

Government of **Western Australia** Department of **Local Government and Communities** 

# SHIRE OF BOYUP BROOK



# **Buildings and Structures**

# **Asset Management Plan**



Version 1.2

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## 1. EXECUTIVE SUMMARY

# Context

The Shire of Boyup Brook is located on the raised inland Darling Plateau. The main population and administrative centre is the town of Boyup Brook, which has a population of around 500, and is situated on the upper reaches of the Blackwood River, approximately 270 kilometres (by road) south/southeast of Perth.

The Shire is predominantly rural in nature and consists of a transition area ranging from smaller holdings near the western boundary to large broad acre farms to the east. However, there is a current trend toward more intensive agricultural pursuits, including viticulture, aquaculture, vegetable production, olive production and tree farming.

The Shire of Boyup Brook occupies an area of 283,800 hectares and has within its boundaries several smaller localities, such as Wilga, Mayanup, Dinninup, Chowerup, Tonebridge, McAlinden and Kulikup.

The objective of this Building and Structures Asset Management Plan is to outline all the tasks and resources required to manage and maintain Council's building and structures portfolio to an agreed standard. This Asset Management Plan provides a detailed overview of the ongoing management of the building and facilities assets.

This plan acts as a tool to support the ability of Council to deliver well targeted, responsive and value for money maintenance and operational services for customers and the community as a whole.

### The Building and Structures Service

The Building and Structures Asset network comprises:

- 5 Amenities Buildings.
- 7 Civic & Corporate Buildings.
- 7 Residential Buildings.
- 6 Community Buildings.
- 6 Recreation Buildings.
- 3 Heritage Buildings.
- 1 Waste Building
- 37 Other Structures.

These infrastructure assets have a replacement value of \$19,239,500.

# What does it Cost?

The projected cost to provide the services covered by this Asset Management Plan includes operations, maintenance, renewal and upgrade of existing assets over the 10 year planning period is \$6,245,000 or \$624,000 per year. Council's estimated available funding for this period is \$5,581,000 or \$558,000 per year. This is a funding shortfall of \$66,000 per year, which is 89% of the cost to provide the service. Projected and budgeted expenditure are shown in the graph below.



Councils' present funding levels are insufficient to continue to provide existing services at current levels in the medium term.

## What we will do

This first cut core Asset Management Plan has been compiled based on the projects identified by the Council and staff. The Council plans to provide Building and Structures asset services for the following:

- Operation and maintenance of Buildings and Structures to meet service levels set by Council in annual budgets.
- Identify highest priority renewals and incorporate them into the 10 Year Long Term Financial Plan.

# What we cannot do

The Asset Management Plan modelling has identified that we cannot fund all renewals required over the next 10 years. The following have not been funded -

- 1. Renewal of the Arts and Crafts Centre;
- 2. Renewal of the Waste Transfer Facility;
- 3. Renewal of 4 x Bitumen Tennis Courts at the Recreation Reserve;
- 4. Renewal of the Concrete Skate Park;
- 5. Renewal of the Shade Shelters at the Aquatic Centre;
- 6. Renewal of the lighting at the Aquatic Centre;
- 7. Renewal of the lighting at the Recreation Reserve; and
- 8. Renewal of the reticulation at the Recreation Reserve.

# **Managing the Risks**

There are risks associated with providing the service and not being able to complete all identified activities and projects. We have identified major risks as:

- Fire
- Drowning/Accident

- Fire and/or death
- Downgrading of services due to a lack of funding
- Lack of maintaining inspection and maintenance systems.

We will endeavour to manage these risks within available funding by:

- Maintaining adequate fire systems.
- Installation of warning signage and ensuring facilities are adequately staffed, where appropriate.
- Installation of hard wired smoke detectors.
- Establishing criteria to determine renewal and new/upgrade priorities.
- Ensure appropriate resources are allocated to maintain systems.

# **The Next Steps**

The actions resulting from this asset management plan are:

- Assess first year costs against actual.
- Prepare ranking system for renewals.
- Review maintenance practices and align with service level requirements.
- Ongoing rolling program of data collection.
- Community consultation on service level provision.

# Questions you may have

#### What is this plan about?

This asset management plan covers the Buildings and Structures infrastructure assets that serve the Shire of Boyup Brook's needs. These assets include public conveniences, civic and corporate buildings, community buildings, recreation buildings, waste facilities, airfield facilities, heritage buildings and other structures throughout the Council area that enable people to gain access to localised services.

#### What is an Asset Management Plan?

Asset management planning is a comprehensive process to ensure delivery of services from infrastructure is provided in a financially sustainable manner.

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

# Why is there a funding shortfall?

Most of the Council's buildings and structures asset network was constructed from government grants often provided and accepted without consideration of ongoing operations, maintenance and replacement needs. Many of these assets are approaching the later years of their life and require replacement, services from the assets are decreasing and maintenance costs are increasing. Councils' present funding levels are insufficient to continue to provide existing services at current levels in the medium term.

#### What options do we have?

Resolving the funding shortfall involves several steps:

- Improving asset knowledge so that data accurately records the asset inventory, how assets are performing and when assets are not able to provide the required service levels;
- Improving our efficiency in operating, maintaining, replacing existing and constructing new assets to optimise life cycle costs;
- 3. Identifying and managing risks associated with providing services from infrastructure;
- 4. Making tradeoffs between service levels and costs to ensure that the community receives the best return from infrastructure;
- Identifying assets surplus to needs for disposal to make saving in future operations and maintenance costs;
- Consulting with the community to ensure that buildings and structures services and costs meet community needs and are affordable;
- 7. Developing partnership with other bodies, where available to provide services;
- Seeking additional funding from governments and other bodies to better reflect a 'whole of government' funding approach to infrastructure services.

#### What happens if we don't manage the shortfall?

It is likely that council will have to reduce service levels in some areas, unless new sources of revenue are found. For Buildings and Structures assets the service level reduction may include rationalisation and decommissioning of building and structures that are under-utilised.

#### What can we do?

Council can develop options and priorities for future Buildings and Structures asset services with costs of providing the services, consult with the community to plan future services to match the community services needs with ability to pay for services and maximise benefit to the community for costs to the community.

# 2. INTRODUCTION

# 2.1 Background

This Building & Structures asset management plan has been developed to demonstrate responsive management of building assets (and services provided from these assets), compliance with regulatory requirements, and to communicate funding required to provide the required levels of service.

This building asset management plan is to be read with Council's Asset Management Policy, Asset Management Strategy and the following associated planning documents:

- Plan for the Future
- Forward Capital Works Plan
- Five Year Financial Plan
- Annual Budget
- Risk Management Policy
- Department of Local Government Asset Management Framework and Guidelines

The Buildings and Structures assets shown in Council's asset register and covered by this asset management plan are shown in Table 2.1.

# Table 2.1: Assets covered by this Plan

Asset category	Number	Replacement Value
Amenities Buildings	5	\$296,500
Civic and Corporate Buildings	7	\$2,254,500
Residential Buildings	7	\$6,095,000
Community Buildings	6	\$1,304,000
Recreation Buildings	6	\$1,735,500
Heritage Buildings	3	\$4,690,000
Waste Buildings	1	\$65,000
Other Structures	37	\$2,799,000
TOTAL	72	\$19,239,500

**Note** – A number of buildings or parts of buildings, particularly those associated with sporting clubs are subject to lease arrangements with varying levels of commitment to maintenance. They are included in the relevant building asset category to enable a contingent liability to be allocated in the case of the Shire of Boyup Brook resuming full control of the building should the organisation cease to exist.

Key stakeholders in the preparation and implementation of this Building Asset Management Plan can be divided into internal and external stakeholders.

#### Internal stakeholders include:

The Shire of Boyup Brook Council Chief Executive

**Operations Team** 

# External stakeholders include:

Shire of Boyup Brook Community Shire of Boyup Brook building tenants Visitors to the Shire of Boyup Brook Local Government Insurance Services Fire and Emergency Services Authority Community representation and administration Council representation and administration, Identification and definition of level of service requirements Design parameters, standards, operation and administration

Building users Building users Building users Minimisation of risk Fire and Emergency Services

# 2.2 Goals and Objectives of Asset Management

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

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

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

The goal of this asset management plan is to:

- Document the services/service levels to be provided and the costs of providing the service,
- Communicate the consequences for service levels and risk, where desired funding is not available, and
- Provide information to assist decision makers in trading off service levels, costs and risks to provide services in a financially sustainable manner.

This asset management plan is prepared under the direction of Council's vision, mission, goals and objectives.

Council's vision is:

# "A local government that acknowledges our heritage, whilst embracing the changing needs and expression of the past and future expectations of our community"

# Council's mission is:

# "To serve the residents of the Boyup Brook district through the provision of effective and efficient services and good governance that will enhance the community's quality of life"

Council is responsible for the provision of buildings and other associated structures including community halls, sporting pavilions, administration centres and other community facilities. Asset management provides for the necessary preventative maintenance to ensure the functionality and performance of its building infrastructure.

The objectives of owning Buildings and Other Structures assets are at two levels:

Level 1 - Corporate Objectives:

- Manage and develop the Shires built infrastructure for long-term sustainability, residential amenity and public safety.
- Ensure all assets are identified.
- Provide improved management of asset-related information.
- Ensure service standards are developed for assets and delivery methods provide best value for the community.

<sup>&</sup>lt;sup>1</sup> IPWEA, 2006, *IIMM* Sec 1.1.3, p 1.3.

Level 2 – Asset Class Specific

- Ensure the Council's Buildings and Structures assets are sustainably managed, maintained, and account for life cycle cost.
- Ensure Buildings and Structures are kept clean, presentable and fit for purpose.

# 2.3 Plan Framework

Key elements of the plan are

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

# 2.4 Core and Advanced Asset Management

This asset management plan is prepared as a first cut 'core' asset management plan in accordance with the International Infrastructure Management Manual<sup>2</sup> and the Asset Management Framework and Guidelines<sup>3</sup>. It is prepared to meet minimum legislative and organisational requirements for sustainable service delivery and long term financial planning and reporting. Core asset management is a 'top down' approach where analysis is applied at the 'system' or 'network' level.

# 2.5 Community Consultation

The Asset Management Framework and Guidelines require local governments to consult with the community on their service requirements, expectations and satisfaction levels as part of the community's ongoing engagement in relation to asset management.

The local government is required to report annually on its asset management; with the community providing feedback on the local government's asset management performance.

This 'core' asset management plan has been prepared to facilitate community consultation initially through feedback on publicly available draft asset management plans prior to adoption by Council. Future revisions of the asset management plan will incorporate community consultation on existing and future service needs, service levels and costs of providing the service.

This will assist Council and the community in matching the level of service needed by the community, service risks and consequences with the community's ability to pay for the service.

<sup>&</sup>lt;sup>2</sup> IPWEA, 2006.

<sup>&</sup>lt;sup>3</sup> Department of Local Government (WA), 2011.

# 3. LEVELS OF SERVICE

# 3.1 Customer Research and Expectations

Council has not carried out any research on customer expectations. This will be investigated for future updates of the asset management plan.

# 3.2 Legislative Requirements

Council has to meet many legislative requirements including Australian and State legislation and State regulations. Relevant legislation is shown in Table 3.2.

Legislation	Requirement
Local Government Act	Sets out role, purpose, responsibilities and powers of local governments including the preparation of a long term financial plan supported by asset management plans for sustainable service delivery.
Aboriginal Heritage Act 1972	Preservation of the community places and objects used by traditional owners.
Aboriginal Heritage Regulations 1974	Preservation of the community places and objects used by traditional owners.
Building Code of Australia 2005	Construction and building standards for all buildings in Australia.
Dangerous Goods Safety Act 2004	Relates to the safe storage, handling and transport of certain dangerous goods
Disability Services Act 1993	An Act for the establishment of the Disability Services Commission and the Ministerial Advisory Council on Disability, for the progress of principles applicable to people with disabilities, for the funding and provision of services to such people that meet certain objectives, for the resolution of complaints by such people and for related purposes.
Disability Services Regulations 2004	Current amendments to Disability Services Act (1993)
Dividing Fences Act 1961	Local government exemption from 50/50 contribution for dividing fences abutting public open space.
Environment Protection and Biodiversity Conservation Act 1999	Provides for the development of a Commonwealth Heritage List, which comprises natural, Indigenous and historic heritage places which are either entirely within a Commonwealth area, or outside the Australian jurisdiction and owned or leased by the Commonwealth or a Commonwealth Authority; and which the Minister is satisfied have one or more Commonwealth Heritage values.
Health Act 1911	Sets down the legislative requirements in relation to health standards for public buildings, including ablution facilities, and the handling and disposal of hazardous materials including asbestos.
Health (Public Buildings) Regulations 1992	The regulations are intended to address operational matters or those where the BCA is considered inadequate for the protection of public health or safety in and about a public building.
Heritage Act of WA 1990	Requires all local governments to compile and regularly review an inventory of local places, which are significant or may become significant heritage properties.
Occupational Health and Safety Act 1984 and associated regulations	Administered in part by local governments to promote and improve standards for occupational health, safety and welfare and to coordinate administration of the laws relating to occupational safety and health for incidental and other purposes.

Table 3.2: Legislative Requirements

# 3.3 Current Levels of Service

Council has defined service levels in two terms.

**Community Levels of Service** relate to the service outcomes that the community wants in terms of safety, quality, quantity, reliability, responsiveness, cost effectiveness and legislative compliance.

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

Quality	How good is the service?
Function	Does it meet users' needs?
Safety	Is the service safe?

**Technical Levels of Service** - Supporting the community service levels are operational or technical measures of performance. These technical measures relate to the allocation of resources to service activities that the council undertakes to best achieve the desired community outcomes.

Technical service measures are linked to annual budgets covering:

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

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

Key Performance Measure	Level of Service Objective	Performance Measure Process	Desired Level of Service	Current Level of Service
COMMUNITY LE	VELS OF SERVICE			
Quality	<ul> <li>Ensure that buildings and other structures are clean, attractive to users and damage free.</li> </ul>	<ul> <li>No. of complaints from users per annum.</li> </ul>	<ul> <li>To be determined</li> </ul>	<ul> <li>Not currently measured. An annual survey of residents is conducted but no level of service has been adopted.</li> </ul>
Function	<ul> <li>Ensure that buildings meet user requirements.</li> </ul>	<ul> <li>No of complaints from users per annum.</li> </ul>	<ul> <li>To be determined</li> </ul>	<ul> <li>Not currently measured. There is ongoing consultation with users of facilities but no level of service has been adopted.</li> </ul>
Safety	<ul> <li>Provide safe, suitable buildings free of hazards.</li> </ul>	<ul> <li>No of injury/incident reports logged.</li> </ul>	<ul> <li>To be determined</li> </ul>	<ul> <li>Not currently measured. The Occupation Safety and Health Committee monitors safety issues but no level of service has been adopted.</li> </ul>

# Table 3.3: Current Service Levels

Key Performance Measure	Level of Service Objective	Performance Measure Process	Desired Level of Service	Current Level of Service	
TECHNICAL LEVE	LS OF SERVICE				
Operations	<ul> <li>Ensure buildings are kept clean and have good sanitation.</li> </ul>	<ul> <li>Cleaning frequency.</li> </ul>	Class 1 – Daily Class 2 – Twice per week Class 3 – Weekly Class 4 – As required Class 5 – As required	Class 1 – Daily Class 2 – Twice per week Class 3 – Weekly Class 4 - As required Class 5 – As required	
	<ul> <li>Building facilities meet users needs</li> </ul>	<ul> <li>Annual condition &amp; defects inspection</li> </ul>	To be determined	Not currently measured	
		<ul> <li>Budget</li> </ul>	\$275,900	\$236,000	
	<ul> <li>Buildings are suitable for purpose.</li> </ul>	<ul> <li>Reactive service requests completed within timeframes</li> </ul>	<ul> <li>Defects made safe within 3 working days.</li> <li>Repairs are completed within 30 working days.</li> </ul>	<ul> <li>Not currently measured.</li> </ul>	
Maintenance		<ul> <li>Planned maintenance activities completed to schedule</li> </ul>	<ul> <li>All planned maintenance activities are completed to schedule.</li> </ul>	<ul> <li>Not currently measured</li> </ul>	
		<ul> <li>Budget</li> </ul>	\$275,900	\$188,000	
Renewal	<ul> <li>Ensure building components are replaced when due so that building continues to be fit for purpose.</li> </ul>	<ul> <li>No of renewals identified in Renewal Plan completed per annum.</li> </ul>	<ul> <li>100% of renewals identified in First generation Renewal Plan completed per annum.</li> </ul>	<ul> <li>Not currently measured.</li> </ul>	
	<ul> <li>Building facilities meet users needs</li> </ul>	<ul> <li>Condition of buildings</li> </ul>	<5% with a condition rating of 4 or 5	<ul> <li>1.4% with a condition rating of 4 or 5</li> </ul>	
		<ul> <li>Budget</li> </ul>	\$127,600	\$72,000	
Upgrades/New	<ul> <li>Ensure building components are upgraded to meet all relevant legislation, new standards, and modern needs.</li> </ul>	<ul> <li>No of non- compliance items with legislation per 6 monthly inspection.</li> <li>No of upgrades identified in Upgrade Plan completed per annum.</li> </ul>	<ul> <li>100% legislative compliance per annum.</li> <li>80% of upgrades identified in First generation Upgrade plan completed per annum.</li> </ul>	<ul> <li>Not currently measured.</li> </ul>	
		<ul> <li>Budget</li> </ul>	<ul> <li>Not identified</li> </ul>	No forward forecasts currently available	

# 3.4 Desired Levels of Service

At present, indications of desired levels of service are obtained from various sources including residents' feedback to Councillors and staff, service requests and correspondence. Council has yet to quantify desired levels of service. This will be done as part of Councils' future community consultation process and incorporated into future revisions of this asset management plan.

# 4. FUTURE DEMAND

# 4.1 Demand Forecast

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

There are no State Service Delivery Plans that may affect Councils future service delivery for this Asset Class.

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

Demand factor	Present position	Impact on services				
Population	<ul> <li>The population as at 30 June 2010 was 1,558<sup>4</sup></li> </ul>	<ul> <li>1,900<sup>5</sup> by 2020 (Band C), equates to 22% increase.</li> </ul>	<ul> <li>Increased demand on community and recreation facilities.</li> <li>Increased demand for aging services.</li> </ul>			
Demographics	<ul> <li>12% in 20-34 age range;</li> <li>21% over 65</li> </ul>	<ul> <li>19% in 20-34 age range by 2020.</li> <li>26% over 65 by 2020</li> </ul>	<ul> <li>Increased demand for aged housing and seniors centre.</li> </ul>			

# Table 4.1: Demand Factors, Projections and Impact on Services

# 4.2 Changes in Technology

It is considered that technology changes will have little effect on the delivery of services covered by this plan. Those changes related to climate change, energy consumption, water use and reuse are subject to ongoing consideration. Significant impacts resulting from technology changes will be qualified in future revisions of this Building Asset Management Plan.

# 4.3 Demand Management Plan

Demand for new services will be managed through a combination of managing existing assets, upgrading of existing assets, leasing of facilities, shared service arrangements, providing new assets to meet demand, and demand management. Demand management practices include alternate service delivery solutions, insuring against risks and managing failures.

Alternate service delivery solutions focus on providing the required service without the need for the council to own the assets. Examples of alternate service delivery solutions include providing services from existing infrastructure such as aquatic centres and libraries that may be in another council area or public toilets provided in commercial premises.

Opportunities identified to date for demand management are shown in Table 4.3. Further opportunities will be developed in future revisions of this asset management plan.

Table 4.3:	Demand	Management	Plan	Summary
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Service Activity	Demand Management Plan									
Buildings	Encoura	Encourage sharing of facilities to avoid duplication.								
Buildings Review	Review utilisatio	current n/perform	building ance of exi	stocks, sting asse	use ts.	levels	and	patterns	to	optimise

<sup>&</sup>lt;sup>4</sup> Source: ABS 2011 Census.

<sup>&</sup>lt;sup>5</sup> Source: "WA Tomorrow Report", 2012 – WA Planning Commission

# 4.4 New Assets for Growth

There are no new building assets required to meet growth.



# Figure 1: New Assets from growth

# 5. LIFECYCLE MANAGEMENT PLAN

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

# 5.1 Background Data

#### 5.1.1 Physical parameters

The buildings and structures assets covered by this asset management plan are shown in Table 5.1.

Building Asset Category	Number
Amenity Buildings	5
Civic & Corporate Buildings (Civic Centre, Works Depot Operations Centre)	7
Residential Buildings (Staff and Aged)	7
Community Buildings (Community Halls, Libraries, Health, Family and Education Centres)	6
Recreation Buildings and Infrastructure (Clubrooms, Recreation Centres, Swimming Pools)	6
Heritage Buildings (those buildings listed on the National, State or local heritage register)	3
Waste Buildings (Refuse Site and Transfer Stations)	1
Other Structures (Transmission aerials, tourism structures, etc)	37
TOTAL	72

#### Table 5.1

A brief description of the different asset groups that make up the building and structures assets are provided below:

Amenity Buildings -

- One ablution building located at Tourist Centre, Abel Street, Boyup Brook with a condition rating of Fair.
- One Gents ablution building located at Recreation Reserve, Beatty Street, Boyup Brook, with a condition rating of Fair.
- One Women's ablution building located at Recreation Reserve, Beatty Street, Boyup Brook, with a condition rating of Fair.
- One ablution building located at Lions Park, Bridge Street, Boyup Brook, with a condition rating of Fair.
- One ablution building located at hockey ground, Beatty Street, Boyup Brook with a condition rating of Fair-Minus.

# Civic & Corporate Buildings -

- One administration centre and library located at Abel Street, Boyup Brook, with a condition rating of Fair.
- One depot administration building located at Connelly Street, Boyup Brook, with a condition rating of Fair.
- One old depot office located at Connelly Street, Boyup Brook, with a condition rating of Fair.
- One Road Signage Shed located at Connelly Street, Boyup Brook, with a condition rating of Fair.
- One depot office and workshop located at Connelly Street, Boyup Brook, with a condition rating of Fair.
- One four-bay open shed located at Connelly Street, Boyup Brook, with a condition rating of Fair.
- One four-bay open shed located at Connelly Street, Boyup Brook, with a condition rating of Fair.

**Residential Buildings-**

- One residential dwelling located at 6 Nix Street, Boyup Brook, with a condition rating of Fair.
- One residential duplex dwelling located at 24A and 24B Proctor Street, Boyup Brook, with a condition rating of Fair.
- One residential duplex dwelling located at 16A and 16B Forrest Street, Boyup Brook, with a condition rating
  of Fair.
- One residential dwelling located at 5 Rogers Avenue, Boyup Brook, with a condition rating of Fair.
- One residential dwelling located at 1 Rogers Avenue Street, Boyup Brook, with a condition rating of Fair.
- One residential dwelling located at 7 Knapp Street, Boyup Brook, with a condition rating of Fair-Plus.
- One Citizens Lodge, consisting of 17 ensuited bedrooms, 2 lounge rooms, respite room, kitchen and dining room located, at Bridge Street, Boyup Brook, with a condition rating of Fair.

Community Buildings -

- One Infant Health/Playgroup Centre located at Abel Street, Boyup Brook, with a condition rating of Fair.
- One Arts and Crafts Centre located at 52 Jayes Road, Boyup Brook, with a condition rating of Fair.
- One Telecentre building located at 89 Abel Street, Boyup Brook, with a condition rating of Fair.
- One fire and rescue shed located at Abel Street, Boyup Brook, with a condition rating of Fair.
- One hangar at airport, located at Boyup Brook-Mayanup Road, Boyup Brook, with a condition rating of Fair.
- One community hall located at 1158 McAlinden Road, McAlinden, with a condition rating of Fair.

**Recreation Buildings -**

- One pavilion and changerooms at Recreation Reserve, located at Beatty Street, Boyup Brook, with a condition rating of Fair.
- One machinery shed at Recreation Reserve, located at Beatty Street, Boyup Brook, with a condition rating of Fair.
- One tennis club and pavilion at Recreation Reserve, located at Beatty Street, Boyup Brook, with a condition rating of Fair.
- One aquatic centre at Recreation Reserve, located at Beatty Street, Boyup Brook, with a condition rating of Fair-Plus.
- One pool pump house shed at Recreation Reserve, located at Beatty Street, Boyup Brook, with a condition rating of Fair.
- One hockey storage shed at Recreation Reserve, located at Beatty Street, Boyup Brook, with a condition rating of Fair-Plus.

Heritage Buildings & Structures

- One town hall, youth centre and toilets, located at Abel Street, Boyup Brook, with a condition rating of Fair.
- One tourist centre, located at Abel Street, Boyup Brook, with a condition rating of Fair.
- One medical centre, located at 78 Abel Street, Boyup Brook, with a condition rating of Fair-Plus.

Waste Buildings-

 One waste transfer station and recycling facility located at Dinninup Road, Boyup Brook, with a condition rating of Fair.

Other Structures-

Gazebos located at Federation Square, Jayes Road, Boyup Brook, with a condition rating of Fair.

- Barbecue shelter located at Federation Square, Jayes Road, Boyup Brook, with a condition rating of Fair.
- Barbecues located at Federation Square, Jayes Road, Boyup Brook, with a condition rating of Fair.
- Picnic tables located at Federation Square, Jayes Road, Boyup Brook, with a condition rating of Fair.
- Playground shade shelters located at Federation Square, Jayes Road, Boyup Brook, with a condition rating of Fair-Plus.
- Concrete skate park located at Federation Square, Jayes Road, Boyup Brook, with a condition rating of Fair.
- Lighting for skate park located at Federation Square, Jayes Road, Boyup Brook, with a condition rating of Fair.
- Timber framed patio and brick paving located at Aquatic Centre, Jayes Road, Boyup Brook, with a condition rating of Fair.
- Brick paved area and 2 barbecues located at Aquatic Centre, Jayes Road, Boyup Brook, with a condition rating
  of Fair.
- Five shade shelters located at Aquatic Centre, Jayes Road, Boyup Brook, with a condition rating of Fair.
- Perimeter and internal fencing located at Aquatic Centre, Jayes Road, Boyup Brook, with a condition rating of Fair.
- Lighting located at Aquatic Centre, Jayes Road, Boyup Brook, with a condition rating of Fair.
- 6 lane pool and associated dive/leisure pool located at Aquatic Centre, Jayes Road, Boyup Brook, with a condition rating of Fair.
- Wading pool and shelter located at Aquatic Centre, Jayes Road, Boyup Brook, with a condition rating of Fair.
- Diving board located at Aquatic Centre, Jayes Road, Boyup Brook, with a condition rating of Fair.
- Storage shed located at Recreation Reserve, Beatty Street, Boyup Brook, with a condition rating of Fair.
- 8 Basketball backboards located at Recreation Reserve, Beatty Street, Boyup Brook, with a condition rating of Fair.
- Basketball lighting located at Recreation Reserve, Beatty Street, Boyup Brook, with a condition rating of Fair.
- Fencing located at Recreation Reserve, Beatty Street, Boyup Brook, with a condition rating of Fair-Plus.
- Four bitumen tennis courts located at Recreation Reserve, Beatty Street, Boyup Brook, with a condition rating
  of Fair.
- Brick entry statement and perimeter fencing located at Recreation Reserve, Beatty Street, Boyup Brook, with a condition rating of Fair.
- 2 sets of AFL goal posts located at Recreation Reserve, Beatty Street, Boyup Brook, with a condition rating of Fair.
- Bore and pump located at Recreation Reserve, Beatty Street, Boyup Brook, with a condition rating of Fair.
- Lighting structures located at Recreation Reserve, Beatty Street, Boyup Brook, with a condition rating of Fair.
- Water storage tank located at Recreation Reserve, Beatty Street, Boyup Brook, with a condition rating of Fair.
- Storage sheds located at Recreation Reserve, Beatty Street, Boyup Brook, with a condition rating of Fair.
- Cricket pitch located at Recreation Reserve, Beatty Street, Boyup Brook, with a condition rating of Fair.
- Cricket practice nets located at Recreation Reserve, Beatty Street, Boyup Brook, with a condition rating of Fair.
- Reticulation located at Recreation Reserve, Beatty Street, Boyup Brook, with a condition rating of Fair.

- Storage shed located at Tennis Club, Beatty Street, Boyup Brook, with a condition rating of Fair.
- Perimeter security fencing at Shire Depot, Connolly Street, Boyup Brook, with a condition rating of Fair.
- Waste oil store facility at Shire Depot, Connolly Street, Boyup Brook, with a condition rating of Fair.
- Storage shed located at Shire Depot, Connolly Street, Boyup Brook, with a condition rating of Fair.
- Dom security chain mesh fencing located at Shire Depot, Connolly Street, Boyup Brook, with a condition rating of Fair.
- Gazebo located at Cemetery, Dinninup Road, Boyup Brook, with a condition rating of Fair-Plus.
- Remembrance wall located at Cemetery, Dinninup Road, Boyup Brook, with a condition rating of Fair-Plus.
- Gazebo located at Rest Area, Mayanup-Tonebridge Road, Tonebridge, with a condition rating of Fair.

The age profile of the assets included in this Buildings and Structures Asset Management Plan is shown in Figure 2.



#### Figure 2: Asset Age Profile

- **Note:** The asset age profile has been determined from the information provided by AVP Valuers in relation to the condition assessment of each building and structure incorporated in the Plan. AVP in their report quantified the following-
  - (1) Estimated Economic Working Life (EEWL); and
  - (2) Estimated Remaining Life Years (ERLY).

The above figures were utilised to determine the age profile of each asset, based on the estimated last renewal date for each asset as follows-

2012 – (EEWL-ERLY) = Age of Asset.

# 5.1.2 Asset capacity and performance

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

For the purposes of identifying deficiencies per location, the table below has taken into account asset condition ratings of 'Fair-Minus' (4) and 'Poor'(5) – see Table 5.1.3 for condition rating definitions.

# Table 5.1.2: Known Service Performance Deficiencies

Location	<b>Condition Rating</b>	Service Deficiency
Hockey Ground Toilets	4	There are deficiencies with the external walls, building services and wall finishes in Fair-Minus condition.

Source - The information in the above table was sourced from the condition report provided by AVP Valuers in May 2012.

It is intended that further inspections will be completed of the above buildings and structures in order to ascertain whether they will be retained. Where a decision to retain is made, specific works to be undertaken will be identified, costs estimates will then be determined and urgency of repairs or renewals will made.

# 5.1.3 Asset condition

Condition is measured using a 1-5 rating system<sup>6</sup> as detailed in Table 5.1.3.

<b>Condition Rating</b>	Description
1	Good: Building is new or has been extensively re-modelled and modernised. 85%-100% remaining of Estimated Economic Working Life.
2	Fair-Plus: Building has been well maintained and has possibly been refurbished. 70%-84% remaining of Estimated Economic Working Life.
3	Fair: Building has been regularly maintained throughout. 20%-69% remaining of Estimated Economic Working Life.
4	Fair-Minus: Building in need of overall maintenance – no obvious structural defects. 0%-19% remaining of Estimated Economic Working life.
5	Poor: Building in disrepair or uninhabitable with possible structural problems – No remaining life.

The condition profile of assets included within this AM Plan is shown in Figures 3 and 3A.

# 80 70 60 No of Buildings 50 40 30 20 10 0 2 3 1 4 5 Good Fair-Plus Fair Fair-Minus Poor **Condition Rating**

#### Figure 3: Asset Condition Profile

<sup>6</sup> IIMM 2006, Appendix B, p B:1-3 ('cyclic' modified to 'planned', 'average' changed to 'fair'')



## Figure 3A: Building Assets Average Condition Profile By Asset Group

# 5.1.4 Asset valuations

The value of assets recorded in the asset register as at 30 June 2010 covered by this asset management plan is shown below. Assets were last revalued at January 2011.

Current Replacement Cost	\$19,239,500
Depreciable Amount	\$19,239,500
Depreciated Replacement Cost	\$9,287,257
Annual Depreciation Expense	\$451,346

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

Asset Consumption	2.3%
(Depreciation/Depreciable Amou	nt)
Asset renewal	0.4%
(Capital renewal exp/Depreciable	e amount)
Annual Upgrade/New	1.5%
(Capital upgrade exp/Depreciable	e amount)
Annual Upgrade/New (including contributed assets)	1.5%
s currently renewing assets at 16.	0% of the

Council is currently renewing assets at 16.0% of the rate they are being consumed and increasing its asset stock by 0.9% each year.

To provide services in a financially sustainable manner, Council will need to ensure that it is renewing assets at the rate they are being consumed over the medium-long term and funding the life cycle costs for all new assets and services in its long term financial plan.

# 5.1.5 Asset hierarchy

An asset hierarchy provides a framework for structuring data in an information system to assist in collection of data, reporting information and making decisions. The hierarchy includes the asset class and component used for asset planning and financial reporting and service level hierarchy used for service planning and delivery.

Council's service hierarchy is shown is Table 5.1.5.

Service Hierarchy	Definition	Service Level Objective
Category 1 – Premium	High use business critical facilities essential to service delivery, (Main buildings used to run the Councils operations)	<ul> <li>Aesthetics – As new or highest quality reasonably achieved.</li> <li>Functionality – All elements must function as intended at all times, with no down time tolerated during periods of intended use.</li> <li>Legislative Requirements – All legal responsibility must be met.</li> <li>Financial – Maximum efficiency of maintenance and cleaning operations is required, to minimise expenditure in achieving the desired outcomes.</li> </ul>
Category 2 – High	High use facilities essential to service delivery, (Buildings which are used for Council business purposes).	<ul> <li>Aesthetics – Minor signs or deterioration when viewed closely may be acceptable. No deterioration when viewed form normal distance. Some deterioration may be tolerated for short period of time.</li> <li>Functionality – All elements must function as intended during periods of intended use, with a low probability of failure.</li> <li>Legislative Requirements – All legal responsibility must be met.</li> <li>Financial – Primary aim is to maximise the long term economic performance of the facility. Refurbishments, equipment replacements and maintenance planning should be above current standards to provide a high level of service and aesthetics.</li> </ul>
Category 3 – Standard	Medium use and key facilities important to service delivery. (Major Council buildings that have a predominant community use focus).	<ul> <li>Aesthetics – Some minor signs of deterioration when viewed from normal distance are acceptable.</li> <li>Functionality – All required elements should function as intended during period of intended use. Minor failures, excluding those which bring a threat to safety or security, can be tolerated.</li> <li>Legislative Requirements– All legal responsibility must be met.</li> <li>Financial - Primary aim is to maximise the long term economic performance of the facility. Refurbishments, equipment replacements and maintenance planning should be in a strategic framework, and decision taken on a life cycle basis.</li> </ul>
Category 4 – Low	Medium to low use facilities that assist in improving service delivery (Minor Council buildings that have a community use focus or are used by community groups).	<ul> <li>Aesthetics – Some signs of deterioration are acceptable.</li> <li>Functionality – All elements requirement should function as intended during periods of intended use. Minor failures, excluding those which bring a threat to safety or security, can be tolerated.</li> <li>Legislative Requirements – All legal responsibility must be met.</li> <li>Financial – Limitation of short term maintenance costs is the primary objective.</li> </ul>

Service Hierarchy	Definition	Service Level Objective
Category 5 – Infrequent Use	Infrequent use facilities.	<ul> <li>Aesthetics – Not important.</li> <li>Functionality – No requirement to retain any functional performance except to avoid degradation of asset value.</li> <li>Legislative Requirements – All legal responsibility must be met.</li> <li>Financial – Limitation of maintenance costs is the primary objective.</li> </ul>

# 5.2 Risk Management Plan

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

The buildings and structures listed in table 5.1.2 with a condition rating of 4 (Fair-Minus) do not pose a significant risk for the Council or to the community at this point in time.

Critical risks, being those assessed as 'Very High' - requiring immediate corrective action and 'High' – requiring prioritised corrective action identified in the Infrastructure Risk Management Plan are summarised in Table 5.2.

Service or Asset at Risk	What can Happen	Risk Rating (VH, H)	Risk Treatment Plan	Associated Costs
Community Buildings	Fire	н	To provide and maintain adequate fire protection systems in all public buildings.	ТВА
Recreation Buildings	Drowning/Accidents	н	To provide adequate warning signage around facilities to raise awareness of risk of drowning	ТВА
Residential Buildings	Fire/death	н	Hard wired smoke detectors and regular servicing.	ТВА
All Buildings	Lack of funding provision for maintenance, operations and renewal activities resulting in declining asset condition	н	Ensure adequate annual funding is allocated for the maintenance, operation and renewal of building assets	ТВА
All Buildings	Lack of maintenance inspections	н	Ensure building maintenance inspections are conducted annually	ТВА
Buildings in flood prone areas	Flooding	М	Clean up afterwards.	ТВА

# Table 5.2: Critical Risks and Treatment Plans

# 5.3 Routine Maintenance Plan

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

#### 5.3.1 Maintenance plan

Maintenance includes reactive, planned and specific maintenance work activities.

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

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

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

Actual past operations and maintenance expenditure is shown in Table 5.3.1.

#### Table 5.3.1: Operations and Maintenance Expenditure Trends

Year	<b>Operations &amp; Maintenance Expenditure</b>
2009/2010	\$424,624
2010/2011	\$480,527
2011/2012	\$457,814

Current maintenance expenditure levels are considered to be inadequate to meet required service levels. Future revision of this asset management plan will include linking required maintenance expenditures with required service levels. Assessment and prioritisation of reactive maintenance is undertaken by operational staff using experience and judgement.

# 5.3.2 Standards and specifications

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

- Applicable Australian Standards
- Building Code of Australia; and
- Acceptable standards of construction.

#### 5.3.3 Summary of future operations and maintenance expenditures

Future operations and maintenance expenditure is forecast to trend in line with the value of the asset stock as shown in Figure 4. Note that all costs are shown in 2012 dollar values.



# Figure 4: Projected Operations and Maintenance Expenditure

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

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

# 5.4 Renewal/Replacement Plan

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

# 5.4.1 Renewal plan

Assets requiring renewal are identified from one of three methods provided in the 'Expenditure Template".

- Method 1 uses Asset Register data to project the renewal costs for renewal years using acquisition year and useful life, or
- Method 2 uses capital renewal expenditure projections from external condition modelling systems (such as Pavement Management Systems), or
- Method 3 uses a combination of average *network renewals* plus *defect repairs* in the *Renewal Plan* and *Defect Repair Plan* worksheets on the 'Expenditure template'.

Method 3 was used for this asset management plan.

The Shire of Boyup Brook does not have any ranking system or criteria for renewal. It is envisaged that this feature will be a key area for development in the next revision of this Plan. It is proposed that the criteria below will be considered in this development.

Criteria	Weighting
Safety and Accessibility	No current weighting or ranking.
Asset Usage	No current weighting or ranking.
Current Asset Condition	No current weighting or ranking.
Community Need	No current weighting or ranking.
Operating & Maintenance Cost	No current weighting or ranking.

# Table 5.4.1: Renewal Priority Ranking Criteria

Criteria	Weighting
Existence of viable alternative	No current weighting or ranking.
Total	0%

Renewal will be undertaken using 'low-cost' renewal methods where practical. The aim of 'low-cost' renewals is to restore the service potential or future economic benefits of the asset by renewing the assets at a cost less than replacement cost. Examples of low cost renewal include minor repair of an asset rather than a major replacement (e.g. replace a section of roof sheeting as opposed to replacing all of the roofing material).

# 5.4.2 Renewal standards

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

Building Code of Australia	Sets out the acceptable standards and are deemed to satisfy provisions for building work both residential and commercial.
Timber Framing AS1684	Sets out design and construction of timber framing
Concrete Structures AS3600	Sets out all concrete and masonry requirements for maintenance.
Plumbing and Drainage AS3500	Sets out all requirements needed for plumbing and drainage.
Shire of Boyup Brook Tenancy/Lease	Sets out the responsibilities of the Shire of Boyup Brook in relation
Agreements	to those buildings under lease/rent.

# 5.4.3 Summary of projected renewal expenditure

Projected future renewal expenditures are forecast to increase over time as the asset stock ages. The costs are summarised in Figure 5. Note that all costs are shown in 2012 dollar values.

The projected capital renewal program is shown in Appendix B.



Figure 5: Projected Capital Renewal Expenditure

Deferred renewal, ie those assets identified for renewal and not scheduled for renewal in capital works programs are to be included in the risk assessment process in the risk management plan. Renewals are to be funded from capital works programs and grants where available. This is further discussed in Section 6.2.

# 5.5 Creation/Acquisition/Upgrade Plan

New works are those works that create a new asset that did not previously exist, or works which upgrade or improve an existing asset beyond its existing capacity. They may result from growth, social or environmental needs. Assets may also be acquired at no cost to the Council from land development. These assets from growth are considered in Section 4.4.

# 5.5.1 Selection criteria

New assets and upgrade/expansion of existing assets are identified from various sources such as councillor or community requests, proposals identified by strategic plans or partnerships with other organisations. Candidate proposals are inspected to verify need and to develop a preliminary estimate. Verified proposals are ranked by priority and available funds and scheduled in future works programmes. The priority ranking criteria is detailed in Table 5.5.1.

# Table 5.5.1: Upgrade/New Assets Priority Ranking Criteria

Criteria	Weighting
Strategic Community Plan Objectives	No current weighting or ranking.
Regulatory Change (including environmental criteria)	No current weighting or ranking.
Community Expectation (Current vs. Future Level of Service)	No current weighting or ranking.
Funding Availability	No current weighting or ranking.
Total	0%

# 5.5.2 Standards and specifications

Standards and specifications for new assets and for upgrade/expansion of existing assets are as follows-

Building Code of Australia	Sets out the acceptable standards and are deemed to satisfy provisions for building work both residential and commercial.
Timber Framing AS1684	Sets out design and construction of timber framing
Concrete Structures AS3600	Sets out all concrete and masonry requirements for maintenance.
Plumbing and Drainage AS3500	Sets out all requirements needed for plumbing and drainage.
Shire of Boyup Brook Tenancy/Lease	Sets out the responsibilities of the Shire of Boyup Brook in relation
Agreements	to those buildings under lease/rent.

# 5.5.3 Summary of projected upgrade/new assets expenditure

Projected upgrade/new asset expenditures are summarised in Figure 6. The projected upgrade/new capital works program is shown in Appendix C. All costs are shown in current 2012 dollar values.



# Figure 6: Projected Capital Upgrade/New Asset Expenditure

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

# 5.6 Disposal Plan

Disposal includes any activity associated with disposal of a decommissioned asset including sale, demolition or relocation. Assets identified for possible decommissioning and disposal are shown in Table 5.6, together with estimated annual savings from not having to fund operations and maintenance of the assets. These assets will be further reinvestigated to determine the required levels of service and see what options are available for alternate service delivery, if any.

Cashflow projections from asset disposals are not available, these will be developed in future revisions of this asset management plan.

# Table 5.6: Assets identified for Disposal

Asset	Reason for Disposal	Timing	Net Disposal Expenditure (Expend +ve, Revenue –ve)	Operations & Maintenance Annual Savings
			\$0	\$0

# 6. FINANCIAL SUMMARY

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

# 6.1 Financial Statements and Projections

The financial projections are shown in Figure 7 for projected operating (operations and maintenance) and capital expenditure (renewal and upgrade/expansion/new assets), net disposal expenditure and estimated budget funding.

Note that all costs are shown in 2012 dollar values.





# 6.1.1 Financial sustainability in service delivery

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

# Long term - Life Cycle Cost

Life cycle costs (or whole of life costs) are the average costs that are required to sustain the service levels over the longest asset life. Life cycle costs include operations and maintenance expenditure and asset consumption (depreciation expense). The life cycle cost for the services covered in this asset management plan is \$875,000 per year (operations and maintenance expenditure plus depreciation expense in year 1).

Life cycle costs can be compared to life cycle expenditure to give an indicator of sustainability in service provision. Life cycle expenditure includes operations, maintenance and capital renewal expenditure in year 1. Life cycle expenditure will vary depending on the timing of asset renewals. The life cycle expenditure at the start of the plan is \$496,000 (operations and maintenance expenditure plus budgeted capital renewal expenditure in year 1).

A shortfall between life cycle cost and life cycle expenditure is the life cycle gap.

The life cycle gap for services covered by this asset management plan is (\$379,000) per year (-ve = gap, +ve = surplus).

Life cycle expenditure is 57% of life cycle costs giving a life cycle sustainability index of 0.57.

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

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

## Medium term – 10 year financial planning period

This asset management plan identifies the projected operations, maintenance and capital renewal expenditures required to provide an agreed level of service to the community over a 10 year period. This provides input into 10 year financial and funding plans aimed at providing the required services in a sustainable manner.

These projected expenditures may be compared to budgeted expenditures in the 10 year period to identify any funding shortfall. In a core asset management plan, a gap is generally due to increasing asset renewals for ageing assets.

The projected operations, maintenance and capital renewal expenditure required over the 10 year planning period is \$624,000 per year.

Estimated (budget) operations, maintenance and capital renewal funding is \$558,000 per year giving a 10 year funding shortfall of (\$66,000) per year and a 10 year sustainability indicator of 0.89. This indicates that Council has 89% of the projected expenditures needed to provide the services documented in the asset management plan.

## Short term – 5 year financial planning period

The projected operations, maintenance and capital renewal expenditure required over the first 5 years of the planning period is \$527,000 per year.

Estimated (budget) operations, maintenance and capital renewal funding is \$522,000 per year giving a 5 year funding shortfall of (\$5,000). This is 99% of projected expenditures giving a 5 year sustainability indicator of 0.99.

#### Financial Sustainability Indicators

Figure 7A shows the financial sustainability indicators over the 10 year planning period and for the long term life cycle.



Figure 7A: Financial Sustainability Indicators

Providing services from infrastructure in a sustainable manner requires the matching and managing of service levels, risks, projected expenditures and funding to achieve a financial sustainability indicator of 1.0 for the first years of the asset management plan and ideally over the 10 year life of the AM Plan. This first cut core Asset Management Plan has been prepared based on the long term financial planning the Shire currently has in place, which shows a misalignment between the projected renewals required and what renewals are proposed to be funded. The Shire will need to align its planned renewals in its Long Term Financial Plan with those identified in this Asset Management Plan, to achieve a better sustainability ratio.

Figure 8 shows the projected asset renewals in the 10 year planning period from Appendix B. The projected asset renewals are compared to budgeted renewal expenditure in the capital works program and capital renewal expenditure in year 1 of the planning period in Figure 8.





Table 6.1.1 shows the shortfall between projected and budgeted renewals

Table 6.1.1: Projected and Budgeted Renewals and Expenditure Shortfall

Year	Projected Renewals (\$000)	Planned Renewal (Budget) (\$000)	Renewal Funding Shortfall (\$000) (-ve Gap, +ve Surplus)	Cumulative Shortfall (\$000) (-ve Gap, +ve Surplus)
2013	\$115	\$72	-\$43	-\$43
2014	\$0	\$72	\$72	\$29
2015	\$93	\$72	-\$21	\$8
2016	\$13	\$72	\$59	\$67
2017	\$130	\$72	-\$58	\$9
2018	\$0	\$72	\$72	\$81
2019	\$52	\$72	\$20	\$101
2020	\$505	\$72	-\$433	-\$332
2021	\$0	\$72	\$72	-\$260
2022	\$368	\$72	-\$296	-\$556

Note: An negative shortfall indicates a funding gap; a positive shortfall indicates a surplus for that year.

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

A gap between projected asset renewals, planned asset renewals and funding indicates that further work is required to manage required service levels and funding to eliminate any funding gap.

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

## 6.1.2 Expenditure projections for long term financial plan

Table 6.1.2 shows the projected expenditures for the 10 year long term financial plan.

Expenditure projections are in current (non-inflated) values. Disposals are shown as net expenditures (revenues are negative).

Year	Operations (\$000)	Maintenance (\$000)	Projected Capital Renewal (\$000)	Capital Upgrade/ New (\$000)	Disposals (\$000)
2013	\$236	\$188	\$115	\$293	\$0
2014	\$246	\$197	\$0	\$63	\$0
2015	\$254	\$203	\$93	\$63	\$0
2016	\$262	\$210	\$13	\$63	\$0
2017	\$271	\$217	\$130	\$63	\$0
2018	\$280	\$224	\$0	\$63	\$0
2019	\$288	\$231	\$52	\$63	\$0
2020	\$298	\$239	\$505	\$63	\$0
2021	\$307	\$246	\$0	\$63	\$0
2022	\$317	\$254	\$368	\$63	\$0

 Table 6.1.2: Expenditure Projections for Long Term Financial Plan (\$000)

Note: All projected expenditures are in 2010 values

# 6.2 Funding Strategy

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

Achieving the financial strategy will require the Council to examine other options, which include-

- Use of loans to fund renewal spikes;
- Cost reductions from review of service levels;
- Increasing revenue from rates and user charges;
- Applying for grants, from Commonwealth and State Governments, where applicable; and
- Cash backed reserves.

# 6.3 Valuation Forecasts

Asset values are forecast to increase as additional assets are added to the asset stock from construction and acquisition by Council and from assets constructed by land developers and others and donated to Council. Figure 9 shows the projected replacement cost asset values over the planning period in 2012 dollar values.



Figure 9: Projected Asset Values

Depreciation expense values are forecast in line with asset values as shown in Figure 10.



Figure 10: Projected Depreciation Expense

The depreciated replacement cost (current replacement cost less accumulated depreciation) reports the remaining service potential of the assets. It will vary over the forecast period depending on the rates of addition of new assets, disposal of old assets and consumption and renewal of existing assets. Forecast of the assets' depreciated replacement cost is shown in Figure 11, which highlights consumption of existing assets at a faster rate than their renewal or upgrade. The effect of contributed and new assets on the depreciated replacement cost is shown in the light colour bar.



# Figure 11: Projected Depreciated Replacement Cost

# 6.4 Key Assumptions made in Financial Forecasts

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

Key assumptions made in this asset management plan are:

- Buildings and Structures assets will remain in Council ownership throughout the planning period.
- Maintenance costs are largely based on historical expenditure and assumes no significant increases in service requirements.
- A valuation report prepared by AVP Valuers in May 2012 has determined the asset values.

# 7. ASSET MANAGEMENT PRACTICES

# 7.1 Accounting/Financial Systems

### 7.1.1 Accounting and financial systems

The Shire of Boyup Brook uses QuickBooks for its financial management system and uses Asset Online software system for asset accounting purposes.

## 7.1.2 Accountabilities for financial systems

Accountabilities and responsibilities are divided between the Manager Administration and Assets, and Finance Officer.

# 7.1.3 Accounting standards and regulations

As well as complying with Australian Accounting Standards, the Shire must comply with the Western Australia Local Government Act 1995 and the Local Government (Finance) Regulations 1996. Accounting Standard AASB116 – "Property, Plant and Equipment" is the significant regulatory requirement relevant to accounting for assets.

# 7.1.4 Capital/maintenance threshold

The Shires Capital Threshold Policy specifies a limit of \$1,000 for expenditure that is expensed in the current year. Expenditure over \$1,000 on an asset is classed as capital expenditure and capitalised against the asset.

#### 7.1.5 Required changes to accounting financial systems arising from this AM Plan

The general ledger may require recoding to allow Council to differentiate between operational costs, maintenance costs, upgrades/expansion, new and renewal costs. The Shire is examining the feasibility on introducing new financial accounting software during 2012/13. Should a new system be purchased and implemented, consideration needs to be given to the structure of the Chart of Accounts to ensure the collection and differentiation of operational and maintenance data is possible.

# 7.2 Asset Management Systems

#### 7.2.1 Asset management system

The Asset Management system is a combination of the spreadsheet asset register and current operating procedures.

#### 7.2.2 Asset registers

The Shire maintains a detailed Asset Register for this asset class by utilising the Assets Online software system.

#### 7.2.3 Linkage from asset management to financial system

The linkage from the financial system to the asset register is manual, with officers inputting data into both the QuickBooks financial system and then into the Asset Online software system.

#### 7.2.4 Accountabilities for asset management system and data

Accountabilities and responsibilities are divided between the Finance Staff and the Manager Administration and Assets. The Manager Administration and Assets provides information on the relevant assets and allocates costs associated with payroll and purchasing systems. The Finance Staff create the records within the Asset Register and post expenditure direct to the Asset Register.

#### 7.2.5 Required changes to asset management system arising from this AM Plan

No changes have been identified to the asset management system, but subsequent revisions of this Buildings and Structures Asset Management Plan may identify further improvements to existing system.

# 7.3 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,
- Financial asset values.

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

- The projected Works Program and trends,
- The resulting budget and long term financial plan expenditure projections.
- Financial sustainability indicators.

These will impact the Long Term Financial Plan, Corporate Business Plan, Annual Budget and Departmental Business Plans and Budgets.

# 7.4 Standards and Guidelines

Standards, guidelines and policy documents referenced in this asset management plan are:

- Shire of Boyup Brook Asset Capitalisation Threshold Policy
- Shire of Boyup Brook Asset Management Policy.
- Shire of Boyup Brook Asset Management Strategy.
- Department of Local Government (WA) Asset Management Framework and Guidelines.

# 8. PLAN IMPROVEMENT AND MONITORING

# 8.1 **Performance Measures**

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

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

# 8.2 Improvement Plan

The asset management improvement plan generated from this asset management plan is shown in Table 8.2.

Task No	Task	Responsibility	Resources Required	Timeline
1	Conduct detailed inspection of all assets with a Fair- Minus condition rating to determine renewal requirements	Manager Administration & Assets (MAA)	Internal	June 2013
2	Assess the first year of Plan against actual costs	MAA	Internal	June 2014
3	Prepare and prioritise a long term plan and ranking systems for renewal & upgrade/new expenditure.	CEO/MAA	Internal	June 2014
4	Review of property maintenance practices to ensure alignment with service level requirements.	CEO/MAA	Internal	Annually
5	Ongoing rolling program of data collection (every 4 Yrs).	CEO/MAA	ТВА	Every 4 Yrs
6	Develop and review detailed risk analysis and planning for critical assets.	CEO/MAA	Internal	June 2015
7	Review service levels and commence internal and Elected Member consultation on service level provision.	CEO/MAA	Internal	June 2015
8	Community consultation on service level provision.	CEO/MAA	TBA	June 2015

# Table 8.2: Improvement Plan

# 8.3 Monitoring and Review Procedures

This asset management 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 decision process.

The Plan has a life of 4 years and a major revision is to be done within six months of its expiry.

# REFERENCES

Shire of Boyup Brook Plan for the Future

Shire of Boyup Brook 2010/2011 Annual Budget.

- Shire of Boyup Brook Forward Capital Works Plan 2010/11 2014/15.
- DVC, 2006, Asset Investment Guidelines, Glossary, Department for Victorian Communities, Local Government Victoria, Melbourne, <u>http://www.dpcd.vic.gov.au/localgovernment/publications-and-research/asset-management-and-financial</u>.
- IPWEA, 2006, International Infrastructure Management Manual, Institute of Public Works Engineering Australia, Sydney, <u>www.ipwea.org.au</u>.
- IPWEA, 2008, *NAMS.PLUS Asset Management* Institute of Public Works Engineering Australia, Sydney, <u>www.ipwea.org.au/namsplus</u>.
- IPWEA, 2009, Australian Infrastructure Financial Management Guidelines, Institute of Public Works Engineering Australia, Sydney, <u>www.ipwea.org.au/AIFMG</u>.
- IPWEA, 2011, Asset Management for Small, Rural or Remote Communities Practice Note, Institute of Public Works Engineering Australia, Sydney, <u>www.ipwea.org.au/AM4SRRC</u>.
- DLG, 2011, Asset Management Framework and Guidelines, Department of Local Government, Western Australia, <u>http://integratedplanning.dlg.wa.gov.au/DeliverAssetManagement.aspx</u>

# **APPENDICES**

Appendix A	Maintenance Response Levels of Service
Appendix B	Projected 10 year Capital Renewal Works Program
Appendix C	Planned Upgrade/Exp/New 10 year Capital Works Program A
Appendix D	Abbreviations
Appendix E	Glossary

ASSET CATEGORY	RESPONSE TIME (WORKING DAYS) FOR DEFECTS WITH RISK LEVELS OF:			
	HIGH	MODERATE	LOW	
Amenities Buildings	1	2	20	
Civic Buildings	1	2	20	
Residential Buildings	1	2	20	
Community Buildings	1	2	20	
Recreation Buildings	1	2	20	
Recreation Infrastructure	1	2	20	
Other Structures	1	2	20	

# Appendix A Maintenance Response Levels of Service

Asset Name	Location	Projected Renewal Year	Renewal Cost \$	Useful Life (Years)
Recreation Reserve	Beatty Street	2013	\$115,000	40
			\$115,000	
Asset Name	Location	Projected Renewal Year	Renewal Cost \$	Useful Life (Years)
Shire Depot	Connolly Street	2015	\$93,000	40
			\$93,000	
Asset Name	Location	Projected Renewal Year	Renewal Cost \$	Useful Life (Years)
Federation Square	Jayes Road	2016	\$10,000	15
Federation Square	Jayes Road	2016	\$3,000	15
			\$13,000	
	Asset Name Recreation Reserve Asset Name Shire Depot Asset Name Federation Square Federation Square	Asset Name Location   Recreation Reserve Beatty Street   Asset Name Location   Shire Depot Connolly Street   Asset Name Location   Federation Square Jayes Road   Federation Square Jayes Road   Federation Square Jayes Road	Asset NameLocationProjected Renewal YearRecreation ReserveBeatty Street2013Asset NameLocationProjected Renewal YearShire DepotConnolly Street2015Asset NameLocationProjected Renewal YearFederation SquareJayes Road2016Federation SquareJayes Road2016	Asset NameLocationProjected Renewal YearRenewal Cost SRecreation ReserveBeatty Street2013\$115,000Asset NameLocationProjected Renewal YearRenewal Cost SShire DepotConnolly Street2015\$93,000Asset NameLocationProjected Renewal YearRenewal Cost SAsset NameLocationProjected Renewal YearRenewal Cost SAsset NameLocationProjected SRenewal Cost SAsset NameLocationProjected SRenewal Cost SFederation SquareJayes Road2016\$10,000 \$3,000Federation SquareJayes Road2016\$3,000 \$13,000

# Appendix B Projected 10 year Capital Renewal Works Program

Asset ID	Asset Name	Location	Projected Renewal Year	Renewal Cost \$	Useful Life (Years)
Skate Park Lighting Timber & Iron Patio & Brick	Federation Square	Jackson Street	2017	\$6,000	16
Paving	Aquatic Centre	Jayes Road	2017	\$23,000	20
Paved Area with 2 Barbecues	Aquatic Centre	Jayes Road	2017	\$25,000	15
8 Basketball Backboards	Recreation Reserve	Beatty Street	2017	\$16,000	15
Basketball Court Lighting	Recreation Reserve	Beatty Street Mayanup-Tonebridge	2017	\$40,000	20
Gazebo	Rest Area	Road	2017	\$20,000	15
				\$130,000	

Asset ID	Asset Name	Location	Projected Renewal Year	Renewal Cost \$	Useful Life (Years)
Gazebos	Federation Square	Jayes Road	2019	\$36,000	18
Barbecue Shelter	Federation Square	Jayes Road	2019	\$16,000	18
Toilet	Rest Area	Mayanup-Tonebridge Road	2019	\$5,000	15

\$57,000

# Appendix B Projected 10 Year Capital Renewal Works Program

Asset ID	Asset Name	Location	Projected Renewal Year	Renewal Cost \$	Useful Life (Years)
Arts and Craft Centre	Arts Centre	52 Jayes Road	2020	\$140,000	40
Football Gents Toilet Block	Recreation Reserve	Beatty Street	2020	\$33,000	40
Football Women's Toilet Block	Recreation Reserve	Beatty Street	2020	\$33,000	40
Recycling Shed	Waste Transfer Station	Dinninup Road	2020	\$65,000	35
Diving Board	Aquatic Centre	Jayes Road	2020	\$38,490	30
4 x Bitumen Basketball Courts	Recreation Reserve	Beatty Street	2020	\$189,000	15
Storage Sheds	Recreation Reserve	Beatty Street	2020	\$6,000	20

\$504,490

Asset ID	Asset Name	Location	Projected Renewal Year	Renewal Cost \$	Useful Life (Years)
Playground Shade Shelter	Federation Square	Jayes Road	2022	\$15,000	15
Concrete Skate Park 5 x Steel Framed Shade	Federation Square	Jayes Road	2022	\$84,000	20
Shelters	Aquatic Centre	Jayes Road	2022	\$25,000	15
Lighting General Purpose Storage	Aquatic Centre	Jayes Road	2022	\$20,000	20
Shed	Recreation Reserve	Beatty Street	2022	\$12,000	20
2 Sets AFL Goal Posts	Recreation Reserve	Beatty Street	2022	\$10,000	15
Lighting	Recreation Reserve	Beatty Street	2022	\$83,000	20
Water Storage Tank	Recreation Reserve	Beatty Street	2022	\$8,000	30
Cricket Practice nets	Recreation Reserve	Beatty Street	2022	\$32,000	20
Reticulation	Recreation Reserve	Beatty Street	2022	\$74,000	20
Storage Shed	Tennis Club	Beatty Street	2022	\$5,000	30
				\$368,000	

# Appendix D Abbreviations

- AAAC Average annual asset consumption
- AMP Asset management plan
- ARI Average recurrence interval
- **BOD** Biochemical (biological) oxygen demand
- **CRC** Current replacement cost
- **CWMS** Community wastewater management systems
- DA Depreciable amount
- EF Earthworks/formation
- IRMP Infrastructure risk management plan
- LCC Life Cycle cost
- LCE Life cycle expenditure
- MMS Maintenance management system
- PCI Pavement condition index
- **RV** Residual value
- SS Suspended solids
- vph Vehicles per hour

# Appendix E Glossary

## Annual service cost (ASC)

- 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 useful life (or total future economic the benefits/service potential) and totalled for each and every asset OR by dividing the carrying amount (depreciated replacement cost) by the remaining useful life (or remaining future economic benefits/service potential) and totalled for each and every asset in an asset category or class.

#### Borrowings

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

### Capital expenditure

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

#### **Capital expenditure - expansion**

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

# Capital expenditure - new

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

# Capital expenditure - renewal

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

#### Capital expenditure - upgrade

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

#### **Capital funding**

Funding to pay for capital expenditure.

#### **Capital grants**

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

#### **Capital investment expenditure**

See capital expenditure definition

#### **Capitalisation threshold**

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

#### **Carrying amount**

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

#### **Class of assets**

See asset class definition

#### Component

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

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

#### 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.
- 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 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 nondisclosure has the potential, individually or collectively, to influence the economic decisions of users taken on the basis of the financial report or affect the discharge of accountability by the management or governing body of the entity.

# Modern equivalent asset

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

# Net present value (NPV)

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

#### Non-revenue generating investments

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

## **Operations expenditure**

Recurrent expenditure, which is continuously required to provide a service. In common use the term typically includes, eg power, fuel, staff, plant equipment, oncosts 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.

#### **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 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/subcomponents 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