




**Shire of Toodyay**

## **LAND & BUILDINGS**

### **Asset Management Plan (Comprehensive)**





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# 1. EXECUTIVE SUMMARY

## 1.1 The Purpose of the Plan

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

Land and Buildings Asset Management Plan details information about Land and Building assets including actions required to provide an agreed level of service in the most cost effective manner while outlining associated risks. The plan defines the services to be provided, how the services are provided and what funds are required to provide the services over a 10-year planning period.

The Land and Buildings Asset Management Plan is the link between the Council's corporate, strategic and operational objectives, interpreted as the provision of specific buildings to the community for their enjoyment of agreed Levels of Service for various community and lifestyle activities.

This plan combines the strategic planning, continuous improvement and operational management factors to provide Levels of Service associated with community needs and to a certain degree, community expectations, (although it is fully acknowledged that community expectations may never be fully realised).

The plan provides the guidelines for management of the Land and Building assets and services to ensure:

Best appropriate practice asset and services management for Shire of Toodyay;

Competent decision-making based on quality information and contemporary management techniques; and

Consistent service provision according to needs based criteria.

The plan relates all relevant regulatory, legislative and reasonable practices against the Levels of Service and risk management framework.

This plan also acknowledges that:

- Determining the sustainability of existing programs may involve the review of all current assets against

the Levels of Service to identify and address any 'gaps'.

- From time to time there will be external strategies, e.g. new Government policy or climate change initiatives which may materially impact on the Land and Building assets and services.
- Technology changes may also impact on the asset management regime;
- The Shire has a number of Heritage buildings; which provide additional challenges in terms of how they are managed over time and
- There will be over time steps undertaken to improve the energy efficiency of Council properties taking into account the age and heritage restrictions that can impose limitations on such efforts.

## 1.2 Asset Description

The Land and Buildings network comprises:

- Freehold land
- Buildings - Non- specialised
- Buildings - Specialised
- Buildings - Specialised (Heritage)

These assets have a replacement value of \$27,627,445.

Note this does not include reserved land which Council has management responsibility but not ownership of despite often having Building assets on them.

## 1.3 Levels of Service

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

Council provides a wide range of building types to accommodate a broad array of community activities including:

- Municipal buildings
- Recreational facilities
- Amenities blocks
- Community facilities
- Minor buildings

Our present funding levels are insufficient to continue to manage risks in the medium term.

## 1.4 Future Demand

The main demands for new services are created by:

- Strategic and Corporate Goals
- Population and Demographic changes
- Consumer preferences
- Regulations
- Technological changes
- Environmental awareness

These will be managed through a combination of managing existing assets, upgrading of existing assets and providing new assets to meet demand and demand management.

## 1.5 Lifecycle Management Plan

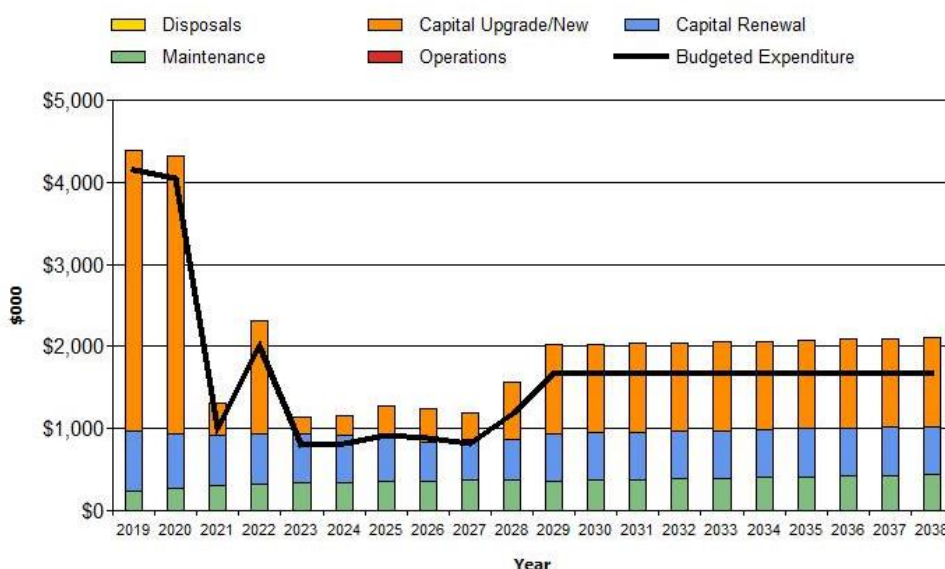
### What does it Cost?

The projected outlays necessary to provide the services covered by Land and Buildings Asset Management Plan includes operations, maintenance, renewal and upgrade of existing assets over the 10-year planning period is \$16,818,878 or \$1,681,888 on average per year.

## 1.6 Financial Summary

### What we will do

Estimated available funding for this period is \$13,947,510 or \$1,394,751 on average per year which is 83% of the cost to provide the service. This is a funding shortfall of \$287,136 on average per year. Projected expenditure required to provide services in the AM Plan compared with planned expenditure currently included in the Long Term Financial Plan are shown in the figure below.



Council plan to provide Land and Buildings assets services for the following:

- Operation, maintenance, renewal and upgrade of Council Buildings and Structures to meet service levels set by in annual budgets.
- Identify highest priority for renewals and incorporate them into the 10-year planning period.



## What we cannot do

Council do **not** have enough funding to provide all services at the desired service levels or provide for new services not within budget scope.

## Managing the Risks

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

- The number of Buildings that the Shire is responsible to manage;
- Insufficient resources including funding to replace/renew building assets in accordance with renewal forecasts;
- Insufficient own-source funding to increase asset stocks;
- Asset failure; and
- Reliance on grant funding for construction of new assets and upgrade and renewal of existing asset stocks.

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

- 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;
- Making trade-offs between service levels and costs to ensure that the community receives the best return from land and buildings;
- Improving our efficiency in operating, maintaining, replacing existing and constructing new assets to optimise life cycle costs; and
- Identifying assets surplus to needs for disposal to make saving in future operations and maintenance costs.

## 1.7 Asset Management Practices

Our systems to manage assets include:

- Synergy soft

## 1.8 Monitoring and Improvement Program

The next steps resulting from Land and Buildings Asset Management Plan to improve asset management practices are:

- Define the delivered customer service levels and develop performance measures;
- Consult with customers and make service level based decisions;
- Review annual budget preparation to recognise target levels of service;
- Review the Shire's current Land and Building assets management staffing structure against work requirements;
- Monitor performance of the Asset Management Plans service levels.



## 2. INTRODUCTION

### 2.1 Background

The Land and Buildings Asset Management Plan communicates the actions required for the responsive management of assets (and services provided from assets), compliance with regulatory requirements, and funding needed to provide the required levels of service over a 10-year planning period.

The Land and Buildings Asset Management Plan is to be read with the following Shire of Toodyay planning documents:

- Strategic Community Plan – sets out the long term strategic direction of the council
- Corporate Business Plan - outlines the council's key priorities and actions over the next four years
- Long Term Financial Plan – outlines all aspects of key financial strategic objectives and commitments over a 10 year period
- Annual Budget – outlines how future expenditure will be funded
- Buildings Preservation Plans – details current levels of service, strategies and information requirements that feed into work instructions, contract specifications and reporting requirements.

The Land and Building assets covered by this Land and Buildings Asset Management Plan are shown in Table 2.1.

**Table 2.1: Assets covered by this Plan**

ASSET CATEGORY	DIMENSION	REPLACEMENT VALUE
Freehold Land		\$11,222,000
Buildings – Non-Specialised	5	\$511,859
Buildings - Specialised	75	\$9,579,733
Buildings - Heritage	22	\$6,313,853
<b>TOTAL</b>		<b>\$27,627,445</b>

Key stakeholders in the preparation and implementation of Land and Buildings Asset Management Plan are shown in Table 2.1.1.

**Table 2.1.1: Key Stakeholders in the Land and Buildings Asset Management Plan**

KEY STAKEHOLDER	ROLE IN ASSET MANAGEMENT PLAN
Councillors	<ul style="list-style-type: none"><li>• Represent needs of community/stakeholders,</li><li>• Allocate resources to meet planning objectives in providing services while managing risks,</li><li>• Ensure service sustainable.</li></ul>
Executive Team	<ul style="list-style-type: none"><li>• To ensure that Asset Management policy and strategy is being implemented as adopted,</li><li>• To ensure that long-term financial needs to sustain the assets for the services they deliver are advised to Council for its strategic and financial planning processes.</li></ul>
Residents, Community User Groups, visitors and Tourists	<ul style="list-style-type: none"><li>• Users of facilities ,</li><li>• Consultation on key issues.</li></ul>
Council Staff	<ul style="list-style-type: none"><li>• As the designated strategic custodian of Land and Building assets, responsible for the overall management of the assets,</li><li>• To ensure provision of the required/agreed level of maintenance services for asset components,</li><li>• To ensure design and construction of assets meets required/agreed standards,</li><li>• To ensure that risk management practices are conducted as per Council policy,</li><li>• To ensure that adequate financial information is provided to Council to the relevant asset managers to facilitate sound management of the assets.</li></ul>
Insurance Provider	<ul style="list-style-type: none"><li>• Partner in insurance and risk management issues.</li></ul>
State and Federal Government Departments	<ul style="list-style-type: none"><li>• Periodic provision of advice, instruction, grants funding to assist with the provision of community assets.</li></ul>



## 2.2 Goals and Objectives of Asset Ownership

Shire of Toodyay exists to provide services. Some of these services are provided by Land and Building assets.

The framework of the Land and Buildings Asset Management Plan is based on the following principles:

- Accountability for Assets – refers to strengthening of the ‘ownership’ of the assets and services to increase performance and accountability;
- Planning and Budgeting – the current and future financial needs, specifically the Renewal Profile for the assets and alignment with the respective depreciation calculations;
- Acquiring Assets – describing the processes of increasing asset stocks, including assets described in the Council’s Capital Works Program;
- Operating and Maintaining Assets – maintenance and operation of assets is the primary activity;
- Disposing of Assets – this section has limited application to Council Buildings because of the “Heritage” status of the majority of buildings; and
- Asset Recording, Valuing and Reporting – including statutory recording and valuing, and performance reporting.

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

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

Key elements of the planning framework are

- Levels of service – specifies the services and levels of service to be provided,
- Future demand – how this will impact on future service delivery and how this is to be met,

- Life cycle management – how to manage its existing and future assets to provide defined levels of service,
- Financial summary – what funds are required to provide the defined services,
- Asset management practices – how we manage provision of the services,
- Monitoring – how the plan will be monitored to ensure objectives are met,
- Asset management improvement plan – how we increase asset management maturity.

Other references to the benefits, fundamentals principles and objectives of asset management are:

- International Infrastructure Management Manual 2015
- ISO 55000

The primary issues for the Land and Building assets are:

- Good data – dimensional and condition data stored in an Asset Inventory that can be uploaded to the Asset Register;
- Increasing the strategic and tactical management of the assets and services – understanding the renewal and maintenance needs for the network and actively managing those needs, both operationally and financially;
- Documentation of the Levels of Service for the Land and Building assets, expressed as Service Standards and Service Targets;
- An appreciation of the cost of provision of the services;
- The future demand for the assets and services, understanding the growth and change factors that influence the management regime;
- Forecasting the renewal and maintenance costs for the next 10+ years, and understanding the affordability and sustainability of the assets and services to the current levels.

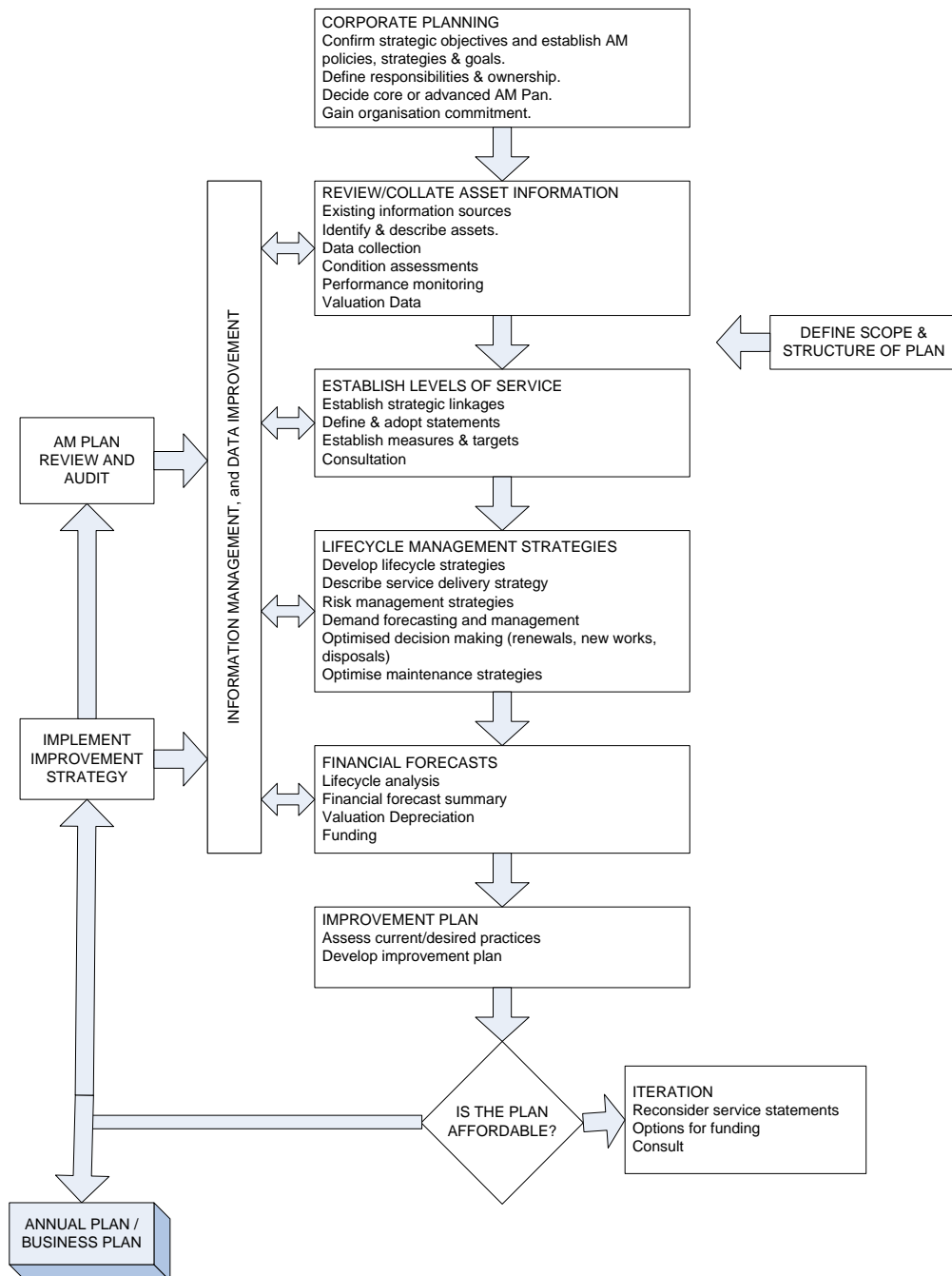
The purpose of this Land and Buildings Asset Management Plan is to:

- Improve understanding of the Land and Building assets and associated services;
- Improve budgeting and forecasting of asset related management options and costs, particularly in understanding the long term investment in capital renewal;
- Afford a level of confidence in forward works programs, maintenance and provide support for any business cases associated with securing the necessary funding requirements; and

- Provide the guidance for elected members and the organisation in taking positive steps toward advanced asset management planning.

### **Road Map for preparing an Asset Management Plan**

Source: IPWEA, 2006, IIMM, Fig 1.5.1, p 1.11



## 2.3 Core and Advanced Asset Management

This Land and Buildings Asset Management Plan is prepared as a 'core' asset management plan over a 10 year planning period in accordance with the International Infrastructure Management Manual. It is prepared to meet minimum legislative and user 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.

Future revisions of Land and Buildings Asset Management Plan will move towards 'advanced' asset management using a 'bottom up' approach for gathering detailed asset information for individual assets to support the provision of activities and programs to meet agreed service levels in a financially sustainable manner.

Advanced asset management will show features such as:

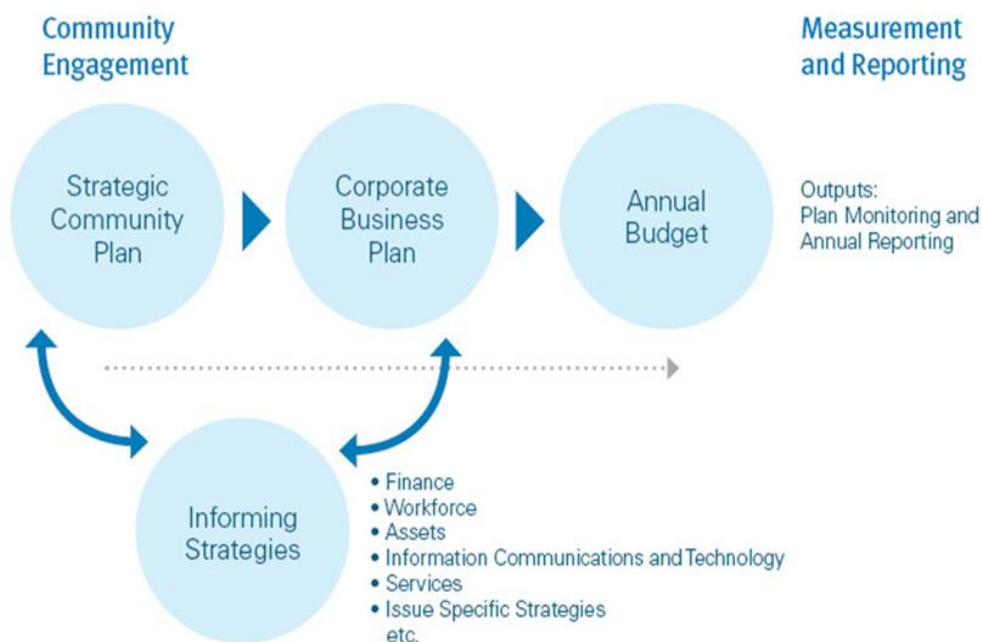
- Long term optimised lifecycle,
- Corporate objectives and asset performance that are aligned and complimentary,
- Information systems that are integrated and used effectively, and
- Strategies are risk based, with appropriate use of predictive models, problem solving and iterative continuous improvement.

Ideally these will begin to involve community consultation for input and testing of community willingness to pay for any increases in the level of service to be provided, recognising that different intervention options will have different costs.

As the Shire moves into a more 'advanced' phase it will address the whole portfolio of Land and Buildings assets and more formally apply critically and risk management principles to better determine the frequency and scope of condition assessment inspections. The Shire will collect more detailed Buildings data with greater breakdown into various components and will apply quality standards to test the level of service being provided and use this to assist the condition assessment process in deciding on future needs. The resultant data will be more rigorously analysed and optimised decision making typically employed to determine priorities for works. The analysis will give a more accurate picture on the remaining life of the Building assets down to their various components, their current replacement cost and their depreciated replacement cost.

The Integrated Planning and Reporting Framework provides the basis for improving the practice of strategic planning in Local Government. Asset Management is a key component of the Integrated Planning and Reporting Framework, as it clearly links to the Strategic Community Plan, Corporate Business Plan and Annual Report, enabling these documents to be influenced by the development of integrated planning elements such as Asset Management Plans.

### *Elements of Integrated Planning and Reporting Framework*



### 3. LEVELS OF SERVICE

#### 3.1 Customer Research and Expectations

This section of the Land and Buildings Asset Management Plan describes the Levels of Service framework development process for Land and Building assets and services for The Shire of Toodyay. The framework recorded was derived from interpretation of Council's corporate objectives and strategies, perceived customer 'needs' and relevant statutory requirements.

To both fully understand and deliver on desired Levels of Service requires suitable asset and services management policies, guidelines, inspection regimes, condition assessment programs, customer inquiry systems and asset and services management practices and processes, plus the development and implementation of various audits to validate the outputs.

Statistical indicators show that The Shire of Toodyay has a static population base. The median age for the population is also increasing. This factor confirms the need to now specify the Levels of Service for defined service programs on behalf of the community. Likewise the need to understand the affordability of the programs becomes an imperative for the organisation and the community.

Levels of Service represent a balance between funding, physical resources and customer needs. The Levels of Service framework includes the following elements, (defined as):

**Levels of Service:** the service quality for a particular activity against which service performance may be measured - a high level statement linking strategic objectives with service delivery;

**Service Standards:** the manner of provision of the services, (in quantitative terms, e.g. function, design and amenity / presentation).

**Service Targets:** the targets for the services required to achieve and maintain the Service Standards, measured as intervention criteria and response times. The Service Targets are used to calculate the level of resources, costs and performance required to achieve against the needs.

This Land and Buildings Asset Management Plan introduces the framework concept to account for Levels of Service according to whole of life programs for the assets.

The Levels of Service defined in this Plan will be used to:

- inform stakeholders of the proposed type and Levels of Service to be offered;
- identify the costs and benefits of the services offered;
- enable stakeholders to assess suitability, affordability and equity of the services offered;
- measure the effectiveness of the Land and Buildings Asset Management Plan, and;
- focus the asset and services management strategies required and developed to deliver the required Levels of Service.

The Levels of Service framework is to be based on:

- Research and needs – predominantly historical information;
- Strategic and Corporate Goals - identifying the specific objectives which the organisation wishes to achieve from the Levels of Service, together with guidance to define the scope of current and future services offered and the manner of the service delivery;
- Legislative requirements – the legislation, regulations, environmental standards and industry and Australian Standards that impact on the way assets are managed; and
- Design Standards and Codes of Practice - Australian Design Standards provide a set of design parameters for the delivery of buildings and facilities.

Future revisions of the asset management plan will incorporate community consultation on service levels and costs of providing the service.





## 3.2 Strategic and Corporate Goals

Land and Buildings Asset Management Plan is prepared under the direction of the Shire of Toodyay vision, mission, goals and objectives.

Our vision is:

“We are a vibrant rural community that celebrates our past and embraces a sustainable future.”

Our mission is:

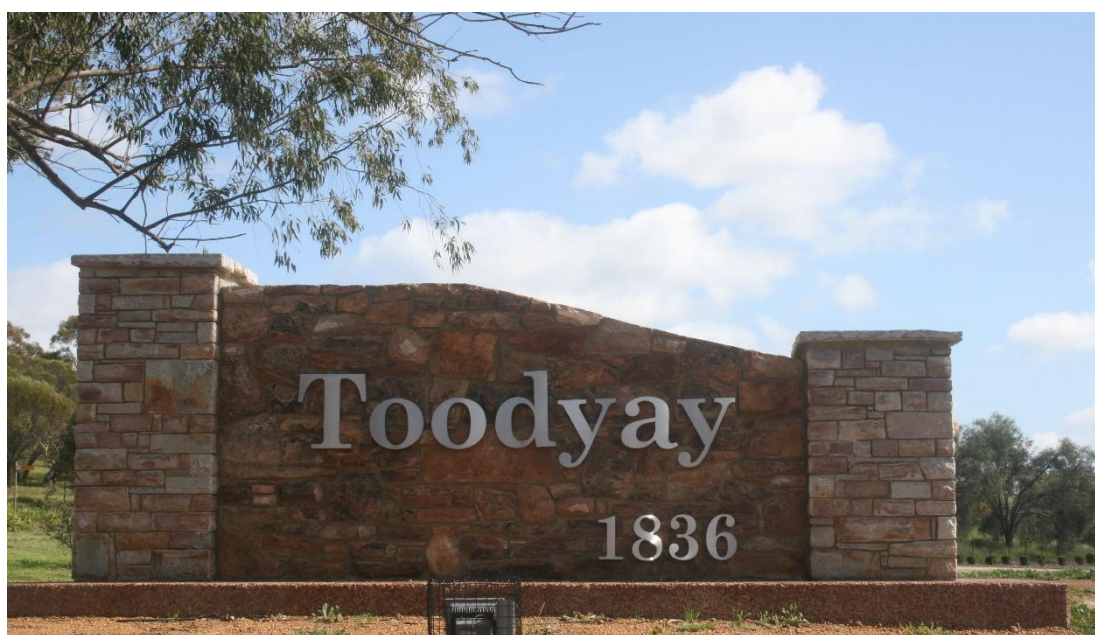
“Local Government and community working together to obtain the best possible social, economic and environmental outcomes for the Toodyay Shire.”

Relevant goals and objectives and how these are addressed in Land and Buildings Asset Management Plan are:

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

GOAL	OBJECTIVE	HOW GOAL AND OBJECTIVES ARE ADDRESSED IN AM PLAN
<b>Built environment:</b> Our buildings, roads and transport	<b>Objective 2:</b> Ensure our built environment meets community needs. <i>S 2.3: Ensure appropriate facilities to engage and retain young people.</i> <b>Objective 3:</b> Improve processes to support the built environment. <i>S 3.2 Implement asset rationalisation and consolidation.</i>	By programmed building renewals, asset disposals, asset replacement/upgrade and new asset constructions.  By improving systems and procedures to obtain more information in relation to the assets.  By ensuring systems and procedures are in place and monitored to keep risk at an acceptable level.

The Shire of Toodyay will exercise its duty of care to ensure public safety in accordance with the Risk Management Plan prepared in conjunction with this Land and Buildings Asset Management Plan. Management of risks is covered in Section 6.



### 3.3 Legislative Requirements

There are many legislative requirements relating to the management of Land and Building assets. These include:

**Table 3.3: Legislative Requirements**

LEGISLATION	REQUIREMENT
<i>Local Government Act 1995</i>	Sets out role, purpose, responsibilities and powers of local governments including the preparation of a Long Term Financial Plan supported by AMPs for sustainable service delivery. The Act also provides guidance on the rules around local governments who derive revenue from operations such as non-core business.
<i>Building Act 2011</i> <i>Building Regulations 2012</i>	The Building Act 2011 and Building Regulations 2012 is the legislation that controls how buildings are to be constructed and set the principal standards for this as the Building Code of Australia.  The Building Code of Australia (BCA) is Volumes One and Two of the National Construction Code (NCC). The BCA is produced and maintained by the Australian Building Codes Board (ABCB) on behalf of the Australian Government and State and Territory Governments. The BCA has been given the status of building regulations by all States and Territories.
<i>Aboriginal Heritage Act 1972</i>	Preservation of the community places and objects used by traditional owners.
<i>Aboriginal Heritage Regulations 1974</i>	Preservation of the community places and objects used by traditional owners.
<i>Native Title Act 1999</i>	Regulations and requirements that the Shire must comply with in relation to the use of land.
<i>Heritage of Western Australia Act 1990</i>	Protection of Places of State Significance included in the State Register of Heritage Places get protection from this legislation.
<i>Planning and Development Act 2005</i>	Governs what planning approvals are required in relation to Shire buildings and is used in conjunction with the Shires Planning Scheme and Local Planning Policies
<i>Dangerous Goods Safety Act 2004</i>	Relates to the safe storage, handling and transport of dangerous goods.
<i>Health (Miscellaneous Provisions) Act 1911</i>	Relates to the handling and disposal of hazardous materials including asbestos and health requirements in relation to buildings
<i>Occupational Health and Safety Act 1984</i>	The Occupational Health and Safety Act is concerned with protecting the safety, health and welfare of people engaged in work or employment. Full consideration and application of the Act should be given in order to identify, manage and reduce or mitigate the risk of harm to the Shire's employees.
<i>OSH Regulations 1996</i>	The guidelines for employees and employers to undertake within the work environment.
<i>Disability Discrimination Act 1992</i>	The Federal Disability Discrimination Act 1992 (D.D.A.) provides protection for everyone in Australia against discrimination based on disability. It encourages everyone to be involved in implementing the Act and to share in the overall benefits to the community and the economy that flow from participation by the widest range of people.
<i>Disability Services Act 1993</i>	An Act for the establishment of the Disability Services Commission and the Ministerial Advisory Council on Disability, for the furtherance 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.
<i>Disability Services Regulations 2004</i>	Current amendments to Disability Services Act (1993)
<i>Accounting Standards</i>	AASB 5 Non-Current Assets Held for Sale and Discontinued Operations AASB 13 Fair Value Measurement AASB 116 Property, Plant and Equipment AASB 118 Revenue AASB 119 Employee Benefits AASB 136 Impairment of Assets AASB 138 Intangible Assets AASB 140 Investment Property AASB 1051 Land Under Roads
<i>Other Standards and Regulations</i>	Other relevant documents include, but are not limited to: AS/NZS 4360: 1995 Risk Management All other relevant State and Federal Acts & Regulations All Local Laws and relevant policies of the organisation



### 3.4 Customer Levels of Service

Service levels are defined service levels in two terms, customer levels of service and technical levels of service. These are supplemented by organisational measures.

**Customer Levels of Service** measure how the customer receives the service and whether value to the customer is provided.

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

**Quality:** How good is the service ...

*What is the condition or quality of the service?*

**Function:** Is it suitable for its intended purpose ....

*Is it the right service?*

**Capacity/Use:** Is the service over or under used ...

*Do we need more or less of these assets?*

Council has not carried out research on customer expectations at a community-wide level. This will be investigated for Plan updates. Council will use this information in developing specific Levels of Service and in the allocation of resources in the Annual Budget. Council engineers and technical officers have traditionally been trained to work to an assumed level of service that is likely to be expected by the community. During any future consultation process Council will test this premise to make sure that it is correct or amend it accordingly.

The expected customer and technical service levels are detailed in Table 3.5 and are based on the following service expectations:

**Municipal buildings:** To provide customers and staff with facilities that are appropriately maintained, comfortable, and safe and meet the administrative needs and Council's corporate goals;

**Community facilities:** To provide the community with access to appropriately maintained buildings that are safe, comfortable and meet the functional needs of the community;

**Recreational facilities:** To provide the community with access to appropriately maintained buildings that are safe and support the delivery of community, sport and recreation activities;

**Amenities blocks:** To provide the community and visitors with sufficient access to public toilets that are safe, clean and appropriately maintained; and

**Minor buildings:** To provide buildings that are appropriately maintained, safe and meet the business operation needs.



## 3.5 Technical Levels of Service

**Technical Levels of Service:** Supporting the customer service levels are operational or technical measures of performance. These technical measures relate to the allocation of resources to service activities to best achieve the desired customer outcomes and demonstrate effective performance.

Technical service measures are linked to the activities and annual budgets covering:

- Operations – the regular activities to provide services (e.g. opening hours, cleaning, energy, inspections, etc).
- Maintenance – the activities necessary to retain an asset as near as practicable to an appropriate service condition. Maintenance activities enable an asset to provide service for its planned life (e.g. building and structure repairs),
- Renewal – the activities that return the service capability of an asset up to that which it had originally (e.g. building component replacement),
- Upgrade/New – the activities to provide a higher level of service (e.g. renovating building components) or a new service that did not exist previously (e.g. a new library).

Service and asset managers plan, implement and control technical service levels to influence the customer service levels. It is important to monitor the service levels provided regularly as these will change. The current performance is influenced by work efficiencies and technology, and customer priorities will change over time. Review and establishment of the agreed position which achieves the best balance between service, risk and cost is essential.

Table 3.5 shows the customer and technical levels of service expected to be provided under this AM Plan.

**Table 3.5: Customer and Technical Levels of Service**

### Municipal Buildings

<b>SERVICE STATEMENT</b>	Municipal buildings provide a safe working environment for Council staff and community members.
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SERVICE FACTORS	CUSTOMER SERVICE STANDARDS	TECHNICAL SERVICE STANDARDS
<b>FUNCTION</b>		
<b>Location</b>	Easy to find for public attendance, (physical location as well as clear signage and marking).	Typically located near the administrative centre or adjacent to other government facilities.
<b>Features</b>	Attractive premises which offer a range of civic and public services for the community.	Building style can be specific for the occupancy, plus be attractive to the occupants and users.
<b>Accessibility</b>	Well located to offer convenient access for total community.	Parking is available in near proximity. Disabled access is provided.
<b>DESIGN</b>		
<b>Building Layout</b>	May cater for individual services or a mixture of public and civic services.  Space and design match needs. Internal layout is practical.	Accommodation and functions according to industry standards. Service growth and extensions factored into building form. Acknowledge any seasonal needs.  Internal Fit-out: Attractive and appealing to customers and staff. May require emergency power back-up.
<b>Reception area / Directory</b>	Welcome / greeting / reception area with clearly signed facilities and directions.	Staffed reception during normal hours.
<b>Security</b>	Community and staff feel safe and confident accessing the building and services.	Security provided matches standards for the building, service types and location.

SERVICE FACTORS	CUSTOMER SERVICE STANDARDS	TECHNICAL SERVICE STANDARDS
		Security cameras may be installed if appropriate. Extensive external and internal lighting for feature and security lighting.
<b>Compliance</b>	Occupiers are aware of relevant compliance / fire service / evacuation procedures and can work with public in an emergency.	Meets all applicable regulations for occupancy and service types. Constant fire / electrical protection and monitoring.
<b>Heating / Cooling</b>	Building is maintained at a comfortable temperature and conditions.	High standard of air-conditioning to all public spaces and service areas with little variation in temperature ranges.
<b>Environmental Issues</b>	Building construction, maintenance and operation are consistent with contemporary standards for low environmental impact.	Low energy consumption building and low carbon footprint. Includes optimised natural features to contribute to sustainable outcomes.
<b>Communication</b>	Building communication capacity matches needs.	Excellent data and communication capacity throughout building.
<b>Toilets</b>	Toilets are conveniently accessible and maintained / operated to high standards according to building occupancy and needs.	Toilet categories align with adjacent use categories and occupation. Toilets located conveniently for all major users and public areas. May include baby nursing / change facilities. Disability access available to public toilet facilities.
<b>Indoor Activities / Exhibitions</b>	Convenient, accessible space available for indoor activities and exhibitions.	Activity spaces located with good public / pedestrian access and vehicle parking.
<b>Catering</b>	Catering facilities available to service normal needs.	Catering capacity aligned with typical occupancies and functions.
<b>Staff Facilities</b>	Staff have access to good quality facilities during normal occupancy.	Adequate areas and facilities for staff, e.g. lunch rooms.
<b>Storage</b>	Reasonable capacity storage available to cater for most occupancies.	Storage provided in proximity and contained areas according to occupancy and service type needs.
<b>Cleaner's Facilities</b>	Cleaner facilities available in building.	Cleaner's facilities and equipment / storage provided according to occupancies and services provided.
<b>Car parking</b>	Car parking internal to or in near proximity to building to cater for all occupancies during and after hours.	Car parking capacity to cater for full occupancy of building within 100 metres of building.
<b>Landscaping / Surrounds</b>	Landscaping and surrounds complement building image and character and functional areas.	Low maintenance treatments used as far as is practicable to maintain the theme of the building / precinct. Low water use plants used wherever practicable.
<b>Cultural Features</b>	Cultural features incorporated according to building purpose and character.	Cultural heritage artwork and/or artefacts add to building space theme and character.

SERVICE FACTORS	CUSTOMER SERVICE STANDARDS	TECHNICAL SERVICE STANDARDS
<b>AMENITY / PRESENTATION</b>		
<b>Image and Character</b>	Buildings reflecting the image and character of the town precinct – may include historical buildings.	Building and features suit streetscape and community themes.
<b>No visible graffiti</b>	All graffiti removed.	High response level for graffiti removal.
<b>No free rubbish or litter</b>	Well maintained surrounds with no litter.	Routine inspections and attention. Quick response times for reactive activities.
<b>Maintenance and operational activities</b>	No disruptions to major events from maintenance and operational activities.	Major maintenance/operational activities typically undertaken outside normal office hours.

### Community & Recreational Facilities and Other Buildings

<b>SERVICE STATEMENT</b>	Community buildings contribute positively to community lifestyle and services, and are readily accessible.
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SERVICE FACTORS	CUSTOMER SERVICE STANDARDS	TECHNICAL SERVICE STANDARDS
<b>FUNCTION</b>		
<b>Location</b>	Easy to find for public attendance, (physical location as well as clear signage and marking).	Typically located near the administrative centre or adjacent to other government facilities.
<b>Features</b>	Attractive premises which offer a range of civic and public services for the community.	Style reflects usage and is attractive to the occupants and users. May be historical buildings.
<b>Accessibility</b>	Well located to offer convenient access for total community.	Parking is available in near proximity. Disabled access is provided.
<b>DESIGN</b>		
<b>Building Layout</b>	May cater for individual services or a mixture of public and civic services.  Space and design match needs.  Internal layout is practical.	Accommodation and functions according to industry standards. Service growth and extensions factored into building form. Acknowledge any seasonal needs. <b>Internal Fit out:</b> Attractive and appealing to customers and staff. May require emergency power back-up.
<b>Reception area / Directory</b>	Welcome / greeting / reception area according to occupancy and use. Clearly signed facilities and directions.	May be staffed reception during normal hours and / or communication available for normal hours and after hours.
<b>Security</b>	Community feel safe and confident accessing building and services	Security provided matches standards for the building, service types and location. Security cameras may be installed if appropriate. Extensive external and internal lighting for feature and security lighting.
<b>Compliance</b>	Users are aware of evacuation procedures.	Meets all current regulations for occupancy and service types. Constant fire protection and monitoring if appropriate.

SERVICE FACTORS	CUSTOMER SERVICE STANDARDS	TECHNICAL SERVICE STANDARDS
Heating / Cooling	Building is maintained at a comfortable temperature and conditions.	High standard of air-conditioning to all public spaces and service areas with little variation in temperature ranges.
Environmental Issues	Building construction, maintenance and operation are consistent with contemporary standards for low environmental impact.	Low energy consumption building and low carbon footprint. Includes optimised natural features to contribute to sustainable outcomes.
Communication	Building communication capacity matches needs.	High standard data and communication capacity where required.
Toilets	Toilets are conveniently accessible and maintained / operated to high standards according to building occupancy and needs.	Toilets located conveniently for all major users and public areas. Showers may be included where appropriate. Disability access available to public toilet facilities.
Indoor Activities	Convenient, accessible space available for indoor activities.	Activity spaces designed in accordance with requirements.
Catering	Catering facilities available to service normal needs.	Basic kitchen facilities provided.
Staff Facilities	Staff have access to good quality facilities during normal occupancy.	Adequate areas and facilities for staff, e.g. lunch rooms.
Storage	Reasonable capacity storage available to cater for most occupancies.	Storage provided in proximity and contained areas according to occupancy / service needs.
Cleaner's Facilities	Cleaner facilities available in building.	Cleaner's facilities and equipment / storage provided according to occupancies and services provided.
Car parking	Car parking internal to or in near proximity to building to cater for all occupancies during and after hours.	Car parking capacity to cater for full occupancy of building within 200 metres of building.
Landscaping / Surrounds	Landscaping and surrounds complement building image and character and functional areas of space.	Low maintenance treatments used as far as is practicable to maintain the theme of the building / precinct.
Cultural Features	Cultural features incorporated according to building purpose and character.	Cultural heritage artwork and/or artefacts add to building space theme and character.
<b>AMENITY / PRESENTATION</b>		
Image and Character	Stand-out buildings reflecting the image and character of the town precinct – may include historical buildings.	Building and features suit streetscape and community themes.
No visible graffiti	All graffiti removed.	High response level for graffiti removal.
No free rubbish or litter	Well maintained surrounds with no litter.	Routine inspections and attention. Quick response times for reactive activities.
Maintenance and operational activities	No disruptions to major events from maintenance and operational activities.	Major maintenance/operational activities typically undertaken outside normal activity hours.



## 4. FUTURE DEMAND

### 4.1 Demand Drivers

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

### 4.2 Demand Forecasts

The present position and projections for demand drivers that may impact future service delivery and use of assets were identified and are documented in Table 4.3.

### 4.3 Demand Impact on Assets

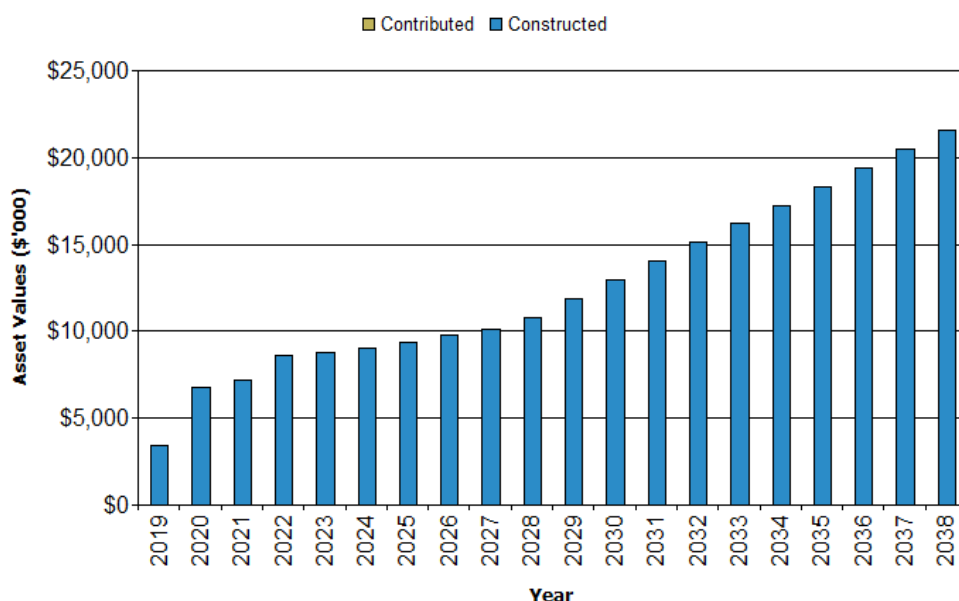
The impact of demand drivers that may affect future service delivery and use of assets are shown in Table 4.3.

*Table 4.3: Demand Drivers, Projections and Impact on Services*

DEMAND DRIVERS	PRESENT POSITION	PROJECTION	IMPACT ON SERVICES
Economic Demand	Increasing cost of maintaining infrastructure assets.	Anticipated to continue to increase.	Increasingly difficult to maintain the current level of service.
Social Demand	Shire of Toodyay has had a static population base over the last four years. Analysis of demographics shows an ageing population and less young people in the Shire.	Increase in demand for assets.	Universal access will be required.  Review and document levels of demand.
Technology	Condition monitoring and Asset Management systems – the need to manage data in the form of inventories, condition ratings, financial performance etc.	Anticipated to continue to change	Possible changes in construction techniques and maintenance practices.
Environment	Preference for environmentally friendly assets with lower whole of life costs.  Climate change risks – increased risk of wild fire, increased frequency and intensity of extreme rainfall and wind is likely to cause significant damage to Buildings assets.	Anticipated to continue	Cost of compliance: managers will have to ensure that assets are maintained at increasingly environmentally sustainable levels.



## 4.4 Demand Management Plan



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

Non-asset solutions focus on providing the required service without the need for asset ownership and management actions including reducing demand for the service, reducing the level of service (allowing some assets to deteriorate beyond current service levels) or educating customers to accept appropriate asset failures. Examples of non-asset solutions include providing services from existing infrastructure such as facilities that may be in another community area or public toilets provided in commercial premises.

The following initiatives/improvements are proposed to meet demand changes:

- Review the Shire's asset management staff structure to ensure that it can continue to deliver currently required tasks, as well as to develop and implement future practice improvements.
- Identify energy and water consumption targets for each building. Implement appropriate tactics in order to reach these targets.
- Identify (where appropriate) the capacity of each building in terms of usage.
- monitor (where appropriate) building's usage levels
- Identify future technologies that can facilitate more effective and cost efficient building management practices.

Further opportunities will be developed in future revisions of Land and Buildings Asset Management Plan.

## 4.5 Asset Programs to Meet Demand

The new assets required to meet growth will be constructed/acquired. New assets constructed/acquired are discussed in Section 5.5. The summary of the cumulative value of new contributed and constructed asset values is shown in Figure 1.

Figure 1: Upgrade and New Assets to meet Demand – (Cumulative)

Acquiring these new assets will commit Council funding to ongoing operations, maintenance and renewal costs for the period that the service provided from the assets is required.

## 5. LIFECYCLE MANAGEMENT PLAN

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

Life Cycle Management is recognised by the Shire of Toodyay as an essential component of the provision and management of assets and services. Life Cycle Management is primarily about using the data and processes to effectively provide, manage, maintain, renew, (and upgrade), existing Land and Building assets and services.

Lifecycle asset management means considering all management options and strategies as part of the asset lifecycle, from planning to disposal, (whole of life analysis). The objective of managing the assets in this manner is to look at long-term cost impacts, (or savings), when making asset and services management decisions.

Lifecycle management planning for Land and Building assets needs to contend with a range of life spans for the groups, types and components of assets. The intention is to progressively review those criteria to verify that they align with real conditions for Council.

### 5.1 Background Data

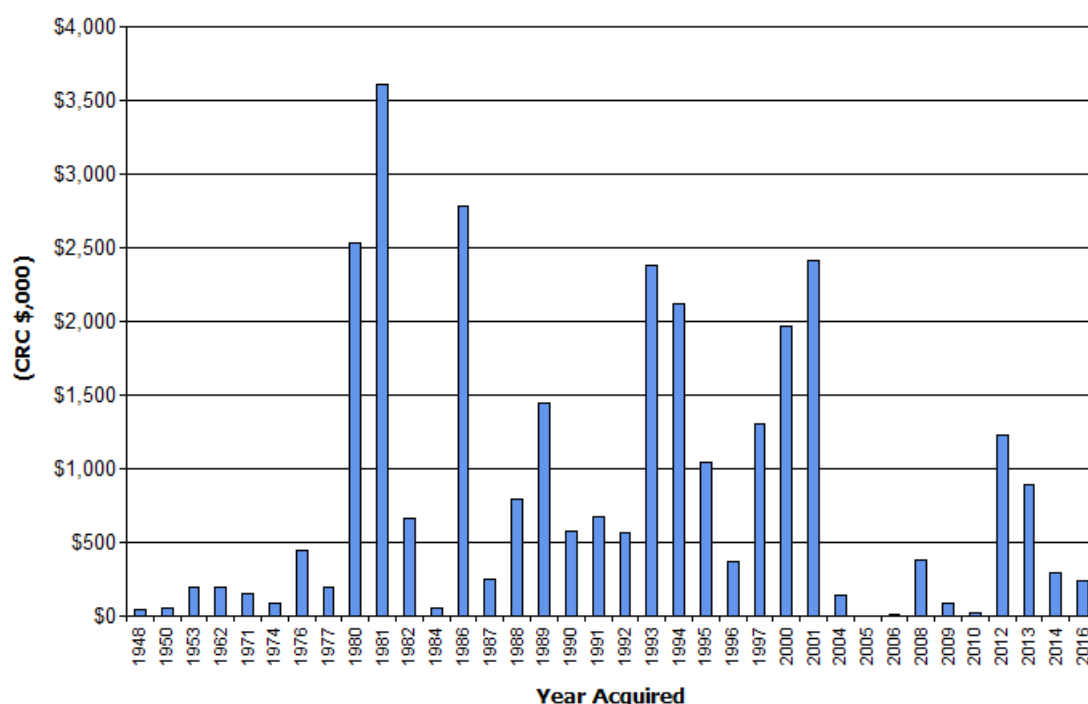
#### 5.1.1 Physical Parameters

The assets covered by Land and Buildings Asset Management Plan are shown in Table 2.1.

Council either owns or is responsible for the care and management of buildings used in the delivery of many Council services. There is an extensive range of building assets ranging from shelters and small sheds to large community facilities. These assets have been provided over many decades and as a result, they have been constructed to different standards and provide levels of fitout depending on the use of the building.

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

**Figure 2: Asset Age Profile**



### 5.1.2 Asset Capacity and Performance

Assets are generally provided to meet design standards where these are available.

Locations where deficiencies in service performance are known are detailed in Table 5.1.2.

**Table 5.1.2: Known Service Performance Deficiencies**

LOCATION	SERVICE DEFICIENCY
Recreation and Showgrounds	No longer fit for purpose – buildings, facilities and land area deficient
Administration Offices	Transportable building being used to house Planning and Development Services condition and suitability are now considered substandard.
Pelham Reserve Toilets	Ageing facility needs to be demolished and new facilities constructed
Toodyay Racecourse	A number of Buildings at the racecourse are dilapidated and in need of renewal or demolition
Syreds Cottage	Building requires significant renewal work
6 Duke Street	Building requires significant renewal work
Toodyay Bowls Club	Building requires significant renewal work
Golf Club	Club house requires significant renewal work

### 5.1.3 Asset Condition

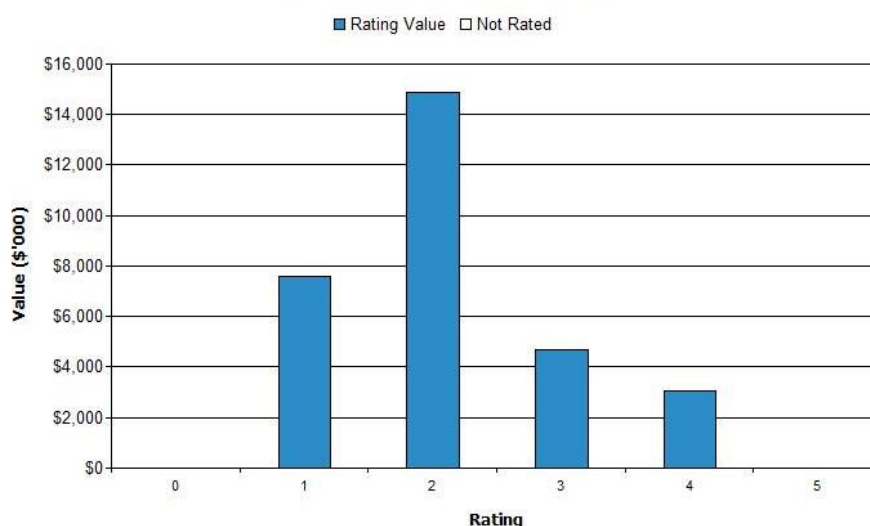
Current building asset conditions were last assessed in 2017. With the condition rating of each of the building elements having been established, it is possible to attribute a whole of building condition rating. However, it must be borne in mind that the primary elements that have structural significance, being the roof, wall frames, floor and foundations will govern priorities for renewal/replacement.

Following the adoption of this Plan, condition audits of buildings will be undertaken annually. This is to help even out inspections, budgets and workloads.

Condition of assets are rated using a 0-5 rating system with 0 being new and 5 representing an asset that has failed completely and cannot be used for the purpose it was in service for.

The condition profile of our assets is shown in Figure 3.

**Fig 3: Asset Condition Profile**



Condition is measured using a 1 – 5 grading system as detailed in Table 5.1.3.

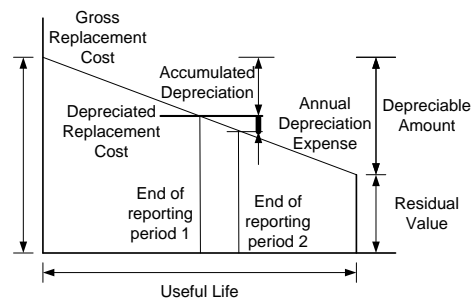
**Table 5.1.3: Simple Condition Grading Model**

CONDITION GRADING	DESCRIPTION OF CONDITION
1	<b>Very Good:</b> only planned maintenance required
2	<b>Good:</b> minor maintenance required plus planned maintenance
3	<b>Fair:</b> significant maintenance required
4	<b>Poor:</b> significant renewal/rehabilitation required
5	<b>Very Poor:</b> physically unsound and/or beyond rehabilitation

#### 5.1.4 Asset Valuations

The value of assets recorded in the asset register as at 30 June 2017 covered by Land and Buildings Asset Management Plan is shown below. Assets were last revalued at 30 June 2017. Assets are valued at Fair Value.

Gross Replacement Cost	\$30,225,206
Depreciable Amount	\$30,225,206
Depreciated Replacement Cost	\$27,627,445
Annual Average Asset Consumption	\$846,415



#### 5.1.5 Historical Data

ASSET	GROSS REPLACEMENT COST	DRC (FAIR VALUE)	ANNUAL DEPRECIATION	CUMULATIVE DEPRECIATION
Freehold Land	\$11,222,000	\$11,222,000	\$0	\$0
Buildings (Non Specialised)	\$531,880	\$511,859	\$23,504	\$20,021
Buildings (Specialised)	\$11,398,180	\$9,579,733	\$472,931	\$1,818,447
Buildings (Heritage)	\$7,073,146	\$6,313,853	\$349,980	\$759,293
<b>GRAND TOTAL</b>	<b>\$30,225,206</b>	<b>\$27,627,445</b>	<b>\$846,415</b>	<b>\$2,597,761</b>

## 5.2 Operations and Maintenance Plan

Operations include regular activities to provide services such as public health, safety and amenity, e.g. Insurance, cleaning, utilities and lighting.

Routine maintenance is the regular on-going work that is necessary to keep assets operating, including instances where portions of the asset fail and need immediate repair to make the asset operational again, e.g. Electrical maintenance 5.2.1 Operations and Maintenance Plan.

Operations activities affect service levels including quality and function through the types and timing of activities, and the design of the buildings.

Maintenance includes all actions necessary for retaining an asset as near as practicable to an appropriate service condition including regular ongoing day-to-day work necessary to keep assets operating but excluding rehabilitation or renewal. Maintenance may be classified into 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 system. Planned maintenance activities include inspection, assessing the condition against failure/breakdown experience, priority of works, 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, replacing air conditioning units, etc. This work falls below the capital/maintenance threshold but may require a specific budget allocation.

Maintenance expenditure levels are considered to be adequate to meet projected service levels, which may be less than or equal to current service levels. Where maintenance expenditure levels are such that will result in a lesser level of service, the service consequences and service risks have been identified and service consequences highlighted in this Land and Buildings Asset Management Plan and service risks considered in the Risk Management Plan.

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

### 5.2.1 Operations and Maintenance Strategies

The Shire of Toodyay will operate and maintain assets to provide the defined level of service to approved budgets in the most cost-efficient manner. The operation and maintenance activities include:

- Scheduling operations activities to deliver the defined level of service in the most efficient manner,
- Undertaking maintenance activities through a planned maintenance system to reduce
- maintenance costs and improve maintenance outcomes. Undertake cost-benefit analysis to determine the most cost-effective split between planned and unplanned maintenance activities (50 – 70% planned desirable as measured by cost),
- Maintain a current infrastructure risk register for assets and present service risks associated with providing services from Land and Buildings assets and reporting Very High and High risks and residual risks after treatment to management and Council,
- Review current and required skills base and implement workforce training and development to meet required operations and maintenance needs,
- Review asset use to identify under used assets and appropriate remedies, and over used assets and customer demand management options,
- Maintain a current hierarchy of critical assets and required operations and maintenance activities,
- Develop and regularly review appropriate emergency response capability,
- Review management of operations and maintenance activities to ensure best value for the resources used.

### 5.2.2 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 has not yet developed an asset service hierarchy, this will be developed for future plans.

### 5.2.3 Critical Assets

Critical assets are those assets which have a high consequence of failure but not necessarily a high likelihood of failure. By identifying critical assets and critical failure modes, investigative activities, maintenance plans and capital expenditure plans can be targeted at the appropriate time.

Operations and maintenance activities may be targeted to mitigate critical assets failure and maintain service levels. These activities may include increased inspection frequency, higher maintenance intervention levels, etc. Critical assets failure modes and required operations and maintenance activities are detailed in Table 5.2.2.1.

**Table 5.2.2.1: Critical Assets and Service Level Objectives**

CRITICAL ASSETS	CRITICAL FAILURE MODE	OPERATIONS & MAINTENANCE ACTIVITIES
Shire Administration Offices	Loss of Power and Storm Damage	Provision of maintained Backup Power and Planned Maintenance
Memorial Hall	Loss of Power and Storm Damage	Provision of maintained Backup Power and Planned Maintenance
Morangup Hall	Loss of Power and Storm Damage	Provision of maintained Backup Power and Planned Maintenance
Shire Emergency Facilities: Toodyay, Julimar, Coondle, Morangup, Bejoording	Loss of Power and Storm Damage	Provision of maintained Backup Power and Planned Maintenance
Shire Works Depot	Loss of Power and Storm Damage	Provision of maintained Backup Power and Planned Maintenance
Medical Centre	Loss of Power and Storm Damage	Provision of maintained Backup Power and Planned Maintenance

### 5.2.4 Standards and Specifications

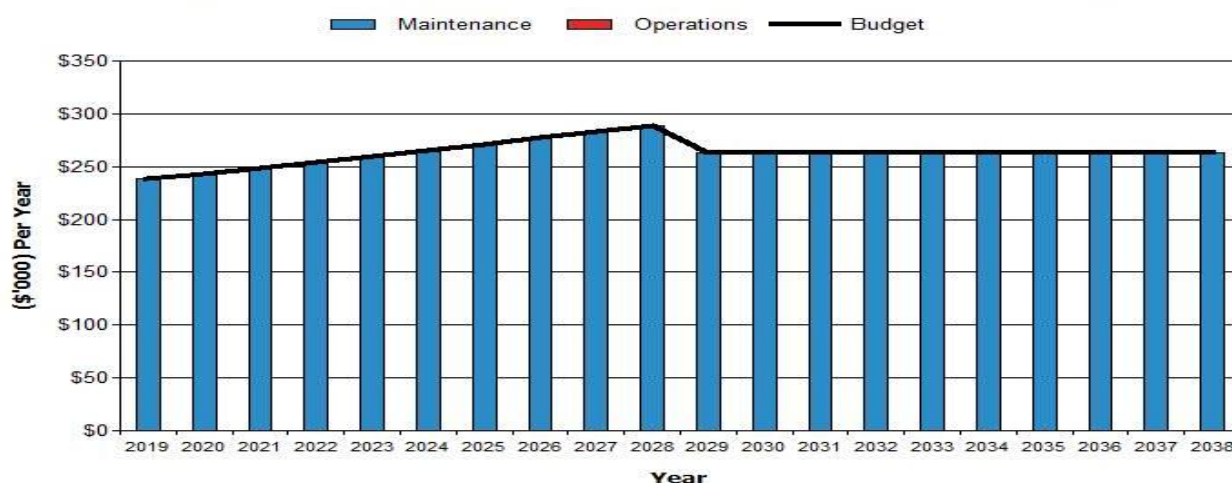
Maintenance work is carried out in accordance with the following Standards and Specifications.

- Building Code of Australia
- Australian Standards relevant to the works being undertaken
- Manufacturer's requirements for proprietary products

### 5.2.5 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 current dollar values (i.e. real values).

**Figure 4: Projected Operations and Maintenance Expenditure**



Deferred maintenance, i.e. works that are identified for maintenance and unable to be funded are to be included in the risk assessment and analysis in the infrastructure risk management plan. Maintenance is funded from the operating budget where available.



## 5.3 Renewal/Replacement Plan

Renewal and replacement 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 resulting in additional future operations and maintenance costs. Replacement and rehabilitation of existing infrastructure is primarily driven by asset condition and performance.

Renewal works fall into the following categories:

**Rehabilitation:** Involves the repair of a small part of an asset that has prematurely failed or is close to doing so. This rehabilitation work does not provide for a planned increase in the operating capacity or design loading. It is intended to enable the asset to meet the current standards of service.

**Renovation:** Involves work that increases the strength of the existing asset by a stabilisation process. As for rehabilitation, renovation does not provide for a planned increase in the operating capacity or design loading, simply enabling the asset to meet the current standards of service.

**Reconstruction:** Involves reconstructing the asset to provide a new asset with the equivalent size or capacity (i.e. does not provide for a planned increase to the operating capacity or design loading). Some minor increase in capacity may result from the process of renewal, but a substantial improvement is needed before system development is considered to have occurred.

### 5.3.1 Renewal Plan

The general renewals strategy is to rehabilitate or replace assets when justified by assessing the following elements in conjunction with the renewal priority criteria outlined below:

**Risk:** The risk of failure and associated financial and social impact justifies action (e.g. impact and extent of resulting inability to achieve access along the road, probable extent of damage to business, any health risk arising from the impediment to access).

**Asset performance:** Renewal of an asset when it fails to meet the required level of service. Non-performing assets are identified by the monitoring of asset reliability, capacity and efficiency during planned maintenance inspections and operational activity.

**Economics:** It is no longer economic to continue repairing the asset (i.e. annual cost of repairs exceeds the annualised cost of renewal).

Buildings assets or their components requiring renewal are identified from condition assessments, on-going maintenance requests or proposals from Managers, and the investigation of customer requests. Land and Buildings asset condition assessments form the basis of the renewal expenditure forecasts within this Plan.

Council has not yet reviewed the useful lives of Land and Buildings assets. This will be done in the next Buildings asset revaluation and will be incorporated into future plans.

### 5.3.2 Renewal and Replacement Strategies

Council will plan capital renewal and replacement projects to meet level of service objectives and minimize infrastructure service risks by:

- Planning and scheduling renewal projects to deliver the defined level of service in the most efficient manner,
- Undertaking project scoping for all capital renewal and replacement projects to identify:
  - the service delivery 'deficiency', present risk and optimum time for renewal/replacement,
  - the project objectives to rectify the deficiency,
  - the range of options, estimated capital and life cycle costs for each options that could address the service deficiency,
  - and evaluate the options against adopted evaluation criteria, and
  - select the best option to be included in capital renewal programs,
- Using 'low cost' renewal methods (cost of renewal is less than replacement) wherever possible,
- Maintain a current risk register for assets and service risks associated with providing services from Land and Buildings assets and reporting Very High and High risks and residual risks after treatment to management and Council,
- Review current and required skills base and implement workforce training and development to meet required construction and renewal needs,
- Maintain a current hierarchy of critical assets and capital renewal treatments and timings required ,
- Review management of capital renewal and replacement activities to ensure the best value for resources used is obtained.

### 5.3.3 Renewal Ranking Criteria

Asset renewal and replacement is typically undertaken to either:

- Ensure the reliability of the existing assets to deliver the service it was constructed to facilitate or
- To ensure the assets are of sufficient quality to meet the service requirements.

It is possible to get some indication of capital renewal and replacement priorities by identifying assets or asset groups that:

- Have a high consequence of failure,
- Have high use and subsequent impact on users would be greatest,
- Have a total value represents the greatest net value,
- Have the highest average age relative to their expected lives,
- Are identified in the Land and Buildings Asset Management Plan as key cost factors,
- Have high operational or maintenance costs, and
- Have replacement with a modern equivalent asset that would provide the equivalent service at a savings.

The ranking criteria used to determine priority of identified renewal and replacement proposals is detailed in Table 5.3.2.

**Table 5.3.2: Renewal and Replacement Priority Ranking Criteria**

CRITERIA	WEIGHTING
Council Plan Objectives	65
Risk Management	10
Community Impact	20
Unforeseen events	5
<b>Total</b>	<b>100%</b>

### 5.3.4 Renewal and replacement standards

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

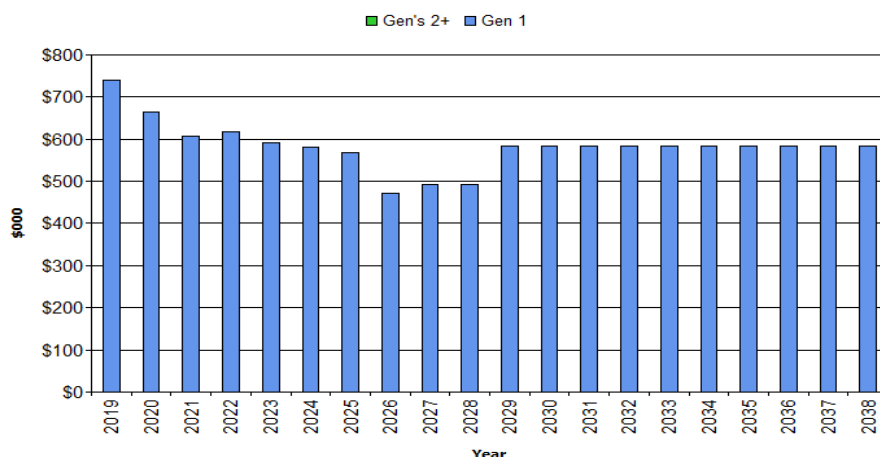
- Building Code of Australia
- Australian Standards relevant to the works being undertaken
- Manufacturer's requirements for proprietary products
- Structural Engineering Certifications

### 5.3.5 Summary of Future Renewal and Replacement Expenditure

Projected future renewal and replacement expenditures are forecast to increase over time when the asset stock increases. The expenditure is required is shown in Fig 5. Note that all amounts are shown in real values.

The projected capital renewal and replacement program is shown in Appendix B.

**Fig 5: Projected Capital Renewal and Replacement Expenditure**



Deferred renewal and replacement, i.e. those assets identified for renewal and/or replacement and not scheduled in capital works programs are to be included in the risk analysis process in the risk management plan. Renewals and replacement expenditure in the capital works program will be accommodated in the Long Term Financial Plan.

## 5.4 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.

### 5.4.1 Selection Criteria

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

**Table 5.4.1: New Assets Priority Ranking Criteria**

CRITERIA	WEIGHTING
Council Plan Objectives	80
Risk Management	5
Community Impact	10
Unforeseen Events	5
<b>Total</b>	<b>100%</b>

### 5.4.2 Capital Investment Strategies

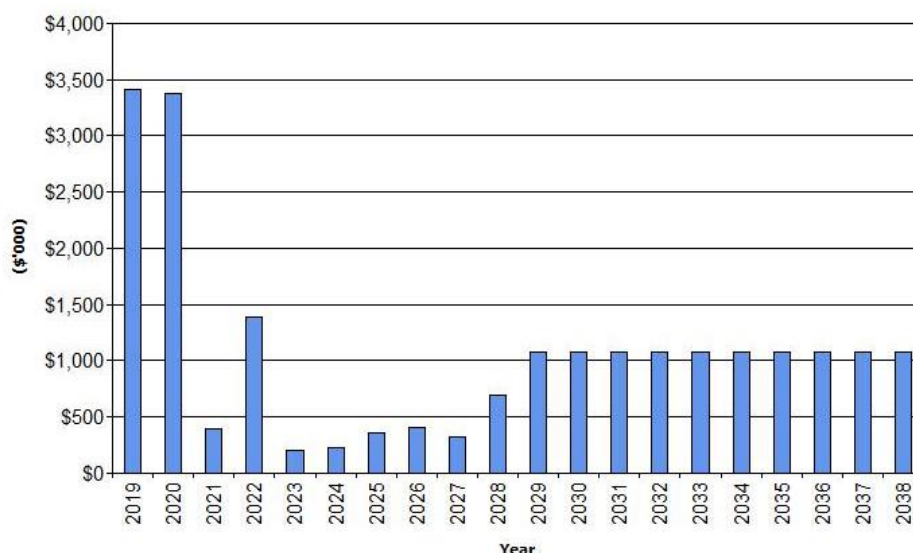
Capital upgrade and new projects will be planned to meet level of service objectives by:

- Planning and scheduling capital upgrade and new projects to deliver the defined level of service in the most efficient manner,
- Undertake project scoping for all capital upgrade/new projects to identify:
  - the service delivery 'deficiency', present risk and required timeline for delivery of the upgrade/new asset,
  - the project objectives to rectify the deficiency including value management for major projects,
  - the range of options, estimated capital and life cycle costs for each options that could address the service deficiency,
  - management of risks associated with alternative options,
  - and evaluate the options against evaluation criteria adopted by Council, and
  - select the best option to be included in capital upgrade/new programs,
- Review current and required skills base and implement training and development to meet required construction and project management needs,
- Review management of capital project management activities to ensure Council is obtaining best value for resources used.

### 5.4.3 Summary of future upgrade/new assets expenditure

Projected upgrade/new asset expenditures are summarised in Fig 6. The projected upgrade/new capital works program is shown in Appendix C. All amounts are shown in real values.

**Fig 6: Projected Capital Upgrade/New Asset Expenditure**



Acquiring these new assets will commit the Shire to the funding of ongoing operations, maintenance and renewal costs for the period that the service provided from the assets is required which will need to be incorporated into future planning and budget forecasts.

Expenditure on new assets and services in the capital works program will be accommodated in the Long Term Financial Plan.

## 5.5 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 5.5, 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. Any costs or revenue gained from asset disposals is accommodated in the Long Term Financial Plan.

Where cash flow projections from asset disposals are not available, these will be developed in future revisions of Land and Buildings Asset Management Plan.

**Table 5.5: Assets Identified for Disposal**

ASSET	REASON FOR DISPOSAL	TIMING	DISPOSAL EXPENDITURE	OPERATIONS & MAINTENANCE ANNUAL SAVINGS
6 Duke street Building	Asset Rationalisation	2018-19	\$5,000	\$3,000
45/46 Telegraph Road	Asset Rationalisation	2018-19	\$10,000	\$5,000
Syreds Cottage	Asset rationalisation	2018-19	\$5,000	\$5,000
Lot 5, 23 Toodyay Road	Asset Rationalisation	2018-19	\$5,000	\$1,000
108 Stirling Terrace	Asset Rationalisation	2020-21	\$5,000	\$8,000
98 Stirling terrace	Asset Rationalisation	2021-22	\$5,000	\$8,000

## 6. RISK MANAGEMENT PLAN

The purpose of risk management is to document the results and recommendations resulting from the periodic identification, assessment and treatment of risks associated with providing services from Land and Building assets, using the fundamentals of International Standard ISO 31000:2009 Risk management – Principles and guidelines.

Risk Management is defined in ISO 31000:2009 as: “coordinated activities to direct and control with regard to risk”.

An assessment of risks associated with service delivery from Land and Buildings assets has identified critical risks that will result in loss or reduction in service from Land and Buildings assets or a ‘financial shock’. 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.

Risk management is one of the fundamentals of asset and services management, and is observed to the highest possible level using industry standard practices. It is appropriate that formal risk management processes be applied to support decision making in all areas and at all levels of the organisation. The processes need to be ingrained in the daily activities for the organisation.

Risks can typically be categorised as:

**Natural Events:** Council has virtually no control over the timing or extent of the event, however, the probabilities may be understood;

**External Impacts:** Council has some control over these risks, associated with other organisations providing goods and services to Council;

**Physical Failure Risk:** Where conditions or performance of an asset could lead to failure. Council can control these risks through maintenance and renewal funding levels;

**Operational Risk:** Where management of the asset or asset management activities might impact on an asset. Council can control these risks through maintenance and renewal funding levels.

Through risk management, the Shire of Toodyay aims to:

- Protect the quality of the property portfolio
- Protect users of property assets
- Reduce the Shire’s exposure to risk
- Promote effective financial and asset management practices

This will be achieved through:

- Identifying, decreasing the likelihood, and mitigating the consequences of, risk within the constraints of sensible commercial objectives and practices
- Applying risk based practices to the management of property assets and associated decision making
- Maintaining safe and reliable plant, equipment and infrastructure
- Preparing appropriate contingencies
- Reviewing the risk profile of the property portfolio at appropriate intervals and when circumstances dictate
- Maintaining an up to date Land and Buildings Asset Management Plan.





## 6.1 Critical Assets

Critical assets are defined as those which have a high consequence of failure causing significant loss or reduction of service. Similarly, critical failure modes are those which have the highest consequences.

Critical assets have been identified, their typical failure mode and the impact on service delivery are as follows:

**Table 6.1 Critical Assets**

CRITICAL ASSET(S)	FAILURE MODE	IMPACT
Shire Administration Offices	Loss of Power & Storm Damage	Loss of the use of the main administration Centre and access to critical records and facilities
Memorial Hall	Loss of Power & Storm Damage	Loss of functionality of the designated evacuation Centre in the Shire
Morangup Hall	Loss of Power & Storm Damage	Loss of functionality of the evacuation Centre in the Morangup locality
Shire Emergency Facilities Toodyay, Julimar, Coondle, Morangup, Bejoording	Loss of Power & Storm Damage	Loss of functionality of facilities to assist in dealing with emergency response for bushfire or SES services
Shire Works Depot	Loss of Power & Storm Damage	Loss of Functionality of the Works depot which provides support in emergencies of equipment and personnel
Medical Centre	Loss of Power & Storm Damage	Loss of functionality of medical facilities

By identifying critical assets and failure modes investigative activities, condition inspection programs, maintenance and capital expenditure plans can be targeted at the critical areas.





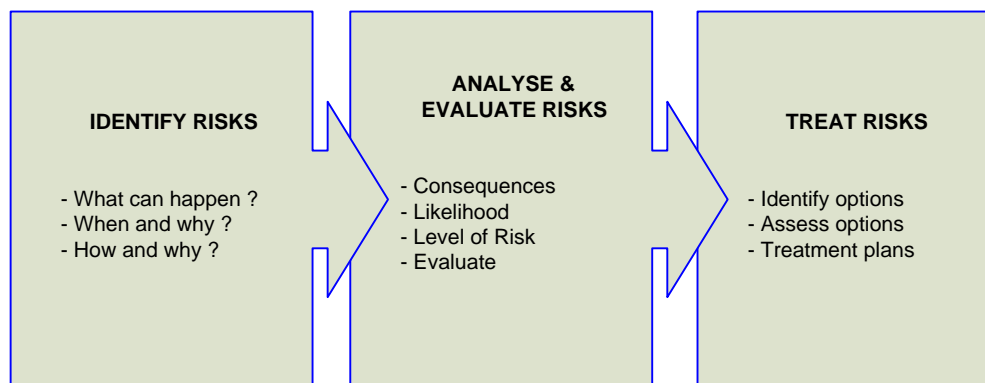
## 6.2 Risk Assessment

The risk management process used in this project is shown in Figure 6.2 below.

It is an analysis and problem solving technique designed to provide a logical process for the selection of treatment plans and management actions to protect the community against unacceptable risks.

The process is based on the fundamentals of ISO risk assessment standard ISO 31000:2009.

**Fig 6.2 Risk Management Process – Abridged**



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 only practicable means of identifying risk is by undertaking an inspection regime of assets. This process should enable significant risks to be discovered and remedied in advance of possible injury. Safety audits need to be undertaken where specific risks are identified.

A four-tier inspection regime covers the key aspects of safety, incidents, defects and condition.

Safety issues may be detected either as the result of the programmed defect inspection or by observation followed by notification to Council by members of the community or council employees while undertaking their normal work duties. A subsequent reactive safety inspection will then be conducted by an appropriate council officer.

**Reactive Inspections:** response to customer enquiries or notifications. Inspections of all reported defects are undertaken following notification by members of the community or Council employees. The subsequent inspection will be conducted by an appropriate Council representative;

**Programmed Inspection:** determine if the asset complies with the specified levels of service;

**Incident Inspections:** enables an incident condition report to be prepared for use in legal proceedings and the gathering of information for the analysis of the causes of accidents and the planning and implementation of asset management and safety measures; and

**Condition Inspections:** identify deficiencies in the structural integrity of the assets, which if untreated, are likely to adversely affect their values. The deficiencies may well impact short-term serviceability as well as the ability of the component to continue to perform for the duration of its intended life span. They are also under a formal timetable regime however at a lesser frequency than the abovementioned programmed inspections.

An assessment of risks associated with service delivery from Land and Buildings assets has identified the critical risks that will result in significant loss, 'financial shock' or a reduction in service.

Critical risks are those assessed with 'Very High' (requiring immediate corrective action) and 'High' (requiring corrective action) rating identified in the Risk Management Plan. The residual risk and treatment cost after the selected treatment plan is operational is shown in Table 6.2. These risks and costs are reported to management and Council.

**Table 6.2: Critical Risks and Treatment Plans**

SERVICE OR ASSET AT RISK	WHAT CAN HAPPEN	RISK RATING (VH, H)	RISK TREATMENT PLAN	RESIDUAL RISK *	TREATMENT COSTS
All Buildings	Major damage or destruction of buildings	H	As outlined in Table 6.3 No. 2	L	On-going
Buildings with asbestos	Inhalation of asbestos fibres.	H	As outlined in Table 6.3 No. 3	L	On-going and Cost of Asbestos surveys on a regular basis at \$3,500
All Buildings with power	Electrocution of user.	H	As outlined in Table 6.3 No. 4	L	On-going

Note \* The residual risk is the risk remaining after the selected risk treatment plan is operational. The risk assessment process compares the likelihood of a risk event occurring against the consequences of the event occurring. In the risk rating table below, a risk event with a likelihood of 'Possible' and a consequence of 'Major' has a risk rating of 'High' as shown in Table 6.3

**Table 6.3: Risk Rating Matrix**

Risk Rating					
Likelihood	Consequences				
	Insignificant	Minor	Moderate	Major	Catastrophic
Rare	L	L	M	M	H
Unlikely	L	L	M	M	H
Possible	L	M	H	H	H
Likely	M	M	H	H	VH
Almost Certain	M	H	H	VH	VH

Ref: HB 436:2004, Risk Management Guidelines, Table 6.6, p 55.

ASSET AT RISK	WHAT IS THE POSSIBLE PROBLEM?	WHAT IS THE CAUSE?	WHAT WOULD HAPPEN AS A RESULT?	LIKELIHOOD	CONSEQUENCES	RISK RATING	RISK TREATMENT PLAN	RISK AFTER TREATMENT	RESPONSIBLE	BY WHEN
<b>1. All Buildings</b>	Minor to moderate damage to buildings	Vandalism Damage and loss due to theft Termite attack	Cost to Council of repairs. Interruption to services. Injury to user. Loss of contents.	M	M	M	<ul style="list-style-type: none"> <li>Have staff and/or contractors available to temporarily make-good and/or repair damage.</li> <li>Plan alternate places for staff to work.</li> <li>Install and maintain suitable locks, security doors and screens.</li> <li>Maintain key register.</li> <li>Encourage community participation in crime reduction programs.</li> <li>Install, maintain and regularly test security systems to high value and critical buildings and systems.</li> <li>Have standby generators available.</li> <li>Regular inspections for termites.</li> </ul>	L	Manager of Planning and Development	Ongoing
<b>2. Buildings</b>	Major damage or destruction of buildings.	Fire, Storm	Death or injury to occupants; Interruption to services.	L	H	H	<ul style="list-style-type: none"> <li>Maintain adequate insurance;</li> <li>Disaster Management Plan updated and current;</li> <li>Ability to evacuate residents to approved cyclone shelter.</li> <li>Ensure smoke alarms are fully functional.</li> <li>Offsite storage of data backups;</li> <li>Ability to relocate to temporary accommodation.</li> <li>Install, maintain and regularly test fire safety systems to critical buildings.</li> <li>Regular evacuation training and practice.</li> </ul>	L	CEO Manager of Planning and Development	Ongoing

ASSET AT RISK	WHAT IS THE POSSIBLE PROBLEM?	WHAT IS THE CAUSE?	WHAT WOULD HAPPEN AS A RESULT?	LIKELIHOOD	CONSEQUENCES	RISK RATING	RISK TREATMENT PLAN	RISK AFTER TREATMENT	RESPONSIBLE	BY WHEN
<b>3. Buildings with Asbestos</b>	Inhalation of asbestos fibres.	Working unprotected on asbestos materials such as AC sheeting or vinyl tiles (containing asbestos).	Death to person. Financial damages to Council.	L	H	H	<ul style="list-style-type: none"> <li>Ensure all buildings have been inspected for asbestos and are appropriately signed.</li> <li>Contractors Handbook</li> <li>Training to all Council building and maintenance staff.</li> <li>Suitable PPE available to staff.</li> </ul>	L	Manager of Planning and Development	Ongoing
<b>4. Buildings with power</b>	Electrocution of user.	Faulty electrical connections or appliances. Inappropriate use or repair by users. Vandalism.	Death or injury to user.	L	H	H	<ul style="list-style-type: none"> <li>All appliances tested and tagged.</li> <li>Regular inspections of building electrical systems.</li> <li>Training of users in the identification of risks in the workplace.</li> </ul>	L	Manager of Planning and Development	Ongoing
<b>5. All Buildings</b>	Building deteriorates to a dangerous condition.	Inadequate maintenance and/or renewal program.	Injury to users; Loss of services.	L	M	M	<ul style="list-style-type: none"> <li>Capital works and maintenance program in place.</li> <li>Regular inspections of all buildings for fall/slip hazards and condition of materials, surface coatings and structure.</li> </ul>	L	Manager of Planning and Development	Ongoing
<b>6. All Buildings</b>	Failure of Mechanical and Electrical Services.	Misuse, unforeseen breakdown, unintended or consequential damage.	Building not available for use. Loss of service provision. Loss of contents/stock. Loss of communication systems.	L	M	M	<ul style="list-style-type: none"> <li>Regular condition inspections.</li> <li>Timely replacement of aging infrastructure.</li> <li>Regular servicing of components.</li> </ul>	L	Manager P & D	Ongoing

ASSET AT RISK	WHAT IS THE POSSIBLE PROBLEM?	WHAT IS THE CAUSE?	WHAT WOULD HAPPEN AS A RESULT?	LIKELIHOOD	CONSEQUENCES	RISK RATING	RISK TREATMENT PLAN	RISK AFTER TREATMENT	RESPONSIBLE	BY WHEN
<b>7. All Buildings</b>	Broken or faulty water or waste water service.	Misuse, unforeseen breakdown, unintended or consequential damage.	Damage to building. Building not available for use.	L	M	M	<ul style="list-style-type: none"> <li>Ensure plumbing staff are available for repairs.</li> <li>Timely replacement of aging infrastructure.</li> </ul>	L	Manager P & D	Ongoing
<b>8. Buildings</b>	Capacity issues within existing buildings and facilities.	Increase in staffing levels in response to community demand for services.	Staff unable to work to capacity. Services interrupted.	M	M	M	<ul style="list-style-type: none"> <li>Adequate strategic planning for future accommodation needs.</li> <li>Apply for grants in a timely manner.</li> </ul>	L	CEO	Ongoing
<b>9. Buildings</b>	Decreasing frequency of maintenance	Maintenance costs increasing due to inadequate renewal program	Assets deteriorate to a lesser service standard and higher risk	M	M	M	<ul style="list-style-type: none"> <li>Planned maintenance program</li> <li>Planned renewal program.</li> </ul>	L	CEO	Ongoing
<b>10. Buildings</b>	Asset renewals not funded when required	Insufficient funding	Asset conditions deteriorate and funding shortfall grows due to higher cost renewal treatments being required	M	M	M	<ul style="list-style-type: none"> <li>Renewal works undertaken when identified or listed for budget</li> </ul>	L	CEO	Ongoing
<b>11. Buildings</b>	Asset failure	Inappropriate technical practices employed for maintenance resulting in failure of asset	Risk to health and safety of users and personnel. Significant cost for rectification works.	L	M	M	<ul style="list-style-type: none"> <li>Construction and maintenance standards to be followed</li> </ul>	L	Manager P & D	Ongoing



## 6.3 Resilience Approach

The resilience of our critical infrastructure is vital to our customers and the services we provide. To adapt to changing conditions and grow over time we need to understand our capacity to respond to possible disruptions and be positioned to absorb disturbance and act effectively in a crisis to ensure continuity of service.

To enhance our capacity to manage unforeseen or unexpected risk to the continuity of operations we take an infrastructure resilience approach using an 'all hazards' methodology.

The 'all-hazards' approach involves:

- An initial assessment of critical assets;
- A resilience assessment for these assets; and
- Identification of related improvements or interventions

Resilience is built on aspects such as response and recovery planning, financial capacity and crisis leadership.

Our current measure of resilience is shown in Table 6.4 which includes the type of threats and hazards, resilience assessment and identified improvements and/or interventions.

**Table 6.4: Resilience**

THREAT / HAZARD	RESILIENCE LMH	IMPROVEMENTS / INTERVENTIONS
Fire	High	An efficient town fire service, and detection systems on high risk buildings can be installed along with good building maintenance.
Flooding	High	Building all above major flooding levels and town has access to SES
Major Storm Events	High	SES is available to assist, robust insurance access to fast response trades

## 6.4 Service and Risk Trade-Offs

The decisions made in adopting this Land and Buildings Asset Management Plan are based on the objective to achieve the optimum benefits from the available resources by taking into consideration:

- What we would like to do based on asset register data
- What we should do with existing budgets and identifying level of service and risk consequences (i.e. what are the operations and maintenance and capital projects we are unable to do, what is the service and risk consequences associated with this position). This may require several versions of the AM Plan.
- What we can do and be financially sustainable with AM Plans matching long-term financial plans.

The Land and Buildings Asset Management Plan provides the tools for discussion with the Council and customers/community on trade-offs between what we would like to do and what we should be doing with existing budgets by balancing changes in services and service levels with affordability and acceptance of the service and risk consequences of the trade-off position.

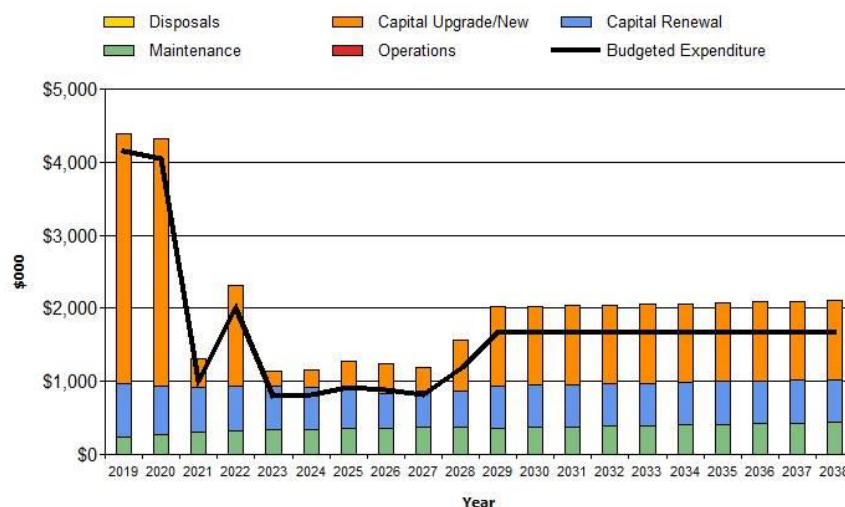
## 7. FINANCIAL SUMMARY

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

### 7.1 Financial Statements and Projections

The financial projections are shown in Fig 7 for projected operating (operations and maintenance) and capital expenditure (renewal and upgrade/expansion/new assets). Note that all costs are shown in real values.

**Fig 7: Projected Operating and Capital Expenditure**



#### 7.1.1 Sustainability of Service Delivery

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

#### 7.1.2 Asset Renewal Funding Ratio

Asset Renewal Funding Ratio: 83%

The Asset Renewal Funding Ratio is the most important indicator and reveals that over the next 10 years of the forecasting that we will have 83% of the funds required for the optimal renewal and replacement of assets.

### 7.1.3 Long term - Life Cycle Cost

Life cycle costs (or whole of life costs) are the average costs that are required to sustain the service levels over the asset life cycle. Life cycle costs include operations and maintenance expenditure and asset consumption (depreciation expense).

Life cycle costs can be compared to life cycle expenditure to give an initial indicator of affordability of projected service levels when considered with age profiles. Life cycle expenditure includes operations, maintenance and capital renewal expenditure. Life cycle expenditure will vary depending on the timing of asset renewals.

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 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.

### 7.1.4 Medium term – 10 Year Financial Planning Period

The Land and Buildings 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 \$1,681,888 on average per year.

Estimated (budget) operations, maintenance and capital renewal funding is \$1,394,751 on average per year giving a 10 year funding shortfall of \$287,136 per year. This indicates 83% of the projected expenditures needed

to provide the services documented in the asset management plan.

Providing services from Land and Buildings in a sustainable manner requires the matching and managing of service levels, risks, projected expenditures and financing with the corresponding capital works program accommodated in the Long Term Financial Plan.

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

We will manage the 'gap' by reviewing future service levels and resources required to provide these services to the community.



## 7.2 Funding Strategy

After reviewing service levels, as appropriate to ensure ongoing financial sustainability projected expenditures identified in Appendix D will be accommodated in the 10 year Long Term Financial Plan.

## 7.3 Key Assumptions Made in Financial Forecasts

This section details the key assumptions made in presenting the information contained in Land and Buildings 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 Land and Buildings Asset Management Plan and risks that these may change are shown in Table 7.3.

**Table 7.3: Key Assumptions made in AM Plan and Risks of Change**

KEY ASSUMPTIONS	RISKS OF CHANGE TO ASSUMPTIONS
All Building Assets deteriorate uniformly	Change short term planning of asset renewal
Renewal programs are based on intervening at Condition 4	Financial and service impact on maintenance, renewal and upgrades.
Maintenance costs are largely based on historical expenditure and assumes no significant increases in service requirements.	Financial and service impact on maintenance program.
Continued use of current construction techniques and materials. Changes in technology may bring about future reductions in costs but cannot be assumed in advance for forecasting.	Insignificant

## 7.4 Forecast Reliability and Confidence

The expenditure and valuations projections in this Land and Buildings Asset Management Plan are based on best available data. Currency and accuracy of data is critical to effective asset and financial management. Data confidence is classified on a 5 level scale in accordance with Table 7.4.

**Table 7.4: Data Confidence Grading System**

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

The estimated confidence level for and reliability of data used in this Land and Buildings Asset Management Plan is shown in Table 7.4.1.

**Table 7.4.1: Data Confidence Assessment for Data used in AM Plan**

DATA	CONFIDENCE ASSESSMENT	COMMENT
Demand drivers	B Reliable	Population change is measured and updated, changes in building numbers are monitored, consumer preferences and demands are discussed with relevant Managers
Growth projections	B Reliable	Based on historical records of growth
Operations expenditures	B Reliable	Based on historical records
Maintenance expenditures	B Reliable	Based on historical records
Projected Renewal expenditures. - Asset values	B Reliable	Assets revalued in FY2016/17
- Asset useful lives	B Reliable	Matches generally accepted industry standards.
- Condition modelling	B Reliable	Carried out during condition assessments
- Network renewals	B Reliable	Based on asset registers
- Defect repairs	B Reliable	Defects identified during condition assessments.
Upgrade/New expenditures	B Reliable	Council has identified these in its Long Term Financial Plan
Disposal expenditures	C Uncertain	To be determined by Council

Over all data sources the data confidence is assessed as medium confidence level for data used in the preparation of this AM Plan.

## 8. PLAN IMPROVEMENT AND MONITORING

### 8.1 Status of Asset Management Practices

#### 8.1.1 Accounting and Financial Data Sources

The Council's Land and Building asset management and financial system is Synergy.

Council's Corporate Services Department is responsible for the valuation of all Land and Building assets and ensuring that depreciation is updated on an annual basis.

The Council must comply with AAS 116 Property, Plant and Equipment.

That all items, purchased or constructed by Council, with a value greater than \$5,000.00 (five thousand dollars) be capitalised and placed on Council's asset register. Such assets are to be depreciated at a rate determined with regard to the remaining useful life of the asset and its residual value. Any items with a value of less than \$5,000.00 (five thousand dollars) are to be expensed in the year of purchase.

There are no required changes to accounting financial systems arising from this AM Plan. Asset management data sources include Asset Registers and Valuation Reports.




## 8.2 Improvement Plan

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

**Table 8.2: Improvement Plan**

IMPROVEMENT OPPORTUNITY	TASKS / PROCESSES	URGENCY	IMPORTANCE	TIMEFRAME	RESPONSIBILITY	STATUS
<b>LEVELS OF SERVICE – SERVICE STANDARDS - GAP ANALYSIS</b>						
<b>Outcome:</b> A proper appreciation of the needs for the buildings assets and the Service Standards across the Shire, plus the 'gap' between current Service Standards and desired Service Standards.	Maintain currency of all asset data; Confirm current and desired Levels of Service for all buildings and facilities; Initial assessment of 'gap' between desired and current Levels of Service – Service Standards; Develop a 'confidence level' for the provision of services for buildings and facilities; Design community survey questions to better capture buildings and facilities needs for the community.	Medium	High	2018/19	Chief Executive Officer / Manager Planning and Development	Initial Levels of Service Standards recorded – to be validated and tested / confirmed / reported to Council for confirmation. Procedures currently being investigated.
<b>LEVELS OF SERVICE - SERVICE TARGETS – GAP ANALYSIS</b>						
<b>Outcomes:</b> Defined Service Targets provided for all buildings and facilities based on occupancy, demand and presentation needs; Service Targets recorded for all non-asset related services, e.g. operational services Good understanding of community needs and expectations - community are involved in the management of assets through the Council.	Understand current Service Targets and 'service drivers'; Ascertain the 'gap' between 'current' and 'desired' Service Targets; Understand the costs of service provision for all buildings related services – asset and non-asset based; Reconcile Service Targets and actual service costs for sustainability and affordability; Develop community consultation processes and measures for Service Targets; Establish monitoring and reporting framework for Service targets; Document all relevant information in the Asset Management Plan;	Medium	High	2018/19	Chief Executive Officer / Manager of Planning and Development	Initiated with the Draft Strategic Community Plan and this Asset Management Plan.
<b>RENEWAL GAP</b>						
<b>Outcome:</b> Measure of 'gap' between current funding and required expenditure to sustain assets and Levels of Service, with strategies to address differences.	Determine whether to allocate more time and resources to accurately capture costs for all renewal and maintenance at asset and asset attribute level, or maintain the current high level approach and assumptions; Develop processes to calculate the whole of life costs for buildings to establish the Renewal Profiles; Build history of renewal, maintenance and operational expenditure for all buildings assets / elements, and align with average condition profiles and trends; Measure gap between current and required, (renewal and maintenance / operational), expenditure for asset and services sustainability; Develop long term financial and operational strategies to address funding gap; Develop plan for capitalisation and recording assets in Asset Register, to include changes as a result of updates from Maintenance Management Program.	High	High	2018/19	Manager of Planning and Development /Manager of Corporate Services	Currently being investigated as part of the development of the Asset Management Plan.

IMPROVEMENT OPPORTUNITY	TASKS / PROCESSES	URGENCY	IMPORTANCE	TIMEFRAME	RESPONSIBILITY	STATUS
<b>LAND AND BUILDINGS ASSET MANAGEMENT PLAN</b>						
<b>Outcomes:</b> Develop asset service hierarchy and identify critical infrastructure assets with associated risk treatment plans. All asset management programs, procedures and key accountabilities are documented.	Progressively collate and document all relevant information for total asset management of all asset categories to fill knowledge gaps in current plan.	Medium	Medium	2019/2020	Manager of Planning and Development	Yet to be commenced. Parameters being developed as part of this plan.
<b>KNOWLEDGE OF ASSETS</b>						
<b>Outcomes:</b> Reviews of the current infrastructure assets age profile, condition, linking useful lives, whole of life asset costs and condition intervention levels; Strategic link with Levels of Service; Accurate Lease register or similar database of Council buildings and properties that are leased.	Regular asset data collection and inspections; Asset Register maintained and monitored; Processes reinforced for the collection and recording of asset data, including 'as constructed' asset information; Comparisons with Levels of Service to confirm relevance;	High	High	2018/19	Manager of Planning and Development	Yet to be formally commenced. Parameters being developed as part of this plan. There is a lot of knowledge gained by experience and informal investigation that needs to be formalized and recorded. Along with additional investigation and research.
<b>ASSET MAINTENANCE AND OPERATIONS COSTING</b>						
<b>Outcome:</b> Established and fully funded maintenance and operations programs that optimise life-cycle costs and sustain Service Targets.	All maintenance and operational activities planned and optimised; Works Order system in place, (based on planning and scheduling) (to find out if applicable); Greater emphasis on planned vs reactive maintenance; Recording of asset 'maintenance' history; Costing frameworks developed to separate renewal, maintenance and operational costs; Align with corporate systems and results; Seek capital improvements that lead to reduced maintenance and operational costs.	High	High	2018/19	Manager of Planning and Development /Manager of Corporate Services	Confirm and document current practices. Part of transition strategy for Council.



IMPROVEMENT OPPORTUNITY	TASKS / PROCESSES	URGENCY	IMPORTANCE	TIMEFRAME	RESPONSIBILITY	STATUS
<b>PERFORMANCE MONITORING</b>						
<b>Outcome:</b> Regular reports confirm sustainability of assets and Levels of Service.	Determine data and system requirements to monitor asset management performance; Determine relevant asset and services related reporting criteria and periods for measurement; Establish measures and targets to assess performance against Service Standards; Initiate reporting system development; Share reports with all key stakeholders and staff; Apply performance reports to programs for productivity enhancements.	Medium	High	2018/19	Manager of Planning and Development /Manager of Corporate Services	To commence.
<b>NEW TECHNOLOGY</b>						
<b>Outcome:</b> High level knowledge of new technology available to enhance operational effectiveness.	Maintain working knowledge of systems and processes to support improved performance in the field and office.	Medium	Medium	2019/20	Manager of Planning and Development	Ongoing reviews.

### 8.3 Monitoring and Review Procedures

The Land and Buildings Asset Management Plan will be reviewed during annual budget planning processes and amended to show any material changes in service levels and/or resources available to provide those services as a result of budget decisions.

The Land and Buildings Asset Management Plan will be updated annually to ensure it represents the current service level, asset values, projected operations, maintenance, capital renewal and replacement, capital upgrade/new and asset disposal expenditures and projected expenditure values incorporated into the Long Term Financial Plan.

The Land and Buildings Asset Management Plan has a life of 4 years and is due for complete revision and will be updated at that time.

### 8.4 Performance Measures

The effectiveness of the Land and Buildings Asset Management Plan can be measured in the following ways:

- The degree to which the required projected expenditures identified in Land and Buildings Asset Management Plan are incorporated into the Long Term Financial Plan,
- The degree to which 1-5 year detailed works programs, budgets, business plans and corporate structures take into account the 'global' works program trends provided by the asset management plan,
- The degree to which the existing and projected service levels and service consequences (what we cannot do), risks and residual risks are incorporated into the Strategic Plan and associated plans,
- The Asset Renewal Funding Ratio achieving the target of 1.0.

## 9. REFERENCES

- IPWEA, 2006, 'International Infrastructure Management Manual', Institute of Public Works Engineering Australasia, Sydney, [www.ipwea.org/IIMM](http://www.ipwea.org/IIMM)
- IPWEA, 2008, 'NAMS.PLUS Asset Management', Institute of Public Works Engineering Australasia, Sydney, [www.ipwea.org/namsplus](http://www.ipwea.org/namsplus).
- IPWEA, 2015, 2nd edn., 'Australian Infrastructure Financial Management Manual', Institute of Public Works Engineering Australasia, Sydney, [www.ipwea.org/AIFMM](http://www.ipwea.org/AIFMM).
- IPWEA, 2015, 3rd edn., 'International Infrastructure Management Manual', Institute of Public Works Engineering Australasia, Sydney, [www.ipwea.org/IIMM](http://www.ipwea.org/IIMM)



## 10. APPENDICES

- Appendix A Projected 10 year Capital Renewal and Replacement Works Program
- Appendix B Projected 10 year Capital Upgrade/New Works Program
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## Appendix A: Projected 10-year Capital Renewal and Replacement Works Program

Forecast Renewal Plan		
year	Network Renewal Projects	budget
2019	Racecourse water main replacement	\$15,000
2019	Newcastle Goal Roof and Structure Works (Grant Funded)	\$313,000
2019	Visitor Centre external Repaint and Drainage	\$12,000
2019	Administration Brick Repairs and repaint Chamber Ceiling and Damp repairs	\$15,000
2019	Works Depot (Railway Road ) Repaint internal external	\$8,000
2019	Bendigo Bank Rear additon repairs remove asbestos fix damage	\$15,000
2019	Showground Pavilion replace gutters and downpipes Refurbish Toilets/Changerooms Stage 1	\$13,500
2019	Donegans Cottage Structural Repairs	\$15,000
2019	P & G Clinton Kitchen and Toilet repairs	\$9,000
2019	Library brickwork repairs	\$6,000
2019	Connors Mill Structural repairs Allowance	\$5,000
2019	Showground Grandstand internal Alterations	\$15,000
2019	Butterfly Cottage Structural Repairs	\$20,000
2019	Community Centre Termite system Repair, Intl Repaint, Structural Floor repair, Recarpet, Meeting Floor renewal Renewal	\$34,500
2019	Fencing old Depot allowance contribution	\$5,000
		<b>\$501,000</b>
Network Renewal Projects		
		Estimate
2020	Racecourse Roof - Tote area	\$75,000
2020	Memorial Hall external and internal repaint - Bathroom refurbish	\$30,000
2020	Parkers Cottage floor & wall repairs	\$15,000
2020	Administration Brick repairs stage 2	\$5,000
2020	Medical Centre Replace Air-con x 2 and external repaint	\$21,000
2020	Showground Pavilion Refurbish Change rooms /Toilets Stage 2 and fix drainage issues	\$16,000
2020	Butterfly Cottage Repaint external & Structural repairs	\$21,000
2020	Library Aircon Replacement and Brickwork repairs	\$8,500
2020	Contaminated site investigations P& G Clinton	\$10,000
2020	Old Goal Machinery Shed gutter, floor and enclose	\$9,000
2020	Butterfly Cottage Structural Repairs	\$12,000
2020	Clinton Street Units Boundary Fence Replacement stage 1	\$5,000
2020	Bendigo Bank external Repaint, Floor treatments & HWS Replacement	\$16,500
2020	Golf Club ceiling repairs and internal repaint allowance for electrical upgrades	\$28,000
2020	Bowls Club commercial Kitchen upgrade allowance for electrical replace HWS	\$95,000
2020	Termite Protection Walkway Bridge	\$12,000
2020	Upgrade Shire master Keys	\$35,000
2020	Replace Carpets at Library Stage 1	\$6,000
		<b>\$420,000</b>
Network Renewal Projects		
		Estimate
2021	New Depot (Railway Road) office Internal Repaint	\$10,000
2021	Community Centre Aircon Replacement /floor resurface & replace part carpet/Repaint Stage 1	\$32,000
2021	Connors Cottage Carpet Replacement	\$5,000
2021	Administration Brick repairs stage 3	\$10,000
2021	Fencing Multipurpose courts/Tennis Courts	\$20,000
2021	Kitchen Refurbishment 19b Clinton st	\$10,000
2021	Clinton Street Units Boundary Fence Replacement stage 2	\$5,000
2021	Medical Centre replace air-con by 2 internal repaint & HWS replace	\$15,000
2021	Show Bar demolish, level and concrete site for temporary shelter	\$9,000
2021	Youth Hall External Repaint and Septic Tank preventative Maint replace HWS	\$10,500
2021	Library Air con replacing Stage 2	\$3,500
2021	Clinton St Units Asbestos Removal and Replacement	\$15,000
2021	Donegans Cottage Structural Repairs replace HWS	\$22,000
2021	Connors Mill Structural repairs Allowance	\$15,000
2021	Butterfly Cottage Structural Repairs	\$12,000
2021	Museum Admin Air Con replacement	\$3,500
2021	Kitchen and Bathroom Refurbishment Golf Club -replace HWS	\$32,000
2021	Bowls Club Internal repaint and floor coverings	\$30,000
2021	Pavilion Kitchen and Bar upgrade	\$40,000
2021	Toodyay Junction External Painting Renewal and external timber maintenance	\$8,000
2021	Electrical Upgrade Bank	\$15,000
2021	Memorial Hall Stage Curtain replacement and electrical upgrade	\$35,000
		<b>\$357,500</b>

Network Renewal Projects		Estimate
2022	Clinton Street Reroof	\$70,000
2022	Memorial Hall floor reseal	\$6,000
2022	Community Centre Air Con replacement/repaint Pt 2	\$6,000
2022	Administration Brick repairs stage 4	\$6,000
2022	Library Internal repaint	\$15,000
2022	19a 7 B Clinton Street New roof and Garages reclad	\$70,000
2022	Medical Centre air con replacement x 3	\$8,000
2022	Cemetery Gazebo repaint/refurbish	\$8,000
2022	Repaint Show Bar Toilets and refurbish plumbing	\$6,000
2022	Clinton St Units Asbestos Removal and replacement	\$10,000
2022	Pavilion LED Lighting & air con upgrade	\$18,000
2022	Connors Cottage - replace Air Con Electrical upgrade	\$24,000
2022	Youth Hall Internal Repaint	\$8,000
2022	Butterfly Cottage Structural Repairs	\$12,000
2022	Fire Water Tank Replacement Kane Road	\$15,606
2022	New Floor coverings Golf Club and Repaint	\$21,000
2022	Bowls Club External repaint and Bathroom Refurb and Electrical upgrade and structural repairs	\$60,000
		<b>\$363,606</b>
Network Renewal Projects		Estimate
2023	Connors Mill Electrical upgrade	\$15,000
2023	Community Centre External Repaint	\$8,000
2023	Administration Building Replace Carpet in Chambers, records and hallway	\$15,000
2023	Fencing Parks and Gardens building	\$20,000
2023	Medical Centre Air con replacement x 3 Int repaint stage 2, Kitchen refresh	\$30,000
2023	Clinton St Units External Repaint and Floor coverings	\$18,000
2023	Butterfly Cottage Repaint Internal and Floor refurbish	\$16,000
2023	Library Boundary Fence Refurbish	\$4,000
2023	Connors Mill Floor Maintenance	\$15,000
2023	Butterfly Cottage Structural Repairs and electrical upgrades	\$20,000
2023	Golf Club New Roof	\$45,000
2023	Museum Toilets Refurbish	\$12,000
2023	Refurbish Grandstand (HWS, electrical, painting structural)	\$35,000
2023	Allowance to Demolish Racecourse Buildings	\$50,000
2023	Bowls Club External replace Aircon	\$30,000
		<b>\$333,000</b>
Network Renewal Projects		Estimate
2024	Youth Hall replace flooring	\$10,000
2024	Library Replace Carpet	\$15,000
2024	Connors Cottage Air con Replacement	\$15,000
2024	Clinton Street Units Replace Floor coverings	\$20,000
2024	Community Centre Bathroom refurb	\$10,000
2024	Sheep Pavilion Repaint and refurbish volunteer help	\$5,000
2024	Medical Centre Floor Coverings replace Foyer and passage and Generator overhaul Electrical Upgrade	\$40,000
2024	Memorial Hall Floor resurface	\$7,500
2024	Dudgee Park New Equipment/Furniture	\$30,000
2024	Visitors Centre Floor Maint	\$6,500
2024	Charcoal Lane Toilets Internal and external repaint	\$5,000
2024	Fire Water Tank Replacement Hill Place	\$12,989
2024	Mrs O'relleys Allowance for structural repairs	\$15,000
2024	Medical Centre Roof drainage maintenance	\$30,000
2024	Replace HWS and Maintain Septics Morangup Hall	\$6,000
2024	Racecourse Electrical upgrade and building structural maintenance	\$60,000
2024	Showground Pavilion Roof repairs and new floor	\$15,000
2024	Federation Square Shelter renewal	\$15,000
		<b>\$317,989</b>
Network Renewal Projects		Estimate
2025	Library Fencing Replacement	\$9,000
2025	Depot Office Air-con replacement stage 1	\$10,000
2025	Newcastle Park Equipment/structure refurbish	\$55,000
2025	Clinton Street Units Allowance for Brickwork Repairs	\$6,000
2025	Youth Hall Bathroom and Kitchen refurbish	\$25,000
2025	Visitors Centre Bathroom Refurbish	\$7,000
2025	Connors Cottage Floor treatments	\$10,000
2025	Police Stables - Structural repairs allowance	\$10,000
2025	Memorial Hall Generator Overhaul	\$6,500
2025	External Repaint Morangup Hall	\$6,000
2025	Donegans Cottage Reroof	\$27,000
2025	Appliance replacement Community Centre	\$6,000
2025	Police Lockup external maintenance	\$8,000
2025	Tennis Club Refurbish	\$65,000
2025	Parkers Cottage Re-roof with allowance for structural repair replace HWS and Electrical upgrade	\$47,000
		<b>\$297,500</b>

Network Renewal Projects		Estimate
2026	Depot Office Air con replacement stage 2	\$10,000
2026	Library Structural Repairs	\$10,000
2026	Cat Pound Refurbish inc replace air-con and HWS	\$20,000
2026	Overhaul Changing Place equipment	\$10,000
2026	Police Stables - Structural repairs allowance	\$15,000
2026	Toodyay Junction Internal repaint	\$10,000
2026	Transfer Station Air Con Replacement	\$5,000
2026	Fire Water Tank Replacement Picnic Hill Road	\$13,514
2026	Newcastle Goal Internal repaint and timber treatments	\$25,000
2026	replace Shade Sail Toodyay Community Hall	\$6,000
2026	Replace Shade Sail Morangup Hall	\$8,000
2026	Administration Chambers Kitchen refurb	\$8,000
2026	Visitors Centre Floor reseal	\$6,000
2026	Conservation Works Newcastle Goal	\$15,000
2026	Toodyay Community Centre Structural repairs	\$15,000
2026	Bendigo Bank Bathroom Refurbishment & Structural repairs	\$17,000
		<b>\$193,514</b>
Network Renewal Projects		Estimate
2027	Toodyay Junction Replace Roof	\$40,000
2027	Shire Depot Office replace floor coverings replace HWS and Refresh Toilets	\$15,000
2027	Clinton St U18A replace HWS	\$1,700
2027	Animal Management Facility HWSand dishwasher replace	\$5,000
2027	Memorial Hall Repaint	\$15,000
2027	Toodyay Community Centre Kitchen refresh	\$20,000
2027	RSL Building External Repaint and fencing	\$25,000
2027	Parkers Cottage Repaint int and Ext	\$15,000
2027	Library - Allow Structural repairs	\$6,000
2027	Bendigo Bank External Maintenance	\$15,000
2027	Connors Mill Allowance for Structural Maintenance and Painting	\$15,000
2027	Visitors Centre - Aircon replacement and allowance for structural repairs	\$25,000
2022	Memorial Hall floor reseal	\$6,500
2027	Administration Generator Overhaul	\$6,000
		<b>\$210,200</b>
Network Renewal Projects		Estimate
2028	Community Centre Replace floor coverings	\$20,000
2028	Clinton St Units Replace Air con units Unit B and Internal Repaint	\$21,000
2028	Fencing Replacement At Toodyay Junction	\$10,000
2028	Medical Centre Bathroom refresh	\$15,000
2028	Duidgee Toilets Repaint	\$1,600
2028	Library - Allow Structural repairs	\$6,000
2028	Donegans Cottage Ext Floor and handrail Refurbish Electrical Upgrade	\$25,000
2028	Connors Mill Allowance for Structural Maintenance and Painting	\$15,000
2028	Charcol Lane Toilets Plumbing Overhaul/ replace HWS	\$16,600
2028	Fire Water Tank Replacement Horse Shoe Road	\$14,060
2028	Mr's Orellieys Fence repairs	\$5,000
2028	Depot Office Carpet replacement and Kitchen refresh	\$10,000
2028	Mrs O'Rellieys Allowance Structural Repairs	\$8,000
2028	Clinton St Units Structural allowance	\$10,000
2028	Bendigo Bank Air -con replacement and Kitchen refirbish and floor coverings	\$25,000
		<b>\$202,260</b>
<b>Total</b>		<b>\$3,196,569</b>

## Appendix B Projected Upgrade/Exp/New 10-year Capital Works Program

Forecast Upgrade/ New Plan		
year	Capital Upgrade and New Projects	budget
2019	Coondle Fire Shed (Grant Funds and shire funds)	\$337,400
2019	Morangup Co-Location Fire Centre Upgrade	\$405,000
2019	Morangup Community centre Additions	\$380,000
2019	Youth Hall Install new air con and replace skylights with roofing	\$15,000
2019	Wicklow Shearing Shed audio/visual installation and improvement works Awning	\$12,000
2019	Dog Pound Structural Alterations and Insulate Roof	\$12,000
2019	Recreation Precinct Works	\$2,236,111
2019	Transfer Station Chemical Shed Fire Wall	\$15,000
		<b>\$3,412,511</b>
	Capital Upgrade and New Projects	Estimate
2020	Pelham Reserve New Toilets and removal of existing	\$90,000
2020	Toodyay Junction access ramp & Handrail	\$19,000
2020	Morangup Hall - Contribution towards Relocating Water tanks floor sealing and a new water	\$25,000
2020	Newcastle Goal New Exhibit Storage Shed behind	\$25,000
2020	Admin Donger replacement Planning	\$20,000
2020	Police Stables - install lighting	\$5,000
2020	New Fire Water Tank Gidgegannup Springs	\$15,300
2020	Community Centre stg 2 Soundproofing	\$12,000
2020	Memorial Hall sound system upgrade and New Curtains	\$25,000
2020	Recreation Precinct Works	\$3,144,139
		<b>\$3,380,439</b>
	Capital Upgrade and New Projects	Estimate
2021	Morangup Hall Improvements contribution to Outdoor lighting, electric BBQ , shade sails and furniture	\$25,000
2021	Toodyay River Walk Trail structure Planning	\$5,000
2021	Bejoording Fire Station Replacement	\$353,031
2021	Cobblers Pool Master Planning	\$10,000
		<b>\$393,031</b>
	Capital Upgrade and New Projects	Estimate
2022	Admin Reroof, Structural repairs, Donger replacement and Toilet Upgrade	\$825,000
2022	Cobblers Pool Improvements - Toilet and Shade shelter BBQ	\$120,000
2022	Toodyay River Walk Trail Structure Construction	\$80,000
2022	Julimar Fire Station Replacement	\$361,355
		<b>\$1,386,355</b>
	Capital Upgrade and New Projects	Estimate
2023	Morangup Hall Improvements contribution towards Kitchen Upgrade and floor reseal	\$40,000
2023	Wicklow Shearing Shed Café Blinds	\$5,500
2023	Cemetery New Toilet and Planning	\$110,000
2023	Planning for Kitchen Additions at Community Centre	\$10,000
2023	Storage Shed at Works Depot	\$40,000
		<b>\$205,500</b>
	Capital Upgrade and New Projects	Estimate
2024	Library Rear Additions Planning Phase	\$12,000
2024	Police Lockup Fitout internal maintenance	\$34,000
2024	Old Depot Site improvement Master Planning and contaminated site clean-up allowance	\$35,000
2024	Construction of Kitchen Additions at Community Centre	\$150,000
		<b>\$231,000</b>

Capital Upgrade and New Projects		Estimate
2025	Heritage Interpretation Works Shire Admin and Museum Precinct Planning	\$15,000
2025	Library Rear Additions	\$300,000
2025	Shire Vehicle Shade at Depot	\$20,000
2025	Shire Vehicle Shade at the Shire Administration	\$20,000
		\$355,000
Capital Upgrade and New Projects		Estimate
2026	Old Depot Site Demolition, Site works and landscaping.	\$150,000
2026	Transfer Station Planning	\$8,000
2026	Heritage Interpretation Works at Admin and Museum Precinct (funding dependant)	\$250,000
		\$408,000
Capital Upgrade and New Projects		Estimate
2027	Old Depot Site Construction Design phase and tender	\$15,000
2027	Transfer Station Improvements works	\$200,000
2027	Planning New Administration and conservation Centre at the Museum Complex	\$10,000
2027	Nardie Cemetery Interpretive Shelter	\$20,000
2027	Replace Surface of Multi -Purpose Courts	\$50,000
2027	Additional double Storage Shed at Toodyay Junction	\$30,000
		\$325,000
Capital Upgrade and New Projects		Estimate
2028	Old Depot Site Construction Phase 1	\$350,000
2028	Stock pound upgrade	\$20,000
2028	Construction of New Administration and Conservation Centre at the Museum	\$320,000
		\$690,000
<b>TOTAL</b>		<b>\$10,786,836</b>



## Appendix C Budgeted Expenditures Accommodated in LTFP

Buildings Forecast Upgrade/ New Plan		
year	Capital Upgrade and New Projects	budget
2019	Coondle Fire Shed (Grant Funds and shire funds)	\$337,400
2019	Morangup Co-Location Fire Centre Upgrade	\$405,000
2019	Morangup Community centre Additions	\$50,000
2019	Youth Hall Install new air con and replace skylights with roofing	\$15,000
2019	Wicklow Shearing Shed audio/visual installation and improvement works Awning	\$12,000
2019	Dog Pound Structural Alterations and Insulate Roof	\$12,000
2019	Duidgee / Stirling Park Upgrade - Infrastructure	\$76,980
2019	Cemetery capital works	\$30,000
2019	Administration additional works	\$12,500
2019	Recreation Precinct Works	\$2,236,111
2019	Transfer Station Chemical Shed Fire Wall	\$16,000
		<b>\$3,202,991</b>
	Capital Upgrade and New Projects	Estimate
2020	Pelham Reserve New Toilets and removal of existing	\$90,000
2020	Toodyay Junction access ramp & Handrail	\$19,000
2020	Morangup Hall - Contribution towards Relocating Water tanks floor sealing and a new water	\$23,000
2020	Newcastle Goal New Exhibit Storage Shed behind	\$25,000
2020	Admin Donger replacement Planning	\$20,000
2020	Police Stables - install lighting	\$20,000
2020	New Fire Water Tank Gidgegannup Springs	\$15,300
2020	Memorial Hall sound system upgrade and New Curtains	\$25,000
2020	Recreation Precinct Works	\$3,144,139
2020	Morangup Community centre Additions	\$330,000
		<b>\$3,711,439</b>
	Capital Upgrade and New Projects	Estimate
2021	Morangup Hall Improvements contribution to Outdoor lighting, electric BBQ , shade sails and furniture	\$25,000
2021	Toodyay River Walk Trail structure Planning	\$10,000
2021	Bejoording Fire Station Replacement	\$353,031
2021	Cobblers Pool Master Planning	\$10,000
		<b>\$398,031</b>
	Capital Upgrade and New Projects	Estimate
2022	Admin Reroof, Structural repairs, Donger replacement and Toilet Upgrade	\$225,000
2022	Cobblers Pool Improvements - Toilet and Shade shelter BBQ	\$120,000
2022	Toodyay River Walk Trail Structure Construction	\$80,000
2022	Julimar Fire Station Replacement	\$361,355
		<b>\$786,547</b>
	Capital Upgrade and New Projects	Estimate
2023	Morangup Hall Improvements contribution towards Kitchen Upgrade and floor reseal	\$40,000
2023	Cemetery New Toilet and Planning	\$110,000
2023	Planning for Kitchen Additions at Community Centre	\$10,000
		<b>\$160,000</b>

Capital Upgrade and New Projects		Estimate
2024	Library Rear Additions Planning Phase	\$12,000
2024	Police Lockup Fitout internal maintenance	\$34,000
2024	Old Depot Site improvement Master Planning and contaminated site clean-up allowance	\$35,000
2024	Construction of Kitchen Additions at Community Centre	\$100,000
		<b>\$181,000</b>
Capital Upgrade and New Projects		Estimate
2025	Heritage Interpretation Works Shire Admin and Museum Precinct Planning	\$7,000
		<b>\$7,000</b>
Capital Upgrade and New Projects		Estimate
2026	Old Depot Site Demolition, Site works and landscaping.	\$70,000
		<b>\$70,000</b>
Capital Upgrade and New Projects		Estimate
2027	Old Depot Site Construction Design phase and tender	\$15,000
2027	Planning New Administration and conservation Centre at the Museum Complex	\$10,000
2027	Nardie Cemetery Interpretive Shelter	\$20,000
2027	Replace Surface of Multi -Purpose Courts	\$40,000
2027	Additional double Storage Shed at Toodyay Junction	\$30,000
		<b>\$115,000</b>
Capital Upgrade and New Projects		Estimate
2028	Old Depot Site Construction Phase 1	\$0
		<b>\$0</b>
<b>TOTAL</b>		<b>\$8,632,008</b>

## Buildings Forecast Renewal Plan

year	Network Renewal Projects	final budget
2019	Racecourse water main replacement	\$15,000
2019	Newcastle Goal Roof and Structure Works (Grant Funded)	\$313,000
2019	Visitor Centre external Repaint and Drainage	\$12,000
2019	Administration Brick Repairs and repaint Chamber Ceiling and Damp repairs	\$15,000
2019	Works Depot (Railway Road ) Repaint internal external	\$8,000
2019	Bendigo Bank Rear addition repairs remove asbestos fix damage	\$15,000
2019	Showground Pavilion replace gutters and downpipes Refurbish Toilets/Change rooms Stage 1	\$92,000
2019	Pelham Reserve Renewal	\$25,760
2019	Donegans Cottage Structural Repairs	\$15,000
2019	P & G Clinton Kitchen and Toilet repairs	\$9,000
2019	Library brickwork repairs	\$6,000
2019	Connors Mill Structural repairs Allowance	\$5,000
2019	Showground Grandstand internal Alterations	\$15,000
2019	Butterly Cottage Structural Repairs	\$20,000
2019	Community Centre Termite system Repair, Intl Repaint, Structural Floor repair, Recarpet, Meeting Floor renewal Renewal	\$34,500
2019	Fencing old Depot allowance contribution	\$5,000
		<b>\$605,260</b>
	<b>Network Renewal Projects</b>	<b>Estimate</b>
2020	Racecourse Roof - Tote area	\$75,000
2020	Memorial Hall external and internal repaint - Bathroom refurbish	\$10,000
2020	Parkers Cottage floor & wall repairs	\$10,000
2020	Administration Brick repairs stage 2	\$5,000
2020	Medical Centre Replace Air-con x 2 and external repaint	\$21,000
2020	Showground Pavilion Refurbish Change rooms /Toilets Stage 2 and fix drainage issues	\$10,000
2020	Butterly Cottage Repaint external & Structural repairs	\$12,000
2020	Library Aircon Replacement and Brickwork repairs	\$8,500
2020	Old Goal Machinery Shed gutter, floor and enclose	\$9,000
2020	Clinton Street Units Boundary Fence Replacement stage 1	\$5,000
2020	Bendigo Bank external Repaint, Floor treatments & HWS Replacement	\$8,500
2020	Golf Club ceiling repairs and internal repaint allowance for electrical upgrades	\$16,000
2020	Termite Protection Walkway Bridge	\$12,000
2020	Upgrade Shire master Keys	\$30,000
2020	Replace Carpets at Library Stage 1	\$6,000
		<b>\$238,000</b>
	<b>Network Renewal Projects</b>	<b>Estimate</b>
2021	New Depot (Railway Road) office Internal Repaint	\$8,000
2021	Community Centre Aircon Replacement /floor resurface & replace part carpet/Repaint Stage 1	\$6,000
2021	Connors Cottage Carpet Replacement	\$5,000
2021	Administration Brick repairs stage 3	\$5,000
2021	Clinton Street Units Boundary Fence Replacement stage 2	\$5,000
2021	Medical Centre replace air-con by 2 internal repaint & HWS replace	\$6,000
2021	Show Bar demolish, level and concrete site for temporary shelter	\$9,000
2021	Youth Hall External Repaint and Septic Tank preventative Maint replace HWS	\$10,500
2021	Library Air con replacing Stage 2	\$3,500
2021	Clinton St Units Asbestos Removal and Replacement	\$10,000
2021	Donegans Cottage Structural Repairs replace HWS	\$22,000
2021	Connors Mill Structural repairs Allowance	\$10,000
2021	Butterly Cottage Structural Repairs	\$12,000
2021	Museum Admin Air Con replacement	\$3,500
2021	Kitchen and Bathroom Refurbishment Golf Club -replace HWS	\$20,000
2021	Bowls Club Internal repaint and floor coverings	\$25,000
2021	Pavilion Kitchen and Bar upgrade	\$15,000
2021	Toodyay Junction External Painting Renewal and external timber maintenance	\$6,000
2021	Memorial Hall Stage Curtain replacement and electrical upgrade	\$20,000
		<b>\$201,500</b>

Network Renewal Projects		Estimate
2022	Clinton Street Reroof	\$70,000
2022	Administration Brick repairs stage 4	\$6,000
2022	Medical Centre air con replacement x 3	\$8,000
2022	Repaint Show Bar Toilets and refurbish plumbing	\$6,000
2022	Pavilion LED Lighting & air con upgrade	\$15,000
2022	Connors Cottage - replace Air Con Electrical upgrade	\$15,000
2022	Youth Hall Internal Repaint	\$8,000
2022	Butterly Cottage Structural Repairs	\$12,000
2022	Fire Water Tank Replacement Kane Road	\$1,506
2022	New Floor coverings Golf Club and Repaint	\$21,000
2022	Bowls Club External repaint and Bathroom Refurb and Electrical upgrade and structural repairs	\$40,000
		<b>\$202,506</b>
Network Renewal Projects		Estimate
2023	Connors Mill Electrical upgrade	\$10,000
2023	Community Centre External Repaint	\$8,000
2023	Medical Centre Air con replacement x 3 Int repaint stage 2, Kitchen refresh	\$30,000
2023	Clinton St Units External Repaint and Floor coverings	\$8,000
2023	Connors Mill Floor Maintenance	\$10,000
2023	Butterly Cottage Structural Repairs and electrical upgrades	\$20,000
2023	Golf Club New Roof	\$45,000
2023	Museum Toilets Refurbish	\$6,000
2023	Refurbish Grandstand (HWS, electrical, painting structural)	\$35,000
2023	Allowance to Demolish Racecourse Buildings	\$30,000
		<b>\$202,000</b>
Network Renewal Projects		Estimate
2024	Library Replace Carpet	\$15,000
2024	Community Centre Bathroom refurb	\$10,000
2024	Medical Centre Floor Coverings replace Foyer and passage and Generator overhaul Electrical Upgrade	\$40,000
2024	Memorial Hall Floor resurface	\$6,500
2024	Visitors Centre Floor Maint	\$6,500
2024	Charcoal Lane Toilets Internal and external repaint	\$5,000
2024	Fire Water Tank Replacement Hill Place	\$12,989
2024	Mrs O'rellieys Allowance for structural repairs	\$15,000
2024	Medical Centre Roof drainage maintenance	\$30,000
2024	Replace HWS and Maintain Septics Morangup Hall	\$6,000
2024	Racecourse Electrical upgrade and building structural maintenance	\$50,000
2024	Showground Pavilion Roof repairs and new floor	\$8,000
2024	Federation Square Shelter renewal	\$8,000
		<b>\$212,989</b>
Network Renewal Projects		Estimate
2025	Library Fencing Replacement	\$9,000
2025	Depot Office Air-con replacement stage 1	\$9,000
2025	Newcastle Park Equipment/structure refurbish	\$8,000
2025	Youth Hall Bathroom and Kitchen refurbish	\$14,000
2025	Visitors Centre Bathroom Refurbish	\$7,000
2025	Connors Cottage Floor treatments	\$10,000
2025	Police Stables - Structural repairs allowance	\$10,000
2025	Memorial Hall Generator Overhaul	\$6,500
2025	Donegans Cottage Reroof	\$30,000
2025	Appliance replacement Community Centre	\$6,000
2025	Police Lockup external maintenance	\$8,000
2025	Tennis Club Refurbish	\$50,000
2025	Parkers Cottage Re-roof with allowance for structural repair replace HWS and Electrical upgrade	\$35,000
		<b>\$202,500</b>

Network Renewal Projects		Estimate
2026	Depot Office Air con replacement stage 2	\$9,000
2026	Library Structural Repairs	\$8,000
2026	Cat Pound Refurbish inc replace air-con and HWS	\$18,000
2026	Overhaul Changing Place equipment	\$8,000
2026	Police Stables - Structural repairs allowance	\$12,000
2026	Fire Water Tank Replacement Picnic Hill Road	\$13,514
2026	Newcastle Goal Internal repaint and timber treatments	\$25,000
2026	replace Shade Sail Toodyay Community Hall	\$6,000
2026	Replace Shade Sail Morangup Hall	\$6,000
2026	Administration Chambers Kitchen refurb	\$7,000
2026	Visitors Centre Floor reseal	\$6,000
2026	Conservation Works Newcastle Goal	\$15,000
2026	Bendigo Bank Bathroom Refurbishment & Structural repairs	\$15,000
2026	Toodyay Community Centre Structural repairs	\$15,000
2026	Toodyay Library Internal Paint	\$15,000
2026	Contaminated site investigations P& G Clinton	\$10,000
2026	Memorial Hall floor reseal & Internal repaint	\$20,000
		<b>\$208,514</b>
Network Renewal Projects		Estimate
2027	Shire Depot Office replace floor coverings replace HWS and Refresh Toilets	\$15,000
2027	Clinton St U18A replace HWS	\$1,700
2027	Animal Management Facility HWS and dishwasher replace	\$5,000
2027	Memorial Hall Repaint	\$13,000
2027	Toodyay Community Centre Kitchen refresh	\$20,000
2027	RSL Building External Repaint and fencing	\$20,000
2027	Parkers Cottage Repaint int and Ext	\$15,000
2027	Library - Allow Structural repairs	\$6,000
2027	Bendigo Bank External Maintenance	\$10,000
2027	Connors Mill Allowance for Structural Maintenance and Painting	\$14,000
2027	Visitors Centre - Aircon replacement and allowance for structural repairs	\$18,000
2027	Administration Generator Overhaul	\$4,000
2027	Memorial Hall floor reseal	\$6,000
2027	Medical Centre Repaint	\$10,000
2027	Community Centre Air Con	\$6,000
2027	Butterly external repaint	\$12,000
2027	Administration Carpet Replace Chambers and Corridor	\$15,000
2027	Community Centre Air Con replace & Floor Resurface	\$12,000
		<b>\$202,700</b>
Network Renewal Projects		Estimate
2028	Community Centre Replace floor coverings	\$20,000
2028	Clinton St Units Replace Air con units Unit B and Internal Repaint	\$20,000
2028	Medical Centre Bathroom refresh	\$12,000
2028	Library - Allow Structural repairs	\$20,000
2028	Donegans Cottage Ext Floor and handrail Refurbish Electrical Upgrade	\$20,000
2028	Connors Mill Allowance for Structural Maintenance and Painting	\$15,000
2028	Charcoal Lane Toilets Plumbing Overhaul/ replace HWS	\$12,000
2028	Fire Water Tank Replacement Horse Shoe Road	\$14,060
2028	Depot Office Carpet replacement and Kitchen refresh	\$10,000
2028	Mrs O'Rellieys Allowance Structural Repairs	\$8,000
2028	Bendigo Bank Air -con replacement and Kitchen refirbish and floor coverings	\$20,000
2028	Clinton St Units Structural allowance	\$8,000
2028	Newcastle Goal allowance for structural repairs	\$10,000
2028	Toodyay Community Centre Interl Repairs repaint	\$15,000
		<b>\$204,060</b>
<b>Total</b>		<b>\$2,480,029</b>



## Appendix D: The Challenges of Heritage Buildings

In terms of Asset Management Heritage buildings present special challenges which must be acknowledged. These factors can vary in impact depending on the level of heritage of the building. The Heritage of a building is not just about its age, it is also about:

1. Its significance to the community;
2. Its significance to a specific period of history; and
3. Its significance in representing a type of architecture, building material/s or style

Knowing the level of heritage impact taking into account these factors is therefore very important. The importance of heritage, which can change over time is reflected in the Heritage classification/s given to a structure. These can vary from:

1. A simple recognition that it has some historical significance but is not officially recognised. This has the least restrictions but can still result in community opposition to any changes.
2. A listing on the Shire's Municipal Heritage Inventory (MI). This classifies a building from 1-5 in importance with 1 being highest. The buildings with a higher classification can also have additional separate classifications. Currently all MI listed buildings require Planning Approval to alter substantially externally. Those that are listed as 1 or 2 have additional restrictions.
3. A National Trust listing. This has no legal standing but does recognise a building's importance and lead to further classifications and assist in obtaining grant funding.
4. State Heritage Council listing. This recognises that a building and/or its surrounds has special significance and places the highest restrictions on what can be altered or changed. These properties have memorials, or restrictions on titles to enforce this.

The Shire manages buildings in all these categories with 5 properties consisting of 7 buildings State listed.

The factors that can and do impact in this way Heritage buildings can be managed are:

1. It can make maintenance, renewal and replacement difficult because often part of a building must be restored because it cannot be replaced due to the historical significance of the fabric.
2. The costs of maintenance can be high because of the specialised skills and more expensive materials involved.
3. In some cases the building's original design life is not relevant because of its heritage importance, so must continue to be maintained even if there are fit for purpose issues.

All of these challenges must be factored into the way heritage building assets are managed. This will necessitate the development of new strategies to manage the way these buildings are maintained and their long term plans in relation to disposal, renewal or development.

# Appendix E Abbreviations

AAAC	Average annual asset consumption
AM	Asset management
AM Plan	Asset management plan
GRC	Gross replacement cost
DA	Depreciable amount
DRC	Depreciated replacement cost
IRMP	Infrastructure risk management plan
LCC	Life Cycle cost
LTFP	Long Term Financial Plan
MMS	Maintenance management system
RV	Residual value

## Appendix F: Glossary

### Annual service cost (ASC)

1. Reporting actual cost  
The annual (accrual) cost of providing a service including operations, maintenance, depreciation, finance/opportunity and disposal costs less revenue.
2. For investment analysis and budgeting  
An estimate of the cost that would be tendered, per annum, if tenders were called for the supply of a service to a performance specification for a fixed term. The Annual Service Cost includes operations, maintenance, depreciation, finance/opportunity and disposal costs, less revenue.

### Asset

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

### Asset category

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

### Asset class

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

### Asset condition assessment

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

### Asset hierarchy

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

### Asset management (AM)

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

### Asset renewal funding ratio (ARFR)

The ratio of the net present value of asset renewal funding accommodated over a 10-year period in a Long Term Financial Plan relative to the net present value of projected capital renewal expenditures identified in an asset management plan for the same period [AIFMM, 2015, Version 1.0, Financial Sustainability Indicator 3, Sec 2.6, p 9].

### Average annual asset consumption (AAAC)\*

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

### Borrowings

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

### Capital expenditure

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

### \*Capital expenditure - expansion

Expenditure that extends the capacity of an existing asset to provide benefits, at the same standard as is currently enjoyed by existing beneficiaries, to a new group of users. It is discretionary expenditure, which increases future operations and maintenance costs, because it increases the asset base, but may be associated with additional revenue from the new user group, e.g. 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, e.g. 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 asset base, e.g. 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**

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

### **Capital investment expenditure**

Relatively large (material) expenditure, which has benefits, expected to last for more than 12 months (See capital expenditure definition)

### **Capitalisation threshold**

The value of expenditure on non-current assets above which the expenditure is recorded 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 in the balance sheet after deducting any accumulated depreciation / amortisation and accumulated impairment losses.

### **Component**

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

### **Core asset management**

Asset management which relies primarily on the use of an asset register, maintenance management systems, top-down condition assessment, simple risk assessment and defined levels of service, in order to establish alternative treatment options and a long-term cash flow projection.

### **Cost of an asset**

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

### **Critical assets**

Those assets that are likely to result in a more significant financial, environment and social cost in terms of impact on organisational objectives.

### **Deferred maintenance**

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

### **Depreciable amount**

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

### **Depreciated replacement cost (DRC)**

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

### **Depreciation / amortisation**

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

### **Economic life**

See useful life definition.

### **Expenditure**

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

### **Expenses**

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

### **Fair value**

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

### **Financing gap**

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

### **Gross replacement cost (GRC)**

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.

### **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 for access to major economic and social facilities and services, e.g. roads, drainage, footpaths and cycle ways. 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.

### **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 parameters or combination of parameters that reflect social, political, economic and environmental outcomes that the organisation delivers.

Levels of service statements describe the outputs or objectives an organisation or activity intends to deliver to customers.

### **Life Cycle**

The cycle of activities that an asset (or facility) goes through while it remains an identity as a particular asset i.e. from planning and design to decommissioning or disposal.

### **Life Cycle Cost (LCC)**

**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 is average cost to provide the service over the longest asset life cycle. It comprises average operations, maintenance expenditure plus asset consumption expense, represented by depreciation expense projected over 10 years. The Life Cycle Cost does not indicate the funds required to provide the service in a particular year.

### Life Cycle Expenditure (LCE)

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

### Maintenance

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

Maintenance may be classified as:

#### Planned maintenance

Falls into three categories:

- a) Periodic – necessary to ensure the reliability or to sustain the design life of an asset.
- b) Predictive – condition monitoring activities used to predict failure.
- c) Preventive – maintenance that can be initiated without routine or continuous checking and is not condition based.

#### Reactive maintenance

Unplanned repair work that is carried out in response to service requests and management/ supervisory directions.

#### Specific maintenance

Maintenance work to repair components or replace sub-components that needs to be identified as a specific maintenance item in the maintenance budget.

#### Unplanned maintenance

Corrective work required in the short-term to restore an asset to working condition so it can continue to deliver the required service or to maintain its level of security and integrity.

### Maintenance expenditure \*

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

### Materiality

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

### Modern equivalent asset

Assets that replicate what is in existence with the most cost-effective asset performing the same level of service. It is the most cost efficient, currently available asset which will provide the same stream of services as the existing asset is capable of producing. It allows for technology changes and, improvements and efficiencies in production and installation techniques. The modern equivalent asset is evidenced by renewal strategies in asset management plans and financing in a long-term financial plan covering at least 10 years.

### \*Net present value (NPV)

The value 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 e.g. 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, e.g. parks and playgrounds, footpaths, roads and bridges, libraries, etc.

### Operations

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

### Operating expenditure

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



### **Operating expense**

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

### **Operating expenses**

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

### **Operations, maintenance and renewal financing ratio**

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

### **Operations, maintenance and renewal gap**

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

### **Pavement management system (PMS)**

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

### **PMS Score**

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

### **Rate of annual asset consumption \***

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

### **Rate of annual asset renewal \***

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

### **Rate of annual asset upgrade/new \***

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

### **Recoverable amount**

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

### **Recurrent expenditure**

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

### **Recurrent funding**

Funding to pay for recurrent expenditure.

### **Rehabilitation**

See capital expenditure - renewal.

### **Remaining useful life**

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

### **Renewal**

See capital expenditure - renewal.

### **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. Residual value reflects consideration receivable from an asset at the end of its useful life to the entity and accordingly would not include cost savings from the re-use of in-situ materials.

### **Revenue generating investments**

Investments for the provision of goods and services to sustain or improve services to the community that are expected to generate some savings or revenue to offset operating costs, e.g. public halls and theatres, childcare facilities, sporting and recreation facilities, tourist information facilities, 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 Asset Management Plan**

A plan that documents and specifies how the organizational objectives are to be converted into AM objectives, the approach for developing AM Plans and the role of the AM system in supporting the achievement of AM objectives.

### **Strategic Plan**

A plan containing the long-term goals and strategies of an organisation. Strategic plans have a strong external focus, cover major portions of the organisation and identify major targets, actions and resource allocations relating to the long-term survival, value and growth of the organisation.

### **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 entity.

### **Valuation**

The process of determining the worth of an asset or liability. Assessed asset value which may depend on the purpose for which the valuation is required, i.e. replacement value for determining maintenance levels, market value for lifecycle costing and optimised deprival value for tariff setting.

### **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, IIMM & AIFMM 2015, Glossary

Additional and modified glossary items shown \*