Projections have been developed using data sources outlined in the previous section of this Plan. The accuracy and reliability of the financial projections is likely to be improved as further data becomes available on the desired levels of service and asset performance.

The financial projections shown below in Table 10.1 (a) relate to projected operating (operations and maintenance) and capital expenditure (renewal and upgrade/expansion/new assets) net disposal expenditure and estimated budget funding assuming inflation at 4% per annum.

Table 10.1 (a) Projected Operating And Capital Expenditure



As discussed in Section 8.6 (above) the existing plant replacement program requires review to determine the optimum timing of plant replacement. Optimisation of plant replacements may significantly impact the associated costs and timing of plant renewal and maintenance expenditure.

FINANCIAL PROJECTIONS

10.2 PROJECTED EXPENDITURE

Table 10.2 (a) shows the projected road expenditures sourced from the Shire's 15 year long term financial plan.

Expenditure projections are based on the assumptions detailed at Section 12.0.

Table 10.2 (a) Expenditure Projections For Long Term Financial Plan

Year	Maintenance \$	Operations \$	Renewal \$	Capital Upgrade/ New \$	Disposals \$
2013	\$234,500	\$1,698,600	\$595,080		\$339,136
2014	\$243,880	\$1,766,544	\$408,728		\$261,480
2015	\$253,635	\$1,837,206	\$358,436	\$500,000	\$358,436
2016	\$263,781	\$1,910,694	\$284,471	\$500,000	\$249,471
2017	\$274,332	\$1,987,122	\$409,864		\$334,864
2018	\$285,305	\$2,066,607	\$375,492	\$500,000	\$375,492
2019	\$296,717	\$2,149,271	\$405,532	\$1,200,000	\$405,532
2020	\$308,586	\$2,235,242	\$463,075		\$423,375
2021	\$320,929	\$2,324,651	\$707,206		\$707,206
2022	\$333,767	\$2,417,637	\$830,613		\$830,613
2023	\$347,117	\$2,514,343	\$867,160		\$867,160
2024	\$361,002	\$2,614,917	\$806,167		\$761,137
2025	\$375,442	\$2,719,513	\$813,880		\$813,880
2026	\$390,460	\$2,828,294	\$983,994		\$983,994
2027	\$406,078	\$2,941,426	\$952,890		\$952,890

The above expenditure forecasts are dependent on the receipt of external grant funding. As previously mentioned, the levels of expenditure on plant renewals require detailed examination before the amount and timing of expenditure may be accurately forecast.

Optimisation of plant replacements may significantly impact the associated costs and timing of plant renewal and maintenance expenditure. Planning the renewal of major items of other infrastructure may significantly

10.3 VALUATION FORECASTS

Current replacement cost of assets is forecast to increase due to inflation. Increases will also occur through the addition of new assets and upgrades to existing assets.

The depreciated replacement cost (current replacement cost less accumulated depreciation) will vary over the forecast period depending on the rates of addition of new assets, disposal of old assets and consumption and renewal of existing assets.

A lack of age and appropriate expected remaining useful life information makes accurate forecasting of depreciation and depreciated replacement costs of assets impossible.

11.1 FINANCIAL SUSTAINABILITY IN SERVICE DELIVERY

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

- The degree to which the required cash flows identified in the Plan are incorporated into the organisation's long term financial plan and Community/Strategic Planning processes; and
- The degree to which 1-5 year detailed works programs, budgets, business plans and organisational structures take into account the 'global' works program trends outlined in the asset management plan.

The Department of Local Government's Asset Management Framework and Guidelines provides three key indicators (KPI) for asset management performance which have been used to assess the Shire's service delivery sustainability.

Asset Consumption Ratio

This KPI shows the proportion of 'as new' condition remaining for general assets. A ratio of less than 50% indicates a potential rapid deterioration of the local government's asset base requiring relevant investment in order to ensure service levels are maintained.

The Asset Consumption Ratio (ACR) is calculated by dividing the projected Depreciated Replacement Cost (DRC) of Assets by the Current Replacement Cost (CRC).

An inability to calculate the projected DRC for general assets as discussed in Section 10.3 above results in the Asset Consumption Ratio being unable to be projected for property assets.

Asset Sustainability Ratio

The rationale for the Asset Sustainability Ratio (ASR) is to highlight if the renewal or replacement of property assets is occurring at variance to the level of depreciation. The ASR is calculated by dividing the budgeted renewal or replacement of assets by the annual depreciation of the assets for the same period.

Where the ratio is greater than 110% it indicates renewal expenditure is higher than the level of deterioration.

An inability to calculate the projected depreciation for general assets as discussed in Section 10.3 above results in the Asset Sustainability Ratio being unable to be projected for these assets.

Asset Renewal Funding Ratio

The Asset Renewal Funding Ratio indicates the long term funding availability for the renewal or replacement of property assets. Using a discount rate of 4% the ratio is calculated by dividing the net present value of planned capital expenditure for the next 10 years by the net present value of the required capital expenditure over the same period.

A target range of 95% to 105% indicates the required asset renewals are fully funded. For the Shire general asset renewals are forecast to be fully funded assuming adequate grant funding is received. Based on this assumption the asset renewal funding ratio is forecast to be 100%.



ASSUMPTIONS

12.1 KEY ASSUMPTIONS

Key assumptions have been used to prepare expenditure forecasts and forecast asset replacement costs, the required operating and capital expenditure, the depreciation expense and the asset carrying amounts. These assumptions are presented below.

It is important to appreciate the limiting impact they have on the accuracy of the data presented in this Plan.

Key assumptions made in this Plan are:

- Projections are based on local operating knowledge and expected budgets;
- Estimated replacement costs are based on 2012 base prices;
- Forecast renewal expenditure is based on estimated entry costs (costs of acquiring asset);
- Forecast renewal costs may differ after applying fair value of the asset;
- Average useful life estimates are based on current local knowledge, historical trends understanding of construction techniques utilised. These estimates may be significantly varied following access to new condition assessment data;
- Maintenance and operational forecasts are based on available current expenditure levels and percentage of replacement cost information; and
- Assets will be sufficiently protected through routine maintenance to prevent damage and loss other than through fair wear and tear.

13.1 ASSET MANAGEMENT SYSTEMS

Accounting/financial systems form the principal reporting system for past transactions undertaken by the entity. All asset maintenance and expenditure is recorded within the accounting/financial system for statutory reporting purposes.

The Shire utilises Synergysoft as the central accounting/financial reporting system and to maintain the asset register of General Infrastructure Assets

The software systems in use are viewed as appropriate to meet the current requirements of the Shire. Further updates to the software may be required to maintain sufficiently detailed asset information.

13.2 ACCOUNTABILITIES FOR FINANCIAL AND ASSET SYSTEMS

The Chief Executive Officer is responsible for the financial management of the Shire in terms of the Local Government Act 1995. Currently the Deputy Chief Executive Officer and Manager of Works and Services are responsible for asset management systems and the associated data.

13.3 ACCOUNTING STANDARDS AND REGULATIONS

The Shire of Christmas Island prepares a general purpose Annual Financial Report in accordance with Australian Accounting Standards and the Local Government Act (CI) 1995. In the preparation of Annual Financial Statements a capitalisation threshold of \$1,000 is used with assets under this value being immediately expensed.

13.4 LINKAGE FROM ASSET MANAGEMENT TO OTHER STRATEGIC PLANS

The asset management system is not directly linked to the financial system. The projected expenditures derived from the system are considered as input into the development of the Long Term Financial Plan. Available future funding levels derived from the Long Term Financial Plan are utilised within the asset management system to identify funding gaps requiring consideration in the Asset Management Plan.

Workforce implications of changes in service level are considered where necessary and captured within the workforce plan. At present no changes in workforce are expected as a result of this plan.

13.5 INFORMATION FLOW REQUIREMENTS AND PROCESSES

The key information flows into this asset management plan are:

- Council strategic and operational plans;
- Service requests from the community;
- Network assets information;
- The unit rates for categories of work/materials;
- Current levels of service, expenditures, service deficiencies and service risks;
- Projections of various factors affecting future demand for services and new assets acquired by Council;
- Future capital works programs; and
- Financial asset values.

The key information flows from this asset management plan are:

- The resulting initial long term expenditure projections, for consideration in the Long Term Financial Plan; and
- Initial financial sustainability indicators for general assets.

These will impact the Long Term Financial Plan, annual budget and departmental business plans and budgets.

IMPROVEMENT PLAN

14.1 IMPROVEMENT PLAN

This plan should be read in conjunction with the key recommendations from the overall Asset Management Improvement Plan as provided below in Table 14.1 (a) for reference.

Table 14.1 (a) Asset Management Improvement Plan

Task	Responsibility
1. The draft Asset Management Policy to be presented to the Council for adoption.	Council.
2. The draft Asset Management Strategy to be adopted by the Executive as the basis for implementation of the Asset Management Policy after consideration of the current and future resourcing constraints.	Executive.
3. The draft Other Infrastructure Asset Management Plan to be presented to the Council for adoption.	Council.
4. Future Long Term Financial Plans to be prepared following consideration of the output of the Asset Management Plans for each class of asset.	Executive.
5. A level of service review to be undertaken using a process of defining, quantifying and documenting current community levels of service and technical levels of service and associated costs.	Executive.
6. The Shire form a cross functional asset management working group tasked primarily with the implementation of asset management within the organisation with the goal of significantly improving the governance and management arrangements in relation to asset management.	Executive.
7. The Shire establishes systems and procedures to update and maintain road asset information. Following the availability of base data, a data improvement program should be implemented to improve the quality of asset data and close identified data gaps.	Asset Management Working Group.
8. A coordinated asset management process implementation across all Departments should be developed and the topic of asset management be included in all new staff and elected members induction programs.	Executive.
9. The Shire conduct an annual evaluation of its asset management program including planning, processes and sustainability and prepares the following performance measures, consumption ratio, asset renewal funding ratio and asset sustainability ratio to assist with this evaluation process.	Council.
10. The Shire links the Annual Report with asset management by reporting on short and long-term service delivery levels in the Annual Report each year.	Council.

IMPROVEMENT PLAN

15.1 IMPROVEMENT PLAN (CONTINUED)

Further improvement to the asset data utilised in the formation of this plan is required to progress the quality of future Plans. These improvement tasks are summarised below and detailed in the Plan and in Table 14.1 (a).

Table 14.1 (b) Data Improvement Plan

Data Improvement Tasks	
1. Inspection Dates and Condition Information	
a. Conduct an assessment of other assets to confirm their existence and level of service.	
b. Update the asset inventory records with current condition and inspection date.	
2. Replacement Costs	
a. Undertake a documented valuation of assets to determine current replacement costs of assets.	
b. Establish a process to three yearly review current replacement costs and current renewal costs.	
3. Useful Lives of Assets	
a. Clarify the definitions of useful lives to reflect Levels of Service: i.e. the length of time assets can be allowed to deteriorate until requiring replacement by new assets.	
b. Review useful lives to reflect current practices and distinguishing between	
i. renewal (replacement) frequency; and	
ii. maintenance frequency (actions on the assets which allow them to reach their useful lives).	
4. Expiry Dates	
Calculate the renewal/expiry date of each asset from the purchase date and expected useful life amended by any asset condition information which may impact the remaining economic life of the asset	
5. Level of Service	
a. Quantify current community level of service expectations and current performance measures.	
b. Quantify technical level of service specifications and current performance measures.	
6. Depreciation Rates	
Align depreciation rates within the financial reporting system with the residual values and useful lives of assets.	



MONITORING AND REVIEW

15.1 MONITORING

Council will routinely monitor progress in implementing the improvement plan. The implementation of Asset Management will be monitored through the quarterly reporting of indicators in conjunction with reporting the Shires' overall performance in achieving the objectives set out in its Corporate Business Plan.

An assessment of if the Shire is meeting the objectives of the Strategic Community Plan will be undertaken through the reporting of its performance to the community in the Annual Report.

15.2 REVIEW PROCEDURES

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

The Plan will be subject to a major review as soon as up to date asset condition information is available or within the next 4 years whichever is the sooner.



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APPENDICES

17.1 APPENDIX A – PLANT REPLACEMENT PROGRAM

		Expected Useful Life	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
	Description																
MP0022	PACIFIC POWER ACTIVATED B 04		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
MP0054	EXTRA HEAVY DUTY SLASHER 30		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
MP0057	CEMENT MIXER P/MOTOR T/BA 23		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
MP0059	QUIKSPRAY 9SBE-600 SGL RE 14		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
MP0060	MINI EXCAVATOR KUBOTA KX1 30		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$122,428	\$0
MP0060/1	BUCKET FOR MINI EXCAVATOR 12		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
MP0061	BROOM 1600MM (ATTACHED TO 14		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
MP0062	FORKS (ATTACHMENT TO VEH: 14		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
MP0066	CEMENT MIXER PETROL ENGIN 12		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
MP0069	TRANSPORTER TANK 10000L/4 30		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
MP0070/1	FLAIL MOWER BOMFORD B458 14		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$71,264	\$0
MP0072	ROTASLASHER 100HP GEARBOX 16		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
MP0073	KUBOTA GR2110 RIDE ON MOW 06		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
MP0074	KUBOTA GR2110 RIDE ON MOW 29		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$26,496	\$0
MP0075	QUIKSPRAY REMOTE RETRACTA 21		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$27,661
MP0076	PAVELINE 3 000L SKID MOUN 20		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$112,554
MP0077	KUBOTA GR2120-48 21HP LAW 30		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$24,800
MP0078	1000L SINGLE AXLE POLY DI 01		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$30,523
VN0476	NUFARM SPRAYING TRAILER U 23		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
VN0547	PLANT TRAILER 22		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
VN0590	BITUMEN SPRAYER A642-1989 08		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
VN0612	TRAILER TANDEM AXLE BOBCA 19		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$20,100	\$0
VN0644	PLANT TRAILER 3450 X 2030 28		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
VN4051	HINO TIP TRUCK GD3HJL Q3 16		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$133,538
VN4052	(CIG1209) HINO TIP TRUCK 16		\$0	\$0	\$147,926	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$227,536	\$0	\$0
VN4052/1	1 CRANE MOUNTED ON VEH: 405 27		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$49,600
VN4507	CATERPILLAR 12G MOTOR GRA 01		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$584,732	\$0
VN4646	GARBAGE TRUCK (HINO SUPER 30		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
VN4666	TRACTOR FORD 5030 FLAIL M 31		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
VN4775	BITELLI VIBRATING TANDEM 30		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100,591	\$0	\$0	\$0
VN4884	TOYOTA DYNA DUAL CAB 3 TO 05		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
VN4922	TRACTOR MASSEY FERGUSON 28		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$90,532	\$0	\$0	\$0
VN5019	TOYOTA RAV4 5 DOOR MANUAL 16		\$0	\$38,148	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$61,527	\$0	\$0	\$0	\$0	\$0
VN5026	TOYOTA HILUX DUAL CAB DIE 29		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
VN5029	BOBCAT LOADER SCATTRAK 13 01		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
VN5030	RUBBISH COMPACTOR ISUZU N 04		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
VN5031	TOYOTA HILUX DUAL CAB DIE 03		\$0	\$0	\$51,205	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
VN5049	AMMAN AV40P PNEUMATIC TYR 08		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$105,017	\$0	\$0
VN5064	CATERPILLAR IT28G LOADER 22		\$229,680	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$353,287	\$0	\$0	\$0	\$0
VN5075	MITSUBISHI TIP TRUCK FV51 12		\$0	\$185,289	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$285,007	\$0	\$0	\$0
VN5235	TOYOTA DYNA 300 DUAL CAB 31		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
VN5290	(CIG0899) TRACTOR MASSEY 27		\$0	\$185,289	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$285,007	\$0	\$0	\$0

APPENDICES


17.1 APPENDIX A – PLANT REPLACEMENT PROGRAM

		Expected Useful Life	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
	Description																
VN5291	TRACTOR MASSEY FERGUSON 4 27		\$0	\$1	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$105,017	\$0	\$0
VN5391	TOYOTA HILUX 4WD DUAL CAB 14		\$0	\$0	\$51,205	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
VN5393	FORKLIFT HYSTER (USED) MO 27		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
VN60003	TRAILER TANDEM AXLE TAG/P 30		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
VN60010	TOYOTA RAV4 5 DOOR EDGE M 28		\$0	\$0	\$51,205	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
VN60031	BOX TRAILER SINGLE AXLE P 19		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
VN60033	WOODCHIPPER BANDIT 150XP 17		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$105,017	\$0	\$0
VN60058	TRAILER TANDEM MODEL: PAP 29		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
VN60075	CASE UNILOADER 85XT WITH 11		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$96,265	\$0	\$0
VN60076	BITELLI BORA C80 VIBRATOR 02		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$175,028	\$0	\$0
VN60102	TRAILER MOBILE TRAFFIC LI 20		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
VN60137	SV500 JET TRAILER MOUNTED 11		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$158,974	\$0
VN60152	BOX TRAILER ALUMINIUM 6 X 11		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
VN60153	COMBINATION MESSAGE & SPE 08		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
VN60198	SKID STEER LOADER MUSTANG 24		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$202,215
VN60199	KUBOTA TRACTOR M126XDC WI 30		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$371,999
VN60330	TOYOTA HILUX 4X4 DIESEL D 07	\$31,320	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$58,934	\$0	\$0	\$0	\$0	\$0	\$0
VN60333	TOYOTA RAV4 5 DOOR EDGE M 24	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
VN60356	SKID STEER LOADER CAT 226 16	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
VN60377	TOYOTA HILUX EXTRA CAB 4X 08	\$0	\$0	\$56,895	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
VN60406	WELDER MPM 12/400 ON 6X4 22	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
VN60423	TRAILER 8X5 H/DUTY PAPAS 29	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
VN60445	TOYOTA HILUX S/CAB DIESEL 17	\$0	\$0	\$0	\$0	\$49,609	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
VN60530	TOYOTA HILUX 4WD D/CAB DI 27	\$0	\$0	\$0	\$0	\$0	\$51,792	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
VN60545	TOYOTA HILUX 2WD KING CAB 28	\$0	\$0	\$0	\$35,639	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
VN60551	LINELAZER III 200HS/LINED 20	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
VN60718	DAIHATSU V116 TRUCK 05	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
VN60803	INTERNATIONAL GARBAGE COM 13	\$334,080	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$513,873	\$0	\$0	\$0	\$0
VN60870	MULTIPAC YL25E MULTI TYRE 10	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$230,726	\$0	\$0	\$0	\$0	\$0
VN60961	TOYOTA HILUX DUAL CAB 4X4 10	\$0	\$0	\$0	\$53,458	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
VN60962	TOYOTA HILUX DUAL CAB 4X4 10	\$0	\$0	\$0	\$53,458	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
VN60963	TOYOTA HILUX DUAL CAB 4X4 10	\$0	\$0	\$0	\$53,458	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
VN60965	TOYOTA HILUX DUAL CAB 4X4 10	\$0	\$0	\$0	\$53,458	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
VN60968	TOYOTA COASTER BUS TURBO 28	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$197,575	\$0	\$0	\$0	\$0	\$0	\$0	\$0
VN61015	TOYOTA HILUX DUAL CAB 4X4 13	\$0	\$0	\$0	\$0	\$0	\$62,012	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
VN61016	TOYOTA HILUX DUAL CAB 4X4 13	\$0	\$0	\$0	\$0	\$0	\$62,012	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
VN61017	TOYOTA HILUX DUAL CAB 4X4 13	\$0	\$0	\$0	\$0	\$0	\$62,012	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
VN61018	TOYOTA COROLLA ASCENT SED 13	\$0	\$0	\$0	\$0	\$0	\$37,207	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
VN61019	TOYOTA HILUX DUAL CAB 4X4 13	\$0	\$0	\$0	\$0	\$0	\$62,012	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
VN61077	HYUNDAI WHEEL LOADER/TOOL 03	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$337,943	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
VN61179	CHERRY PICKER CRENDON SQU 14	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
VN61197	TOYOTA HILUX DUAL CAB 4X4 08	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$67,589	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
VN61319	TOYOTA RAV4 4X4 3	\$0	\$0	\$0	\$0	\$0	\$0	\$64,740	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

APPENDICES

17.1 APPENDIX A – PLANT REPLACEMENT PROGRAM

		Expected Useful Life	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28
Description																	
VN61320	TOYOTA HILUX DUAL CAB 4X4 09		\$0	\$0	\$0	\$0	\$0	\$64,740	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
VN61321	IVECO/ACCO 2350G/260 4 X 31		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$538,360	\$0	\$0	\$0	\$0	\$0
VN61322	HINO 300 SERIES 716 CREW 30		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$112,900	\$0	\$0	\$0	\$0	\$0	\$0	\$0
VN61323	HINO 300 SERIES 716 CREW 30		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$112,900	\$0	\$0	\$0	\$0	\$0	\$0	\$0
VN61325	HINO 300 SERIES 716 MED S 28		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$117,868	\$0	\$0	\$0	\$0	\$0	\$0
VN61326	TOYOTA HILUX 4X4 T/D DC/C 26		\$0	\$0	\$0	\$0	\$0	\$64,740	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
VN61327	TOYOTA HILUX 4X4 T/D DC/C 26		\$0	\$0	\$0	\$0	\$0	\$64,740	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
VN61328	TOYOTA HILUX 4X4 T/D DC/P 26		\$0	\$0	\$0	\$0	\$0	\$64,740	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
VN61380	FUSO FV51JKD2RFAB 11M3 2 02		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$324,136	\$0	\$0	\$0	\$0	\$0	\$0
VN61571	TOYOTA HILUX 4X4 3		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$73,667	\$0	\$0	\$0	\$0	\$0	\$0
VN61572	TOYOTA HILUX 4X4 3		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$73,667	\$0	\$0	\$0	\$0	\$0	\$0
VN61582	TOYOTA DIESEL POWERED FOR 26		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$58,934	\$0	\$0	\$0	\$0	\$0	\$0
VN61597	HINO 300 SERIES 717 TIPPE 25		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total			\$595,080	\$408,727	\$358,436	\$249,471	\$334,864	\$375,492	\$405,532	\$423,375	\$707,206	\$830,613	\$867,160	\$761,137	\$813,880	\$983,994	\$952,890



APPENDICES

17.2 APPENDIX B – FURNITURE AND EQUIPMENT REPLACEMENT PROGRAM

Year	IT Equipment
2016-17	\$35,000
2020-21	\$39,700
2021-22	\$45,030



APPENDICES

17.3 [APPENDIX C - ABBREVIATIONS](#)

AAAC	Average annual asset consumption
AMP	Asset management plan
CRC	Current replacement cost
DA	Depreciable amount
LCC	Life Cycle cost
LCE	Life cycle expenditure
SDA	Service Delivery Agreement

17.4 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 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 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.

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.

Appendix D - Glossary (Continued)

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 re sheeting 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.

Appendix D - Glossary (Continued)

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.

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.

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.

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.

Fair value

The price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.⁷

⁷ AASB13, Fair Value Measurement, September 2011

Appendix D - Glossary (Continued)

Funding gap

A funding gap exists whenever an entity has insufficient capacity to fund 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 funding gap means service levels have already or are currently falling. A projected funding 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 annual operations, maintenance and asset consumption expense, represented by depreciation expense. The Life Cycle Cost does not indicate the funds required to provide the service in a particular year.

Appendix D - Glossary (Continued)

Life Cycle Expenditure

The Life Cycle Expenditure (LCE) is the actual or planned annual operations, maintenance and capital renewal expenditure incurred in providing the service in a particular year. Life Cycle Expenditure may be compared to average Life Cycle Cost to give an initial indicator of life cycle sustainability.

Loans / borrowings

See borrowings.

Maintenance

All actions necessary for retaining an asset as near as practicable to its original 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.

- **Significant 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 and renewal gap

Difference between estimated budgets and projected required expenditures for maintenance and renewal of assets to achieve/maintain specified service levels, totalled over a defined time (e.g. 5, 10 and 15 years).

Maintenance and renewal sustainability index

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

Maintenance expenditure

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

Materiality

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.

APPENDICES

Appendix D - Glossary (Continued)

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 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.

Pavement management system

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

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

Rate of annual asset renewal

A measure of the rate at which assets are being renewed per annum expressed as a percentage of depreciable amount (capital renewal expenditure/DA).

Rate of annual asset upgrade

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

Recoverable amount

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

APPENDICES

Appendix D - Glossary (Continued)

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).

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.

APPENDICES

Appendix D - Glossary (Continued)

Specific Maintenance

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

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