



SHIRE OF CHRISTMAS ISLAND

PROPERTY ASSET MANAGEMENT PLAN - 2013



Reliance

The professional advice and opinion in this report has been prepared for the exclusive use of the Shire of Christmas Island and for the purposes specified in our letter of engagement. This report is supplied in good faith and reflects the knowledge, expertise and experience of the engagement consultant and is based on the information and representations provided by the Shire of Christmas Island. We accept no responsibility for any loss occasioned by any person acting or refraining from action as a result of reliance on the report, other than the Shire of Christmas Island.

Disclaimer

The services provided in terms of this engagement comprise an advisory engagement, which is not subject to assurance or other standards issued by the Australian Auditing and Assurance Standard Board and, consequently no opinions or conclusions are intended to convey assurance either expressed or implied.

UHY Haines Norton, Perth, a Perth based partnership of trusts ("the Firm"), carries on business separately and independently from other UHY Haines Norton member firms around Australia and New Zealand and UHY member firms worldwide.

UHY Haines Norton is a member of Urbach Hacker Young International Limited, a UK company, and forms part of the international UHY network of legally independent accounting and consulting firms. UHY is the brand name for the UHY international network. The services described herein are provided by the Firm and not by UHY or any other member firm of UHY. Neither UHY nor any member of UHY has any liability for service provided by other members.

Acknowledgement

Development of this plan has been supported by the Department of Local Government and funding from the Local Government Reform Fund, which is administered by the Australian Government's Department of Regional Australia, Local Government and Arts.

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.qov.cx
www.christmas.shire.qov.cx*

Document Management

Version: 2.0
Approved by: P Breman
Status: Final
Release Date: 6 May 2013

Contents

1.0	EXECUTIVE SUMMARY	1
1.1	Context.....	1
1.2	Scope.....	1
1.3	Strategic Property Management Issues.....	1
1.4	Projected Annual Property Expenditure	5
1.5	Financial Capacity and Timing.....	5
1.6	Managing the Risks	5
1.7	The Next Steps	6
2.0	INTRODUCTION.....	7
2.1	Background	7
2.2	Assets Covered By This Plan.....	7
2.3	Linkage To Strategic Community Plan	7
2.4	Goals and Objectives of Asset Management	8
3.0	ABOUT ASSET MANAGEMENT	9
3.1	Plan Framework	9
3.2	Core and Advanced Asset Management.....	9
3.3	Legislative Requirements	10
4.0	LEVEL OF SERVICE	11
4.1	Desired Levels Of Service	11
4.2	Community Feedback on Levels Of Service	12
4.3	Current Technical Levels Of Service	13
5.0	DEMAND MANAGEMENT.....	14
5.1	Demand Forecast	14
5.2	Changes In Technology	15
5.3	Demand Management Plan	15
5.4	New Assets and Growth.....	15
6.0	LIFECYCLE MANAGEMENT	16
6.1	Background Data.....	16
6.2	Physical parameters.....	16
6.3	Asset valuations	19
7.0	RISK MANAGEMENT.....	20
7.1	Identified Risks.....	20
8.0	OPERATION MANAGEMENT	21
8.1	Maintenance Plan	21
8.2	Asset Renewal/Replacement Plan	23
8.3	Creation/Acquisition/Upgrade Plan.....	24
8.4	New Assets Standards And Specifications	24
8.5	Summary Of Projected Upgrade/New Assets Expenditure	25
8.6	Disposal Plan	25
9.0	FUNDING	26
9.1	Funding Strategy	26
9.2	Funding Gaps/Alternative delivery solutions.....	26
10.0	FINANCIAL PROJECTIONS.....	27
10.1	Projected Expenditure	27

Contents

11.0	PERFORMANCE MEASURES	29
11.1	Valuation Forecasts.....	29
11.2	Financial Sustainability In Service Delivery	29
11.3	Asset Consumption Ratio.....	29
11.4	Asset Sustainability Ratio.....	30
11.5	Asset Renewal Funding Ratio.....	30
12.0	ASSUMPTIONS	31
12.1	Key Assumptions.....	31
13.0	ASSET MANAGEMENT PRACTICES	32
13.1	Asset Management Systems	32
13.2	Accountabilities For Financial And Asset Systems	32
13.3	Accounting Standards And Regulations.....	32
13.4	Linkage From Asset Management To Other Strategic Plans.....	32
13.5	Information Flow Requirements and Processes	33
14.0	IMPROVEMENT PLAN.....	34
14.1	Property Asset Management Improvement Plan	34
15.0	MONITORING AND REVIEW	36
15.1	Monitoring	36
15.2	Review.....	36
16.0	CHRISTMAS ISLAND RECREATION CENTRE	37
16.1	Background – Recreation Centre	37
16.2	Level of Service and Demand Management	38
16.3	Risk Management	38
16.4	Operation Management	38
17.0	REFERENCES	39
18.0	APPENDICES	40
18.1	Appendix A –Property Details.....	40
18.2	Appendix B - Abbreviations.....	41
18.3	Appendix C - Glossary	42

1.1 Context

Situated in the Indian Ocean 2,600 km north-west of Perth Christmas Island has an average annual rainfall of 1,930 millimetres and average daily maximum temperature of 28°C (April) falling to a minimum of 22°C (August) with humidity between 80% and 90%.

The Shire of Christmas Island administers and maintains a number of property assets which service the local community and support its functions. The majority of property assets are located on land owned by the Shire whilst some are on land vested under the Shire's care and control.

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.

All Shire controlled property assets are addressed in this Plan. Property assets are defined as permanent structures with a weatherproof roof and range in size from the Recreation Centre to small free standing beach shelters.

The most significant community building on the Island is the Recreation Centre which is owned by the Commonwealth of Australia but managed by the Shire under a management agreement. The Recreation Centre is considered separately in Section 16.0 due to its significance and importance of to the community.

1.3 Strategic Property Management Issues

The Shire faces significant building asset management challenges that principally relate to the high levels of corrosion caused by the harsh weather conditions. A high level of routine maintenance is required to protect all building components and minimise the impacts of the tropical weather.

The Shire is unable to obtain insurance cover through the traditional Western Australian Local Government Insurance providers (LGIS) as it is situated outside Western Australia. With no access the insurance pool offered by LGIS obtaining adequate insurance for Shire property is becoming increasingly difficult and expensive.

1.3 Strategic Property Management Issues (Continued)

The Shire has the following building assets recorded within its property inventory system.

Building Type	Estimated Area (m²)
Administration	1,330
Commercial	6,007
Community	1,691
Housing	1,322
Shed/Outbuilding	144
Shelter/Bus Stop	Unkown
Total	10,494

Land and buildings were reported the Annual Financial Report, 30 June 2012, at a net book value of \$1,766,782 based on depreciated historical cost.

The Shire currently maintains a financial asset register for its building assets but this data is limited and there is no current condition assessment or accurate dimensions held. In the absence of this data the Plan has been prepared based on measurements of roof areas obtained from the geographical information system (GIS) to gain a basic measurement of area for each building and generate an initial estimate of replacement costs.

A lack of current and accurate detailed property inventory and condition data limits the capacity to estimate future renewal/maintenance requirements. Significant improvement in property asset data will be required as a prerequisite to establishing a full understanding of future property asset renewal requirements.

A basic inspection of property exteriors was undertaken in October 2012 to provide an indication of property condition. The Poon Saan Community Hall and George Fam Administration Centre were noted as requiring significant maintenance work to improve safety and prevent component failure. The current poor condition of building assets is to be partially addressed through maintenance work which is scheduled to be undertaken in the 2012/13 year. Following this work a detailed inspection of building components will be required to ensure all related risks have been adequately addressed.

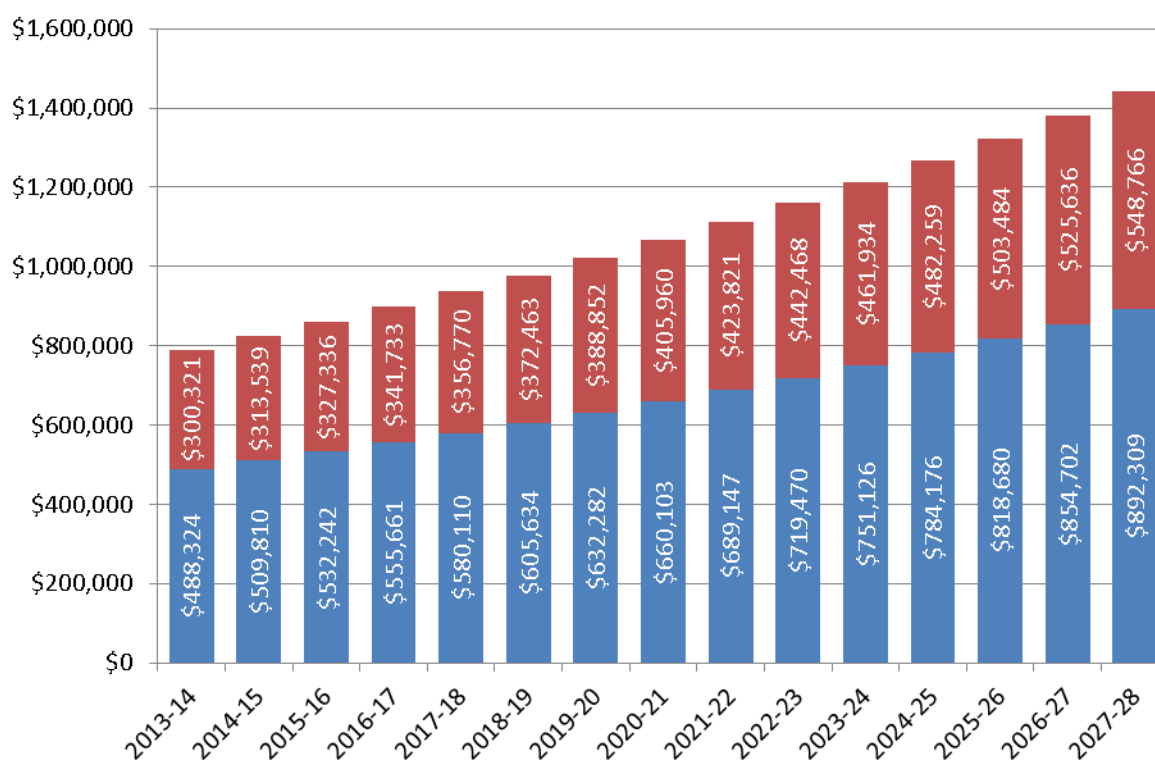
Routine maintenance of the Recreation Centre is undertaken by the Shire under a management agreement with the Commonwealth Government. Despite past routine maintenance, roof leakage will require significant expenditure to prevent further damage to ceilings, floors and other building components. Management considers expenditure to affect these repairs is beyond the scope of the current agreement and not considered to be Shire responsibility.

1.3 Strategic Property Management Issues (Continued)

The projected cost required to maintain and renew the property infrastructure services covered by this Asset Management Plan (including operations, maintenance and renewal of existing assets) is extremely difficult to estimate accurately due to the lack of detailed condition information. In the absence of condition information historical maintenance expenditure levels can often be used as a guide to future need however in the present circumstances the historical maintenance level is considered to be inadequate.

In the absence of base information on asset condition a percentage maintenance/renewal level of 1.5% of estimated replacement cost is offered as the future forecast for maintenance/renewal expenditure. This percentage basis for the calculation of forecast maintenance /renewal expenditure should be considered as an indicative level only and may be subject to significant fluctuation.

Table 1.3.a Projected Maintenance, Operating and Capital Expenditure



1.3 Strategic Property Management Issues (Continued)

Future decisions regarding asset renewal/maintenance should consider the functionality of the building, to determining if the optimum course of action is to replace the building or renew it.



Figure 1 George Fam Administration Centre Oct 2012

1.4 Projected Annual Property Expenditure

The overall condition of Shire properties may be described as inconsistent with certain properties requiring major maintenance and others in relatively good condition.

The projected costs contained in the Plan are initial estimates based on the available property inventory information and using the renewal methodologies currently employed by the Shire. It should be noted, actual costs may vary significantly from this projected expenditure in light of an updated property condition assessment. Undertaking this assessment in the future will not reduce the need to eventually renew the property components or the cost of doing so; however it will provide a more accurate indication of the required timing of the renewal works.

Historically, capital expenditure has not been separately identified or classified in the accounting system (or budget) as asset renewal or expenditure on new assets. As a consequence, it has not been possible to examine and present historical asset renewal expenditure. The Shire plans to separately record these cost components to improve future asset expenditure analysis.

1.5 Financial Capacity and Timing

There is limited potential for residential and commercial property development due to the Island's location and environmental constraints. This in turn restricts the prospect of growth in revenue from property rates. The Shire is almost totally reliant on external government funding to achieve road works and road plant purchases. Receipt of this funding for roads and plant enables the Shire to utilise its own financial resources for building maintenance and renewals. Failure to receive road grants would likely result in a consequential reduction in funds allocated to buildings.

1.6 Managing the Risks

The major risks in relation to the provision of property infrastructure are identified as:

- Property condition creating a safety risk to occupants and users;
- Property condition resulting in loss of other assets such as Shire records;
- Damage occurring due to severe storms;
- A sudden and unforeseen loss of grant funding; and
- The loss of current levels of service and failure to meet community expectations.

The Shire will endeavour to manage these risks using its internal financial capacity and external contributions by:

- Conducting routine maintenance and component renewals to maintain assets in good condition and minimise risk to building occupants and other Shire Assets;
- Conduct component renewals and upgrades to minimise impact of periods when funding is not available; and
- Continuing to seek sufficient external funding for property maintenance and renewal.

1.7 The Next Steps

In response to this initial asset management plan and as a priority, the Shire intends to review its asset management practices in relation to the currency, quality and maintenance of its property asset data systems. This would involve undertaking a property condition assessment to provide the basis for improvements to future Asset Management plans and permit the development of a detailed planned works program. Other recommended actions resulting from this asset management plan are detailed in Section 14.0.

In the absence of the financial and physical resources required to undertake extensive asset renewal works, the Shire will be forced to consider which assets are of critical importance to the community and present the highest safety risk and prioritise renewal works accordingly. Adequate future routine maintenance is essential for the on-going protection of the Shires property assets.



Figure 2 - Bus Stop - Poon Saan

2.1 Background

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

The Plan should be read in conjunction with the Shire of Christmas Island:

- *Asset Management Policy;*
- *Asset Management Strategy; and*
- *Strategic Community Plan 2013; (Under development)*

2.2 Assets Covered By This Plan

All property assets located on Shire land have been included within this plan and details of these properties are provided at Appendix A.

Details of the property assets covered by this Plan have been extracted from the information in the Shire's asset register.

The Shire is not able to confirm whether responsibility for the maintenance/renewal of property assets located on vested land rests with the Shire and as a result these properties have been excluded from consideration under this plan. A list of excluded property is also provided at Appendix A.

2.3 Linkage To Strategic Community Plan

This plan is prepared to progress 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.

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

2.4 Goals and Objectives of Asset Management

A significant Shire service provided to the community is that of staff housing and community buildings. To achieve its strategic objectives the Shire aims to manage these assets over their lifecycle within an asset management framework that takes into consideration the community's service expectations.

The key elements of property asset management are to:

- providing a defined level of service and monitoring performance;
- managing the impact of growth or decline 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 funded.²



Figure 3 - Damage to Council Depot Roof Lining, Oct 2012

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

3.1 Plan Framework

The Plan content is based on the Department of Local Government Asset Management Framework and Guidelines and the Asset Management for Small, Rural or Remote Communities Practice Note (AM4SRRC) 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 basic defined level of service, in order to establish a long-term cashflow projection. Users of this plan should recognise the base level of asset management maturity at which the Shire is currently situated 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 property infrastructure assets the Shire must meet many requirements set out in State and Federal legislation. For reference, the most relevant legislation is shown below in Table 3.3.a.

Table 3.3.a Legislative Requirements

Legislation	Requirement
<i>Local Government Act CI 1995 (as amended) and associated regulations.</i>	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.
<i>Building Code of Australia 2005.</i>	Sets out the law relating to building works.
<i>Disabilities Discrimination Act 1992.</i>	Provides protection against discrimination based on disability, in this case in connection with access to and within buildings.
<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>Heritage Act 2004.</i>	Provides for and encourages the conservation of heritage places.
<i>Health Act 1911.</i>	Regulations of activities and the provision of services relating to public health.
<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.

4.1 Desired Levels Of Service

A description of 'levels of service' seeks to document the outputs or objectives the Shire intends to deliver to its community and customers. There are two principal 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

At present, indications of desired levels of service are obtained from various sources including the residents' feedback to Councillors and staff, service requests and correspondence.



Figure 4 - 23 Seaview Drive, Silver City

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

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

4.2 Community Feedback on Levels Of Service

During the first half of 2013, a community engagement program was undertaken to review the Shire's Strategic Community Plan. The program invited the local community to share their visions for the future of the Shire of Christmas Island.

The engagement program did not include any determination of service levels. Future engagement programs may consist of a survey which permits analysis between the mean level of importance and mean level of satisfaction to generate a performance gap. This gap seeks to quantify the desire of the community for service improvement in a service area relevant to other services.

Community service levels are detailed below in Table 4.2.a

Table 4.2.a Current Community Service Levels - Property

Key Performance Measure	Level Of Service Measure	Performance Measurement Process	Target Performance Measure	Current Performance Measure
Quality	Well maintained buildings.	Number of complaints received by Shire relating to maintenance of buildings.	No increase in current number received per year.	To be confirmed.
	Community Satisfaction with buildings.	Community Survey Results.	Mean satisfaction rating maintained.	Unknown where 1= Low Satisfaction 3= High Satisfaction.
Function	User requirements for intended usage are met.	Number of complaints received by Shire relating to suitability of building.	No increase in current number received per year.	To be confirmed.
	Community Importance with buildings.	Community Survey Results.	Current Mean Importance Rating is maintained.	Unknown where 1= Low Satisfaction 3= High Satisfaction.
Safety	Safe buildings are provided throughout district.	Number of accidents per year attributable to property condition or layout.	Nil.	To be confirmed.

4.3 Current Technical Levels Of Service

Technical service levels are detailed below in Table 4.3.a.

Table 4.3.a Current Technical Service Levels -Property

Key Performance Measure	Level Of Service Measure	Performance Measurement Process	Target Performance Measure	Current Performance Measure
Condition	Defects found which are outside of service standard.	Repair Timeframes.	Average repair timeframes reasonable.	Assessed as Poor
	Assessed property condition.	Condition Assessment.	Property condition reasonable.	Assessed as Poor
Function	Average usage rates.	No of Days building is not utilised.	No increase in current number per year.	Unknown
Safety	Safe properties are provided throughout district.	No of accidents due to defective property condition or design.	Number per year does not increase.	Unknown
Sustainability ⁵	Asset consumption ratio (ACR).	Depreciated replacement cost divided by current replacement cost.	Ratio can be identified and is 50% or greater.	Average for 15 Years Unknown%.
	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.	Average for 15 Years Unknown%
	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%.	100% (assuming Federal funding will continue to be received).

⁵ DLG, Advisory Standard, 2012, p 7.

5.1 Demand Forecast

The factors affecting demand for property services include population change, changes in demographics, seasonal factors, consumer preferences and expectations, economic factors, 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. ⁶	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. ⁷	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.	Currently covered by Indian Ocean Territories Legislation.	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 satellite internet & mobile phone system is basic.	National Broadband Network connection -will have a major positive impact., particularly on education and eCommerce services.	Major improvements expected in data processing and communications.
Industries	Are there any new industries that impact on the Shire?	None known. Increase in tourism possible, but no impact on Shire assets.	Minor increase in the number of visitors to the Shire.	Increase in demand on waste and other municipal services.
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 impact the Shire assets?	Property assets likely to be impacted by severe tropical storms.	Increase in the frequency and ferocity of storms.	Design specifications for buildings may increase. Risk of major loss of property increasing.
Safety	Factors that will impact on buildings include: • Ageing Facilities with some in need of refurbishment • Removal of asbestos from existing buildings.	Ageing buildings containing asbestos are in current use.	Program to replace components containing asbestos to be developed. Renewal of major components such as electrical and fire protection systems required.	Service levels maintained

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

⁷ Australian Bureau of Statistics, Basic Community Profile Code 910052009, 2011.

5.2 Changes In Technology

Technology changes may affect the delivery of services in construction as well as maintenance materials and techniques. These changes, which have not been specifically identified, have the potential to improve the life of certain property assets as well as changing the nature and level of demand for certain property services. At present no changes in technology are evident or forecast.

5.3 Demand Management Plan

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

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

Table 5.3.a Demand Management Plan Summary

Service Activity	Demand Management Plan
Safety	Renewal of components presenting a safety hazard and removal of asbestos.
Global Warming	Increase in design specifications for new buildings.
Disabled Access	New buildings to include disabled access in line with the Disability Access Inclusion Plan.

5.4 New Assets and Growth

Currently no increase in the permanent population is forecast; however the recent arrival of asylum seekers to the islands has caused an increase in the temporary population of the island placing additional demand for accommodation and community property. Such sudden and large increases in population are not possible to accurately forecast.



Figure 5 - 30 Seaview Drive, Silver City

Lifecycle management planning details how the Shire plans to manage and operate the assets at the agreed levels of service (defined in Section 4) while optimising life cycle costs.

6.1 Background Data

The Shire's property assets are located within the townsite and consist of Shire offices, Shire depot, staff housing and community buildings. Most property assets (except for the Depot which was constructed in 2000) were contributed to the Shire on its formation in 1992.

6.2 Physical parameters

Sourced from a Financial Asset Register, Table 6.2.a summarises the property assets of the Shire.

Table 6.2.a Property Assets on Shire Land

Property Type	Estimated area m ²	No. of Assets
Commercial	6,007	2
Community	1691	2
Housing	1,322	6
Administration	1,330	1
Shed/Outbuilding	144	2
Shelter/Bus Stop	Unknown	Unknown

Detailed property dimensions and property components are not currently recorded. Approximate areas were obtained by Shire staff using GIS measurements of roof area to provide an indicative guide of the dimensions of the buildings.

The year of construction (or last renewal) of buildings is also not consistently recorded in the asset register. Most building assets were acquired when the Shire was formed in 1992 with this being the acquisition date recorded in the register.

The Recreation Centre is located on Commonwealth land and is operated and maintained under an agreement with the Commonwealth Government.

6.2 Physical parameters (Continued)

6.2.1 Asset condition

No formal condition assessment is current for property assets. In October 2012 building exteriors were inspected to gain a general impression of the overall building condition. A formal assessment based on a documented standard is necessary to confirm the condition of each asset.

A summary of the general inspection is detailed in Table 6.2.a below

Table 6.2.a Matters noted during building inspection.

Property Type	Matters Noted
Housing	General exterior condition good.
Commercial	General Condition good. Roof lining damaged and requiring renewal
Administration	Significant renewal work required. Fire protection systems appear inadequate and require assessment by a qualified person.
Community	Significant renewal work required on Community Hall.



Figure 6 - Timber decay, George Fam Administration Centre, Oct 2012

6.2.2 Asset capacity and performance

On advice from Shire staff no formal or specific design standards have been used for the construction or maintenance of properties on the Islands. Known deficiencies in service performance are detailed in Table 6.2.2.a

Table 6.2.2.a Known Service Performance Deficiencies

Property Type	Service Deficiency
Cyclone/Emergency	No cyclone rated community buildings exist on the island. Emergency Centre buildings are considered inadequate for current resident population level and are not designed to withstand cyclone force winds. Christmas Island is not considered to be a cyclone prone location (AECOM 2010) however a recent cyclone event occurred in April 2008. ⁸
Staff Housing	An inadequate number of houses are available for staff to rent on the Island raising the demand for staff housing.
Administration	No disabled access available to administration building.



Figure 7 - Poon Saan Community Hall Oct, 2012

⁸ AECOM, Indian Ocean Territory Climate Change Risk Assessment, 2010.

6.3 Asset valuations

Property assets have not been subject to revaluation and are currently valued at historical cost within the annual financial report.

To derive the approximate current replacement cost the dimensions of the property roof area were measured using GIS. Rawlinsons Australian Construction Handbook⁹ provided indicative unit rates per square metre for construction. These rates are detailed in Table 12.1.a. Rawlinsons does not provide an index factor for Christmas Island however an indexation factor of 200% is provided for the Torres Strait Islands, this factor is considered relevant for Christmas Island as it aligns to historical costs of construction.

Approximate current replacement cost of assets along with building areas are shown below in Table 6.3.a.

Table 6.3.a Approximate Property Asset Costs (Refer to Comment)

Building Type	Estimated Area (m²)	Approximate Current Replacement Cost
Administration	1,330	\$11,850,300
Commercial	6,007	\$6,413,740
Community	1,691	\$6,493,440
Housing	1,322	\$7,633,300
Shed/Outbuilding	144	\$164,160
Total	10,494	\$32,554,940

Comment: The approximate costs provided are indicative only and are not a valuation. Details of the assets in each class are provided in the Appendices on the same basis.

⁹ Rawlinsons, Australian Construction Handbook 2012

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 '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
Public Liability incident attributable to sub-standard property conditions or property layout.	Liability Risk.	Medium	Ensure property assets are maintained in compliance with applicable standards.
Climate Change.	Likelihood of severe storm damage increases.	Medium	Consider climate change impacts when designing and managing assets.
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 risk and 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 increase in population.	Sudden increase in level of service requirements.	Low	Monitor population trends and industry developments in the region.
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

Property maintenance incorporates reactive and planned maintenance which can be either routine or specific in nature.

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 repainting, gutter clearing, property sweeping, minor crack repairs etc. This work generally falls below the capital/maintenance threshold but may require a specific budget allocation

8.1.1 Maintenance Standards And Specifications

According to Shire staff, no documented standards are utilised when conducting maintenance of property. According to management no registered builders are currently resident on the island.

8.1.2 Projected Operations And Maintenance Expenditures

A comparison of 2012 actual and 2013 budgeted operating and maintenance expenditure highlights the differences in expenditure levels.

	2012 Actual	2013 Budget
Building maintenance expenditure	\$26,338	\$406,300
Building operating expenditure	\$201,770	\$287,665

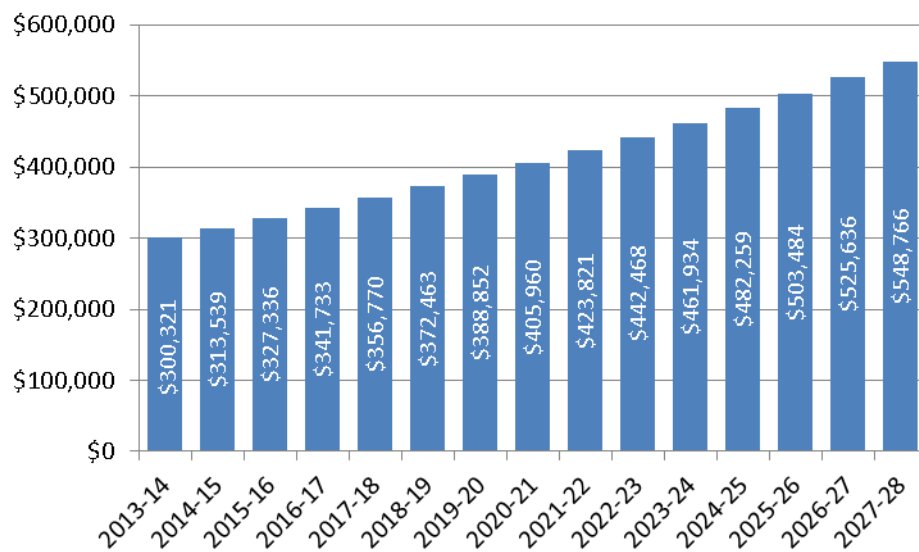
The 2013 budgeted maintenance expenditure includes the repainting of all houses along with repainting and other renewal works on the George Fam Administration Centre and Poon San Community Hall.

Historical maintenance expenditure is considered a poor indicator of potential future maintenance expenditure in the case of Christmas Island due to the poor condition of a number of building assets. Future maintenance expenditure is included within renewal expenditure within the Long Term Financial Plan due to the lack of separation of maintenance and renewal expenditure.

8.1 Maintenance Plan (Continued)

Future operating expenditure has been forecast based on the 2013 budget within the Long Term Financial Report, as reflected below in Chart 8.1.a

Chart 8.1.a. Projected Property Operating Expenditure



Maintenance and operations are funded from the Shire operating budget.

Maintenance of the Recreation Centre is undertaken by the Shire under funding received from the Commonwealth Government for the operation and maintenance of the facility. The grant for the operation and maintenance of this facility is currently \$780,000 per annum.

The high humidity and close proximity of the sea result in a high maintenance requirement for all exposed metal components of buildings. Failure to undertake this maintenance work may result in sudden failure of these building components in the future.

8.2 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.

Based on age, property components may be scheduled for renewal within the period covered by this plan (15 years). Each property component may have a different useful life. To provide a reasonable documented estimate of optimum component renewal timing a physical inspection of each property component will be required.

8.2.1 Renewal Standards And Specifications

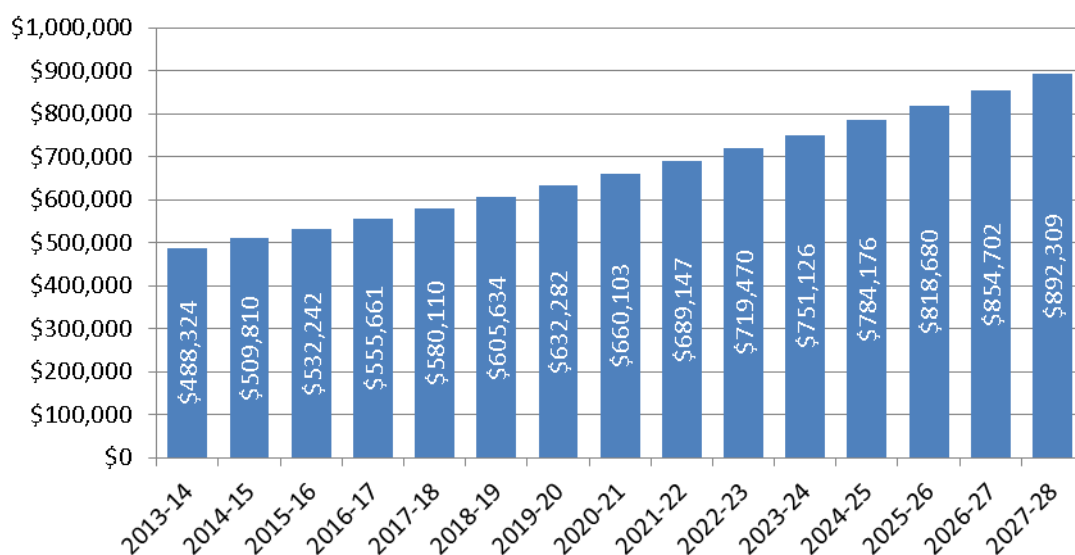
Shire staff advise renewal works are not carried out in accordance with any standards or specifications.

8.2.2 Summary Of Projected Renewal Expenditure

In the absence of accurate maintenance and renewal expenditure forecasts a simple calculation of 1.5% of estimated replacement cost has been used to project average renewal/maintenance expenditure. This percentage is considered to be an appropriate initial estimate, as used by other local governments and documented in an IPWEA Case Study.¹⁰

On this basis Projected renewal expenditure as summarised below in Chart 8.2.a

Chart 8.2.a. Projected Asset Renewal/Maintenance Expenditure



¹⁰ IPWEA, IIMM 2006 Section 3.37

8.2 Asset Renewal/Replacement Plan (Continued)

The use of simple percentage methods for estimating renewal/maintenance expenditure increases the risk of inaccurate projections. This risk is amplified by the low number of Shire owned buildings on the Island and the issues identified with the estimation of current replacement costs (Section 6.3). Detailed analysis of each building is required to mitigate this risk and determine the current condition and level of service.

Significant uncertainty also exists as to the capacity of the Shire to renew property assets due to the high reliance on grant funding to maintain general operations and renew assets.

Future maintenance/renewal decisions should also consider the suitability of each building for current use. For example, the lack of disabled access to George Fam Centre may result in a decision to replace the entire building with one more suitably capable of meeting future service requirements. This in turn may impact on the level of investment in building maintenance in the years prior to the replacement.

Community buildings located on vested land, such as Cocos Padang and the Sports Hall, have not been included in the maintenance/renewal schedule as it is not clear if the Shire is responsible for the renewal of the buildings. In support of this exclusion, in October 2012 Cocos Padang underwent a major renewal which was undertaken by the Federal Government with no Shire involvement.

8.3 Creation/Acquisition/Upgrade Plan

New works are defined as works that create a new asset (not previously existing), or works which upgrade or improve an existing asset beyond its previous service capacity. Assets acquired at no cost to the Council from land development or 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 determined in consultation with other organisations.

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

8.4 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.

8.5 Summary Of Projected Upgrade/New Assets Expenditure

No specific upgrade/new asset expenditure is currently planned. Recognising future building renewals are likely to contain an element of upgrade or new service level the Long Term Financial Plan allows for the following unspecified future building upgrade expenditure:

Table 8.5.a New/upgrade expenditure per Long Term Financial Plan

Year	New/upgrade expenditure
2016	\$800,000
2022	\$1,000,000
2028	\$1,100,000

8.6 Disposal Plan

Asset disposal includes any activity associated with disposal of a decommissioned asset including sale, demolition or relocation. There are currently no property assets identified for disposal or decommissioning.

9.1 Funding Strategy

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

9.2 Funding Gaps/Alternative delivery solutions

The Shire is highly reliant on grant funding for purchase of new assets and renewal of major road and plant assets. Consideration has been given during the development of this plan to alternative service delivery solutions and strategies to address any funding gaps. The limited resources and alternative funding sources on the Island significantly reduce the number of available alternatives.

Each funding gap will need to be considered on an asset by asset basis with the lack of alternatives currently available to the Shire necessitating 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 operation of assets beyond their optimal economic life will be selected, provided it is safe and affordable to do so.



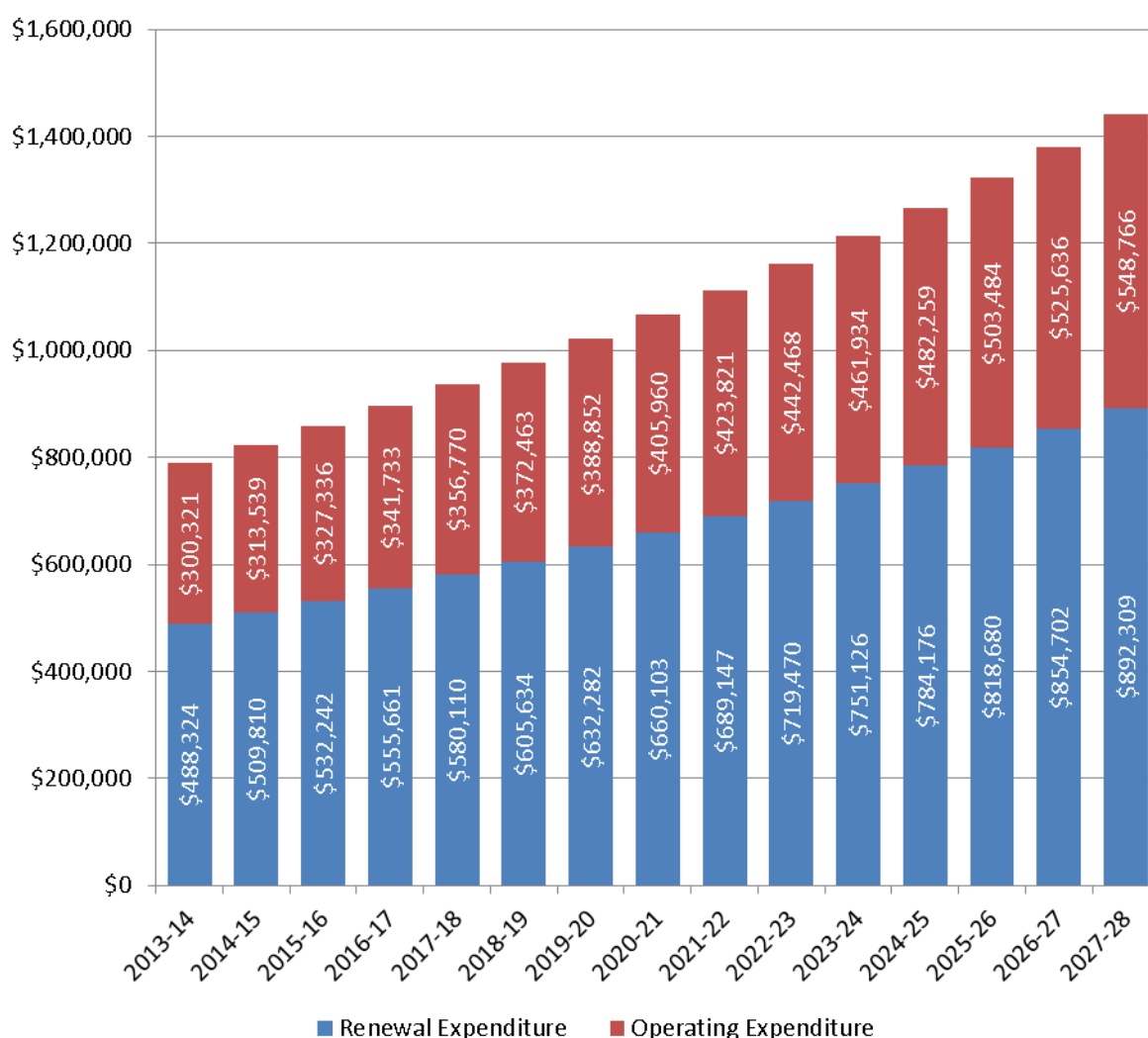
Figure 8 - Council Depot Facility, Oct 2012

10.1 Projected Expenditure

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

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

Chart 10.1.a. Projected Maintenance, Operating and Capital Expenditure



10.1 Projected Expenditure (Continued)

Table 10.1.b shows the projected property 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 10.1.b Expenditure Projections for Long Term Financial Plan

Year	Operations	Maintenance/ Renewal per AMP	Maintenance/ Renewal per LTFP	Capital Upgrade/ New	Disposals \$
2014	\$300,321	\$488,324	\$424,177	\$0	\$0
2015	\$313,539	\$509,810	\$442,842	\$0	\$0
2016	\$327,336	\$532,242	\$662,327	\$800,000	\$0
2017	\$341,733	\$555,661	\$482,667	\$0	\$0
2018	\$356,770	\$580,110	\$503,902	\$0	\$0
2019	\$372,463	\$605,634	\$526,072	\$0	\$0
2020	\$388,852	\$632,282	\$549,216	\$0	\$0
2021	\$405,960	\$660,103	\$573,379	\$0	\$0
2022	\$423,821	\$689,147	\$1,098,609	\$1,000,000	\$0
2023	\$442,468	\$719,470	\$624,945	\$0	\$0
2024	\$461,934	\$751,126	\$652,441	\$0	\$0
2025	\$482,259	\$784,176	\$681,148	\$0	\$0
2026	\$503,484	\$818,680	\$711,118	\$0	\$0
2027	\$525,636	\$854,702	\$742,406	\$0	\$0
2028	\$548,766	\$892,309	\$1,375,072	\$1,100,000	\$0

Future property condition assessment will improve the accuracy of future financial forecasts as will recording expenditure information at a level sufficiently detailed to separately identify new and upgrade costs.

11.1 Valuation Forecasts

Current replacement cost of property assets are forecast to increase due to inflation and routine revaluations. Marginal increases will also occur through the addition of new assets and upgrades to existing assets from construction and acquisition by the Shire.

Recent amendments to Regulation 17A of the Local Government (Financial Management) Regulations 1996 require all land and buildings to be valued at 'fair value' prior to 30 June 2015. This requirement may significantly change the value of property assets. The extent of this change is unable to be determined at this time.

Forecasting of future depreciation expense requires reliable information regarding the age of existing property assets and estimates on the remaining useful life. This information is currently unavailable or considered too unreliable to enable forecasting of future depreciation and depreciated replacement costs.

11.2 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 cashflows 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.

11.3 Asset Consumption Ratio

The Asset Consumption Ratio (ACR) shows the proportion of 'as new' condition remaining for property. 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 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 property assets (as discussed in Section 11.1 above) results in the Asset Consumption Ratio being unable to be projected for property assets.

11.4 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 property assets (as discussed in Section 11.1 above) results in the Asset Sustainability Ratio being unable to be projected for property assets.

11.5 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 of Christmas Island property renewals have not been forecast with any accuracy due to a lack of condition information relating to the buildings. Utilising the projections contained within Table 10.1.b above and a discount rate of 4% the Asset Renewal Ratio is 87% which is marginally below the desired level.

12.1 Key Assumptions

Various key assumptions have been used to prepare expenditure forecasts and forecast asset replacement costs, the required operating and capital expenditure. These assumptions are presented below. It is important to understand the limiting impact they may 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 with no allowance for inflation;
- Forecast renewal expenditure is based on estimated replacement;
- Forecast renewal costs and current replacement costs may differ from the fair value of the asset;
- Average useful life estimates are based on current local knowledge, historical trends and an understanding of construction techniques utilised. These estimates may significantly change following access to new condition assessment data;
- Maintenance and operational forecasts are based on available current expenditure levels and percentage of replacement cost information;
- Properties will be sufficiently protected through routine maintenance to prevent damage and loss of property; and
- The Rawlinsons replacement costs reflected in Table 12.1.a below have been utilised.

Table 12.1.a Rawlinsons Estimated replacement costs¹¹

Rawlinsons Category	Description	Average Estimated Current Replacement Cost m ²
1.1.1	ADMINISTRATION OFFICE- single storey, standard finishes, subdivisional partitioning to offices, reception, amenities areas, air conditioning	\$4,455
2.1.4.3	MACHINERY SHED – Freestanding, one long wall open	\$530
2.1.4.4	MACHINERY SHED – Freestanding, sliding doors to long wall, windows to end walls	\$570
11.2.1	CHANGE ROOM/TOILET BUILDING – single storey, standard construction and basic finishes, large change area and adjoining shower/toilets.	\$5,110
11.5.1	COMMUNITY RECREATION CENTRE – basic standard with minimum amenities	\$1,920
13.1.2.1	INDIVIDUAL HOUSE – medium standard finish. Framed.	\$2,785
13.1.2.3	INDIVIDUAL HOUSE – medium standard finish. Full Brick	\$3,245
13.2.2.1	APARTMENTS – One or two bedroom units. Basic standard finish	\$3,190

¹¹ Rawlinsons 2012, Australian Construction Handbook 2012, Perth

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 software as the central accounting/financial reporting system. The software includes an asset register module which is used for maintenance of an asset inventory. The asset register contains expenditure information for each property. Property inventory information is maintained by Shire staff.

The software systems in use are viewed as appropriate to meet the current requirements of the Shire.

13.2 Accountabilities For Financial And Asset Systems

The Chief Executive Officer is responsible for the financial management of the Shire in accordance with 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 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, a workforce plan has not been completed.

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 property infrastructure.

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

14.1 Property Asset Management 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 quick reference.

Table 14.1.a Asset Management Improvement Plan

	Task	Responsibility
1	A draft Asset Management Policy be presented to the Council for adoption.	Council
2	The draft Asset Management Strategy 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 Property Infrastructure Asset Management Plan be presented to the Council for adoption.	Council
4	Future Long Term Financial Plans be prepared following consideration of the output of the Asset Management Plans for each class of asset.	Executive
5	A level of service review is 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 property 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 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 link the Annual Report with asset management by reporting on short and long-term service delivery levels in the Annual Report each year.	Council

14.6 Property Asset Management Improvement Plan (Continued)

Further improvement to the asset data utilised in the formation of this plan is required to progress the quality of future revision of the plan. These data improvements are summarised below and detailed in the Plan and in Table 14.1.b.

Table 14.1.b Data Improvement Plan

Property Infrastructure Data Improvement Tasks	
1	Inspection Dates and Condition Information: <ul style="list-style-type: none"> a Conduct a condition assessment of property including measurement of sub components to improve the accuracy of the projected timeline for subcomponent renewals to prevent sudden major failure of the property subcomponents; and b Update the asset inventory records with current measurement, condition and inspection date.
2	Unit Rates: <ul style="list-style-type: none"> a Document the assumptions underlying unit rates considering renewal of existing assets (Brownfields) rather than construction of assets in pristine situation (Greenfields). Document the construction standard such as type of materials and quality of finishing's to ensure the rates used are in accord with the level of service provided by the asset; and b Establish a process to routinely review unit rates to reflect current replacement costs and current renewal costs.
3	Useful Lives of Assets: <ul style="list-style-type: none"> 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 renewal or replacement by new assets; and b Review useful lives to reflect current practices and distinguishing between <ul style="list-style-type: none"> i renewal (replacement) frequency; and ii maintenance frequency (actions on the assets which allow them to reach their useful lives).
4	Expiry Dates: <ul style="list-style-type: none"> a Calculate the expiry date of each asset sub component from the asset condition and inspection date; b Apply the above relationship to the asset register and derive renewal dates (expiry dates) for all assets; and c Use the total useful lives to calculate a deemed construction date for components where the construction date is unknown by subtracting the useful life from the expiry date.
	Level of Service <ul style="list-style-type: none"> a Quantify current community level of service expectations and current performance measures; and b Quantify technical level of service specifications and current performance measures.

15.1 Monitoring

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

How the Shire is meeting the objectives of the Strategic Community Plan will be undertaken by reporting performance to the community through the Annual Report.

15.2 Review

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 should be subject to a major review as soon as up to date condition information is available or within 4 years whichever is the sooner.

16.1 Background – Recreation Centre

The Christmas Island Recreation Centre is owned by the Commonwealth Government and operated and maintained by the Shire under a funded management agreement.

It is the Shire's opinion that control of the centre remains with the Commonwealth Government and costs and liabilities associated with the centre remain the responsibility of the Commonwealth Government. As a consequence a detailed condition assessment has not been undertaken to forecast future renewal expenditure.

Should funding no longer be received for the centre the Shire is unlikely to be able to continue operations and maintenance of the centre utilising its own resources.

A general inspection of the facility in October 2012 highlighted a number of maintenance items including roof leakages and damage to underlying sub components. Shire officers indicated the costs to rectify these defects and repair the internal damage is likely to exceed \$2 million. Continuing to leave the defects unattended may result in further damage to internal components.

A detailed assessment of the facility by a suitably qualified engineer is required to develop the most effective repair, maintenance and renewal plan for each of the facilities components.



Figure 9 - Recreation Centre Entrance, Oct 2012

16.2 Level of Service and Demand Management

The recreation centre services the Christmas Island community with a 25m swimming pool, indoor basketball court, gymnasium and activity/meeting rooms. The facility services the current resident population and visitor population and is expected to be able to meet forecast recreation facility demands on the Island.

Potential demand exists for the utilisation of the facility as an emergency shelter. Meeting this demand in the future will require an engineering appraisal of the building to determine any structural modifications required as well as modifications to toilet and food preparation facilities within the building.

16.3 Risk Management


The most significant risk to the provision of existing levels of service is the loss of Commonwealth Grant funding for the operation and maintenance of the facility.

16.4 Operation Management

The most significant cost of operating the centre is staff costs which comprised \$616,416 of the total operating costs of \$1,001,013 in 2012. An annual contribution of \$780,000 is received from the Commonwealth for operations and maintenance with the balance of expenditure being funded from fees and charges from the centre.

Commonwealth contributions have remained at the same level since operation of the centre was taken over by the Shire and have been eroded by inflation over this time. Significant increases in operating costs have resulted in a decrease in the level of funds identified to fund future expenditure

A continuation of the current trend of expending all revenue on the centre operations and replacement of furniture and equipment will result in inadequate funds being available for future component renewals and maintenance expenditure. At 30 June 2012, the Shire held \$469,555 in the Recreation Centre Reserve to fund future upgrades and Furniture and Equipment expenditure. In 2012 \$106,857 was utilised from the reserve for Furniture and Equipment for the centre.



REFERENCES

- Shire of Christmas Island, *Strategic Plan 2011-2015 and into the future*, Shire of Christmas Island.
- Shire of Christmas Island, *Annual Budget 2012/2013*, Shire of Christmas Island.
- DVC, 2006, *Asset Investment Guidelines*, Glossary, Department for Victorian Communities, Local Government Victoria, Melbourne,
<http://www.dpcd.vic.gov.au/localgovernment/publications-and-research/asset-management-and-financial>.
- IPWEA, 2006, *International Infrastructure Management Manual*, Institute of Public Works Engineering Australia, Sydney, www.ipwea.org.au.
- IPWEA, 2008, *NAMS.PLUS Asset Management* Institute of Public Works Engineering Australia, Sydney, www.ipwea.org.au/namsplus
- IPWEA, 2009, *Australian Infrastructure Financial Management Guidelines*, Institute of Public Works Engineering Australia, Sydney, www.ipwea.org.au/AIFMG.
- IPWEA, 2011, *Asset Management for Small, Rural or Remote Communities* Practice Note, Institute of Public Works Engineering Australia, Sydney, www.ipwea.org.au/AM4SRRC.
- IPWEA, 2011, *International Infrastructure Management Manual*, Institute of Public Works Engineering Australia, Sydney, www.ipwea.org.au
- Cardno, 2011, Shire of Christmas Island Asset Valuation Summary 2009/2010.
- Rawlinsons, 2012, *Australian Construction Handbook 2012*, Perth.
- AECOM, 2010, *Indian Ocean Territory Climate Change Risk Assessment*, Canberra.

18.1 Appendix A –Property Details

Property Name	Building Type	Estimated Area m ²	Estimated Replacement Cost (Utilising Rawlinsons Rates)
George Fam Centre	Administration	1,330	\$11,850,300
Shire Depot (Quarry Road)	Commercial	5,428	\$5,753,680
P & G Depot	Commercial	579	\$660,060
Poon Saan Community Hall	Community	1,691	\$6,493,440
Bus Shelters All Areas	Community	Unknown	Unknown
Shed 12m X 9m Recycling	Shed/Outbuilding	108	\$123,120
Depot Shed 6m X 6m	Shed/Outbuilding	36	\$41,040
5 Jalan Ketam Merah, Drumsite	Staff Accommodation	258	\$1,674,420
28 Seaview Drive, Silver City	Staff Accommodation	288	\$1,604,160
12 Guano Close, Silver City	Staff Accommodation	221	\$1,230,970
30 Seaview Drive, Silver City	Staff Accommodation	245	\$1,364,650
23 Seaview Drive, Silver City	Staff Accommodation	270	\$1,503,900
112 Gaze Road	Staff Accommodation	40	\$255,200

Property Assets Vested in the Shire not included in this plan

Cemetery (Chinese)
Cemetery (Muslim)
Basketball Court
Cemetery (Christian)
Cemetery (Pioneer)
Picture Theatre Cinema/ Open Air Cinema
Cocos Padang (Gaze Rd)
Sports Hall

18.2 Appendix B - 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

18.3 Appendix C - 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.

18.3 Appendix C - Glossary

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 property 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 property 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 property, 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.

18.3 Appendix C - Glossary

18.3 Appendix C - Glossary

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.¹²

¹² AASB13, Fair Value Measurement, September 2011

18.3 Appendix C - Glossary

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. properties, 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.

18.3 Appendix C - Glossary

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.

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 on going day-to-day work necessary to keep assets operating, eg property 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.

18.3 Appendix C - Glossary

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.

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, properties 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.

18.3 Appendix C - Glossary

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 property pavements and wearing surfaces over time and recommending corrective actions.

PMS Score

A measure of condition of a property 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.

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.

18.3 Appendix C - Glossary

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 are 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.

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.

18.3 Appendix C - Glossary

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