ATTACHMENT 8

Shire of
Bridgetown-Greenbushes
.... simply beautiful

Parks, Reserves & Other Infrastructure

Asset Management Plan 2016-2020

Scenario 1 Version 1

June 2016 Revision 2

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1. EXECUTIVE SUMMARY

Context

The Shire of Bridgetown-Greenbushes is located at the heart of the South West of Western Australia close to forests and National Parks, wineries, heritage walks and trails. The Shire contains some of the state's most stunning historical buildings. In 2000, Bridgetown was recognised as a "Heritage Town".

Parks, reserves & other infrastructure are an important component of Council's asset portfolio, as parks and reserves infrastructure provides access to community and recreational facilities and is seen by the community as essential infrastructure. Council needs to ensure that there is an appropriate level of funding to enable this category of assets to be maintained and renewed to an acceptable standard.

This Plan collates current property portfolio condition, valuation, income and expenditure data, and compares it with the asset stock's long term funding needs (that are required to provide an agreed and sustainable Level of Service).

This Plan investigates whether Council's current level of asset operational, maintenance and renewal funding are sufficient to sustain the assets at a standard that will be acceptable to both asset owners and users.

Asset management involves continuous monitoring and improvement. Specific tasks and projects have been identified in this plan to ensure the progress of asset management in relation to parks, reserves and other infrastructure. Improving the Shire's asset management approach will ensure the provision of information required to ensure the whole of life costs involved in parks, reserves and other infrastructure asset management are acknowledged and the target levels of service are delivered to stakeholders.

The major issue for Council in delivery of services via its parks, reserves and other infrastructure is the lack of available condition and utilisation information to enable sustainable planned maintenance and renewal programs.

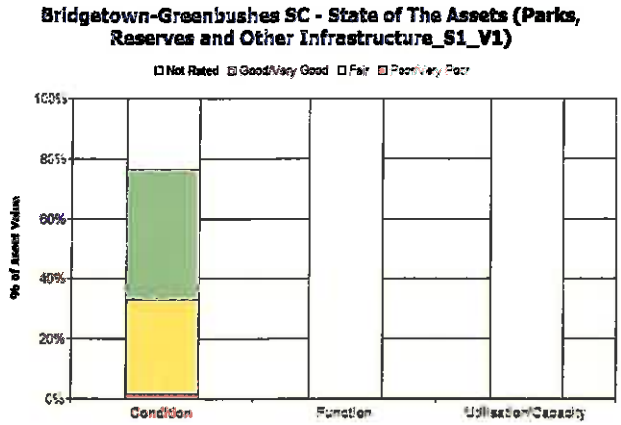
The Parks, Reserves & Other Infrastructure Service
The Parks, Reserves and Other Infrastructure network comprises:

- Parks
- Gardens
- Reserves
- Other Infrastructure

These infrastructure assets have a replacement value of $4,828,000.

Current State of the Assets
The State of the Assets graphs below show the percentage of assets in very good/good (1-2), fair (3) and poor/very poor (4-5) condition, function and utilisation.

The State of the Assets report can be used to measure whether the performance of the service is improving or not over time.



	Condition	Function	Utilisation/ Capacity
Not Rated	23.6 %	100 %	100 %
Good / Very Good	43.2 %	0 %	0 %
Fair	31.6 %	0 %	0 %
Poor / Very Poor	1.6 %	0 %	0 %

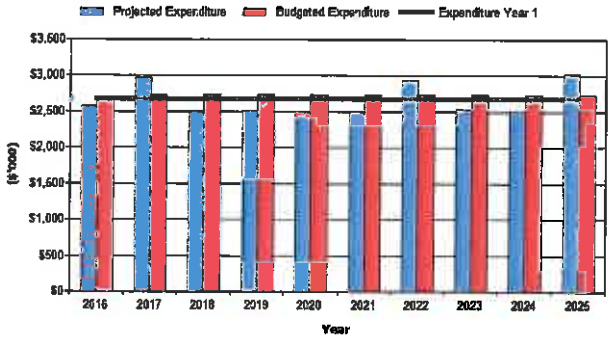
What does it Cost?

The projected outlays necessary to provide the services covered by this Asset Management Plan (AM Plan) includes operations, maintenance, renewal and upgrade of existing assets over the 10 year planning period is $26,520,000 or $2,652,000 on average per year.

Estimated available funding for this period is $27,294,000 or $2,729,000 on average per year which is 103% of the cost to provide the service. This is a

funding surplus of $77,000 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 graph below.

Bridgetown-Greenbushes SC - Projected and Budget Expenditure for (Parks, Reserves and Other Infrastructure_S1_V1)



What we will do

We plan to provide parks, reserves and other infrastructure services for the following:

- Operation, maintenance, renewal and upgrade of Parks, Reserves & Other Infrastructure to meet service levels set by Council in annual budgets.
- New landfill cell
- Geegeelup Brook open drain renewal & beautification
- Trail development

within the 10 year planning period.

What we cannot do

Although it appears as though we have sufficient funding to provide all the current services, because the level of confidence in the asset data is assessed as **low**, it may be, after the data has been assessed and updated, that we may not have enough funding to provide all services at the desired service levels or provide new services. If, after all the data has been reviewed and the confidence assessed as being high, there is still insufficient funding, works and services that cannot be provided under present funding levels will be determined after a review of existing levels of services and asset useful lives has been completed.

Managing the Risks

There are risks associated with providing the service and not being able to complete all identified activities and projects.
Council has to undertake a risk assessment in order to identify major risks.

Once identified, we will endeavour to manage these risks within available funding by developing risk mitigation strategies.

Confidence Levels

This AM Plan is based on low level of confidence information.

The Next Steps

The actions resulting from this asset management plan are:

- Develop a process for community engagement on Levels of Service including a survey to determine community service level expectations delivered via Council's parks, reserves & other infrastructure assets
- Develop a hierarchy for all parks, reserves & other infrastructure assets identifying parent/child relationships, and link to Levels of Service
- Develop a data collection procedure to ensure repeatability and on-going improvement of condition data collection and modelling processes
- Implement the condition inspection programme for parks, reserves & other infrastructure assets
- Greater degree of componentisation in the condition rating process
- Review the Shire's year acquired date for all parks, reserves & other infrastructure assets
- Determine useful lives and remaining useful lives of Council's parks, reserves & other infrastructure assets and adopt consistent unit rates
- Configure the Shire's corporate financial system to record asset expenditure at the individual asset level according to maintenance type and activity
- Identify and improve capture of operational expenditure in the organisation financial system to enable more accurate reporting of operational expenditure
- Develop and implement safety and maintenance inspection programmes and methodologies for building assets
- Identify and assess critical parks, reserves & other infrastructure assets for failure modes
- Identify parks, reserves & other infrastructure assets for possible future disposal
- Develop staff AM performance measures and link KPI's to individual job descriptions
- Provide asset management training to relevant staff and Councillors
- Determine split in costs between renewal and upgrades for all future upgrades in Council's planning documents
- Develop a long term capital works programme after undertaking condition inspections

- Develop a ranking criteria for assessing renewal/replacement priorities
- Develop a ranking criteria for assessment and selection of new/upgrade assets in forward planning documents
- Analyse demand impacts as a result of increased tourism
- Analyse demand impacts as a result of age demographic changes
- Investigate and implement a suitable asset management software program to consolidate all asset classes into one integrated database

Questions you may have

What is this plan about?

This asset management plan covers the infrastructure assets that serve the Shire of Bridgetown-Greenbushes community's Parks, Reserves & Other Infrastructure needs. These assets include parks, gardens, reserves and other infrastructure throughout the community area that enable people to enjoy parks, gardens and associated infrastructure such as playground equipment.

What is an Asset Management Plan?

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

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

Why is there a funding shortfall?

Most of the Council's Parks, Reserves & Other Infrastructure network was constructed by developers and from government grants, often provided and accepted without consideration of ongoing operations, maintenance and replacement needs.

Many of these assets are approaching the later years of their life and require replacement, services from the assets are decreasing and maintenance costs are increasing.

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

What options do we have?

Resolving the funding shortfall involves several steps:

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

What happens if we don't manage the shortfall?

It is likely that we will have to reduce service levels in some areas, unless new sources of revenue are found. For parks, reserves & other infrastructure, the service level reduction may include reducing the frequency of mowing grassed areas, reduction in the provision of playground equipment so that only high levels of community use are provided with equipment.

What can we do?

We can develop options, costs and priorities for future Parks, Reserves & Other Infrastructure services, consult with the community to plan future services to match the community service needs with ability to pay for services and maximise community benefits against costs.

What can you do?

We will be pleased to consider your thoughts on the issues raised in this asset management plan and suggestions on how we may change or reduce its Parks, Reserves & Other Infrastructure mix of services to ensure that the appropriate level of service can be provided to the community within available funding.

2. INTRODUCTION

2.1 Background

This asset management plan is to demonstrate responsive management of assets (and services provided from assets), compliance with regulatory requirements, and to communicate funding needed to provide the required levels of service over a 20 year planning period.

The asset management plan follows the format for AM Plans recommended in Section 4.2.6 of the International Infrastructure Management Manual[1].

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

- 10 year Long Term Financial Plan
- Strategic Community Plan
- Corporate Business Plan
- Forward Capital Works Plan

This infrastructure assets covered by this asset management plan are shown in Table 2.1. These assets are used to provide parks, gardens, reserves and other infrastructure services to the community.

Table 2.1: Assets covered by this Plan

Asset category	Dimension	Replacement Value
Parks & Gardens	Areas to be calculated	$ 2,428,965
Reserves	Areas to be calculated	$ 1,178,724
Playground equipment	Quantity to be determined	$ 761,913
Other Infrastructure	Quantity to be determined	$ 458,026
TOTAL		**$ 4,827,628**

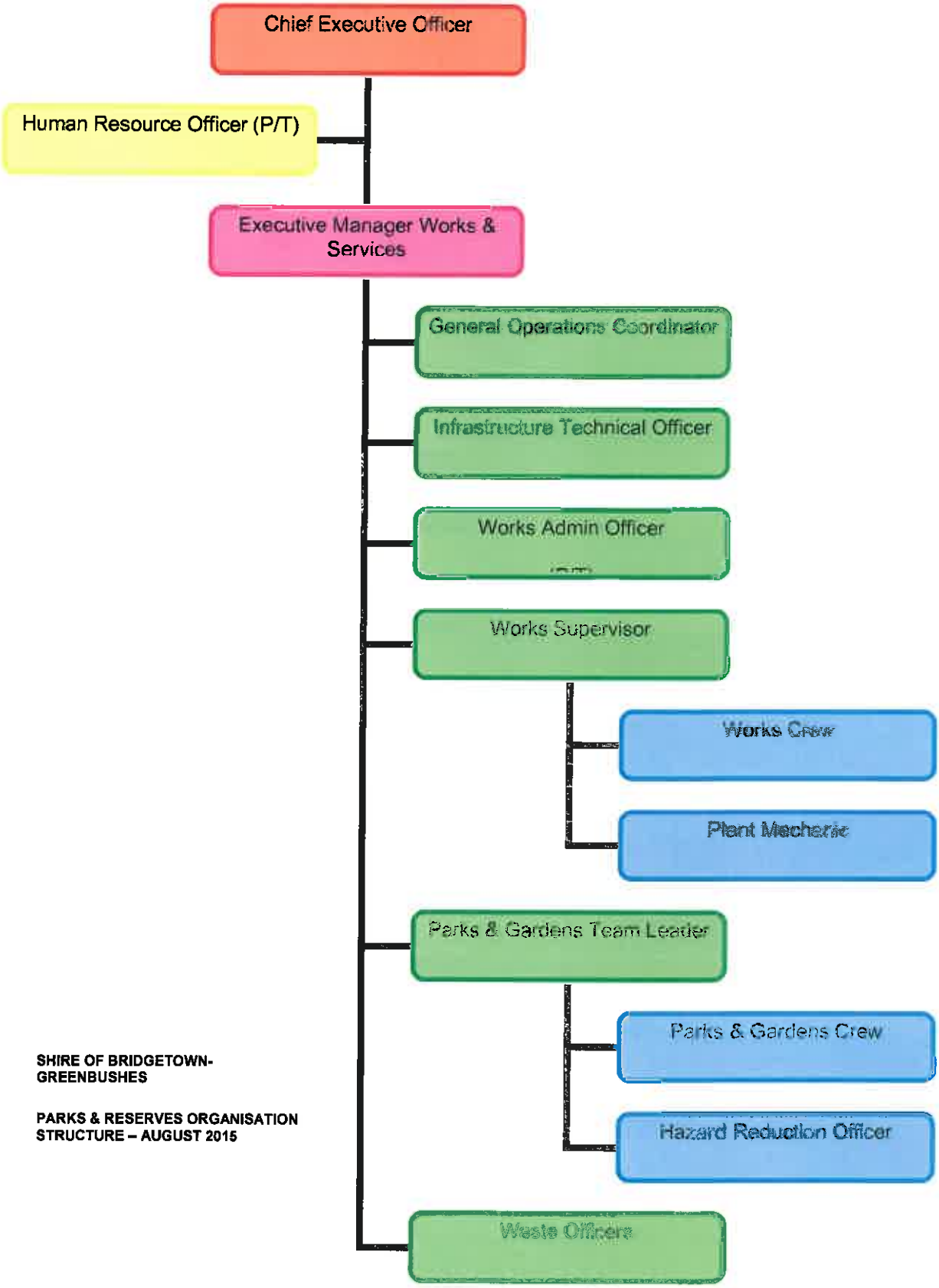
Key stakeholders in the preparation and implementation of this asset management plan are: Shown in Table 2.1.1.

Table 2.1.1: Key Stakeholders in the AM Plan

Key Stakeholder	Role in Asset Management Plan
Councillors	**Meeting community needs, sound management and allocation of resources, good governance.**
Employees / Contractors	Safe working environment
Community residents and businesses	Value for money, equitable and responsible service, well maintained assets
Parks & Reserves Infrastructure Users	Well maintained assets specific to users needs
Insurers	Appropriate risk management policies and practices, safe working environments, well maintained assets.
Tourists	Well maintained assets, accessible services, safe facilities
Government (Federal & State)	Systems in place to sustain transport infrastructure, accountability & transparency

Our organisational structure for service delivery from infrastructure assets is detailed below,

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



SHIRE OF BRIDGETOWN-GREENBUSHES

PARKS & RESERVES ORGANISATION STRUCTURE – AUGUST 2015

2.2 Goals and Objectives of Asset Management

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

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

- Providing a defined level of service and monitoring performance,
- Managing the impact of growth through demand management and infrastructure investment,
- Taking a lifecycle approach to developing cost-effective management strategies for the long-term that meet the defined level of service,
- Identifying, assessing and appropriately controlling risks, and
- Having a long-term financial plan which identifies required, affordable expenditure and how it will be financed.[2]

2.3 Plan Framework

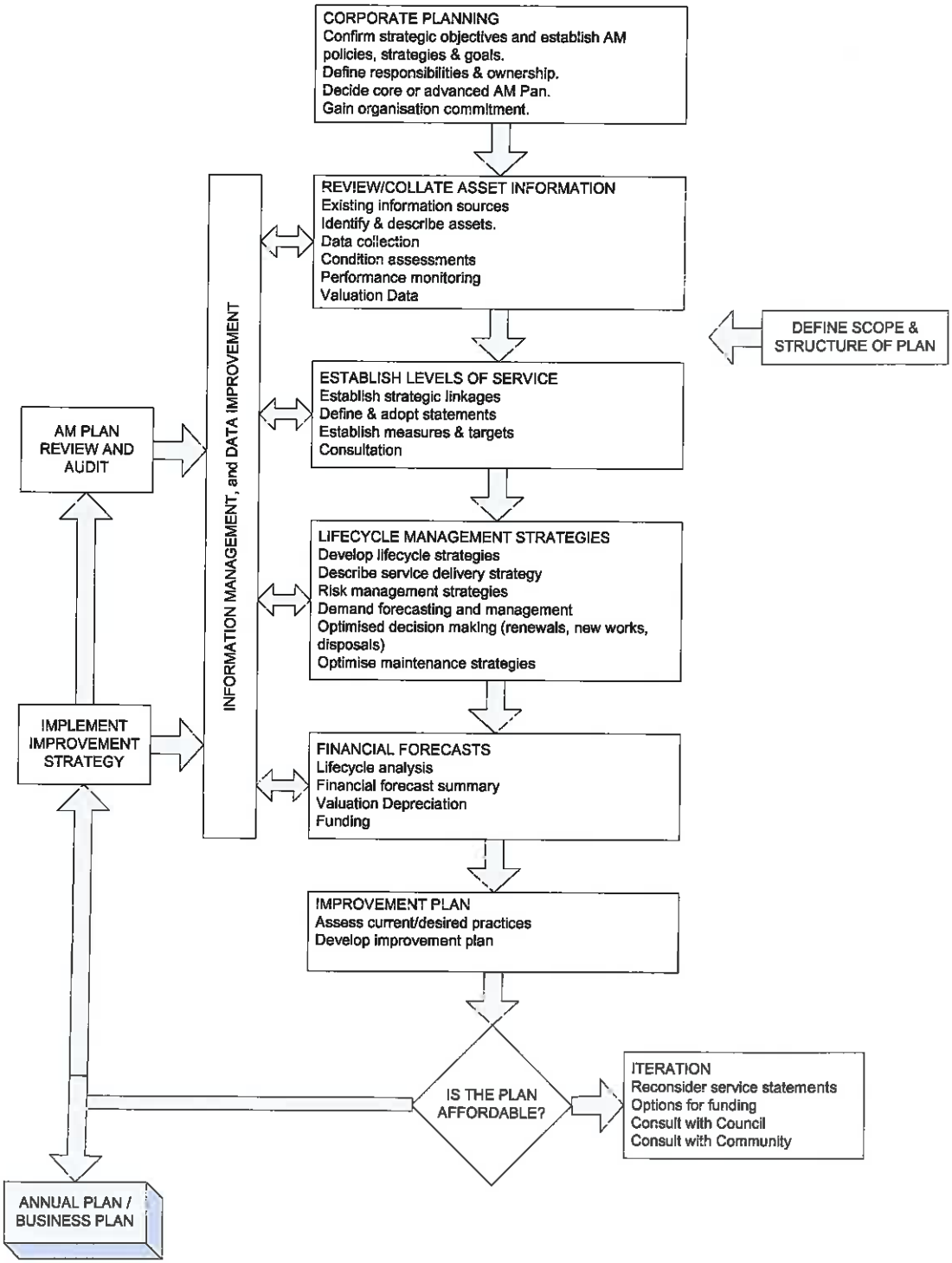
Key elements of the plan are

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

A road map for preparing an asset management plan is shown below.

[2] Based on IPWEA, 2011, IIMM, Sec 1.2 p 1|7.

Road Map for preparing an Asset Management Plan
Source: IPWEA, 2006, IIMM, Fig 1.5.1, p 1.11.



2.4 Core and Advanced Asset Management

This asset management plan is prepared as a 'core' asset management plan over a 20 year planning period in accordance with the International Infrastructure Management Manual[3]. It is prepared to meet minimum legislative and organisational requirements for sustainable service delivery and long term financial planning and reporting. Core asset management is a 'top down' approach where analysis is applied at the 'system' or 'network' level.

Future revisions of this asset management plan will move towards 'advanced' asset management using a 'bottom up' approach for gathering asset information for individual assets to support the optimisation of activities and programs to meet agreed service levels in a financially sustainable manner.

2.5 Community Consultation

Future revisions of the asset management plan will incorporate community consultation on service levels and costs of providing the service. This will assist the Council and the community in matching the level of service needed by the community, service risks and consequences with the community's ability and willingness to pay for the service.

3. LEVELS OF SERVICE

3.1 Customer Research and Expectations

We participated in the 2013 Shire of Bridgetown-Greenbushes Strategic Community Plan which incorporated a Local Government Customer Satisfaction survey. This involved an on-line survey, hard copy survey an community street event promoted as the "Bridgetown Wishing Tree" and a community visioning workshop to obtain a sample of residents level of satisfaction with Council's services. The most recent community satisfaction survey reported satisfaction levels for the following services

Table 3.1: Community Satisfaction Survey Levels[4]

Performance Measure	Satisfaction Level				
	Very Satisfied	Fairly Satisfied	Satisfied	Somewhat satisfied	Not satisfied
Townscape presentation	✓				
Town Parks	✓				
Rubbish Tip	✓				
Playgrounds		✓			
Landscaping		✓			
Walk trails, bridle trails etc				✓	
Skate parks				✓	
Cemetery management				✓	

The organisation uses this information in developing its Strategic Plan and in allocation of resources in the budget.

[3] IPWEA, 2011, IIMM.
[4] Shire Bridgetown-Greenbushes Community Strategic Plan 2013 – page 10

3.2 Strategic and Corporate Goals

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

Our vision is:

A wonderful place to live, work and invest, with the community and the Shire Council working together to achieve shared outcomes.

Relevant organisational goals and objectives and how these are addressed in this asset management plan are:

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

Goal	Objective	How Goal and Objectives are addressed in AM Plan	How Objectives, Outcomes and Strategies are addressed in AM Plan
Objective 1: **A strong, resilient and balanced economy**	**Outcome 1.1:** A diverse range of employment opportunities.	**Strategy 1.1.1** Develop the Shire as a centre for natural trails such as multi-use walk, bike, kayak and bridle trails.	Council will seek the State Government continue grant funding support for the provision of facilities that will stimulate employment opportunities that support use of the trail network.
		Strategy 1.1.2 Develop and implement a Tourism Strategy	The preparation of a Tourism Strategy that provides the cost benefits of establishing the Shire as a centre for natural trails will aid in the development of specific strategies to achieve the stated goals.
	Outcome 1.2: Ensure infrastructure and services are provided for future development in keeping with the environment.	**Strategy 1.2.9** Improved facilities for tourists.	The preparation of a Tourism Strategy will aid in the development of specific strategies to achieve improved facilities for tourists.
	Outcome: 1.5 Maintain an appropriate standard of parks, reserves and other infrastructure.	Strategy: 1.5.1 Maximise funding opportunities	Council will seek grant funding to assist with the provision of park infrastructure.
		Strategy: 1.5.5 Implement Bicycle Network Plan.	Council will seek grant funding to assist with the provision of infrastructure associated with the implementation of the Trails Master Plan.
		Strategy: 1.5.6 Implement and review the Regional Trails Master Plan.	Council will review the Trails Master Plan once implemented to ensure the levels of service are meeting the expectations of the community.
Objective 2: **Our unique natural and built environment is protected and enhanced**	**Objective 2.1:** Natural resources are used efficiently and effectively	**Strategy 2.8.3** Source gravel from local land for roadworks, using powers under the Local Government Act with the view to minimise transport distances.	The innovative approach adopted in the AMP reinforces vale-engineering design principles, thus allowing the most cost-effective construction methods to be implemented
	Objective: 2.3 Improve parkland areas and public open spaces.	**Strategy: 2.3.2** Continue to prepare management or conservation plans for key bushland reserves.	Preparation of management and/or conservation plans will assist with the future provision of infrastructure assets where a need has been identified as being necessary to meet levels of service requirements.

		Strategy: 2.3.3 Prepare a Parkland Improvement Strategy.	Preparation of a Parkland Improvement Strategy will assist with the future provision of infrastructure assets where a need has been identified as being necessary to meet levels of service requirements.
	Objective: 2.4 Protect and better utilise the river and natural landscape as an asset to the Shire.	**Strategy: 2.4.2** Implement the Regional Trails Masterplan.	Council will implement the Regional Trails Master Plan to provide an alternative opportunity to utilise the natural attributes of the river reserve.
		Strategy: 2.4.3 Identify opportunities for greater recreational and commercial use of the Blackwood River.	Council will undertake a review of alternative uses that could be implemented to provide additional opportunities to utilise the natural attributes of the river reserve.
	Objective: 2.8 Natural resources are used efficiently and effectively.	**Strategy: 2.8.5** Support and promote sound environmental practices.	Council will ensure that any development/use of the natural resources is undertaken in an environmentally sensitive manner.
	Objective: 2.9 Increased community involvement in managing the natural environment.	**Strategy: 2.9.3** Support the establishment of "Friends of" groups, for Shire reserves.	Council will encourage the establishment of community "Friend of" groups to manage and care for allotted sections of parks, parklands and/or trails.
Objective 3: **Our community enjoys a high quality of life.**	**Objective 3.1** Maintain a high standard of lifestyle, recreational and cultural facilities.	**Strategy: 3.1.7** Implement the Regional Trails Masterplan	Council will implement the Regional Trails Master Plan to provide a high standard of lifestyle, recreational and culture experience for users.
Objective 4: **A collaborative and engaged community**	**Outcome 4.1** A community that actively participates in civic life.	**Strategy 4.1.5** Implement an annual feedback survey	Council will utilise the community feedback to review the levels of service being provided to ensure the level of services are sustainable in the medium – long term.
	Outcome 4.2. A high standard of governance and accountability	**Strategy 4.2.1** Continue to provide elected member training and development	Asset management training for both elected members and Council staff has been identified as areas for improvement
		Strategy 4.2.3 Ensure compliance with relevant legislation	Compliance with the amendments to the Local Government Act 1995 and regulations that were effective from June 2013
		Strategy 4.2.4 Periodically review the organisational structure and its required service levels	The most appropriate level of service for the road network has been chosen, and will be reviewed periodically as required by the AMP.
		Strategy 4.2.5 Implement an annual feedback survey to monitor service provision	Council performance will be fed back to the community on a quarterly basis via the council newsletter and Shire website.
		Strategy 4.2.6 Provide quality local government services.	This AMP affects the way Council will do business in the future provision of a consistent quality of services.
	Outcome 4.4 The Shire provides a can-do approach within the regulatory framework	**Strategy 4.4.4** Implement annual customer feedback surveys and targeted surveys (including feedback	Council will utilise the community feedback to review the levels of service being provided to ensure the level of services are sustainable in

		forms)	the medium – long term.
	Outcome 4.5 Long term financial viability	**Strategy 4.5.1** Develop and implement the integrated Planning and reporting framework.	This AMP aligns with the Integrated Planning and Reporting Framework.
		Strategy 4.5.3 Seek efficiencies in planning and operations	The AMP identifies that the management of the network must be done in a whole of life cycle manner in order that sustainable budgeting practices can be implemented.
	Outcome 4.6 The revenue needs are managed in an equitable and sustainable manner	**Strategy 4.6.2** Identify appropriate areas for the application of the user pays cost recovery principle.	Council will undertake annual reviews to ensure that where practical, the user pays principle is utilised to offset the costs associated with the provision of facilities within the parks, reserves and other infrastructure portfolio.
	Outcome 4.10 Best practice asset management	**Strategy 4.10.1** Develop and implement asset management plans (AMP).	This is the second AMP for Transport Infrastructure completed by the Shire.

3.3 Legislative Requirements

The organisation has to meet many legislative requirements including Australian and State legislation and State regulations. These include:

Table 3.3: Legislative Requirements

Legislation	Requirement
Local Government Act 1995	Sets out role, purpose, responsibilities and powers of local governments including the preparation of a long term financial plan supported by asset management plans for sustainable service delivery.
Land Administration Act 1997	Sets out the requirements for undertaking activities on land vested in the Crown and managed by Council
Occupational Safety and Health Act 1984	Sets out the responsibilities of local government, employees and contractors engaged by local government in relation to their safety and health
Planning and Development Act 2005	Sets out the responsibilities of local government in relation to the land resumption process for the purpose of roadworks
Environmental Protection Act 1986	Sets out the local government's responsibilities to protect the environment whilst undertaking road infrastructure works.
Aboriginal Heritage Act 1972	Sets out the responsibilities of local government to ensure that areas of aboriginal significance are not impacted adversely as a result of undertaking infrastructure works
Heritage of Western Australia Act 1990	Sets out the responsibilities of local government to ensure that areas of heritage significance are not impacted adversely as a result of undertaking infrastructure works
Conservation and Land Management Act 1984	Sets out the requirements of undertaking works on lands under the management of State Government agencies – i.e. gravel for roads works accessed from crown land.
Public Works Act 1902	Sets out the responsibilities for undertaking public works associated with roads, bridges etc.
Building Act 2011	Sets out the requirements for construction of structures associated with the provision of facilities situated on parks and reserve land.
Building Code of Australia 2015	Provides detailed codes of practice to be adhered to when constructing facilities.
Fire & Emergency Services Act 1998	Sets out the requirements to ensure structures meet relevant fire prevention measures applicable to faciiities.

Health Act 1911	Sets out the public health standards to be satisfied for public buildings/structures associated with parks & reserves infrastructure.
Cemeteries Act 1986	Sets out the requirements for the provision of facilities etc. in public cemeteries.
Soil and Land Conservation Act 1945	Sets out the requirements to mitigate damage to the natural environment when developing land associated with parks & reserves where such development may adversely affect the land.
Australian Standards for Playgrounds AS 4685.1 2004 parts 1-6	Current safety requirements and test methods.

The organisation will exercise its duty of care to ensure public safety is accordance with the infrastructure risk management plan prepared in conjunction with this AM Plan. Management of infrastructure risks is covered in Section 5.2

3.4 Community Levels of Service

Service levels are defined service levels in two terms, customer levels of service and technical levels of service.

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

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

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

The organisation's current and expected community service levels are detailed in Tables 3.4 and 3.5. Table 3.4 shows the agreed expected community levels of service based on resource levels in the current long-term financial plan and community consultation/engagement.

Table 3.4: Community Level of Service

Service Attribute (KPI)	Service Objective	Performance Measure Process	Current Performance	Expected position in 10 years based on current LTFP
Community Outcomes: • A strong, resilient and balanced economy • Our unique natural and built environment is protected and enhanced • Our community enjoys a high quality of life • A collaborative and engaged community				
Strategic Community Plan Outcomes: 1.1.1; 1.5.5;1.5.6; 2.4.2; 3.1.7; **Parks, Reserves & Other Infrastructure –Walk Trails, Cycle Ways & Bridle Paths**				
Community/Operational Level of Service				
Quality	Well maintained and suitable walk trails, cycle ways and bridle paths. To ensure the ongoing provision of well-kept community facilities	User Satisfaction	TBC% of users satisfied with the maintenance of trails, paths & cycle ways	TBC% of users satisfied with the maintenance of trails, paths & cycle ways
	Ensure that people with disabilities have the same opportunities as other people to access path network	% Fully accessible paths and cycle ways.	TBC% of paths and cycle ways accessible	TBC% of paths and cycle ways accessible

	Ensure that people with disabilities have the same opportunities as other people to access path network	Number of complaints about access to paths & cycle ways	Customer requests <10/year	Customer requests <5/year
Function	Functionally fit for purpose Sufficient facilities to meet user demand/needs	Path, trail & cycle way audits to assess fitness for purpose. (1 fully meets needs – 5 unusable)	Unknown	Unknown
Capacity/Utilisation	To provide and maintain trail, path & cycle way network to a safe standard	Number of incidents/injury/accidents linked to each path, trail or cycle way	TBC/yr	Nil/yr

Service Attribute (KPI)	Service Objective	Performance Measure Process	Current Performance	Expected position in 10 years based on current LTFP
Community Outcomes:				
Strategic Community Plan Outcomes: 2.1.2; 2.3.2; 2.3.3; 2.5.1; 2.8.5; 2.9.3; **Parks, Reserves & Other Infrastructure – Parks, Gardens & Playground Equipment**				
Community/Operational Level of Service				
Quality	Well maintained and suitable parks, gardens and playground equipment. To ensure the ongoing provision of well-kept community facilities	User Satisfaction	TBC% of users satisfied with the maintenance of parks, gardens & playground equipment	TBC% of users satisfied with the maintenance of suitable parks, gardens & playground equipment
	Ensure that people with disabilities have the same opportunities as other people to access parks and gardens areas	% Fully accessible parks & gardens.	TBC% of parks and gardens accessible	TBC% of parks and gardens accessible
	Ensure that people with disabilities have the same opportunities as other people to access parks & gardens	Number of complaints about access to parks & gardens.	Unknown	Unknown
Function	Functionally fit for purpose Sufficient facilities to meet user demand/needs	Path, trail & cycle way audits to assess fitness for purpose. (1 fully meets needs – 5 unusable)	Unknown	Unknown
Capacity/Utilisation	To provide and maintain trail, path & cycle way network to a safe standard	Number of incidents/injury/accidents linked to each path, trail or cycle way	TBC/yr	Nil/yr

3.5 Technical Levels of Service

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

Technical service measures are linked to annual budgets covering:

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

Service and asset managers plan, implement and control technical service levels to influence the customer service levels.[5]

Table 3.5 shows the technical level of service expected to be provided under this AM Plan. The agreed sustainable position in the table documents the position agreed by the Council following community consultation and trade-off of service levels performance, costs and risk within resources available in the long-term financial plan.

[5] IPWEA, 2011, IIMM, p 2.22

Table 3.5: Technical Levels of Service

Service Attribute (KPI)	Service Objective	Activity Measure Process	Current Performance*	Expected position in 10 years based on current LTFP**	Agreed Sustainable Position***
Technical Level of Service					
Legislative/Statutory	Meet criteria as detailed in Licences, Acts or Regulations	Compliance with Legislative/Statutory requirements	TBC% compliance	100% compliance	100% compliance
Operations	Path networks are safe for users requirements	Assessment of suitability for purpose through regular condition and defect surveys	TBC yearly condition and defect inspections of network	Annual condition and defect inspections of TBC% of network	Annual condition and defect inspections of TBC% of network
	Path, trails and cycle ways are appropriately used to justify the capital and running expense	Annual cost ($) per km	$TBC/pa	$TBC/pa	$TBC/pa
		Budget	Inspections (av) $TBC Other $TBC Total $TBC	Inspections (av) $TBC Other $TBC Total $TBC	Inspections (av) $TBC Other $TBC Total $TBC
Maintenance	Maintain the network at the agreed standards for the relevant infrastructure	User satisfaction measurement survey Cost effectiveness of maintenance	TBC% of customers believe the paths, trails & cycle ways provides good value for money	TBC% of customers believe the paths, trails & cycle ways provides good value for money	
		Budget	Inspections (av) $TBC Other $TBC Total $TBC	Inspections (av) $TBC Other $TBC Total $TBC	Inspections (av) $TBC Other $TBC Total $TBC
Renewal	Maintain condition of asset to maximise useful life	Forward Capital Works & Long Term Financial Plan schedule	Number of complaints of assets not meeting condition requirements <TBC/pa	Assets have a useful life of 40 years	Assets have a useful life of TBC years
		Budget	Inspections (av) $TBC Other $TBC Total $TBC	Inspections (av) $TBC Other $TBC Total $TBC	Inspections (av) $TBC Other $TBC Total $TBC
Upgrade	Paths, trails or cycle ways are replaced when scheduled to meet the levels of service and functionality requirements	Forward Capital Works & Long Term Financial Plan schedule and condition rating	Number of complaints of assets not meeting condition requirements <xx/pa	Number of complaints of assets not meeting condition requirements <xx/pa	Number of complaints of assets not meeting condition requirements <xx/pa
		Budget	Inspections (av) $TBC Other $TBC Total $TBC	Inspections (av) $TBC Other $TBC Total $TBC	Inspections (av) $TBC Other $TBC Total $TBC

Note: * *Current activities and costs (currently funded).*

** *Desired activities and costs to sustain current service levels and achieve minimum life cycle costs (not currently funded).*

*** *Activities and costs communicated and agreed with the community as being sustainable (funded position following trade-offs, managing risks and delivering agreed service levels).*

Service Attribute (KPI)	Service Objective	Activity Measure Process	Current Performance*	Expected position in 10 years based on current LTFP**	Agreed Sustainable Position***
Technical Level of Service					
Legislative/Statutory	Meet criteria as detailed in Licences, Acts or Regulations	Compliance with Legislative/Statutory requirements	TBC% compliance	100% compliance	100% compliance
Operations	Parks & gardens are safe for users requirements	Assessment of suitability for purpose through regular condition and defect surveys	TBC yearly condition and defect inspections of network	Annual condition and defect inspections of TBC% of network	Annual condition and defect inspections of TBC% of network
	Parks & gardens are appropriately used to justify the capital and running expense	Annual cost ($) per km	$TBC/pa	$TBC/pa	$TBC/pa
		Budget	Inspections (av) $TBC Other $TBC Total $TBC	Inspections (av) $TBC Other $TBC Total $TBC	Inspections (av) $TBC Other $TBC Total $TBC
Maintenance	Maintain the network at the agreed standards for the relevant infrastructure	User satisfaction measurement survey Cost effectiveness of maintenance	TBC% of customers believe the parks & gardens provides good value for money	TBC% of customers believe the parks & gardens provides good value for money	TBC% of customers believe the parks & gardens provides good value for money
		Budget	Inspections (av) $TBC Other $TBC Total $TBC	Inspections (av) $TBC Other $TBC Total $TBC	Inspections (av) $TBC Other $TBC Total $TBC
Renewal	Maintain condition of asset to maximise useful life	Forward Capital Works & Long Term Financial Plan schedule	Number of complaints of assets not meeting condition requirements <TBC/pa	Assets have a useful life of TBC years	Assets have a useful life of TBC years
		Budget	Inspections (av) $TBC Other $TBC Total $TBC	Inspections (av) $TBC Other $TBC Total $TBC	Inspections (av) $TBC Other $TBC Total $TBC
Upgrade	Parks & Gardens infrastructure assets are replaced when scheduled to meet levels of service and functionality requirements	Forward Capital Works & Long Term Financial Plan schedule and condition rating	Number of complaints of assets not meeting condition requirements <TBC/pa	Number of complaints of assets not meeting condition requirements <TBC/pa	Number of complaints of assets not meeting condition requirements <TBC/pa
		Budget	Inspections (av) $TBC Other $TBC Total $TBC	Inspections (av) $TBC Other $TBC Total $TBC	Inspections (av) $TBC Other $TBC Total $TBC

4. FUTURE DEMAND

4.1 Demand Drivers

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

4.2 Demand Forecast

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

4.3 Demand Impact on Assets

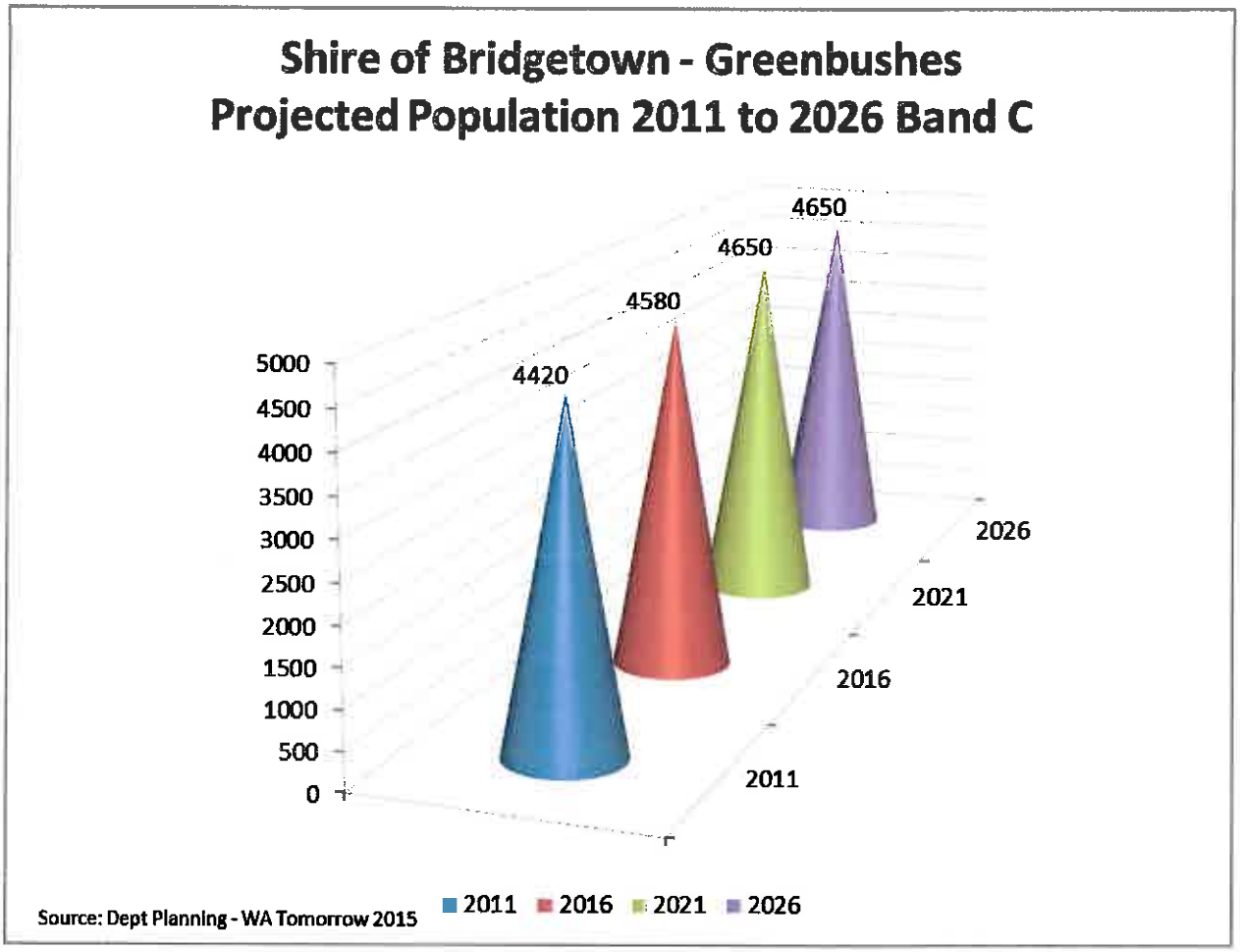
The impact of demand drivers that may affect future service delivery and utilisation of assets are shown in Table 4.3.

Table 4.3: Demand Drivers, Projections and Impact on Services

Demand drivers	Present position	Projection	Impact on services
Population	Present population estimated as at 2016 approx. 4,580	Increase of 1.53% from 2016 (4,580) to 2026 (4,650) an increase of 70 over 10 years. Projected increase of 0.34% per annum[6] from base year 2011 is less than predicted in 2013 due to the down-turn in the mining industry having a negative impact on the resident population in the future.	At an average increase of 7 per year the impact on services is considered to be **neutral.**
Demographic	**Age** **No.** 00-09 590 10-19 700 20-39 720 40-59 1280 60-79 1200 80+ 100	**Age** **No.** **Difference** 00-09 520 - 70 10-19 710 + 10 20-39 770 + 50 40-59 1110 - 170 60-79 1280 + 80 80+ 250 +150 Projected increases in the: 20-39 age group (8.5%), 60-79 age group (13.6%), 80+ age group (25.4%) and decreases in the 0-9 age group (-11.9 %) & 40-59 age group (-28.8%).	Increasing population in the 60+ age group will impact in the areas of disability parking facilities, aged care facilities and associated path and parking requirements for the aged and infirm. **Increase.** The net decrease in the 20-59 age group, may impact on the service levels currently provided by Council. **Decrease.**
Tourism		The population increases during peak tourist periods, especially during the "Blues at Bridgetown" music festival. The size of the increase is unknown.	Seasonal increase in demand for use of ablution facilities, temporary road closures, rubbish collection and signage is negligible. **Neutral.**
Environmental	No overriding policy in existence to minimise carbon footprint	Existence of policy to aid in minimisation of Council's carbon footprint	Potentially higher whole of life costs due to effects of climate change; moderate change from

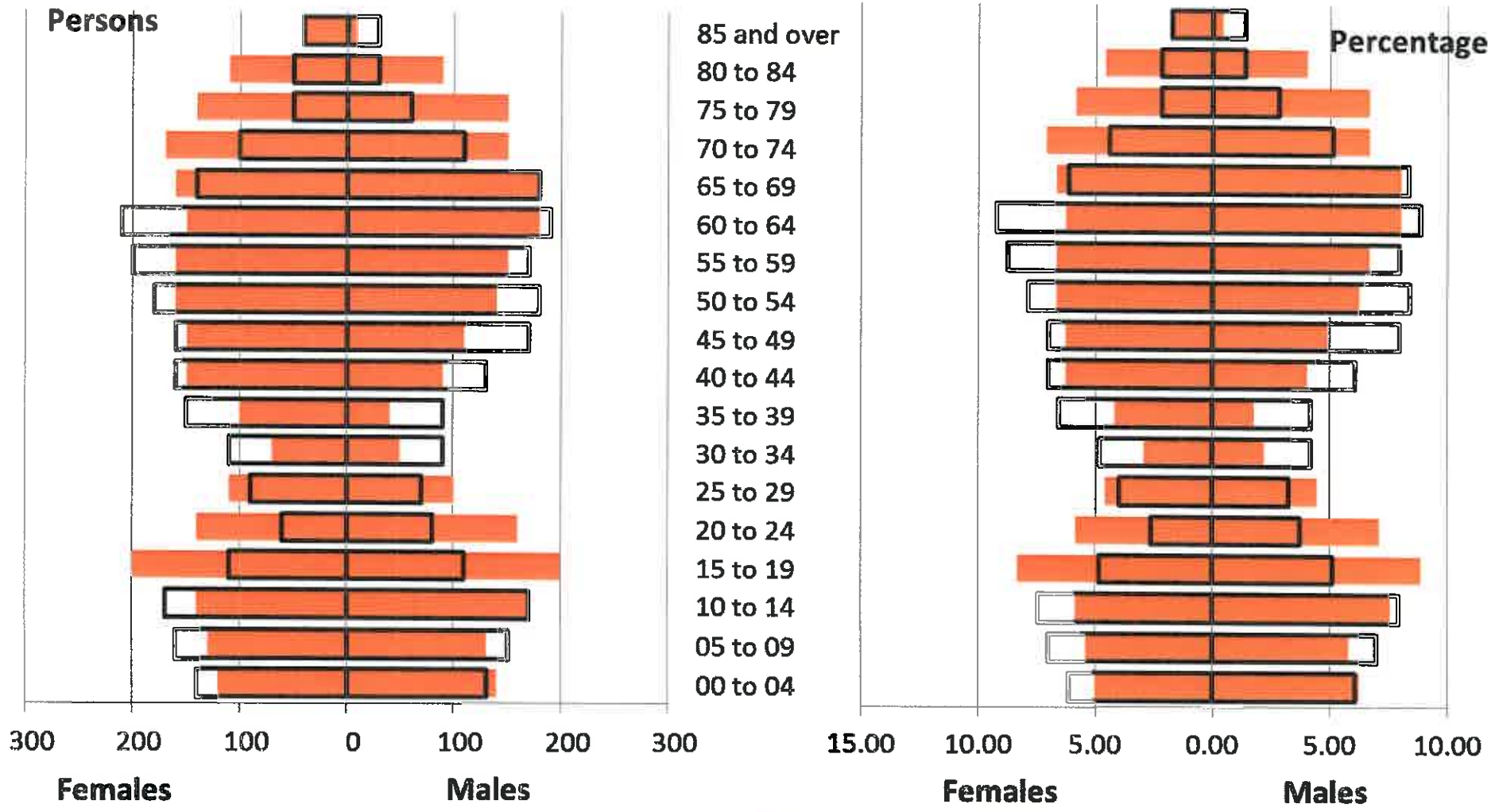
[6] ABS Population projection 2013

			sustainability pressures. **Increase.**
Climate Change	**Temperature:** The Annual Mean Temperature has increased by approx. 0.40 C since the late 1960's to 2015. **Rainfall:** Annual rainfall has been decreasing steadily since 1910 to 2015 (down approx. 150mm).	**Temperature:** The annual mean temperature anomaly trend for the Southwestern Australia graph (see below) indicates that the temperatures for the SW area will continue increase in years to come. Annual maximum & minimum temperatures are forecast to increase in accordance with BOM projections. **Rainfall:** Annual rainfall will continue to decrease as indicated by the Annual Rainfall Anomaly trend graph (see below) with the likelihood of more extreme weather events occurring.	With increasing temperatures both maximum & minimum, decreasing rainfall, extended growing season, the trend down in both the number of wet days and consecutive wet days being experienced and more extreme weather events being experienced, there will be an increase in fire risk, increased occurrences of storm damage and possible increase in the service requirements of controlling areas of parks due to longer growing seasons. **Increase.**



Bridgetown-Greenbushes (S)

Age - Sex Distribution - Band C

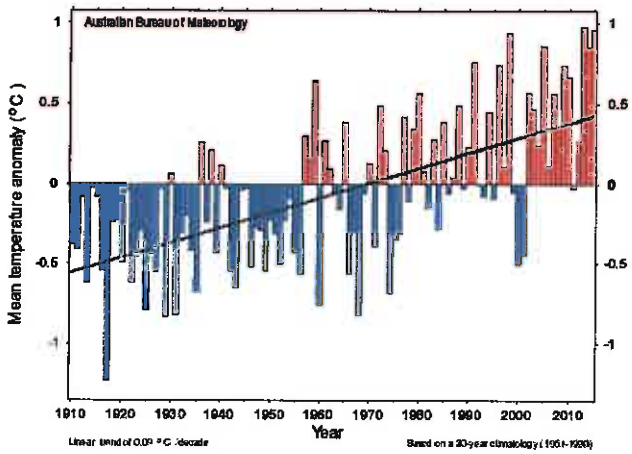


Source: WA Tomorrow Population Report No. 10

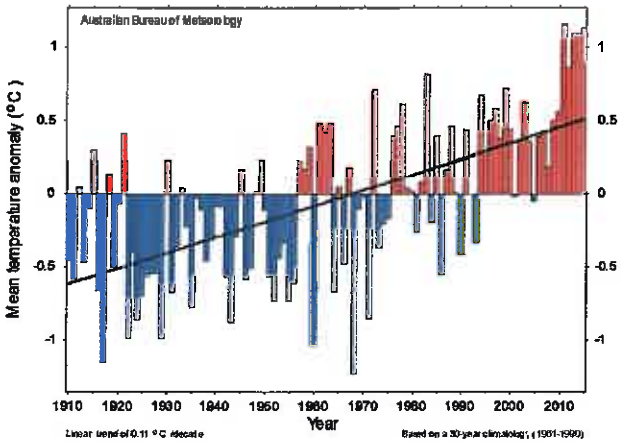
Note: The bars for 2011 and 2026 overlap

Climate Change Graphs (produced by Bureau of Meteorology Perth)

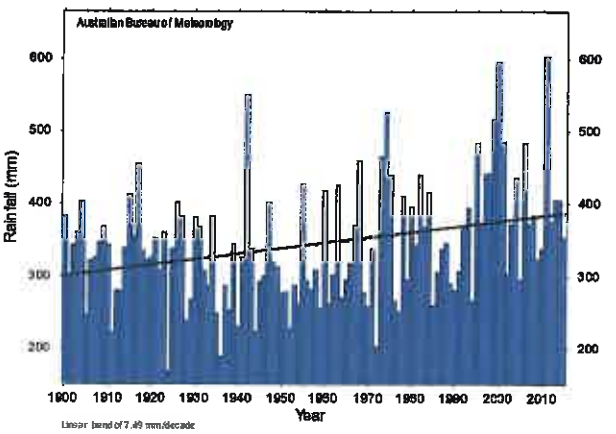
Annual mean temperature anomaly - Western Australia (1910-2015)



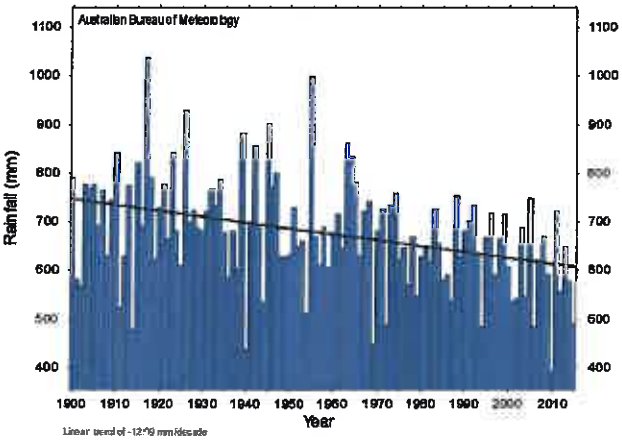
Annual mean temperature anomaly - Southwestern Australia (1910-2015)



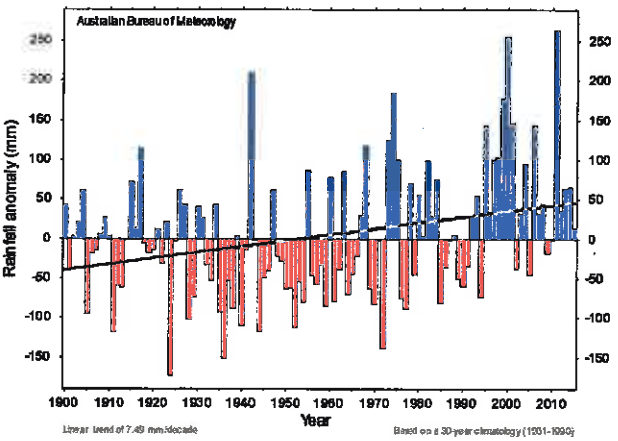
Annual rainfall - Western Australia (1900-2015)



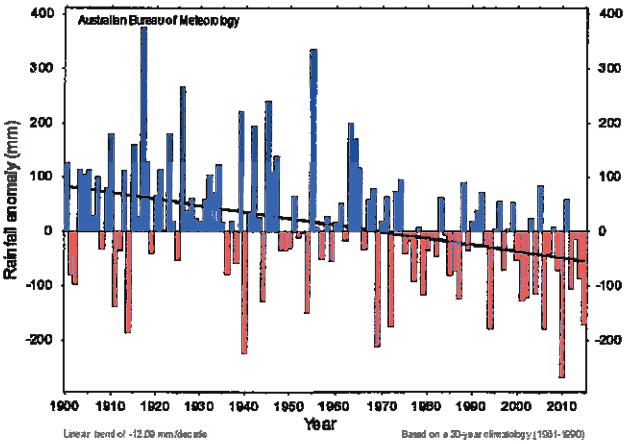
Annual rainfall - Southwestern Australia (1900-2015)



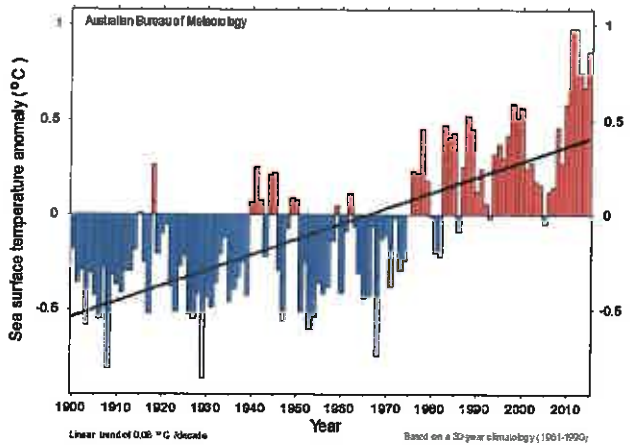
Annual rainfall anomaly - Western Australia (1900-2015)



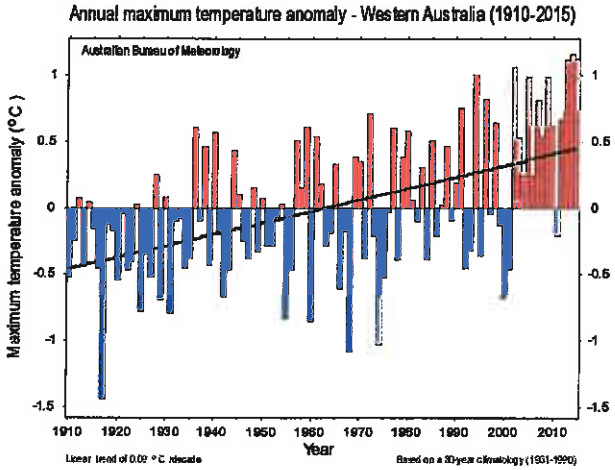
Annual rainfall anomaly - Southwestern Australia (1900-2015)



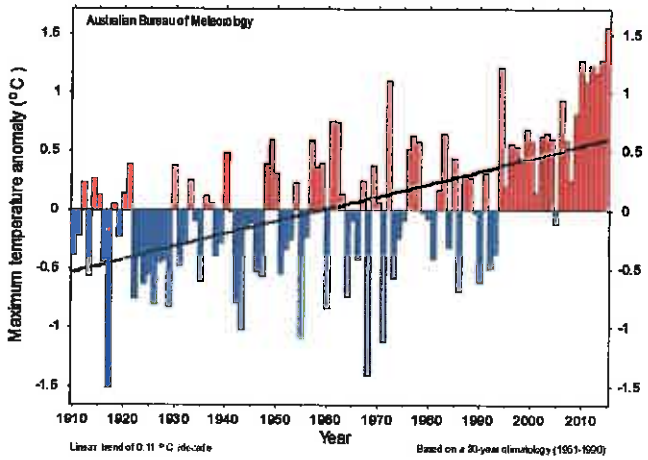
Annual sea surface temperature anomaly - Southwest Region (1900-2015)



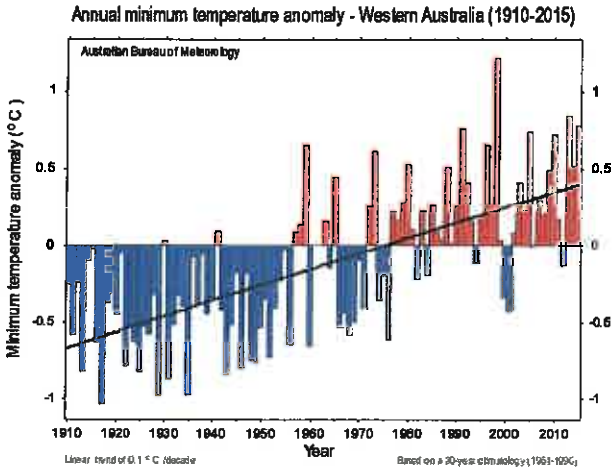
Annual maximum temperature anomaly - Western Australia (1910-2015)



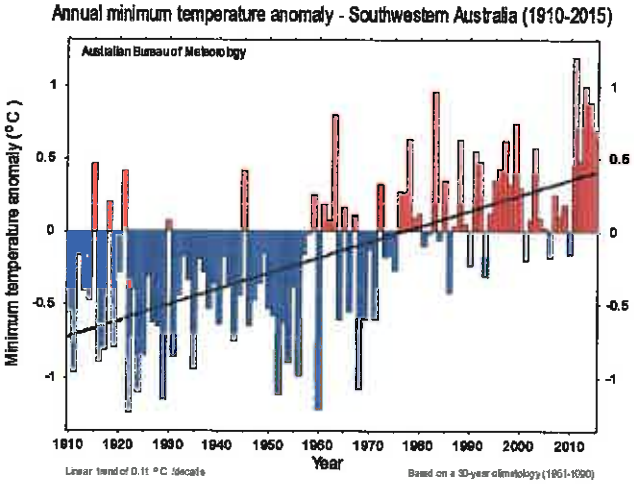
Annual maximum temperature anomaly - Southwestern Australia (1910-2015)

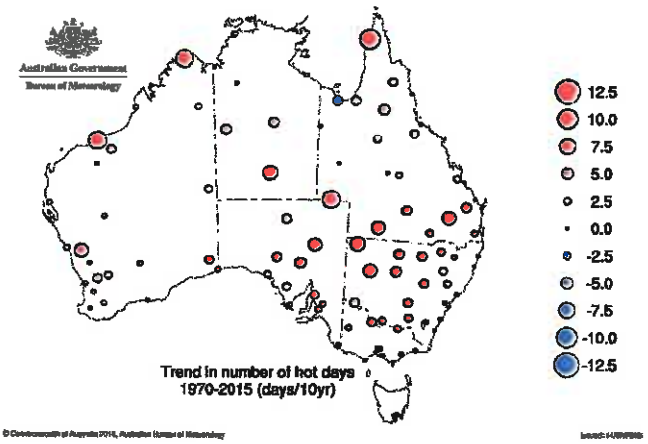


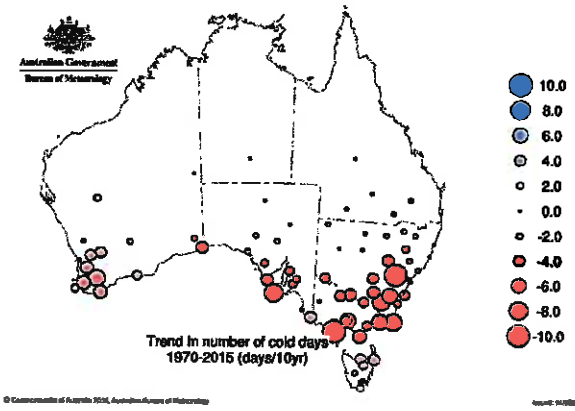
Annual minimum temperature anomaly - Western Australia (1910-2015)

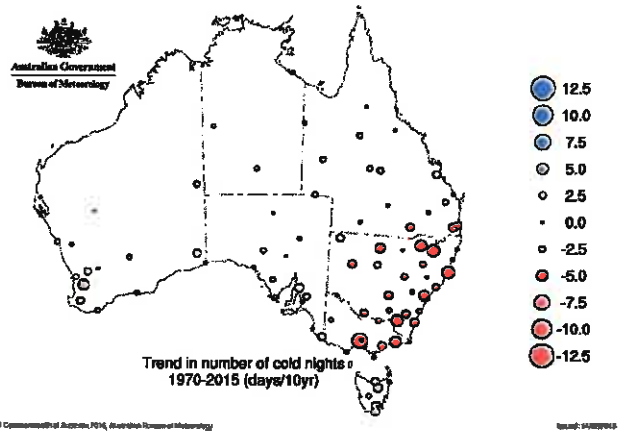


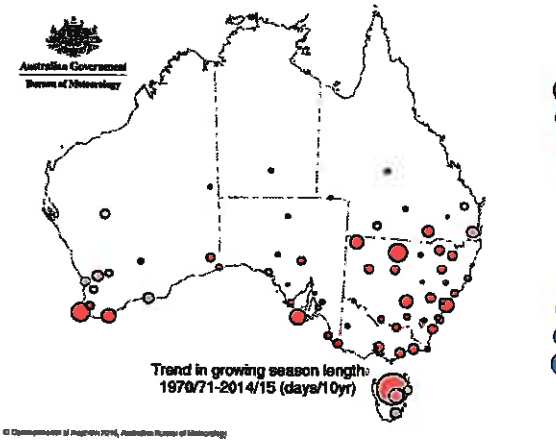
Annual minimum temperature anomaly - Southwestern Australia (1910-2015)

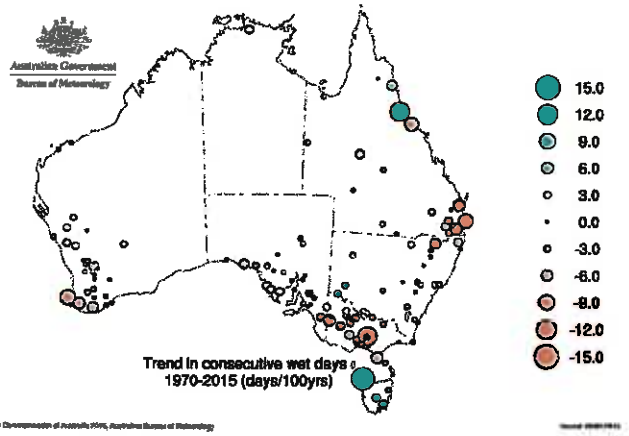


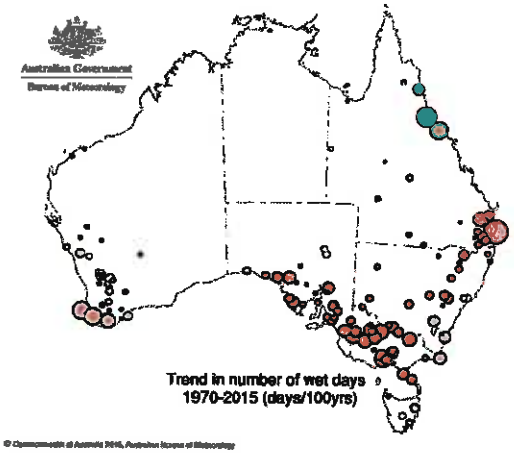


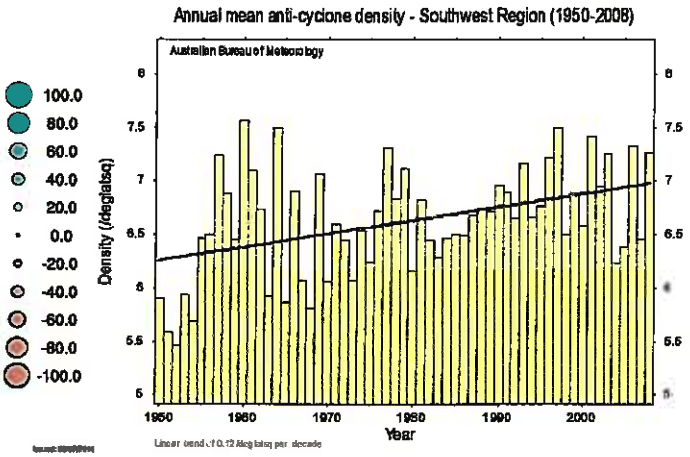

Australian Government
Bureau of Meteorology
10.0
8.0
6.0
4.0
2.0
0.0
-2.0
-4.0
-6.0
-8.0
-10.0
Trend in number of cold days
1970-2015 (days/10yr)


Australian Government
Bureau of Meteorology
12.5
10.0
7.5
5.0
2.5
0.0
-2.5
-5.0
-7.5
-10.0
-12.5
Trend in number of cold nights
1970-2015 (days/10yr)


Australian Government
Bureau of Meteorology
20.0
16.0
12.0
8.0
4.0
0.0
-4.0
-8.0
-12.0
-16.0
-20.0
Trend in growing season length
1970/71-2014/15 (days/10yr)


Australian Government
Bureau of Meteorology
15.0
12.0
9.0
6.0
3.0
0.0
-3.0
-6.0
-9.0
-12.0
-15.0
Trend in consecutive wet days
1970-2015 (days/100yrs)


Australian Government
Bureau of Meteorology
100.0
80.0
60.0
40.0
20.0
0.0
-20.0
-40.0
-60.0
-80.0
-100.0
Trend in number of wet days
1970-2015 (days/100yrs)


Annual mean anti-cyclone density - Southwest Region (1950-2008)
Australian Bureau of Meteorology
Density (deg/latsq)
8
7.5
7
6.5
6
5.5
5
1950
1960
1970
1980
1990
2000
Year

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 the organisation to own the assets 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[7]. Examples of non-asset solutions include providing services from existing infrastructure such as aquatic centres and libraries that may be in another community area or public toilets provided in commercial premises.

Opportunities identified to date for demand management are shown in Table 4.4. Further opportunities will be developed in future revisions of this asset management plan.

Table 4.4: Demand Management Plan Summary

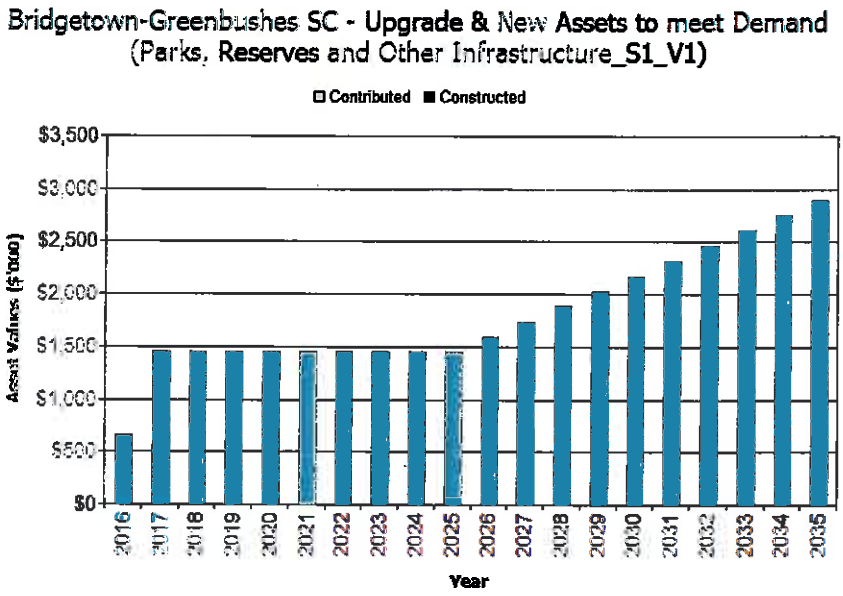
Demand Driver	Impact on Services	Demand Management Plan
Community engagement	To be determined	• Engage with the community to identify justifiable community needs from other expectations and consider only community needs consistent with Shire's charter • Develop an understanding of the community's desired level of service.
Customer requests	To be determined	• Analyse customer requests to optimise the use and performance of existing assets and look for non-asset based solutions to meet demand for services
Increased demand for local accessible facilities for the aged	To be determined	• Improvement of access to all facilities, wherever possible to meet the requirements of the Occupational, Safety & Health Act; • Ensure flexibility of design to allow facilities to adapt to changing user needs; and • Respond to gaps in provision as identified by service departments, the community or other agencies
Energy management and sustainability	To be determined	• Investigate alternative power generation technologies (i.e. solar power) to help reduce the Shire's carbon footprint and operating costs
Shire capacity	To be determined	• Understand the Shire's future resource capacity
Strategic Community Plan	To be determined	• Develop the needs identified in the Strategic Community Plan into fully costed and scheduled project proposals for inclusion in the Budget process

[7] IPWEA, 2011, IIMM, Table 3.4.1, p 3|58.

4.5 Asset Programs to meet Demand

The new assets required to meet growth will be acquired free of cost from land developments and constructed/acquired by the organisation. New assets constructed/acquired by the organisation are discussed in Section 5.5. The cumulative value of new contributed and constructed asset values are summarised in Figure 1.

Figure 1: Upgrade and New Assets to meet Demand



Acquiring these new assets will commit the organisation to fund ongoing operations, maintenance and renewal costs for the period that the service provided from the assets is required. These future costs are identified and considered in developing forecasts of future operations, maintenance and renewal costs in Section 5.

5. LIFECYCLE MANAGEMENT PLAN

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

5.1 Background Data

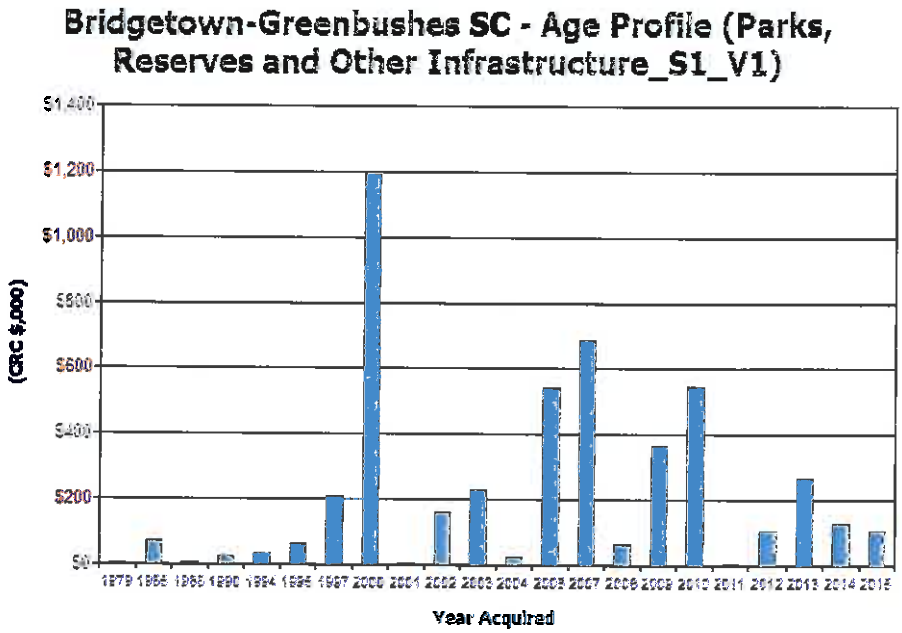
5.1.1 Physical parameters

The assets covered by this asset management plan are shown in Table 2.1.

Assets that comprise Parks & Gardens, Reserves, Playground equipment and Other Infrastructure are located throughout the Shire of Bridgetown-Greenbushes with the majority within the town of Bridgetown and to a lesser extent, Greenbushes. The developed parks & gardens contain the majority of playground equipment and other improvements.

The age profile of the assets include in this AM Plan is shown in Figure 2.

Figure 2: Asset Age Profile



No detailed plans showing the Parks & Reserves Infrastructure assets are available:

5.1.2 Asset capacity and performance

The organisation's services 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
To be assessed	To be assessed

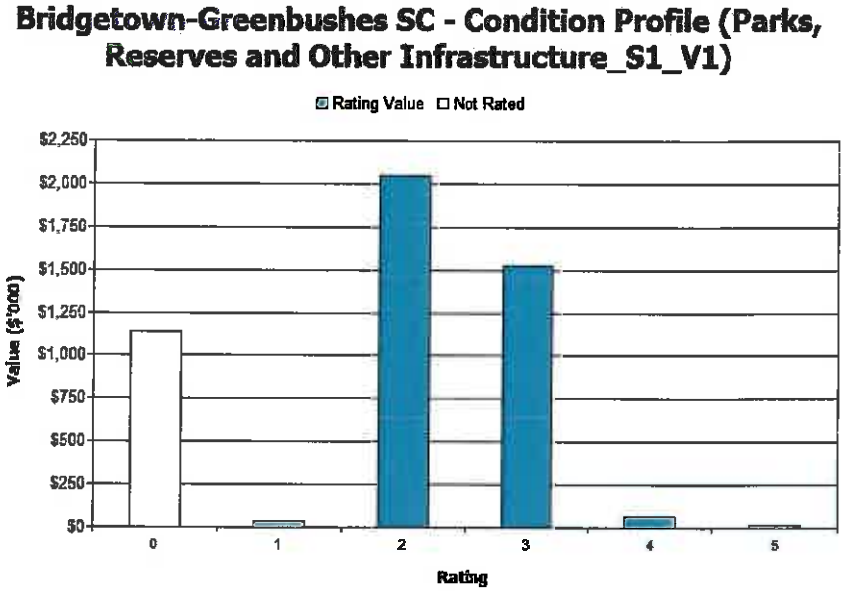
The above service deficiencies will be identified as part of the review process to be carried out.

5.1.3 Asset condition

Condition is monitored (but not formally rated and documented) during routine inspections carried out by the Parks & Gardens staff as part of normal safety assessments.

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[8] as detailed in Table 5.1.3.

Table 5.1.3: Simple Condition Grading Model

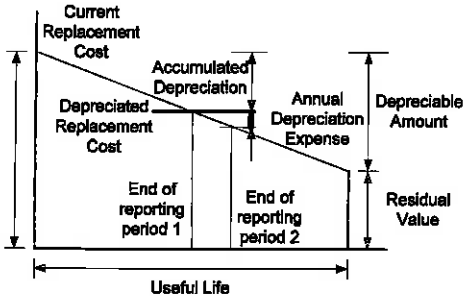
Condition Grading	Description of Condition
1	**Very Good**: only planned maintenance required
2	**Good**: minor maintenance required plus planned maintenance
3	**Fair**: significant maintenance required
4	**Poor**: significant renewal/rehabilitation required
5	**Very Poor**: physically unsound and/or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

[8] IPWEA, 2011, IIMM, Sec 2.5.4, p 2|79.

5.1.4 Asset valuations

The value of assets recorded in the asset register as at 30th June 2015 covered by this asset management plan is shown below. Assets were last revalued at 30th June 2015. Assets are valued at fair value.

	($,000)
Current Replacement Cost	$4,828
Depreciable Amount	$4,828
Depreciated Replacement Cost[9]	$3,067
Annual Depreciation Expense	$ 198



Useful lives were reviewed in June 2015 by AssetVal Pty Ltd under AASB 116 and AASB13 the value of property is to be recorded at fair value. This is usually determined using a sales based market value approach. However, the methodology adopted in determining the fair value of the asset will depend on the level of specialisation of the asset, the existence of a market for the asset and the existence of market evidence. There are instances where assets are not sold except as part of a continuing business. Where a market value approach is not suitable an alternative approach is depreciated replacement cost. .

Key assumptions made in preparing the valuations were:

- that all items inspected are compliant with regulatory and government statutes, have been subject to normal wear and tear and have been properly maintained.
- Unless otherwise noted, no deduction has been made from our valuation in respect of any outstanding amounts owing under any finance lease or hire purchase agreements. The subject assets have been valued as being wholly owned and free of all encumbrances.

No major changes from previous valuations were noted within the Fair Value report by AssetVal Pty Ltd.

Various ratios of asset consumption and expenditure have been prepared to help guide and gauge asset management performance and trends over time.

Rate of Annual Asset Consumption (Depreciation/Depreciable Amount)	4.1%
Rate of Annual Asset Renewal (Capital Renewal expenditure/Depreciable amount)	2.2%

In 2016 the organisation plans to renew assets at 54% of the rate they are being consumed and will be increasing its asset stock by 13.5% in the year.

[9] Also reported as Written Down Current Replacement Cost (WDCRC).

5.1.5 Historical Data

The data as shown in the table below was sourced from the Shire of Bridgetown-Greenbushes' Annual Financial Reports for the relevant years.

Annual Consumption & Renewal (% of Asset Value)	Year		
	2012-13	2013-14	2014-15
Asset Consumption (ACR)	0.71	0.73	0.79
Asset Renewal (ARFR)	n/a	n/a	n/a
Asset Upgrade/New (including Contributed Assets)	n/a	n/a	n/a

Note: Above ratios are sourced from the Shire of Bridgetown-Greenbushes Annual Financial Reports and cover ALL assets. No separate ratios are available for individual asset classes as yet.

5.2 Infrastructure Risk Management Plan

An assessment of risks[10] associated with service delivery from infrastructure assets has identified critical risks that will result in loss or reduction in service from infrastructure assets or a 'financial shock' to the organisation. The risk assessment process identifies credible risks, the likelihood of the risk event occurring, the consequences should the event occur, develops a risk rating, evaluates the risk and develops a risk treatment plan for non-acceptable risks.

Critical risks, being those assessed as 'Very High' - requiring immediate corrective action and 'High' – requiring prioritised corrective action identified in the Infrastructure Risk Management Plan, together with the estimated residual risk after the selected treatment plan is operational are summarised in Table 5.2. These risks are reported to management and Council.

Table 5.2: Critical Risks and Treatment Plans

Service or Asset at Risk	What can Happen	Risk Rating (VH, H)	Risk Treatment Plan	Residual Risk *	Treatment Costs
TBD**	TBD		TBD		TBD

Note * The residual risk is the risk remaining after the selected risk treatment plan is operational.
Note ** TBD = to be determined

5.3 Routine Operations and Maintenance Plan

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

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

5.3.1 Operations and Maintenance Plan

Operations activities affect service levels including quality and function through street sweeping and grass mowing frequency, intensity and spacing of street lights and cleaning frequency and opening hours of building and other facilities.

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, e.g. road patching but

[10] Draft Parks, Reserves and Other Infrastructure Risk Management Plan (to be developed)

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

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

Actual past maintenance expenditure is shown in Table 5.3.1.

Table 5.3.1: Maintenance Expenditure Trends

Year	Maintenance Expenditure	
	Planned and Specific	Unplanned
2012-13	$424,919	$114,299
2013-14	$407,912	$153,654
2014-15	$503,882	$166,784

Planned maintenance work is currently 76.7% of total maintenance expenditure.

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 AM Plan and service risks considered in the Infrastructure Risk Management Plan.

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

5.3.2 Operations and Maintenance Strategies

The organisation 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 infrastructure 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 utilisation to identify underutilised assets and appropriate remedies, and over utilised 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 Council is obtaining best value for resources used.

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.

The organisation's draft service hierarchy is shown is Table 5.3.2.

Table 5.3.2: Draft Asset Service Hierarchy

HIERARCHY				
Classification	**Approximate Size**	**Estimated Service Group**	**Approximate Service Radius**	**Description of Function**
Regional Parkland	1000m^2 plus	Local and inter-shire communities	Inter-shire	Assets that have, support or are located within an asset that has national or state significance
District Parkland	5ha to 15ha	Services 3 or more neighbourhoods	Inter-shire	Parks which provide for a diverse range of recreational opportunities in an attractive, high maintained landscape setting. The parks will be visited by residents from a wide area, most of who will drive or cycle to it. Visitors will stay for several hours at the parks and will use it predominately on weekends. Facilities may include a large highly developed playground catering for a wide range of ages and abilities, a range of facilities including car parking and public toilets, picnic shelters, barbeques and irrigated garden beds, these parks are major recreation or sports parks that offer a wide variety of opportunities to a broad cross section of residents. Large I size and well known among residents, these parks are major destinations. May incorporate grassed area for informal/formal games, organised sport and hard surface sporting activities.
Neighbourhood Parkland	1ha to 5ha	Services 600 or more dwellings	1km or more from dwellings	A well developed park within walking distance from most households. The parks will be predominantly used by residents who live within walking distance. Most visitors will spend up to an hour in the park, although some may stay several hours using picnic facilities. At least one suburban park is located in most town sites. These are mid sized parks providing a range of facilities and activity space for recreation and sport. They cater for large groups and are appealing to a range of users. They service several communities or suburbs and are a fairly well known destination for those people living within their catchment. Facilities may include a good quality playground, facilities for teenage play, picnic facilities, shelters and barbeque areas, irrigated garden beds and a good quality grassed area.
Local Parkland	0.4ha to 5ha	Services less than 600 dwellings	Within 500m of most dwellings	Parks which provide a basic local playground and areas for relaxation and play. The parks are used by residents who live within a 5 – 10 minute walking distance who spend less than one hour at the park, but may use it on a daily basis. Facilities may include a basic playground with shade areas, tree plantings and kick about spaces. These are smaller parks providing a limited range of recreational opportunities for local residents. Designed for local children's play and as resting places. Provide good visual supervision.
Natural Parklands	Generally 3000m^2 plus	Local community	Varies	Any natural reserve area. With the exception of some pathways, there are generally no facilities in these areas. Includes the following classifications. a. River foreshore areas b. Rural nature reserves c. Bridal trails d. Regional conservation reserves

Specific Purpose Reserves	Varies	Local Community	Varies	Reserves that are not used for recreation or sporting activities. Includes the following classifications. a. Gravel b. Drainage c. Volunteer Bushfire Brigade purposes d. Cemetery e. Waste Management f. Parking g. Halls h. Civic Purposes i. Access, PAW's j. Resting Place k. Aged Accommodation l. Water Supply m. Saleyards n. Historic Site o. Other

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, organisations can target and refine investigative activities, maintenance plans and capital expenditure plans at the appropriate time.

Operations and maintenances 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 5.3.2.1.

Table 5.3.2.1: Critical Assets and Service Level Objectives

Critical Assets	Critical Failure Mode	Operations & Maintenance Activities
To be developed	To be developed	To be developed

Standards and specifications

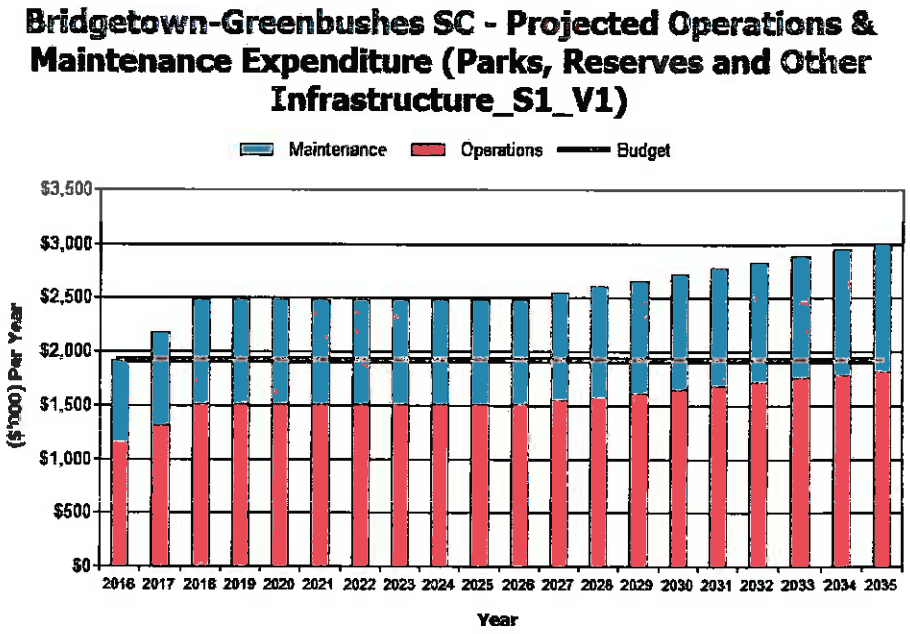
Maintenance work is carried out in accordance with the following Standards and Specifications.

- AS 4685:2014 Playground Equipment and Surfacing has been published! (24/04/2014)
- Building Code 2013

5.3.3 Summary of future operations and maintenance expenditures

Future operations and maintenance expenditure is forecast to trend in line with the value of the asset stock as shown in Figure 4. Note that all costs are shown in current 2016 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. This is further discussed in Section 6.2.

5.4 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 or lesser required service potential. Work over and above restoring an asset to original service potential is upgrade/expansion or new works expenditure.

5.4.1 Renewal plan

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

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

Method 1 was used for this asset management plan.

The useful lives of assets used to develop projected asset renewal expenditures are shown in Table 5.4.1. Asset useful lives were last reviewed on 30th June 2015.[11]

Table 5.4.1: Useful Lives of Assets

Asset (Sub)Category	Useful life
Playground equipment & improvements	15-25
Retaining walls, reticulation, shelters, paths, courts, skate park	30-50

5.4.2 Renewal and Replacement Strategies

The organisation will plan capital renewal and replacement projects to meet level of service objectives and minimise 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 evaluation criteria adopted by the organisation, 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 infrastructure risk register for assets and service risks associated with providing services from infrastructure 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 Council is obtaining best value for resources used.

[11] AssetVal Pty Ltd - Valuation for Accounting Compliance Purposes 30 June 2015

Renewal ranking criteria

Asset renewal and replacement is typically undertaken to either:

- Ensure the reliability of the existing infrastructure to deliver the service it was constructed to facilitate (e.g. replacing a bridge that has a 5 t load limit), or
- To ensure the infrastructure is of sufficient quality to meet the service requirements (e.g. roughness of a road).[12]

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 a high utilisation and subsequent impact on users would be greatest,
- The total value represents the greatest net value to the organisation,
- Have the highest average age relative to their expected lives,
- Are identified in the AM Plan as key cost factors,
- Have high operational or maintenance costs, and
- Where replacement with modern equivalent assets would yield material savings.[13]

The draft ranking criteria used to determine priority of identified renewal and replacement proposals is detailed in Table 5.4.2.

Table 5.4.2: Draft Renewal and Replacement Priority Ranking Criteria

Criteria	Weighting
To be Developed	To be Developed
Total	**100%**

Renewal and replacement standards

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

- AS 4685:2014 Playground Equipment and Surfacing has been published! (24/04/2014)
- Building Code 2013

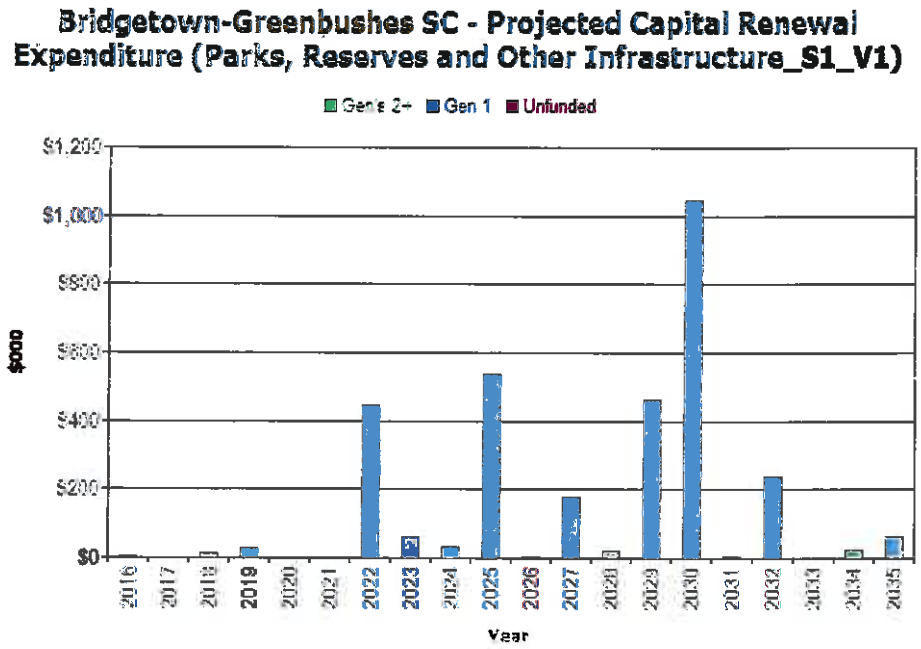
5.4.3 Summary of future renewal and replacement expenditure

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

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

[12] IPWEA, 2011, IIMM, Sec 3.4.4, p 3|60.
[13] Based on IPWEA, 2011, IIMM, Sec 3.4.5, p 3|66.

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 organisation's capital works program will be accommodated in the long term financial plan. This is further discussed in Section 6.2.

5.5 Creation/Acquisition/Upgrade Plan

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

5.5.1 Selection criteria

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

Table 5.5.1: Draft New Assets Priority Ranking Criteria

Criteria	Weighting
To be developed	To be developed
Total	**100%**

5.5.2 Capital Investment Strategies

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

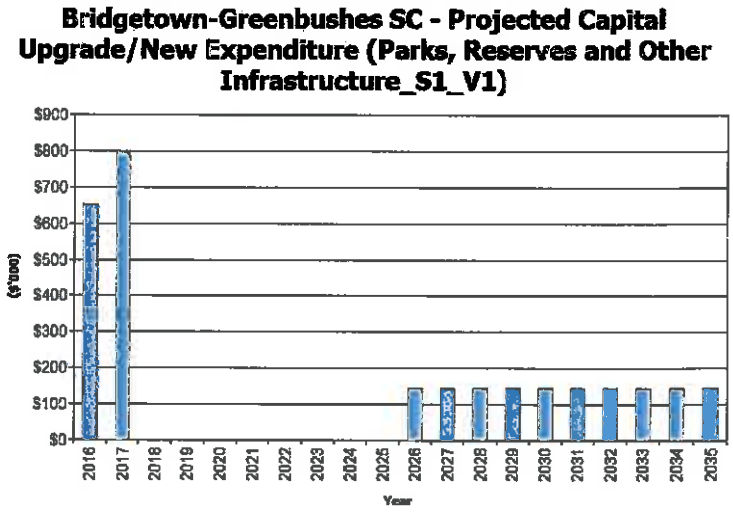
- Planning and scheduling capital upgrade and new projects to deliver the defined level of service in the most efficient manner,
- Undertake project scoping for all capital upgrade/new projects to identify:
    - the service delivery 'deficiency', present risk and required timeline for delivery of the 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.

Standards and specifications for new assets and for upgrade/expansion of existing assets are the same as those for renewal shown in Section 5.4.2.

5.5.3 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



Expenditure on new assets and services in the organisation's capital works program will be accommodated in the long term financial plan. This is further discussed in Section 6.2.

5.6 Disposal Plan

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

service delivery, if any. Any revenue gained from asset disposals is accommodated in Council's long term financial plan.

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

Table 5.6: Assets Identified for Disposal

Asset	Reason for Disposal	Timing	Disposal Expenditure	Operations & Maintenance Annual Savings
No assets identified at present				

5.7 Service Consequences and Risks

The organisation has prioritised decisions made in adopting this AM Plan to obtain the optimum benefits from its available resources. Decisions were made based on the development of 3 scenarios of AM Plans.

Scenario 1 - What we would like to do based on asset register data

Scenario 2 – 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.

Scenario 3 – What we can do and be financially sustainable with AM Plans matching long-term financial plans.

The development of scenario 1 and scenario 2 AM Plans provides the tools for discussion with the Council and community on trade-offs between what we would like to do (scenario 1) and what we should be doing with existing budgets (scenario 2) by balancing changes in services and service levels with affordability and acceptance of the service and risk consequences of the trade-off position (scenario 3).

5.7.1 What we cannot do

There are likely to be some operations and maintenance activities and capital projects that are unable to be undertaken within the next 10 years.

Works and services that cannot be provided under present funding levels will be determined after a review of existing levels of services and asset useful lives has been completed.

5.7.2 Service consequences

Operations and maintenance activities and capital projects that cannot be undertaken will maintain or create service consequences for users. These will be assessed once the review of existing levels of services being provided and the review of useful lives has been completed and assessed.

5.7.3 Risk consequences

The operations and maintenance activities and capital projects that cannot be undertaken may maintain or create risk consequences for the organisation. These risks, once identified, will be assessed for possible consequences for the organisation.

These risks have been included with the Infrastructure Risk Management Plan summarised in Section 5.2 and risk management plans actions and expenditures included within projected expenditures.

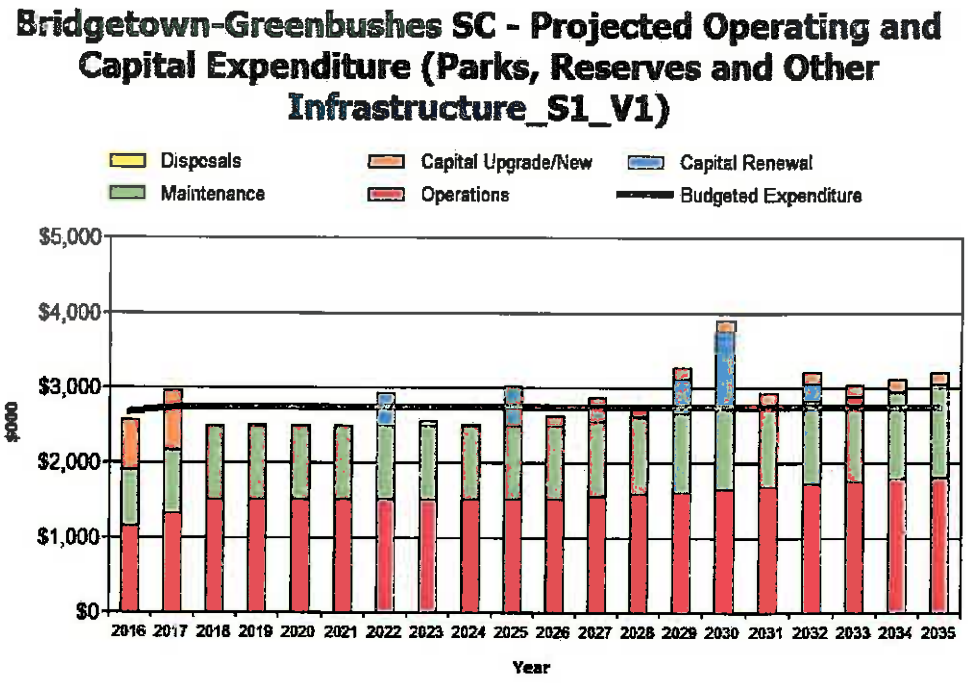
6. FINANCIAL SUMMARY

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

6.1 Financial Statements and Projections

The financial projections are shown in Fig 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



6.1.1 Sustainability of service delivery

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

Asset Renewal Funding Ratio

Asset Renewal Funding Ratio[14] 36%

The Asset Renewal Funding Ratio is the most important indicator and reveals that over the next 10 years, Council is forecasting that it will have 36% of the funds required for the optimal renewal and replacement of its assets.

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

[14] AIFMG, 2012, Version 1.3, Financial Sustainability Indicator 4, Sec 2.6, p 2.16

expense). The life cycle cost for the services covered in this asset management plan is $2,593,000 per year (average operations and maintenance expenditure plus depreciation expense projected over 10 years).

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 expenditure over the 10 year planning period is $1,945,000 per year (average operations and maintenance plus capital renewal budgeted expenditure in LTFP over 10 years).

A shortfall between life cycle cost and life cycle expenditure is the life cycle gap. The life cycle gap for services covered by this asset management plan is -$648,000 per year (-ve = gap, +ve = surplus).

Life cycle expenditure is 75% of life cycle costs.

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

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

Medium term – 10 year financial planning period

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

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

The projected operations, maintenance and capital renewal expenditure required over the 10 year planning period is $2,507,000 on average per year.

Estimated (budget) operations, maintenance and capital renewal funding is $1,945,000 on average per year giving a 10 year funding shortfall of -$562,000 per year. This indicates that Council expects to have 78% of the projected expenditures needed to provide the services documented in the asset management plan.

Medium Term – 5 year financial planning period

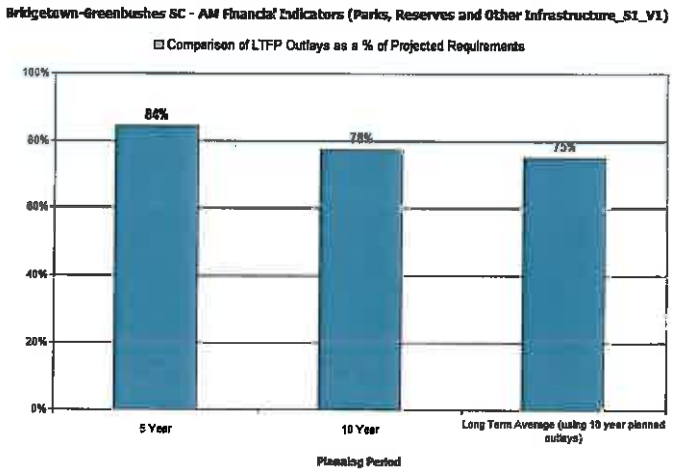
The projected operations, maintenance and capital renewal expenditure required over the first 5 years of the planning period is $2,316,000 on average per year.

Estimated (budget) operations, maintenance and capital renewal funding is $1,953,000 on average per year giving a 5 year funding shortfall of -$362,000. This indicates that Council expects to have 84% of projected expenditures required to provide the services shown in this asset management plan.

Asset management financial indicators

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

Figure 7A: Asset Management Financial Indicators



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

Figure 8 shows the projected asset renewal and replacement expenditure over the 20 years of the AM Plan. The projected asset renewal and replacement expenditure is compared to renewal and replacement expenditure in the capital works program, which is accommodated in the long term financial plan

Figure 8: Projected and LTFP Budgeted Renewal Expenditure

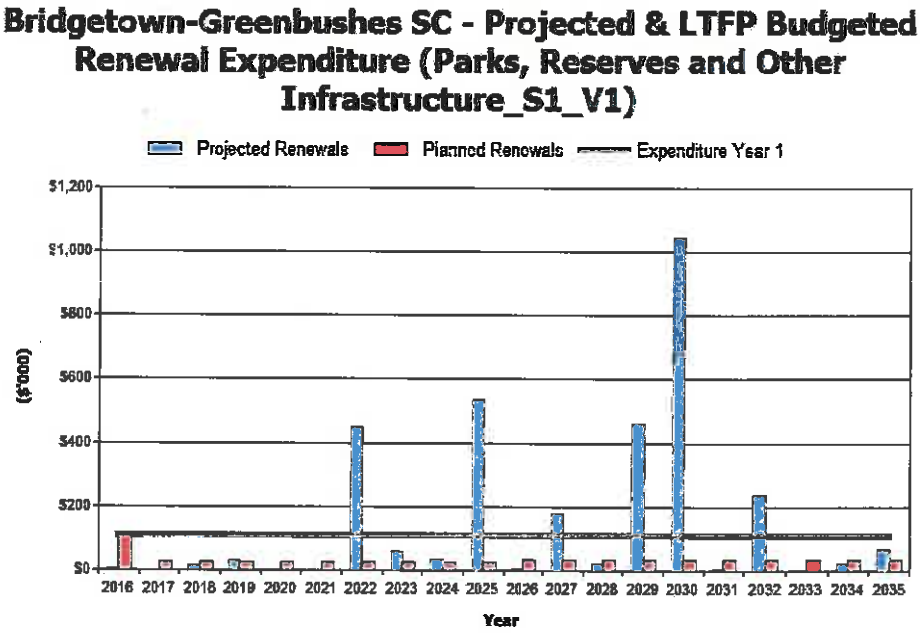


Table 6.1.1 shows the shortfall between projected renewal and replacement expenditures and expenditure accommodated in long term financial plan. Budget expenditures accommodated in the long term financial plan or extrapolated from current budgets are shown in Appendix D.

Table 6.1.1: Projected and LTFP Budgeted Renewals and Financing Shortfall

Year End June 30	Projected Renewals ($'000)	LTFP Renewal Budget ($'000)	Renewal Financing Shortfall (- gap, + surplus) ($'000)	Cumulative Shortfall (- gap, + surplus) ($'000)
2016	$4	$107	$103	$103
2017	$0	$26	$26	$129
2018	$14	$26	$12	$142
2019	$28	$26	$-2	$140
2020	$2	$26	$24	$164
2021	$2	$26	$24	$189
2022	$447	$26	$-421	$-233
2023	$58	$26	$-32	$-265
2024	$32	$26	$-6	$-270
2025	$538	$26	$-512	$-782
2026	$3	$34	$31	$-751
2027	$177	$34	$-143	$-894
2028	$19	$34	$15	$-879
2029	$461	$34	$-427	$-1,306
2030	$1,047	$34	$-1,013	$-2,319
2031	$4	$34	$31	$-2,288
2032	$237	$34	$-203	$-2,491
2033	$0	$34	$34	$-2,457
2034	$23	$34	$11	$-2,445
2035	$65	$34	$-31	$-2,476

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

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

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

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

6.1.2 Projected expenditures for long term financial plan

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

Expenditure projections are in 2016 real values.

Table 6.1.2: Projected Expenditures for Long Term Financial Plan ($000)

Year	Operations	Maintenance	Projected Capital Renewal	Capital Upgrade/New	Disposals
2016	$1,160	$751	$4	$652	$0
2017	$1,317	$852	$0	$795	$0
2018	$1,508	$976	$14	$0	$0
2019	$1,508	$976	$28	$0	$0
2020	$1,508	$976	$2	$0	$0
2021	$1,508	$976	$2	$0	$0
2022	$1,508	$976	$447	$0	$0
2023	$1,508	$976	$58	$0	$0
2024	$1,508	$976	$32	$0	$0
2025	$1,508	$976	$538	$0	$0

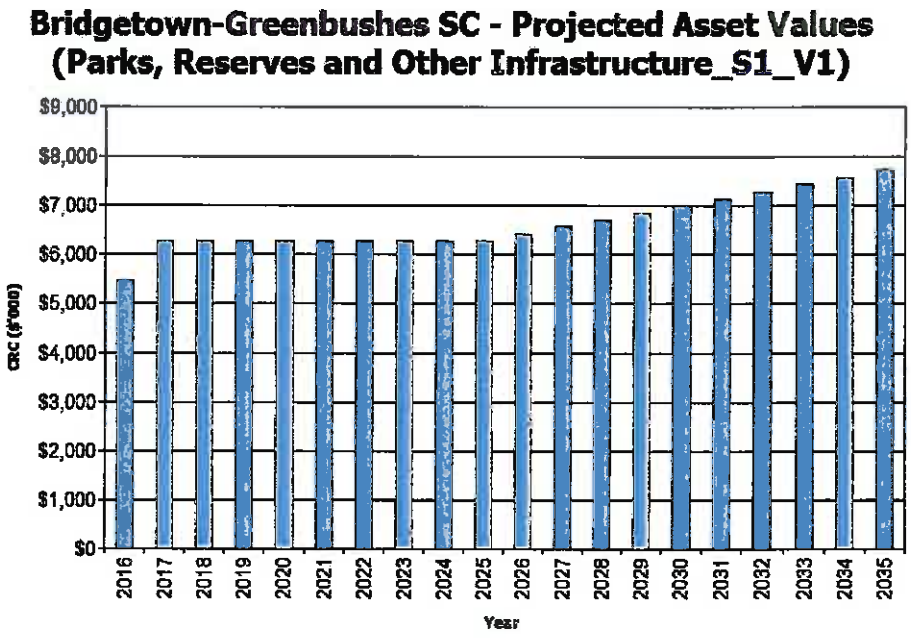
6.2 Funding Strategy

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

6.3 Valuation Forecasts

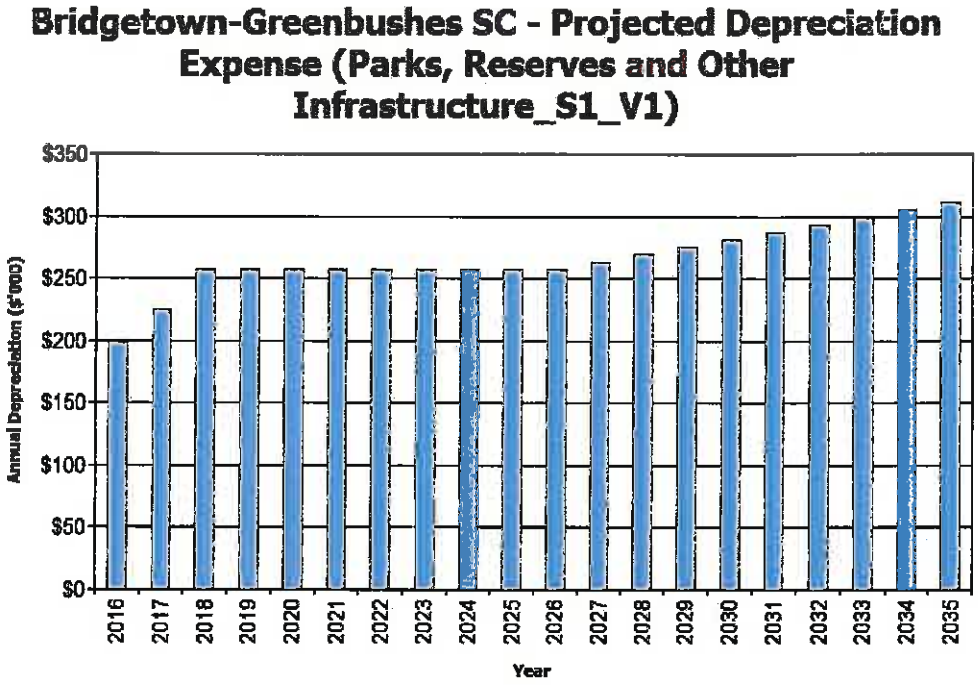
Asset values are forecast to increase as additional assets are added to the asset stock from construction and acquisition by Council and from assets constructed by land developers and others and donated to Council. Figure 9 shows the projected replacement cost asset values over the planning period in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

Figure 9: Projected Asset Values



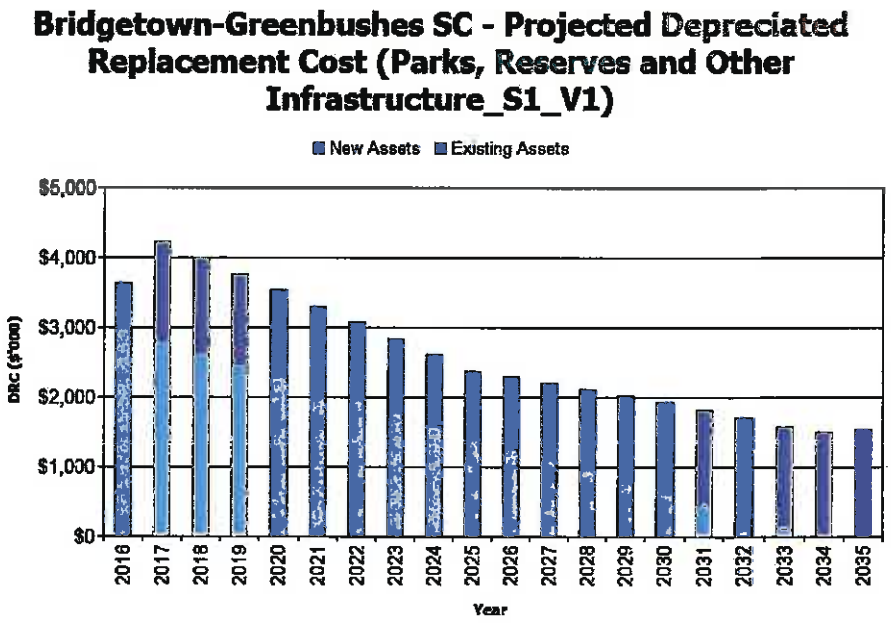
Depreciation expense values are forecast in line with asset values as shown in Figure 10.

Figure 10: Projected Depreciation Expense



The depreciated replacement cost will vary over the forecast period depending on the rates of addition of new assets, disposal of old assets and consumption and renewal of existing assets. Forecast of the assets' depreciated replacement cost is shown in Figure 11. The depreciated replacement cost of contributed and new assets is shown in the darker colour and in the lighter colour for existing assets.

Figure 11: Projected Depreciated Replacement Cost



6.4 Key Assumptions made in Financial Forecasts

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

Key assumptions made in this asset management plan and risks that these may change are shown in Table 6.4.

Table 6.4: Key Assumptions made in AM Plan and Risks of Change

Key Assumptions	Risks of Change to Assumptions
Budgeted expenditure amounts are accurate as at 2015/16 year	Future budget allocations may alter as a result of Council decision
Future planned operations and maintenance expenditure is based on an average of planned expenditure for the years 2015/16 to 2023/24	Future budget allocations may alter as a result of Council decision resulting in a review of planned expenditures
The asset register and valuation is correct as at 30 June 2014	Change in asset values and holdings since June 2014 not incorporated
The current levels of service will remain constant throughout the useful life of the assets	Service levels may change as a result of community consultation and review
Rate of parks, reserves and other infrastructure depreciation is constant throughout the useful life of the asset	Depreciation rates may change as a result of periodic reviews of valuation and remaining useful lives
All predicted financial figures are based on 2016 rates and are not adjusted by the inflation rate for the particular year of works	Fluctuations in inflation (CPI) from year to year

6.5 Forecast Reliability and Confidence

The expenditure and valuations projections in this AM 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[15] in accordance with Table 6.5.

Table 6.5: Data Confidence Grading System

Confidence Grade	Description
A Highly reliable	Data based on sound records, procedures, investigations and analysis, documented properly and recognised as the best method of assessment. Dataset is complete and estimated to be accurate ± 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 ± 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 ± 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 ± 40%
E Unknown	None or very little data held.

The estimated confidence level for and reliability of data used in this AM Plan is shown in Table 6.5.1.

[15] IPWEA, 2011, IIMM, Table 2.4.6, p 2|59.

Table 6.5.1: Data Confidence Assessment for Data used in AM Plan

Data	Confidence Assessment	Comment
Demand drivers	Reliable	Main drivers currently influencing demand within Shire – reviewed at the time of reviewing AMP
Growth projections	Highly reliable	Based on ABS & Department of Planning projection
Operations expenditures	Reliable	Projections entirely based on historical levels of expenditure
Maintenance expenditures	Reliable	Projections are based on preliminary assessment of asset maintenance to maintain asset condition
Projected Renewal exps. - Asset values	Uncertain	Projections are based on preliminary assessment of asset conditions
- Asset residual values	Reliable	Residual values based on a high level assessment of the building
- Asset useful lives	Very uncertain	Useful lives and age of individual assets are to be reviewed and updated where necessary to better reflect actual condition of assets
- Condition modelling	Unknown	Condition modelling may be implemented once accurate condition data is known
- Network renewals	Very uncertain	Renewal expenditures not supported by data held - primarily re-active renewal process is utilised
- Defect repairs	Unknown	Not currently used
Upgrade/New expenditures	Very uncertain	Very little exists to support future requirements
Disposal expenditures	Unknown	No asset disposal identification process has been undertaken

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

7. PLAN IMPROVEMENT AND MONITORING

7.1 Status of Asset Management Practices

7.1.1 Accounting and financial systems

Council uses IT Vision's SynergySoft as their accounting software. The general ledger module provides a breakdown of costings for each individual general ledger account for each month over a particular financial year together with details of the current allocated budget and total current expenditure.

Accountabilities for financial systems

The Executive Manager of Corporate Services is accountable for the accuracy and level of confidence in the accounting and financial systems of the Shire. The CEO is required to undertake reviews of the financial management systems every 4 years.

Accounting standards and regulations

Council operates under the:

- Local Government Act 1995;
- Local Government (Financial Management) Regulations 1996; and
- Western Australian Local Government Accounting Manual (Edition 3)

The Shire complies with the above standards, legislation & regulations and produces an Annual General Purpose Financial Report in accordance with Australian Accounting Standards.

Capital/maintenance threshold

The Shire of Bridgetown-Greenbushes has adopted the following capitalisation thresholds[16]:

- Property, Plant and Equipment assets $2,000
- Infrastructure assets $5,000

Required changes to accounting financial systems arising from this AM Plan

- Amending the chart of account and job ledger to reflect nature of expenditure into Operations; Planned, Reactive & Specific Maintenance; Capital Renewal and Capital Upgrade/New/Expansion.
- Implement a single asset management system that holds all relevant data (asset id, asset name/description, year acquired, updated useful life, current replacement cost, renewal/replacement cost, condition, function, utilization, accumulated depreciation, annual depreciation & written down value etc.) to ensure continuity of asset management procedures and the facilitation of data transfer for the Long Term Financial Plan.

7.1.2 Asset management system

Council currently has the following Asset Management Systems being utilized:

- ROMAN II/RAMM GIS — all road infrastructure assets
- SynergySoft – Asset Register — all non- road infrastructure assets
- Microsoft Excel — holds some asset data (exported from ROMAN II & SynergySoft) for data analysis purposes.

[16] Shire of Bridgetown-Greenbushes Annual Budget 2015/16

The asset management data held in relation to parks, reserves & other Infrastructure has been provided in support of recent Fair Value measurements. The level of data confidence has been assessed as 'uncertain'.

Data held in the asset register within the SynergySoft system for all assets, requires a more detailed and in-depth review to ensure it is accurate and up-to-date, in particular the date of construction. Currently there are a significant number of assets that appear to have a default date of acquisition being the date the asset was entered into the system rather than the actual construction date.

Confidence in the SynergySoft data is therefore 'Uncertain'.

Data exported to spreadsheets from the SynergySoft data would also be rated as 'Uncertain' until such time as it has been analysed and corrected.

Asset registers

All building asset data is held in SynergySoft primarily for accounting purposes and supported by Excel spread sheets where applicable.

Linkage from asset management to financial system

There is very little asset management data held in relation to buildings. Data held is for accounting purposes. Following the implementation of a single asset management system linkages to the financial system can then achieved.

Accountabilities for asset management system and data maintenance

The Executive Manager of Corporate Services is accountable for the accuracy and level of confidence in building financial data. New processes are required for collection and recording of more comprehensive asset management data. The responsibility for this data collection and maintenance will rest with the Principal Building Surveyor.

Required changes to asset management system arising from this AM Plan

It would be desirable if all asset data could be centralized into the one asset management system. Identification and implementation of such a system is yet to be fully evaluated.

7.2 Improvement Plan

The asset management improvement plan generated from this asset management plan is shown in Table 7.2.

Table 7.2: Improvement Plan

Task No	Task	Responsibility	Resources Required	Timeline
1	Develop a process for community engagement on Levels of Service including a survey to determine community service level expectations delivered via Council's parks, reserves & other infrastructure assets	Senior Management Group	Staff time/ Consultants ($10,000)	
2	Develop a hierarchy for all parks, reserves & other infrastructure assets identifying parent/child relationships, and link to Levels of Service	EMWS & Leading Hand Parks & Gardens	Staff time	
3	Develop a data collection procedure to ensure repeatability and on-going improvement of condition data collection and modelling processes	EMWS /Asset Management Group	Staff time	
4	Implement the condition inspection programme for parks, reserves & other infrastructure assets	EMWS & Leading Hand Parks & Gardens	Staff time	
5	Greater degree of componentisation in the condition rating process	EMWS & Leading Hand Parks & Gardens	Staff time	
6	Review the Shire's year acquired date for all parks, reserves & other infrastructure assets	EMWS /Executive Manager Corporate Services	Staff time	
7	Determine useful lives and remaining useful lives of Council's parks, reserves & other infrastructure assets and adopt consistent unit rates	EMWS	Staff time	
8	Configure the Shire's corporate financial system to record asset expenditure at the individual asset level according to maintenance type and activity	Executive Manager Corporate Services	Staff time	
9	Identify and improve capture of operational expenditure in the organisation financial system to enable more accurate reporting of operational expenditure	Executive Manager Corporate Services	Staff time	
10	Develop and implement safety and maintenance inspection programmes and methodologies for building assets	EMWS & Leading Hand Parks & Gardens	Staff time	
11	Identify and assess critical parks, reserves & other infrastructure assets for failure modes	EMWS & Leading Hand Parks & Gardens	Staff time	
12	Identify parks, reserves & other infrastructure assets for possible future disposal	Senior Management Group	Staff time	
13	Develop staff AM performance measures and link KPI's to individual job descriptions	Human Resource Officer	Staff time	
14	Provide asset management training to relevant staff and Councillors	Human Resource Officer	Training Course Fees ($20,000)	
15	Determine split in costs between renewal and upgrades for all future upgrades in Council's planning documents	Senior Management Group	Staff time	

16	Develop a long term capital works programme after undertaking condition inspections	EMWS/ Chief Executive Officer	Staff time	
17	Develop a ranking criteria for assessing renewal/replacement priorities	Asset Management Working Group	Staff time	
18	Develop a ranking criteria for assessment and selection of new/upgrade assets in forward planning documents	Asset Management Working Group	Staff time	
19	Analyse demand impacts as a result of increased tourism	Executive Manager Community Services	Staff time	
20	Analyse demand impacts as a result of age demographic changes	Manager Planning & Development/Chief Executive Officer	Staff time	
21	Investigate and implement a suitable asset management software program to consolidate all asset classes into one integrated database	Asset Management Working Group/Senior Management Group	Staff time/ Consultants	

7.3 Monitoring and Review Procedures

This asset management plan will be reviewed during annual budget planning processes and amended to recognise any material changes in service levels and/or resources available to provide those services as a result of budget decisions.

The AM 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 organisation's long term financial plan.

The AM Plan has a life of 4 years (Council election cycle) and is due for complete revision and updating within 12 months of each Council election.

7.4 Performance Measures

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

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

8. REFERENCES

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

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

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

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

Sample Council, 'Strategic Plan 20XX – 20XX',

Sample Council, 'Annual Plan and Budget'.

9. APPENDICES

Appendix A	Maintenance Response Levels of Service
Appendix B	Projected 10 year Capital Renewal and Replacement Works Program
Appendix C	Projected 10 year Capital Upgrade/New Works Program
Appendix D	LTFP Budgeted Expenditures Accommodated in AM Plan
Appendix E	Abbreviations
Appendix F	Glossary

Appendix A Maintenance Response Levels of Service

To be developed.

Appendix B Projected 10 year Capital Renewal and Replacement Works Program

Asset ID	Sub Category	Asset Name	From	To	Rem Life (Years)	Planned Renewal Year	Renewal Cost ($)	Useful Life (Years)
	Basket Ball Hoop	1 x	Greenbushes Skate Park	Greenbushes	0	2016	$1,600	15
	Seating Benches	1 x table and 2 benches composite	Memorial Park Play Area	Bridgetown	0	2016	$2,000	15
						Subtotal	$3,600	
	Cricket Oval	4 x Half Size Soccer Goal Posts	Greenbushes Sportsground	Greenbushes	2	2018	$6,000	30
	Seating Benches	5 x wooden	Greenbushes Cemetery	Greenbushes	2	2018	$7,800	10
						Subtotal	$13,800	
	BBQ Shelter	1 x	Blackwood River Park	Bridgetown	3	2019	$6,400	15
	Bins	1 x	Heritage Park	Greenbushes	3	2019	$1,100	15
	Bins	1 x	Pioneer Park	Bridgetown	3	2019	$1,100	15
	Bins	1 x metal	Greenbushes Cemetery	Greenbushes	3	2019	$1,100	15
	Lights	2 x Fixed	Bridgetown Skate Park	Bridgetown	3	2019	$500	15
	Playground Equipment	2 x Log Benches	Small Camp Ground	Greenbushes	3	2019	$3,000	15
	Seating Benches	3 x Log Bench Tables	Greenbushes Pool & Boardwalk	Greenbushes	3	2019	$4,500	15
	Storage Shed	1 x 3x2 metres	Bridgetown Cemetery	Bridgetown	3	2019	$5,100	15
	Storage Shed	3 x 2 metres	Greenbushes Cemetery	Greenbushes	3	2019	$5,000	40
						Subtotal	$27,800	
	Seating Benches	1 x Wooden	Thompson Park Greenbushes	Greenbushes	4	2020	$1,600	10
						Subtotal	$1,600	
	Picnic Bench	1 x Concrete	Greenbushes Skate Park	Greenbushes	5	2021	$1,700	20
						Subtotal	$1,700	
	250 Litre Bins MGB	4 x	Blackwood River Park	Bridgetown	6	2022	$4,600	15
	Basket Ball Hoop	1 x	Bridgetown Skate Park	Bridgetown	6	2022	$1,600	15
	BBQ	1 x 2 Burner	Heritage Park	Greenbushes	6	2022	$6,100	15
	BBQ	1 x 4 Burner	Bridgetown Tennis Club	Bridgetown	6	2022	$200	15
	Benches	1 x	Pioneer Park	Bridgetown	6	2022	$1,600	15
	Benches	11 x Wooden Type 1	Bridgetown Tennis Club	Bridgetown	6	2022	$17,100	15
	Benches	18 x Wooden Type 2	Bridgetown Tennis Club	Bridgetown	6	2022	$21,000	15
	Benches	2 x Wooden	Bridgetown Information Bay South	Bridgetown	6	2022	$3,100	15
	Benches	2 x Wooden	Geegeelup Brook Park	Bridgetown	6	2022	$3,100	15
	Benches	2 x Wooden	Heritage Park	Greenbushes	6	2022	$3,100	15
	Benches	2 x Wooden	Memorial Park Play Area	Bridgetown	6	2022	$3,100	15
	Benches	7 x Steel Frame Plastic	Bridgetown Tennis Club	Bridgetown	6	2022	$7,000	15
	Benches Seating	5 x Plastic Around Memorial	Memorial Park Play Area	Bridgetown	6	2022	$10,000	15
	Bin	1 x 240 litre	Bridgetown Information Bay South	Bridgetown	6	2022	$1,200	15
	Bin	1 x 240 litre Bin	Bridgetown Information Bay North	Bridgetown	6	2022	$1,200	15
	Bin	1 x Metal Street Bin	Memorial Park Play Area	Bridgetown	6	2022	$1,100	15
	Bins	1 x 240 litre	Memorial Park Play Area	Bridgetown	6	2022	$1,200	15
	Bins	1 x 240 Litre MGB	Small Camp Ground	Greenbushes	6	2022	$1,200	15

Bins	1 x 240 litre MGB	Thompson Park Greenbushes	Greenbushes	6	2022	$1,200	15
Bins	1 x Metal	Greenbushes Town Square	Greenbushes	6	2022	$1,100	15
Bins	1 x Metal Bin	Bridgetown Skate Park	Bridgetown	6	2022	$1,100	15
Bins	1 x Metal Coiled	Greenbushes Skate Park	Greenbushes	6	2022	$1,100	15
Bins	1 x Metal Street Bin	Thompson Park Greenbushes	Greenbushes	6	2022	$1,100	15
Bins	2 x 240 Litre MGB	Greenbushes Sportsground	Greenbushes	6	2022	$2,300	15
Bins	3 x	Memorial Park Play Area	Bridgetown	6	2022	$3,400	15
Bins	3 x 240 Litre MGB	Bridgetown Tennis Club	Bridgetown	6	2022	$500	15
Bins	3 x 240 Litre MGB	Greenbushes Pool & Boardwalk	Greenbushes	6	2022	$3,500	15
Bollards	35 x Composite	Bridgetown Skate Park	Bridgetown	6	2022	$2,300	15
Bus Shelter	Bus Shelter	Bridgetown		6	2022	$16,500	15
Bus Shelter	Bus Shelter	Hester		6	2022	$16,500	15
Bicycle Racks	3 x	Greenbushes Town Square	Greenbushes	6	2022	$1,500	15
Cricket Oval	1 x 240 litre MGB	Greenbushes Sportsground	Greenbushes	6	2022	$1,200	15
Cricket Pitch	1 x Pitch	Bridgetown Sportsground	Bridgetown	6	2022	$9,000	15
Fencing	550 Metres Perimeter	Bridgetown Tennis Club	Bridgetown	6	2022	$53,625	15
Gates	2 x Metal Access gates	Greenbushes Sportsground	Greenbushes	6	2022	$2,400	15
Gazebo	1 x Hexagonal	Heritage Park	Greenbushes	6	2022	$17,500	15
Goal Posts	2 x	Thompson Park Greenbushes	Greenbushes	6	2022	$12,500	15
Heavy Duty Bollards	5 x	Blackwood River Park	Bridgetown	6	2022	$300	15
Lighting	2 x Spotlights	Memorial Park Play Area	Bridgetown	6	2022	$500	15
Lights Indoor	4 x	Memorial Park Play Area	Bridgetown	6	2022	$800	15
Niche Wall Shelter	1 x 6x4 metres	Bridgetown Cemetery	Bridgetown	6	2022	$11,200	15
Picnic Table	1 x	Pioneer Park	Bridgetown	6	2022	$2,000	15
Picnic Table	1 x Square	Heritage Park	Greenbushes	6	2022	$2,000	15
Play Station 3	1 x Barrel Roller	Memorial Park Play Area	Bridgetown	6	2022	$2,500	15
Play Station 3	2 x Double Swings Sets	Memorial Park Play Area	Bridgetown	6	2022	$7,400	15
Playground Equipment	1 x Arched Bridge closed in rails	Greenbushes Sportsground	Greenbushes	6	2022	$4,400	15
Playground Equipment	1 x Arched Hexi Tunnel	Bridgetown Tennis Club	Bridgetown	6	2022	$1,900	15
Playground Equipment	1 x Archway Panel	Greenbushes Sportsground	Greenbushes	6	2022	$400	15
Playground Equipment	1 x Cubby Roof Yellow	Bridgetown Tennis Club	Bridgetown	6	2022	$6,300	15
Playground Equipment	1 x Curved Slide 1200	Greenbushes Sportsground	Greenbushes	6	2022	$1,600	15
Playground Equipment	1 x Fire Pole and Climber	Bridgetown Tennis Club	Bridgetown	6	2022	$1,300	15
Playground Equipment	1 x Guard Rail Panel	Bridgetown Tennis Club	Bridgetown	6	2022	$1,900	15
Playground Equipment	1 x Hexi Pole	Greenbushes Sportsground	Greenbushes	6	2022	$1,900	15
Playground Equipment	1 x Lookout Panel	Greenbushes Sportsground	Greenbushes	6	2022	$400	15
Playground Equipment	1 x Net Climber	Greenbushes Sportsground	Greenbushes	6	2022	$700	15
Playground Equipment	1 x Pig Tail Pole	Bridgetown Tennis Club	Bridgetown	6	2022	$1,900	15
Playground Equipment	1 x Pig Tail Pole	Greenbushes Sportsground	Greenbushes	6	2022	$1,900	15

Playground Equipment	1 x Rung ladder	Bridgetown Tennis Club	Bridgetown	6	2022	$1,900	15
Playground Equipment	1 x Rung ladder	Greenbushes Sportsground	Greenbushes	6	2022	$1,900	15
Playground Equipment	1 x Shop Counter Panel	Bridgetown Tennis Club	Bridgetown	6	2022	$1,900	15
Playground Equipment	1 x Steering Wheel Panel	Bridgetown Tennis Club	Bridgetown	6	2022	$2,100	15
Playground Equipment	1 x Tuck Shop Panel	Bridgetown Tennis Club	Bridgetown	6	2022	$1,900	15
Playground Equipment	1 x Wobble Bridge Open Rail	Bridgetown Tennis Club	Bridgetown	6	2022	$4,400	15
Playground Equipment	2 x Back Hoes	Blackwood River Park	Bridgetown	6	2022	$2,500	15
Playground Equipment	2 x Double Swings	Blackwood River Park	Bridgetown	6	2022	$7,400	15
Playground Equipment	2 x Wooden Signs	Small Camp Ground	Greenbushes	6	2022	$13,500	15
Playground Equipment	Single Wave Slide 1600	Bridgetown Tennis Club	Bridgetown	6	2022	$1,600	15
Power Boxes	1 x	Heritage Park	Greenbushes	6	2022	$300	15
Power Boxes	1 x Double	Geegeelup Brook Park	Bridgetown	6	2022	$500	15
Power Boxes	2 x Single	Geegeelup Brook Park	Bridgetown	6	2022	$500	15
Power Boxes	4 x Power Boards	Memorial Park Play Area	Bridgetown	6	2022	$2,000	15
Power Point	1 x Double Outdoor	Memorial Park Play Area	Bridgetown	6	2022	$200	15
Power Point	1 x Double Outdoor	Memorial Park Play Area	Bridgetown	6	2022	$200	15
Seating Benches	1 x Wooden	Greenbushes Town Square	Greenbushes	6	2022	$1,600	15
Seating Benches	1 x wooden bench and seating	Memorial Park Play Area	Bridgetown	6	2022	$3,000	15
Seating Benches	3 x single composite benches	Memorial Park Play Area	Bridgetown	6	2022	$4,700	15
Seating Benches	7 x Bench Tables	Greenbushes Pool & Boardwalk	Greenbushes	6	2022	$14,000	15
Shade Cloth	2 x	Bridgetown Tennis Club	Bridgetown	6	2022	$3,656	15
Shade Sails	4 x Shade Sails	Memorial Park Play Area	Bridgetown	6	2022	$7,313	15
Shelters	1 x 3 x 3 metre square	Greenbushes Pool & Boardwalk	Greenbushes	6	2022	$4,600	15
Signs	1 x Wooden	Greenbushes Town Square	Greenbushes	6	2022	$1,800	15
Street Furniture	12 x Benches			6	2022	$18,700	15
Street Furniture	20 x Bins			6	2022	$22,400	15
Street Furniture	4 x Tree Benches			6	2022	$4,700	15
Table	1 x Wooden	Bridgetown Information Bay South	Bridgetown	6	2022	$2,000	15
Tier Benches Wooden	14 x 420 centimetres	Memorial Park Play Area	Bridgetown	6	2022	$14,000	15
Toilet Block	1 x	Bridgetown Skate Park	Bridgetown	6	2022	$3,000	15
Water Cannon	1 x	Bridgetown Sportsground	Bridgetown	6	2022	$5,000	15
Water Fountain	1 x	Bridgetown Skate Park	Bridgetown	6	2022	$700	15
Water Fountain	1 x	Greenbushes Town Square	Greenbushes	6	2022	$700	15
Water Fountain	1 x	Thompson Park Greenbushes	Greenbushes	6	2022	$700	15
Water Fountain	1 x Double Spout	Memorial Park Play Area	Bridgetown	6	2022	$1,100	15
Wire Mesh Bins	3 x	Bridgetown Cemetery	Bridgetown	6	2022	$3,800	15
					Subtotal	$447,394	
BBQ s	1 x Module 3 Electric	Memorial Park Play Area	Bridgetown	7	2023	$11,100	15
Fencing Railing	190 metres	Memorial Park Play Area	Bridgetown	7	2023	$28,738	15
Seating Benches	11 x	Blackwood River Park	Bridgetown	7	2023	$17,100	15

Water Fountain	1 x Spout	Blackwood River Park	Bridgetown	7	2023	$700	15
					Subtotal	$57,638	
Bridge	1 x Wooden	Pioneer Park	Bridgetown	8	2024	$5,440	30
Depot	Drum Shelter	Depot		8	2024	$1,500	30
Entrance Gates	1 x Metal	Pioneer Park	Bridgetown	8	2024	$1,500	30
Goal Posts	2 x Hockey Goal Posts	Greenbushes Sportsground	Greenbushes	8	2024	$3,500	30
Lighting	1 x	Heritage Park	Greenbushes	8	2024	$4,700	30
Shed	6 x 6 metres	Greenbushes Skate Park	Greenbushes	8	2024	$15,000	30
					Subtotal	$31,640	
BBQ	1 x Jumbuck 6 Burner	Bridgetown Tennis Club	Bridgetown	9	2025	$300	15
BBQ s	1 x	Blackwood River Park	Bridgetown	9	2025	$6,100	15
BBQ s	1x module 2 gas	Greenbushes Pool & Boardwalk	Greenbushes	9	2025	$6,100	15
BBQ Shelter	1 x	Heritage Park	Greenbushes	9	2025	$6,400	15
BBQ Shelter	1 x	Memorial Park Play Area	Bridgetown	9	2025	$6,400	15
Bins	1 x 240 litre MGB	Bridgetown Skate Park	Bridgetown	9	2025	$1,200	15
Bins	1 x Domestic 240 Litre MGB	Bridgetown Library Grounds	Bridgetown	9	2025	$200	15
Bins	2 x Recycle 240 litre MGB	Bridgetown Library Grounds	Bridgetown	9	2025	$300	15
Bollards	2 x Removable	Bridgetown Town Square	Bridgetown	9	2025	$100	15
Bollards	30 x Wooden	Greenbushes Sportsground	Greenbushes	9	2025	$2,000	15
Bollards	35 x Wooden	Greenbushes Skate Park	Greenbushes	9	2025	$2,300	15
Bollards	40 x	Greenbushes Pool & Boardwalk	Greenbushes	9	2025	$2,600	15
Bus Shelter	Bus Shelter	Greenbushes		9	2025	$16,500	15
CCTV Camera Light	1 x	Memorial Park Play Area	Bridgetown	9	2025	$500	15
CCTV Cameras	2 x	Memorial Park Play Area	Bridgetown	9	2025	$2,700	15
Concrete Plinth	1 x 15 metres Single	Bridgetown Cemetery	Bridgetown	9	2025	$375	15
Concrete Plinth	1 x 18 metres Single	Bridgetown Cemetery	Bridgetown	9	2025	$450	15
Fencing	880 metres	Bridgetown Sportsground	Bridgetown	9	2025	$57,200	15
Fitness Equipment Fixed	1 x Aerobic Rider	Somme Creek Parklands	Bridgetown	9	2025	$3,100	15
Fitness Equipment Fixed	1 x Butterfly Press and Curles	Somme Creek Parklands	Bridgetown	9	2025	$5,600	15
Fitness Equipment Fixed	1 x Double Cycle and Shoulder Grinder	Somme Creek Parklands	Bridgetown	9	2025	$4,400	15
Fitness Equipment Fixed	1 x Double Leg Press	Somme Creek Parklands	Bridgetown	9	2025	$4,800	15
Fitness Equipment Fixed	1 x Lap Pull Down and Shoulder Press	Somme Creek Parklands	Bridgetown	9	2025	$5,000	15
Fitness Equipment Fixed	1 x Rowing Machine	Somme Creek Parklands	Bridgetown	9	2025	$3,800	15
Fitness Equipment Fixed	1 x Waste Twister and Stepper	Somme Creek Parklands	Bridgetown	9	2025	$3,800	15
Gazebo	1 x	Bridgetown Information Bay South	Bridgetown	9	2025	$17,500	15
Gazebos	2 x Hexagonal	Somme Creek Parklands	Bridgetown	9	2025	$35,000	15
Lights	12 x Path Uplights exposed	Bridgetown Library Grounds	Bridgetown	9	2025	$4,800	15
Maze Play Station 4	1 x Arched Enterance	Memorial Park Play Area	Bridgetown	9	2025	$1,900	15
Maze Play Station 4	1 x Bubble Panel	Memorial Park Play Area	Bridgetown	9	2025	$2,100	15
Maze Play Station 4	1 x Chime Panel	Memorial Park Play Area	Bridgetown	9	2025	$1,900	15
Maze Play Station 4	1 x Crawl Through Tunnel	Memorial Park Play Area	Bridgetown	9	2025	$2,500	15

Maze Play Station 4	1 x Double Roof Red	Memorial Park Play Area	Bridgetown	9	2025	$6,300	15
Maze Play Station 4	1 x Peaked Entrance	Memorial Park Play Area	Bridgetown	9	2025	$1,900	15
Maze Play Station 4	1 x Steering Panel	Memorial Park Play Area	Bridgetown	9	2025	$2,100	15
Maze Play Station 4	1 x Sunrise Panel	Memorial Park Play Area	Bridgetown	9	2025	$1,900	15
Maze Play Station 4	1 x Telescope Panel	Memorial Park Play Area	Bridgetown	9	2025	$2,100	15
Maze Play Station 4	2 x Ball Panel	Memorial Park Play Area	Bridgetown	9	2025	$3,800	15
Maze Play Station 4	2 x Crawl Through Panels	Memorial Park Play Area	Bridgetown	9	2025	$4,100	15
Maze Play Station 4	3x Alphabet Panels	Memorial Park Play Area	Bridgetown	9	2025	$6,200	15
Maze Play Station 4	4 x Squeeze Panel	Memorial Park Play Area	Bridgetown	9	2025	$7,500	15
Maze Play Station 4	6 x Guard Rail Panels	Memorial Park Play Area	Bridgetown	9	2025	$11,300	15
Maze Play Station 4	9 x Solid Panels	Memorial Park Play Area	Bridgetown	9	2025	$14,100	15
Maze Play Station 4	Rubber Flooring x 50m Square	Memorial Park Play Area	Bridgetown	9	2025	$3,250	15
Memorial Lighting	2 x 3 globe up lights	Memorial Park Play Area	Bridgetown	9	2025	$1,600	15
Path Lights	12 x single globe up lights	Memorial Park Play Area	Bridgetown	9	2025	$4,800	15
Play Equipment	1 x Double Roof	Rec Centre	Bridgetown	9	2025	$6,300	15
Play Equipment	1 x Fireman Pole	Rec Centre	Bridgetown	9	2025	$1,300	15
Play Equipment	1 x Guard Rail	Rec Centre	Bridgetown	9	2025	$1,900	15
Play Equipment	1 x Rung Ladder	Rec Centre	Bridgetown	9	2025	$1,900	15
Play Equipment	1 x Squeeze Panel	Rec Centre	Bridgetown	9	2025	$1,900	15
Play Equipment	1 x Wave Slide 1200	Rec Centre	Bridgetown	9	2025	$1,600	15
Play Equipment	Playground Flooring	Rec Centre	Bridgetown	9	2025	$3,250	15
Play Station 1 Large	1 x Abacus Panel	Memorial Park Play Area	Bridgetown	9	2025	$2,200	15
Play Station 1 Large	1 x Chin Up Bar	Memorial Park Play Area	Bridgetown	9	2025	$2,200	15
Play Station 1 Large	1 x Cubby Roof	Memorial Park Play Area	Bridgetown	9	2025	$5,000	15
Play Station 1 Large	1 x Flying Fox	Memorial Park Play Area	Bridgetown	9	2025	$16,200	15
Play Station 1 Large	1 x Guard Rail Panel	Memorial Park Play Area	Bridgetown	9	2025	$1,900	15
Play Station 1 Large	1 x Hexi Pole	Memorial Park Play Area	Bridgetown	9	2025	$1,900	15
Play Station 1 Large	1 x Parallel Bar	Memorial Park Play Area	Bridgetown	9	2025	$2,300	15
Play Station 1 Large	1 x Pommel Walker	Memorial Park Play Area	Bridgetown	9	2025	$2,900	15
Play Station 1 Large	1 x Rotating Ball	Memorial Park Play Area	Bridgetown	9	2025	$3,100	15
Play Station 1 Large	1 x Safety Stairs	Memorial Park Play Area	Bridgetown	9	2025	$3,800	15
Play Station 1 Large	1 x Spiral Slide 1800	Memorial Park Play Area	Bridgetown	9	2025	$2,300	15
Play Station 1 Large	2 x Arched Monkey Bars	Memorial Park Play Area	Bridgetown	9	2025	$4,200	15
Play Station 1 Large	2 x Tri Platforms	Memorial Park Play Area	Bridgetown	9	2025	$4,400	15
Play Station 1 Large	3 x Square Platforms	Memorial Park Play Area	Bridgetown	9	2025	$7,500	15
Play Station 2	1 x 5 Safety Stairs Open Rail	Memorial Park Play Area	Bridgetown	9	2025	$3,800	15
Play Station 2	1 x Crawl Through Tunnel	Memorial Park Play Area	Bridgetown	9	2025	$2,500	15
Play Station 2	1 x Guard Rail Panel	Memorial Park Play Area	Bridgetown	9	2025	$1,900	15
Play Station 2	1 x Rung Ladder	Memorial Park Play Area	Bridgetown	9	2025	$1,900	15
Play Station 2	1 x Shop Counter Panel	Memorial Park Play Area	Bridgetown	9	2025	$1,900	15
Play Station 2	1 x Straight Slide 800mm	Memorial Park Play Area	Bridgetown	9	2025	$1,600	15
Play Station 5	1 x Climbing Net	Memorial Park Play Area	Bridgetown	9	2025	$22,400	15
Play Station 6	1 x Ball Panel	Memorial Park Play Area	Bridgetown	9	2025	$1,900	15
Play Station 6	1 x Bubble Panel	Memorial Park Play Area	Bridgetown	9	2025	$1,900	15
Play Station 6	1 x Cogs Panel	Memorial Park Play Area	Bridgetown	9	2025	$2,100	15
Play Station 6	1 x Mirror Panel	Memorial Park Play Area	Bridgetown	9	2025	$1,900	15
Playground Equipment	1 x 5 Safety Stairs Open Rail	Blackwood River Park	Bridgetown	9	2025	$3,800	15
Playground Equipment	1 X Access Ramp Open Rails	Blackwood River Park	Bridgetown	9	2025	$3,100	15
Playground Equipment	1 x Arched Monkey Bar	Greenbushes Pool & Boardwalk	Greenbushes	9	2025	$1,700	15
Playground Equipment	1 x Backhoe	Greenbushes Pool & Boardwalk	Greenbushes	9	2025	$1,300	15
Playground Equipment	1 x Double Swing	Greenbushes Pool & Boardwalk	Greenbushes	9	2025	$3,700	15

Playground Equipment	1 x Fireman Pole	Greenbushes Pool & Boardwalk	Greenbushes	9	2025	$1,700	15
Playground Equipment	1 x Flying Fox	Greenbushes Pool & Boardwalk	Greenbushes	9	2025	$10,900	15
Playground Equipment	1 x Hexi Pole	Blackwood River Park	Bridgetown	9	2025	$1,900	15
Playground Equipment	1 x Pig Tail Pole	Greenbushes Pool & Boardwalk	Greenbushes	9	2025	$1,900	15
Playground Equipment	1 x Platform Square	Greenbushes Pool & Boardwalk	Greenbushes	9	2025	$2,500	15
Playground Equipment	1 x Rung Ladder with Rails	Greenbushes Pool & Boardwalk	Greenbushes	9	2025	$1,900	15
Playground Equipment	1 x See Saw Rocker	Blackwood River Park	Bridgetown	9	2025	$3,600	15
Playground Equipment	1 x Single Chain Wall	Greenbushes Pool & Boardwalk	Greenbushes	9	2025	$2,000	15
Playground Equipment	1 x Single Roof Square	Blackwood River Park	Bridgetown	9	2025	$5,000	15
Playground Equipment	1 x Single Wave Slide 1200	Blackwood River Park	Bridgetown	9	2025	$1,600	15
Playground Equipment	1 x Solid Panel	Greenbushes Pool & Boardwalk	Greenbushes	9	2025	$500	15
Playground Equipment	1 x Spiral Slide 1800	Blackwood River Park	Bridgetown	9	2025	$2,300	15
Playground Equipment	1 x Surf Rocker	Greenbushes Pool & Boardwalk	Greenbushes	9	2025	$800	15
Playground Equipment	1 x Tuck Shop Panel	Greenbushes Pool & Boardwalk	Greenbushes	9	2025	$700	15
Playground Equipment	4 x Guard Rail Panels	Blackwood River Park	Bridgetown	9	2025	$7,500	15
Playground Equipment	Arched Bridge Closed in Rails	Blackwood River Park	Bridgetown	9	2025	$4,400	15
Playground Equipment	Sand Base	Blackwood River Park	Bridgetown	9	2025	$1,000	15
Playground Equipment	Sand Base	Bridgetown Tennis Club	Bridgetown	9	2025	$500	15
Playground Equipment	Wave Slide 1600	Greenbushes Pool & Boardwalk	Greenbushes	9	2025	$2,800	15
Seating Benches	1 X Composite	Bridgetown Skate Park	Bridgetown	9	2025	$1,600	15
Seating Benches	1 x Wooden	Bridgetown Skate Park	Bridgetown	9	2025	$1,600	15
Seating Benches	2 x Composite	Somme Creek Parklands	Bridgetown	9	2025	$3,100	15
Seating Benches	2 x Aluminium	Bridgetown Cemetery	Bridgetown	9	2025	$3,100	15
Seating Benches	Aluminium Red stack Bench	Greenbushes Sportsground	Greenbushes	9	2025	$2,000	15
Shade Sails	6 x	Bridgetown Skate Park	Bridgetown	9	2025	$10,969	15
Shade Sails	Shade Sails	Rec Centre	Bridgetown	9	2025	$3,656	15
Shelter	1 x 3x1 metres	Bridgetown Cemetery	Bridgetown	9	2025	$3,900	15
Shelter	4 x 6 metre Red Roof	Bridgetown Skate Park	Bridgetown	9	2025	$11,200	15
Signage	2 x	Greenbushes Pool & Boardwalk	Greenbushes	9	2025	$2,000	15
Signage	3 x	Greenbushes Cemetery	Greenbushes	9	2025	$3,000	15
Stainless Steel Hand Railing	1 x Single	Bridgetown Library Grounds	Bridgetown	9	2025	$400	15
Stainless Steel Hand Railing	1 x Triple	Bridgetown Library Grounds	Bridgetown	9	2025	$1,200	15
Street Furniture	2 x Large Bins			9	2025	$4,500	15
Tier Handrails	40 metres x 50mm Tubing	Memorial Park Play Area	Bridgetown	9	2025	$8,000	15
Tier Lighting	12 x Flush Lights	Memorial Park Play Area	Bridgetown	9	2025	$6,000	15
Tree Lights	6 x 2 globe up lights	Memorial Park Play Area	Bridgetown	9	2025	$3,600	15
					Subtotal	$537,650	
					Program Total	$1,122,622	

Appendix C Projected Upgrade/Exp/New 10 year Capital Works Program

Bridgetown-Greenbushes SC
Projected Capital Upgrade/New Works Program - Parks, Reserves & Other Infrastructure_S1_V1

($000)

Year	Item	Description	Estimate
2016	1	New Landfill cell	$517
	2	Drainage	$90
	3	Other Infrastructure	$45
2016		**Total**	**$652**

($000)

Year	Item	Description	Estimate
2017	1	Bridgetown Sports Ground Dam	$70
	2	Geegeelup Brook Open Drain Renewal & Beautification	$425
	3	Trails	$250
	4	SW Drainage	$50
2017		**Total**	**$795**

($000)

Year	Item	Description	Estimate
2018	1		
	2		
2018		**Total**	**$0**

($000)

Year	Item	Description	Estimate
2019	1		
	2		
2019		**Total**	**$0**

($000)

Year	Item	Description	Estimate
2020	1		
	2		
2020		**Total**	**$0**

($000)

Year	Item	Description	Estimate
2021	1		
	2		
2021		**Total**	**$0**

($000)

Year	Item	Description	Estimate
2022	1		
	2		
2022		**Total**	**$0**

($000)

Year	Item	Description	Estimate
2023	1		
	2		
2023		**Total**	**$0**

($000)

Year	Item	Description	Estimate
2024	1		
	2		
2024		**Total**	**$0**

($000)

Year	Item	Description	Estimate
2025	1		
	2		
2025		**Total**	**$0**

Appendix D Budgeted Expenditures Accommodated in LTFP

NAMS.PLUS3 Asset Management — **Bridgetown-Greenbushes SC**

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Parks, Reserves & Other Infrastructure_S1_V1 — Asset Management Plan

First year of expenditure projections **2016** (financial yr ending)

Parks, Reserves & Other Infrastructure

Asset values at start of planning period

Current replacement cost	$4,828 (000)	Calc CRC from Asset Register $4,828 (000)
Depreciable amount	$4,828 (000)	This is a check for you.
Depreciated replacement cost	$3,067 (000)	
Annual depreciation expense	$198 (000)	

Operations and Maintenance Costs for New Assets

	% of asset value
Additional operations costs	24.03%
Additional maintenance	15.56%
Additional depreciation	4.10%
Planned renewal budget (Information only)	

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

Planned Expenditures from LTFP

20 Year Expenditure Projections Note: Enter all values in current **2016** values

Financial year ending	2016 $000	2017 $000	2018 $000	2019 $000	2020 $000	2021 $000	2022 $000	2023 $000	2024 $000	2025 $000
Expenditure Outlays included in Long Term Financial Plan (in current $ values)										
Operations										
Operations **budget**	$977	$977	$977	$977	$977	$977	$977	$977	$977	$977
Management **budget**	$183	$183	$183	$183	$183	$183	$183	$183	$183	$183
AM systems **budget**	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total operations	$1,160	$1,160	$1,160	$1,160	$1,160	$1,160	$1,160	$1,160	$1,160	$1,160
Maintenance										
Reactive maintenance **budget**	$180	$180	$180	$180	$180	$180	$180	$180	$180	$180
Planned maintenance **budget**	$571	$571	$571	$571	$571	$571	$571	$571	$571	$571
Specific maintenance items **budget**	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total maintenance	$751	$751	$751	$751	$751	$751	$751	$751	$751	$751
Capital										
Planned renewal **budget**	$107	$26	$26	$26	$26	$26	$26	$26	$26	$26
Planned upgrade/new **budget**	$652	$799	$799	$799	$799	$799	$799	$799	$799	$799
Non-growth contributed asset value	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Asset Disposals										
Est Cost to dispose of assets	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Carrying value (DRC) of disposed assets	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Additional Expenditure Outlays Requirements (e.g from Infrastructure Risk Management Plan)	2016 $000	2017 $000	2018 $000	2019 $000	2020 $000	2021 $000	2022 $000	2023 $000	2024 $000	2025 $000
Additional Expenditure Outlays required and not included above										
Operations	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Maintenance	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Capital Renewal	to be incorporated into Forms 2 & 2.1 (where Method 1 is used) OR Form 2B Defect Repairs (where Method 2 or 3 is used)									
Capital Upgrade	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
User Comments #2										

Forecasts for Capital Renewal using Methods 2 & 3 (Form 2A & 2B) & Capital Upgrade (Form 2C)	2016 $000	2017 $000	2018 $000	2019 $000	2020 $000	2021 $000	2022 $000	2023 $000	2024 $000	2025 $000
Forecast Capital Renewal from Forms 2A & 2B	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Forecast Capital Upgrade from Form 2C	$652	$795	$0	$0	$0	$0	$0	$0	$0	$0

Appendix E Abbreviations

AAAC	Average annual asset consumption
AM	Asset management
AM Plan	Asset management plan
ARI	Average recurrence interval
ASC	Annual service cost
BOD	Biochemical (biological) oxygen demand
CRC	Current replacement cost
CWMS	Community wastewater management systems
DA	Depreciable amount
DRC	Depreciated replacement cost
EF	Earthworks/formation
IRMP	Infrastructure risk management plan
LCC	Life Cycle cost
LCE	Life cycle expenditure
LTFP	Long term financial plan
MMS	Maintenance management system
PCI	Pavement condition index
RV	Residual value
SoA	State of the Assets
SS	Suspended solids
vph	Vehicles per hour
WDCRC	Written down current replacement cost

Appendix 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. Infrastructure assets are a sub-class of property, plant and equipment which are non-current assets with a life greater than 12 months and enable services to be provided.

Asset category

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

Asset class

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

Asset condition assessment

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

Asset hierarchy

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

Asset management (AM)

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

Asset renewal funding ratio

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

Average annual asset consumption (AAAC)*

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

Borrowings

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

Capital expenditure

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

Capital expenditure - expansion

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

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

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

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

Capital funding
Funding to pay for capital expenditure.

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

Capital investment expenditure
See capital expenditure definition

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

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

Class of assets
See asset class definition

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

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

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

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

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

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

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

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

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

Economic life
See useful life definition.

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

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

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

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

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

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

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

Investment property
Property held to earn rentals or for capital appreciation or both, rather than for:
(a) use in the production or supply of goods or services or for administrative purposes; or
(b) sale in the ordinary course of business.

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

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

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

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

Loans / borrowings
See borrowings.

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

- **Planned maintenance**
  Repair work that is identified and managed through a maintenance management system (MMS). MMS activities include inspection, assessing the condition against failure/breakdown criteria/experience, prioritising scheduling, actioning the work and reporting what was done to develop a maintenance history and improve maintenance and service delivery performance.
- **Reactive maintenance**
  Unplanned repair work that is carried out in response to service requests and management/ supervisory directions.
- **Specific maintenance**
  Maintenance work to repair components or replace sub-components that needs to be identified as a specific maintenance item in the maintenance budget.
- **Unplanned maintenance**
  Corrective work required in the short-term to restore an asset to working condition so it can continue to deliver the required service or to maintain its level of security and integrity.

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

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

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

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

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

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

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

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

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

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

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

Pavement management system (PMS)
A systematic process for measuring and predicting the condition of road pavements and wearing surfaces over time and recommending corrective actions.

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

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

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

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

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

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

Recurrent funding
Funding to pay for recurrent expenditure.

Rehabilitation
See capital renewal expenditure definition above.

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

Renewal
See capital renewal expenditure definition above.

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

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

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

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

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

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

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

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

Sub-component
Smaller individual parts that make up a component part.

Useful life
Either:
(a) the period over which an asset is expected to be available for use by an entity, or
(b) the number of production or similar units expected to be obtained from the asset by the entity.
It is estimated or expected time between placing the asset into service and removing it from service, or the estimated period of time over which the future economic benefits embodied in a depreciable asset, are expected to be consumed by the Council.

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

Source: IPWEA, 2009, Glossary

Additional and modified glossary items shown *

Shire of
Bridgetown-Greenbushes
.... simply beautiful

Property Infrastructure

Asset Management Plan

Scenario 1 Version 2

June 2016

Document Control	

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1. EXECUTIVE SUMMARY

Context

The Shire of Bridgetown-Greenbushes is located at the heart of the South West of Western Australia close to forests and National Parks, wineries, heritage walks and trails. The Shire contains some of the state's most stunning historical buildings. In 2000, Bridgetown was recognised as a "Heritage Town".

Council's property infrastructure assets, of which building infrastructure is an important component, provides access to community and recreational facilities and is seen by the community as essential infrastructure. Council needs to ensure that there is an appropriate level of funding to enable this category of assets to be maintained and renewed to an acceptable standard.

This Plan collates current property portfolio condition, valuation, income and expenditure data, and compares it with the asset stock's long term funding needs (that are required to provide an agreed and sustainable Level of Service).

This Plan investigates whether Council's current level of asset operational, maintenance and renewal funding is sufficient to sustain the assets at a standard that will be acceptable to both asset owners and users.

Asset management involves continuous monitoring and improvement. Specific tasks and projects have been identified in this plan to ensure the progress of asset management in relation to property infrastructure. Improving the Shire's asset management approach will ensure the provision of information required to ensure the whole of life costs involved in property asset management are acknowledged and the target levels of service are delivered to stakeholders.

The major issue for Council in delivery of services via its property infrastructure is the lack of available condition and utilisation information to enable sustainable planned maintenance and renewal programs.

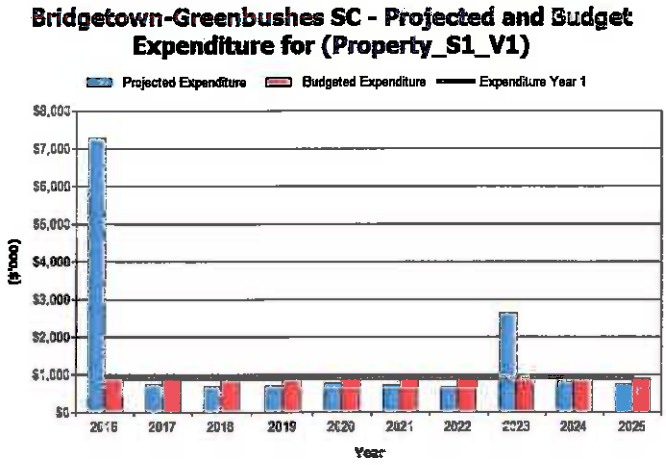
Property Infrastructure
The Property Infrastructure network comprises:
6 Community Use Buildings
17 Council Administration and Operation Buildings
12 Emergency Services Buildings
6 Historical Buildings
1 Library
7 Public Conveniences
5 Public Halls
3 Residential Properties
31 Sport and Recreation Buildings
1 Tourism Building; and
associated freehold land, furniture and equipment to support the provision of services associated with these various building assets.

These infrastructure assets have a replacement value of $45,598,995.

What does it Cost?

The projected outlays necessary to provide the services covered by this Asset Management Plan (AM Plan) includes operations, maintenance, renewal and upgrade of existing assets over the 10 year planning period is $15,785,000 or $1,578,000 on average per year.

Estimated available funding for this period is $8,930,000 or $893,000 on average per year which is 57% of the cost to provide the service. This is a funding shortfall of -$685,000 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 graph below.



What we will do

We plan to provide building asset services for the following:

- Operation, maintenance, renewal and upgrade of buildings to meet service levels set by Council in annual budgets.
- Major renewals within the 10 year planning period include works on the following buildings:

- Administration Office
- Bridgetown Civic Centre
- Bridgetown Football Club Facilities
- Bridgetown Railway Station
- Greenbushes Hall
- Greenbushes Offices
- Shire Depot

What we cannot do

Until the issue of poor asset condition and utilisation information has been resolved, Council will continue to allocate finite resources to property assets that is not based on sound asset management planning principles. This AM Plan indicates that Council has insufficient funding to provide current levels of service into the future. The life cycle gap is the shortfall between life cycle expenditure and the long term life cycle cost. The life cycle gap for services covered by this AM Plan is -$435,000 per year.

Managing the Risks

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

- Lack of condition information about the property, and in particular the building assets, could lead to assets becoming unsafe and/or being replaced at sub-optimum levels
- Current levels of service are not clearly understood or documented; this can create inconsistencies around service level delivery and dissatisfaction of the service by the community and facility users
- Insufficient knowledge within the organisation of the Asset Management Planning process does not encourage a strategic focus being applied to asset management potentially leading to poor asset management decisions

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

- Provide training to relevant staff and Councillors
- Include KPI's in staff job descriptions and annual performance reviews
- Development of a building hierarchy
- Develop and implement an annual condition inspection program
- Undertake community consultation to develop levels of service and incorporate into integrated planning documents
- Undertake annual community survey on levels of service, review resources available to meet expected LOS
- Provide additional resources or adjust levels of service in consultation with the community

Confidence Levels

This AM Plan is based on medium level of confidence information.

The Next Steps

- The actions resulting from this asset management plan are:
- Develop a process for community engagement on Levels of Service including a survey to determine community service level expectations delivered via Council's property assets
- Implement a suitable system and process to record property utilisation and booking request levels
- Develop a hierarchy for all property infrastructure assets identifying parent/child relationships, and link to Levels of Service
- Develop a data collection procedure to ensure repeatability and on-going improvement of condition data collection and modelling processes
- Implement the condition inspection programme for property infrastructure assets
- Greater degree of componentisation in the condition rating process i.e. structure, roof, services and fit out
- Review the Shire's year acquired date for all property infrastructure assets
- Determine useful lives and remaining useful lives of Council's property and adopt consistent unit rates
- Configure the Shire's corporate financial system to record asset expenditure at the individual asset level according to maintenance type and activity
- Identify and improve capture of operational expenditure in the organisation financial system to enable more accurate reporting of operational expenditure
- Develop and implement safety and maintenance inspection programmes and methodologies for property infrastructure assets
- Identify and assess critical property assets for failure modes e.g. backup power facilities in the event of prolonged power outages
- Identify properties for possible future disposal
- Develop staff AM performance measures and link KPI's to individual job descriptions
- Provide asset management training to relevant staff and Councillors
- Determine split in costs between renewal and upgrades for all future upgrades in Council's planning documents
- Develop a long term capital works programme after undertaking condition inspections

- Develop a ranking criteria for assessing renewal/replacement priorities
- Develop a ranking criteria for assessment and selection of new/upgrade assets in forward planning documents
- Analyse demand impacts as a result of increased tourism
- Analyse demand impacts as a result of age demographic changes
- Create Sustainable Property Infrastructure Policy and an associated action plan
- Investigate alternative power generation technologies to help reduce the Shire's carbon footprint and operating costs
- Investigate and implement a suitable asset management software program to consolidate all asset classes into one integrated database

Questions you may have

What is this plan about?

This asset management plan covers the infrastructure assets that serve the Shire of Bridgetown-Greenbushes community's Property Infrastructure needs.

These assets include various building structures located throughout the community area that enable Council to deliver numerous services including:

- General community use
- Council's administration and operation
- Emergency Services
- Retention of important historical buildings
- Library services
- Public conveniences
- Public halls
- Residential
- Sport and recreation
- Tourism

What is an Asset Management Plan?

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

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

Why is there a funding shortfall?

This asset management plan indicates the current funding level is sufficient to continue to provide existing services at current levels in the medium term (5 – 10 years). However, when considering long term life cycle cost that includes asset consumption (depreciation expense) a shortfall of -$435,000 per year in expenditure is predicted. Until the issue of poor asset condition and utilisation information has been resolved, Council will continue to allocate finite resources to property assets that are not based on sound asset management principles.

What options do we have?

Resolving the funding shortfall involves several steps:

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

What happens if we don't manage the shortfall?

It is likely that we will have to reduce service levels in some areas, also the possibility of disposing of property assets that no longer provide the services they were designed for or are under utilised, unless new sources of revenue are found.

What can we do?

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

What can you do?

We will be pleased to consider your thoughts on the issues raised in this asset management plan and suggestions on how we may change or reduce its Property Infrastructure mix of services to ensure that the appropriate level of service can be provided to the community within available funding.

2. INTRODUCTION

2.1 Background

This asset management plan is to demonstrate responsive management of assets (and services provided from assets), compliance with regulatory requirements, and to communicate funding needed to provide the required levels of service over a 20 year planning period.

The asset management plan follows the format for AM Plans recommended in Section 4.2.6 of the International Infrastructure Management Manual[1].

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

- The Shire of Bridgetown-Greenbushes – Strategic Community Plan 2013
- The Shire 10 Year Building Capital Works and Maintenance Plan 2014-2024
- The Shire of Bridgetown-Greenbushes 2015/2016 Budget

This infrastructure assets covered by this asset management plan are shown in Table 2.1. These assets are used to provide various services to the community as categorised below:.

Table 2.1: Assets covered by this Plan

Asset category	Dimension	Replacement Value
Community Use	6	$1,362,000
Council Administration & Operations	17	$5,431,400
Emergency Services	12	$1,968,600
Historical	6	$1,403,300
Libraries	1	$4,026,000
Public Conveniences	7	$850,300
Public Halls	5	$5,170,800
Residential Property	3	$1,074,000
Sport and Recreation	31	$14,047,300
Tourism	1	$2,173,000
Furniture & Equipment	74	$343292
Land	85	$7,749,003
TOTAL	**248**	**$45.598.995**

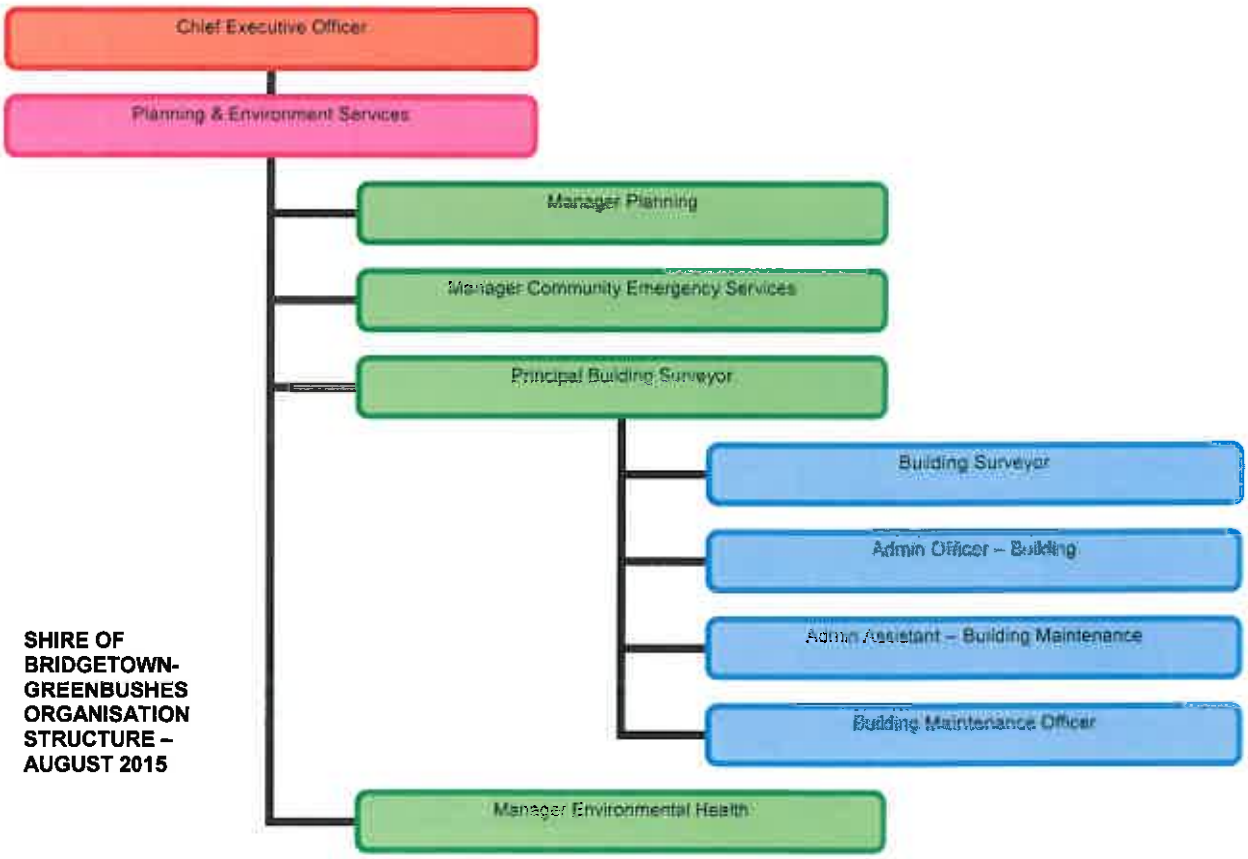
[1] IPWEA, 2011, Sec 4.2.6, *Example of an Asset Management Plan Structure*, pp 4|24 – 27.

Key stakeholders in the preparation and implementation of this asset management plan are: Shown in Table 2.1.1.

Table 2.1.1: Key Stakeholders in the AM Plan

Key Stakeholder	Role in Asset Management Plan
Councillors	Represent needs of community/shareholders Allocate resources to meet the organisation's objectives in providing services while managing risks Ensure organisation is financially sustainable
Employees / Contractors	Safe working environment
Community residents and businesses	Value for money, equitable and responsible service Well maintained assets
Facility Users	Well maintained assets specific to users needs
Insurers	Appropriate risk management policies and practices Safe working environments Well maintained assets
Tourists	Well maintained assets Accessible services Safe facilities
Government (Federal and State)	Systems in place to sustain building infrastructure, accountability and transparency

Our organisational structure for service delivery from infrastructure assets is detailed below,



2.2 Goals and Objectives of Asset Management

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

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

- Providing a defined level of service and monitoring performance,
- Managing the impact of growth through demand management and infrastructure investment,
- Taking a lifecycle approach to developing cost-effective management strategies for the long-term that meet the defined level of service,
- Identifying, assessing and appropriately controlling risks, and
- Having a long-term financial plan which identifies required, affordable expenditure and how it will be financed.[2]

2.3 Plan Framework

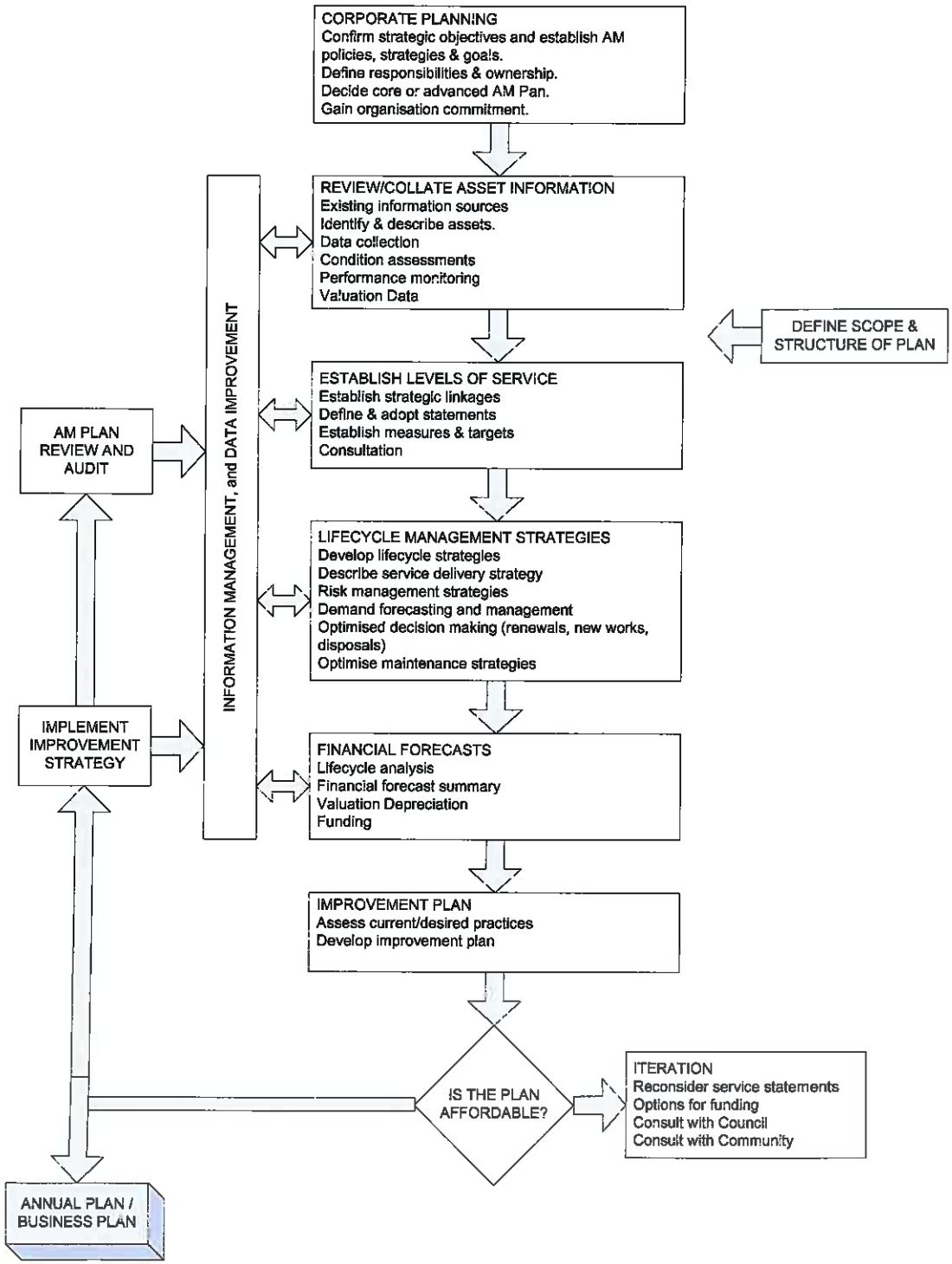
Key elements of the plan are:

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

A road map for preparing an asset management plan is shown below.

[2] Based on IPWEA, 2011, IIMM, Sec 1.2 p 1|7.

Road Map for preparing an Asset Management Plan
Source: IPWEA, 2006, IIMM, Fig 1.5.1, p 1.11.



2.4 Core and Advanced Asset Management

This asset management plan is prepared as a 'core' asset management plan over a 20 year planning period in accordance with the International Infrastructure Management Manual[3]. It is prepared to meet minimum legislative and organisational requirements for sustainable service delivery and long term financial planning and reporting. Core asset management is a 'top down' approach where analysis is applied at the 'system' or 'network' level.

Future revisions of this asset management plan will move towards 'advanced' asset management using a 'bottom up' approach for gathering asset information for individual assets to support the optimisation of activities and programs to meet agreed service levels in a financially sustainable manner.

2.5 Community Consultation

Future revisions of the asset management plan will incorporate community consultation on service levels and costs of providing the service. This will assist the Council and the community in matching the level of service needed by the community, service risks and consequences with the community's ability and willingness to pay for the service.

3. LEVELS OF SERVICE

3.1 Customer Research and Expectations

The outcomes of the community consultation conducted as part of the development of the Strategic Community Plan have informed this 'core' asset management plan. Analysis of Council's customer service request system has also been used to gauge current community expectations.

Table 3.1: Community Satisfaction Survey Levels

Performance Measure	Satisfaction Level				
	Very Satisfied	Fairly Satisfied	Satisfied	Somewhat satisfied	Not satisfied
To be developed in future AMP's					

The organisation uses this information in developing its Strategic Plan and in allocation of resources in the budget.

3.2 Strategic and Corporate Goals

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

Our vision is:

"A wonderful place to live, work, invest and visit with the community working together to achieve shared objectives"

Relevant organisational goals and objectives and how these are addressed in this asset management plan are:

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

Objectives	Outcomes	Strategy	How Objectives, Outcomes and Strategies are addressed in AM Plan
Objective 1: A strong, resilient and balanced economy	Outcome 1.2: Ensure infrastructure and services are provided for future development in	1.2.1 Identify opportunities for expansion of the commercial area	Demand forecasting, level of service and monitoring

[3] IPWEA, 2011, IIMM.

	keeping with the environment		
		1.2.9 Improved facilities for tourists	Capital works are programmed and funded
Objective 2: Our unique natural and built environment is protected and enhanced	Outcome 2.1: Maintain the heritage and character of the main streets in Bridgetown and Greenbushes	2.1.2 Ensure the maintenance of the Town Centres achieves a high level of appearance and amenity	Demand forecasting, level of service and monitoring
	Outcome 2.2: Recognition and retention of our cultural, indigenous and heritage assets	2.2.1 Review the municipal heritage inventory	Heritage assets are identified and maintained effectively
		2.2.3 Prepare conservation plans for key shire owned heritage buildings	Capital works are programmed and funded
		2.2.4 Work with the community to identify and assist in the implementation of projects that promote the unique heritage and history of each town	Data on forward works programs is available to the community for comments and suggestions
	Outcome 2.8: Natural resources are used efficiently and effectively	2.8.1 Investigate retrofitting of Shire buildings for energy and water efficiency	Optimise energy usage in buildings
		2.8.2 Future development of Shire buildings incorporates environmental sustainable design principles	Consider environmentally sustainable design principles on all future Shire buildings
Objective 3: Our community enjoys a high quality of life	Outcome 3.4: Maintain a safe community	3.4.5 Monitor the Shire's risk management profile and exposure to risk	The AMP reduces the Council's exposure to risk as it clearly sets out the most appropriate levels of service affordable by Council
Objective 4: A collaborative and engaged community	Outcome 4.2: A high standard of governance and accountability	4.2.4 Periodically review the organisational structure and its required service levels	The AMP incorporates current and proposed levels of service delivered via Council's building assets.
		4.2.5 Implement bi-annual feedback survey to monitor service provision	Council performance will be fed back to the community via the council newsletter and Shire website
		4.2.6 Provide quality local government services	Demand forecasting, level of service and monitoring
	Outcome 4.5: Long term financial viability	4.5.1 Develop and implement the Integrated Planning and Reporting framework	This AMP aligns with the Integrated Planning and Reporting framework

		4.5.3 Seek efficiencies in planning and operations	The AMP identifies that the management of the properties must be done in a whole of life cycle manner in order that sustainable budgeting practices can be implemented
	Outcome 4.10: Develop and implement asset management plans	4.10.1 Implement Asset Management Plans by ensuring the inclusion of expenditure requirements in the Corporate Business Plan and Long Term Financial Plan	This is the first of the AMPs to be completed by the Shire
		4.10.2 Periodically review the use of Shire buildings to ensure there use is optimised	Demand forecasting, level of service and monitoring

3.3 Legislative Requirements

The organisation has to meet many legislative requirements including Australian and State legislation and State regulations. These include:

Table 3.3: Legislative Requirements

Legislation	Requirement
Local Government Act 1995	Sets out role, purpose, responsibilities and powers of local governments including the preparation of a long term financial plan supported by asset management plans for sustainable service delivery.
Land Administration Act 1997	Sets out the requirements for undertaking activities on land vested in the Crown and managed by Council
Aboriginal Heritage Act 1972	Sets out the responsibilities of local government to ensure that areas of aboriginal significance are not impacted adversely as a result of undertaking infrastructure works
Native Title Act 1999	Regulations and requirements that the Shire must comply with in relation to the use of land.
Planning and Development Act 2005	Sets out the responsibilities of local government in relation to the land resumption process for the purpose of roadworks
Heritage of Western Australia Act 1990	Sets out the responsibilities of local government to ensure that areas of heritage significance are not impacted adversely as a result of undertaking infrastructure works
Building Code of Australia 2015	Sets out the uniform building standards to be used during the approval process for construction works
Building Act 2013	Sets out the requirements to be used during the approval process for construction or demolition works
Australian Standards and Codes of Practice	Referenced in the Building Code of Australia. Covers a cast range of building construction and management.
Health Act 1911	Sets out the requirements to be applied during the approval process for installation of sanitary and waste water systems in buildings
Fire and Emergency Services Act 1998	Sets out the building standards as related to fire mitigation measures to be used during the approval process for construction works
Disability Discrimination Act 1992	To ensure that persons with disabilities have the same rights as the rest of the community (including access to premises).
Environment Protection Act 1986	Regulations regarding noise, sustainability, land fill, stormwater and groundwater resources.

Occupational Health & Safety Act 1984	Provide a work environment that is safe and as far as practicable without risk to health.

The organisation will exercise its duty of care to ensure public safety is accordance with the infrastructure risk management plan prepared in conjunction with this AM Plan. Management of infrastructure risks is covered in Section 5.2

3.4 Community Levels of Service

Service levels are defined service levels in two terms, customer levels of service and technical levels of service.

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

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

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

The organisation's current and expected community service levels are detailed in Tables 3.4 and 3.5. Table 3.4 shows the agreed expected community levels of service based on resource levels in the current long-term financial plan and community consultation/engagement.

Table 3.4: Community Level of Service

Service Attribute (KPI)	Service Objective	Performance Measure Process	Current Performance	Expected position in 10 years based on current LTFP
Community Outcomes: A strong, resilient and balanced economy Our unique natural and built environment is protected and enhanced Our community enjoys a high quality of life A collaborative and engaged community				
Buildings				
Community/Operational Level of Service				
Quality	Well maintained and suitable buildings	Customer service requests	Customer requests/complaints <50 complaints per year	Customer requests/complaints <30 complaints per year
Function	Building facilities meets users requirements	Results of customer surveys and customer service requests	TBC	TBC
		Organisational measure Confidence level	**Low**	
Capacity/ Utilisation	Provide safe facilities	Number of injury/accidents	<5 per year	Nil per year
	Facility utilised to optimum level	Usage data	TBC	80% utilisation
		Organisational measure Confidence level	**Low**	

3.5 Technical Levels of Service

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

Technical service measures are linked to annual budgets covering:

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

Service and asset managers plan, implement and control technical service levels to influence the customer service levels.[4]

Table 3.5 shows the technical level of service expected to be provided under this AM Plan. The agreed sustainable position in the table documents the position agreed by the Council following community consultation and trade-off of service levels performance, costs and risk within resources available in the long-term financial plan.

[4] IPWEA, 2011, IIMM, p 2.22

Table 3.5: Technical Levels of Service

Service Attribute (KPI)	Service Objective	Activity Measure Process	Current Performance*	Expected position in 10 years based on current LTFP**	Agreed Sustainable Position***
Buildings					
Technical Level of Service					
Legislative/ Statutory	Meet criteria as detailed in Licences, Acts or Regulations	Compliance with Legislative/ Statutory requirements	100 % compliance	100 % compliance	100 % compliance
Operations	Buildings are safe for users requirements	Assessment of suitability for purpose through regular condition and defect surveys	3 yearly condition and defect inspections of network	3 yearly condition and defect inspections of network	TBC
	Buildings are clean	Cleaning frequency	Level 1 daily Level 2 twice per week Level 3 one per week	Level 1 daily Level 2 twice per week Level 3 one per week	TBC
		Budget	Cleansing $211,996 Other $261,942 Total $473,938	Cleansing $221,996 Other $261,942 Total $473,938	Cleansing $TBC Other $TBC Total $TBC
Maintenance	Maintain the facilities at the agreed standards for lowest lifecycle cost	Reactive service requests completed within adopted time-frames.	TBC % of reactive service requests completed	TBC % of reactive service requests completed	TBC % of reactive service requests completed
		Budget	Reactive $98,754 Planned $71,523 Total $170,277	Reactive $122,250 Planned $88,525 Total $210,775	Reactive $TBC Planned $TBC Total $TBC
Renewal	Buildings are suitable for purpose	Buildings are maintained to a minimum condition rating of 3	External Structure TBC % Internal Structure TBC %	External Structure TBC % Internal Structure TBC %	External Structure TBC % Internal Structure TBC %
		% of buildings in poor/very poor (4,5) condition	21.5 %	5 %	TBC %
Upgrade/ New	Building capacity matches usage	High use buildings scheduled for upgrade/ replacement with additional capacity when utilisation score is consistently rated as 5	TBC % of buildings meet hierarchy capacity standards	TBC % of buildings meet hierarchy capacity standards	TBC % of buildings meet hierarchy capacity standards

Note: * *Current activities and costs (currently funded).*

** *Desired activities and costs to sustain current service levels and achieve minimum life cycle costs (not currently funded).*

*** *Activities and costs communicated and agreed with the community as being sustainable (funded position following trade-offs, managing risks and delivering agreed service levels).*

4. FUTURE DEMAND

4.1 Demand Drivers

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

4.2 Demand Forecast

The present position and projections for demand drivers that may impact future service delivery and utilisation 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 utilisation 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
Population	Present population estimated as at 2016 approx. 4,580	Increase of 1.53% from 2016 (4,580) to 2026 (4,650). Projected increase of 0.34% per annum[5] from base year 2011 is less than predicted in 2013 due to the down-turn in the mining industry having a negative impact on the resident population in the future	Very small increase in overall demand for services over the 10 year period should be accommodated within existing strategies. **Neutral.**
Demographic	00-09 590 10-19 700 20-39 720 40-59 1280 60-79 1200 80+ 100	00-09 520 10-19 710 20-39 770 40-59 1110 60-79 1280 80+ 250 Projected increases in the: 20-29 age group (8.5%), 60-79 age group (13.6%), 80+ age group (25.4%) and decreases in the 0-9 age group (-11.9 %) & 40-59 age group (-28.8%)	Increasing population in the 60+ age group (39.0%) will impact in the areas of disability access to facilities and requirement for aged care facilities. **Increase.** A decrease in the 40-59 age group (-28.8%) may impact on the type of activities required being transitional from active to passive. **Decrease.**
Tourism	Limited data available and not relevant specifically to this district	The population increases during peak tourist periods, especially during the "Blues at Bridgetown" music festival. The size of the increase is unknown	Increased demand for short stay, caravan and camping facilities. Increased use of ablution facilities. **Increase.**
Environmental	No overriding policy in existence to minimise carbon footprint	Existence of policy to aid in minimisation of Council's carbon footprint	Potentially higher whole of life costs due to effects of climate change; moderate change from sustainability pressures. **Increase.**

[5] ABS Population Projection 2013

Climate Change	**Temperature:** The Annual Mean Temperature has increased by approx. 0.40 C since the late 1960's to 2015. **Rainfall:** Annual rainfall has been decreasing steadily since 1910 to 2015 (down approx. 150mm).	**Temperature:** The annual mean temperature anomaly trend for the Southwestern Australia graph (see below) indicates that the temperatures for the SW area will continue increase in years to come. Annual maximum & minimum temperatures are forecast to increase in accordance with BOM projections. **Rainfall:** Annual rainfall will continue to decrease as indicated by the Annual Rainfall Anomaly trend graph (see below) with the likelihood of more extreme weather events occurring.	With increasing temperatures both maximum & minimum, decreasing rainfall, extended growing season, the trend down in both the number of wet days and consecutive wet days being experienced and more extreme weather events being experienced, there will be an increase in fire risk, increased potential for more severe weather events there may be more damage caused to infrastructure, vegetation and other equipment. Increase.

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.

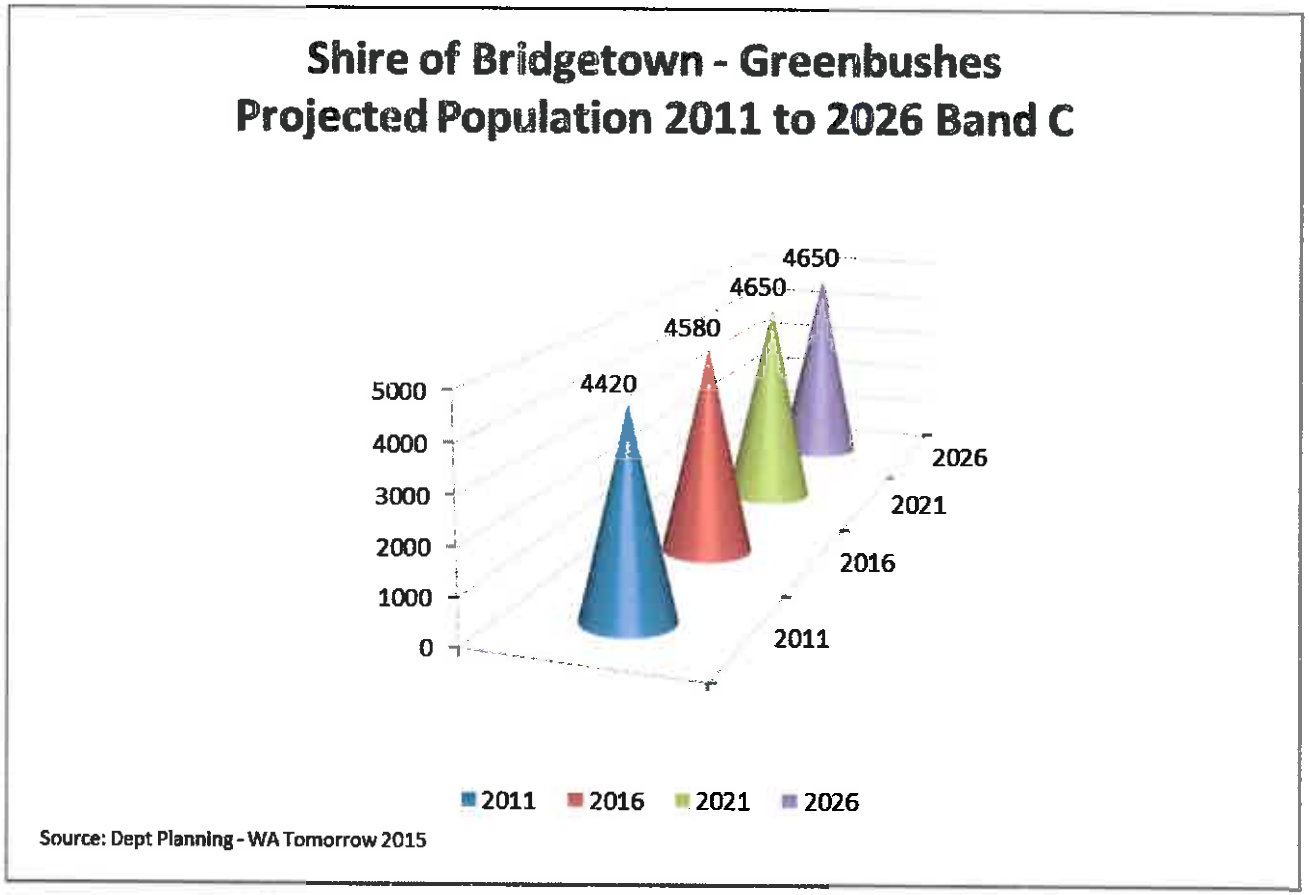
Non-asset solutions focus on providing the required service without the need for the organisation to own the assets and management actions including reducing demand for the service, reducing the level of service (allowing some assets to deteriorate beyond current service levels) or educating customers to accept appropriate asset failures[6]. Examples of non-asset solutions include providing services from existing infrastructure such as aquatic centres and libraries that may be in another community area or public toilets provided in commercial premises.

Opportunities identified to date for demand management are shown in Table 4.4. Further opportunities will be developed in future revisions of this asset management plan.

Table 4.4: Demand Management Plan Summary

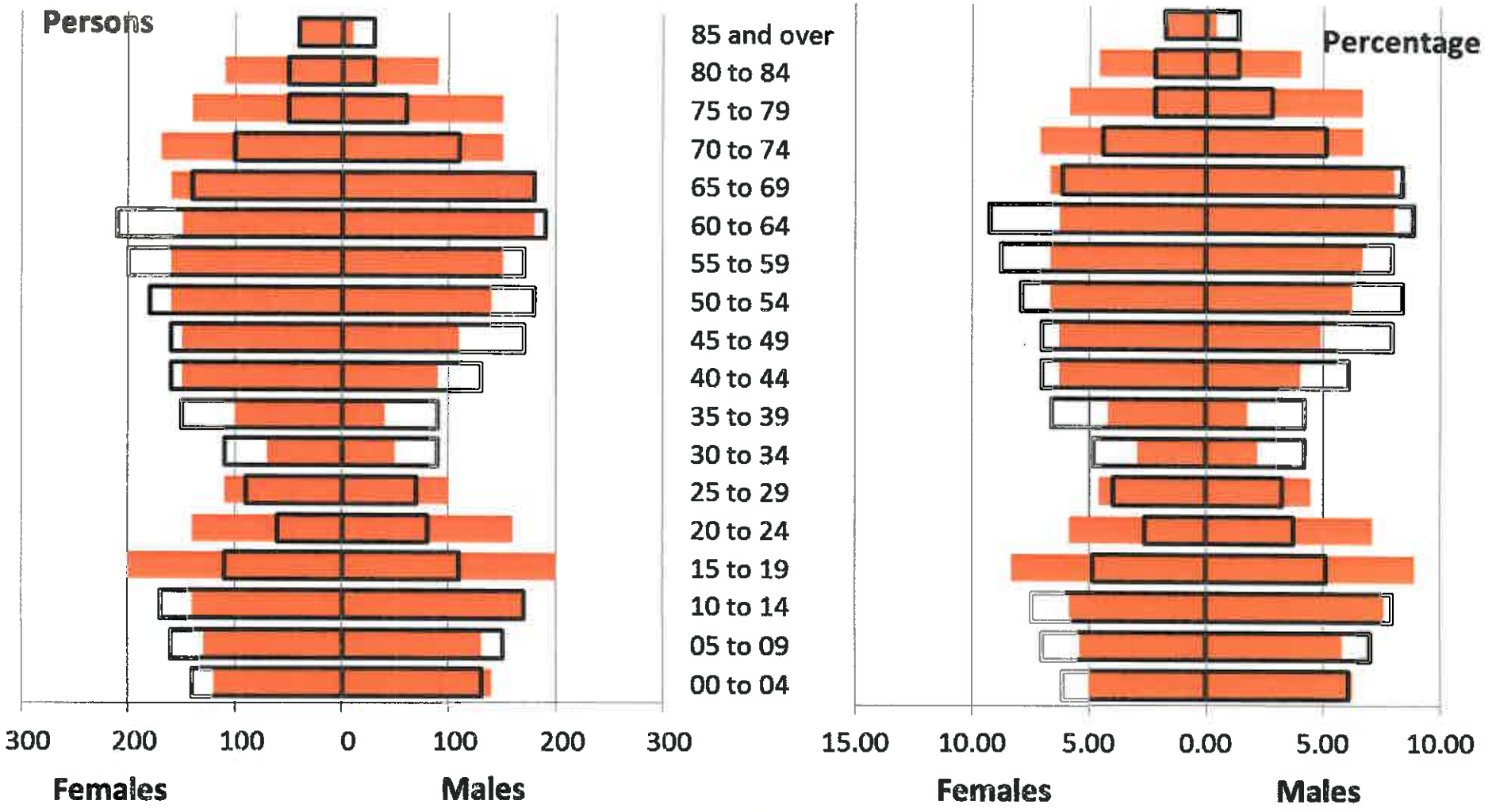
Demand Driver	Impact on Services	Demand Management Plan
Community engagement	Identify services no longer required or at the existing level	Engage with the community to identify justifiable community needs from other expectations and consider only community needs consistent with Shire's charter Develop an understanding of the community's desired level of service.
Customer requests	Targeted expenditure to areas most needed	Analyse customer requests to optimise the use and performance of existing assets and look for non-asset based solutions to meet demand for services
Increased demand for local accessible facilities for the aged	Targeted expenditure to areas most needed	Improvement of access to all facilities, wherever possible to meet the increasing requirements of the Building Code (not retrospective); Ensure flexibility of design to allow facilities to adapt to changing user needs; and Respond to gaps in provision as identified by service departments, the community or other agencies
Energy management and sustainability	Identify alternative management systems to reduce financial impacts and ensure better environmental outcomes	Create Sustainable Building Policy and an associated action plan Investigate alternative power generation technologies to help reduce the Shire's carbon footprint and operating costs
Shire capacity	Levels of service adapted to resources available	Understand the Shire's future resource capacity
Strategic Community Plan	Targeted expenditure to areas identified through consultation process	Develop the needs identified in the Strategic Community Plan into fully costed and scheduled project proposals for inclusion in the Budget process

[6] IPWEA, 2011, IIMM, Table 3.4.1, p 3|58.


Shire of Bridgetown - Greenbushes
Projected Population 2011 to 2026 Band C
4650
4650
4580
4420
5000
4000
3000
2000
1000
0
2026
2021
2016
2011
2011
2016
2021
2026
Source: Dept Planning - WA Tomorrow 2015

Bridgetown-Greenbushes (S)

Age - Sex Distribution - Band C

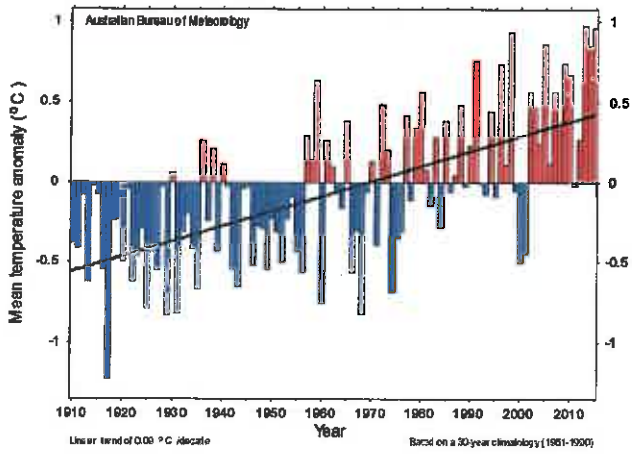


Source: WA Tomorrow Population Report No. 10

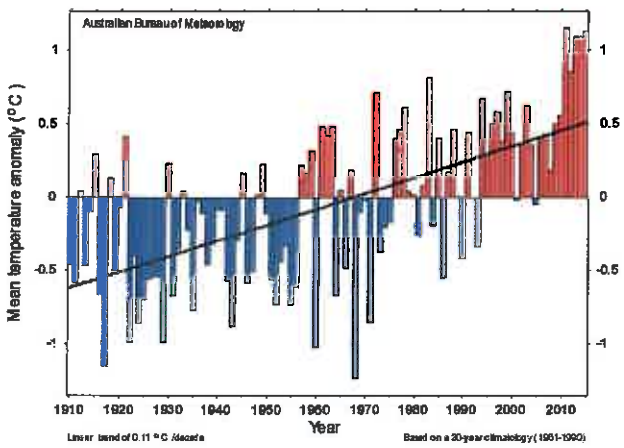
Note: The bars for 2011 and 2026 overlap

Climate Change Graphs (produced by Bureau of Meteorology Perth)

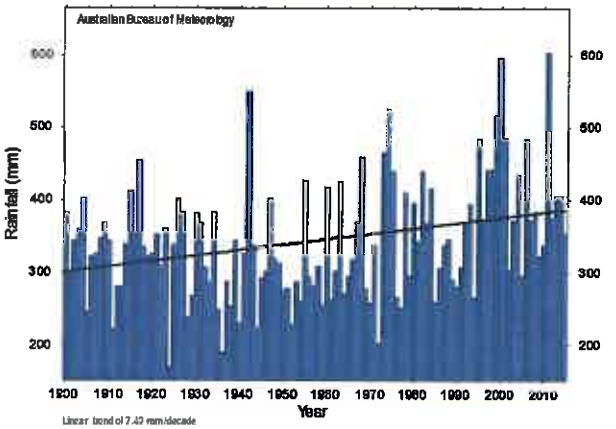
Annual mean temperature anomaly - Western Australia (1910-2015)



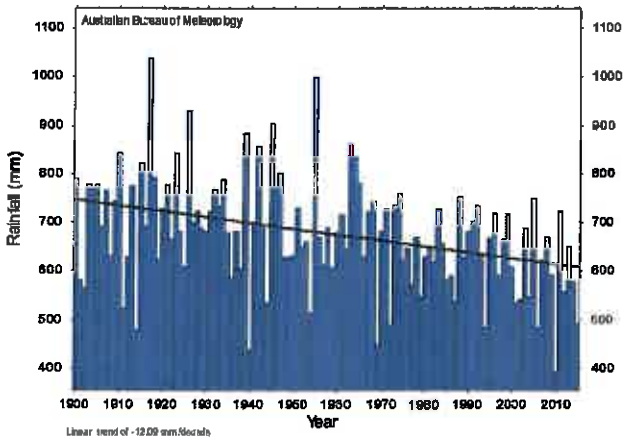
Annual mean temperature anomaly - Southwestern Australia (1910-2015)



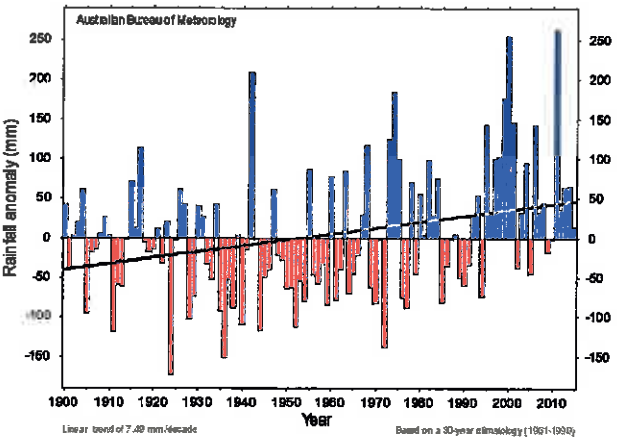
Annual rainfall - Western Australia (1900-2015)



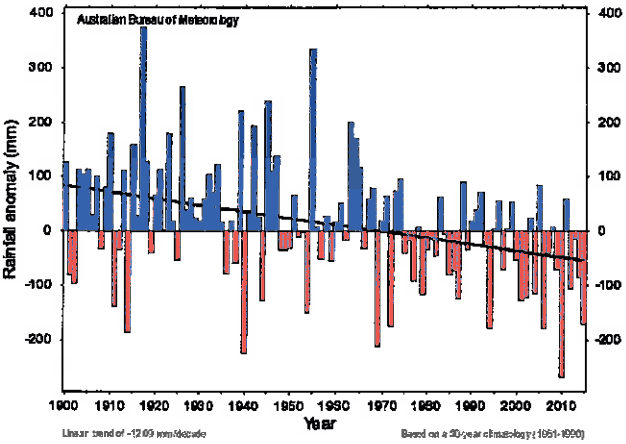
Annual rainfall - Southwestern Australia (1900-2015)



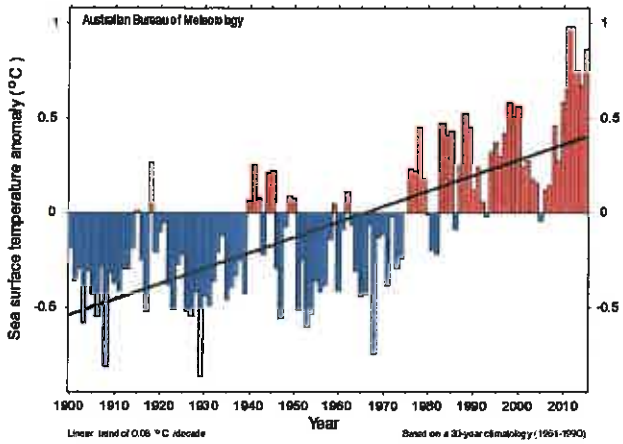
Annual rainfall anomaly - Western Australia (1900-2015)



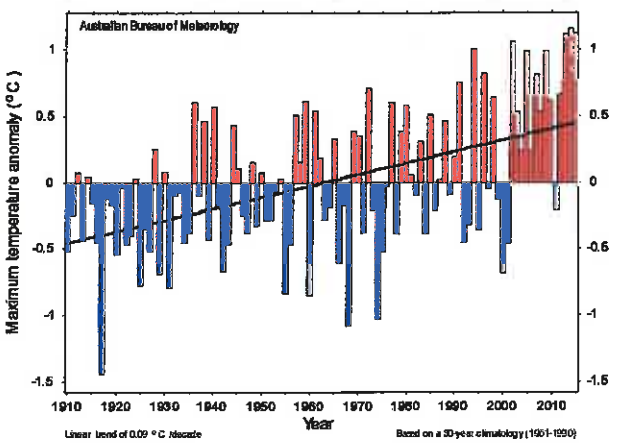
Annual rainfall anomaly - Southwestern Australia (1900-2015)



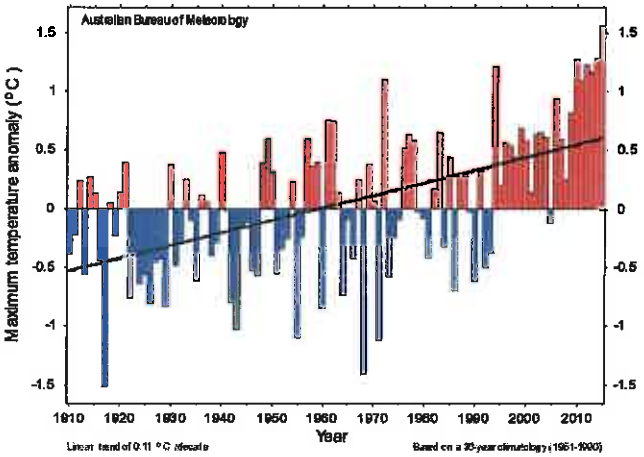
Annual sea surface temperature anomaly - Southwest Region (1900-2015)



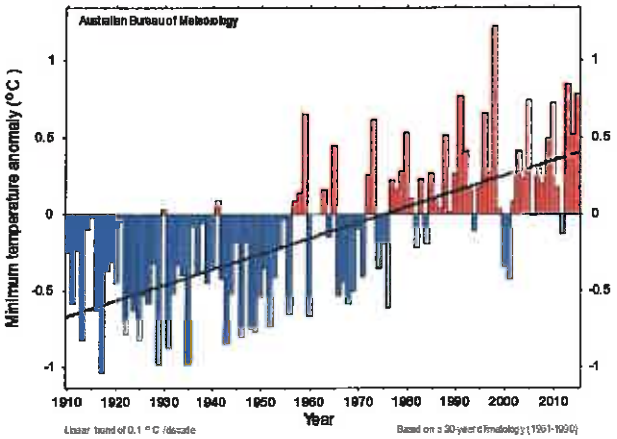
Annual maximum temperature anomaly - Western Australia (1910-2015)



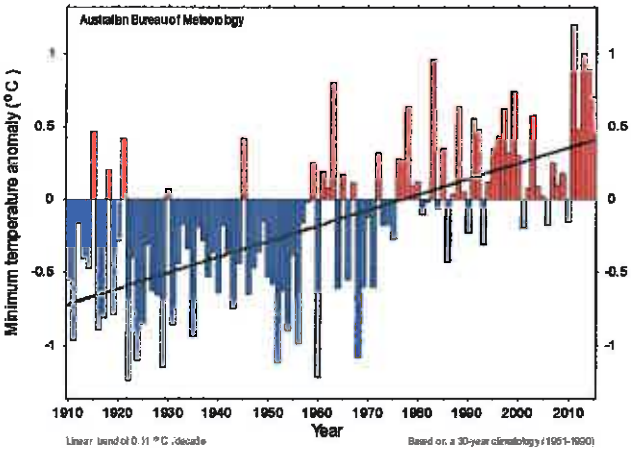
Annual maximum temperature anomaly - Southwestern Australia (1910-2015)

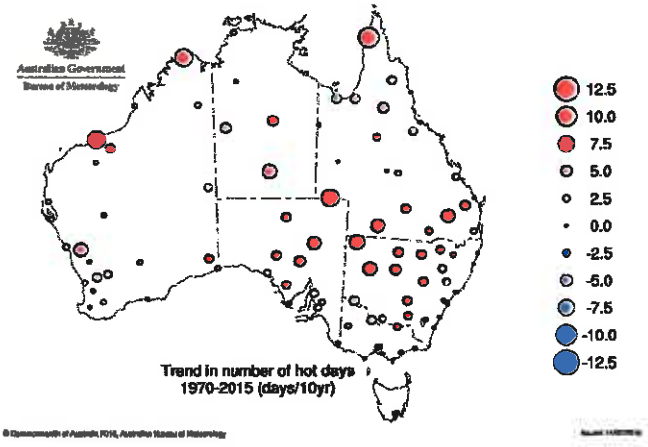


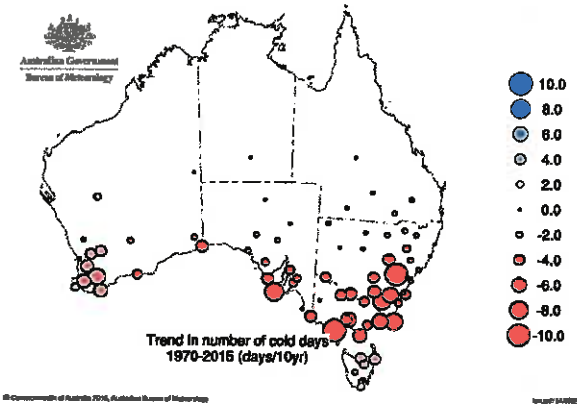
Annual minimum temperature anomaly - Western Australia (1910-2015)

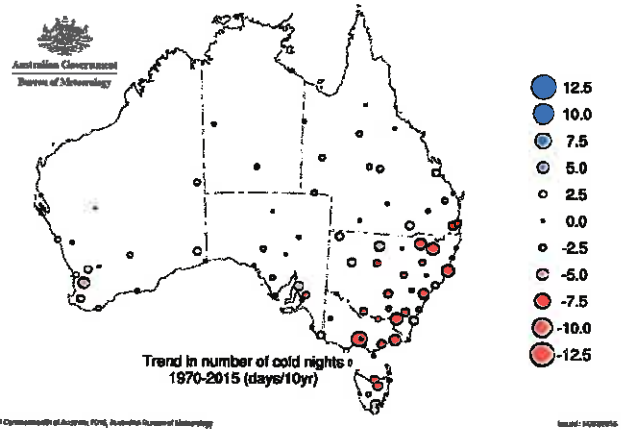


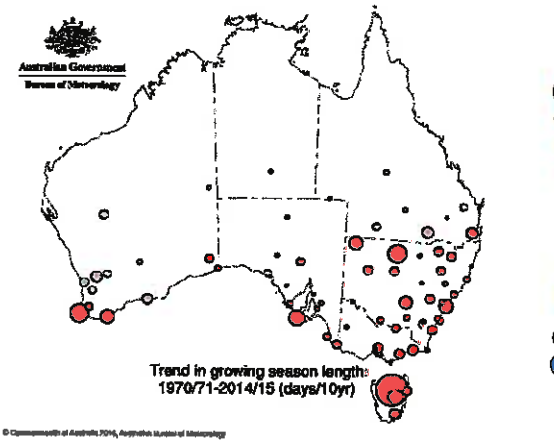
Annual minimum temperature anomaly - Southwestern Australia (1910-2015)

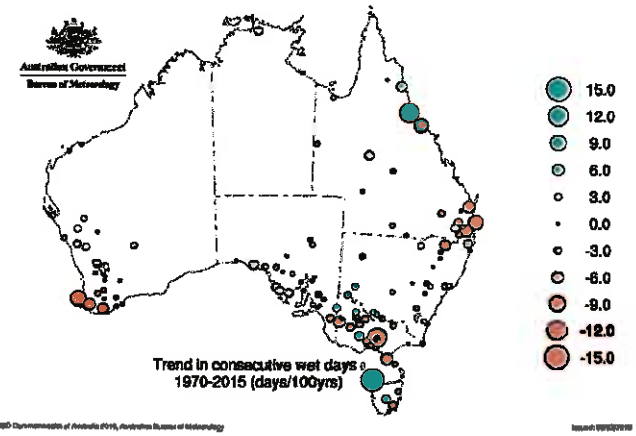


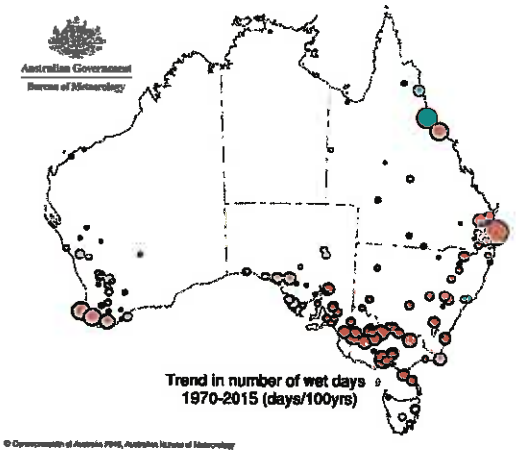


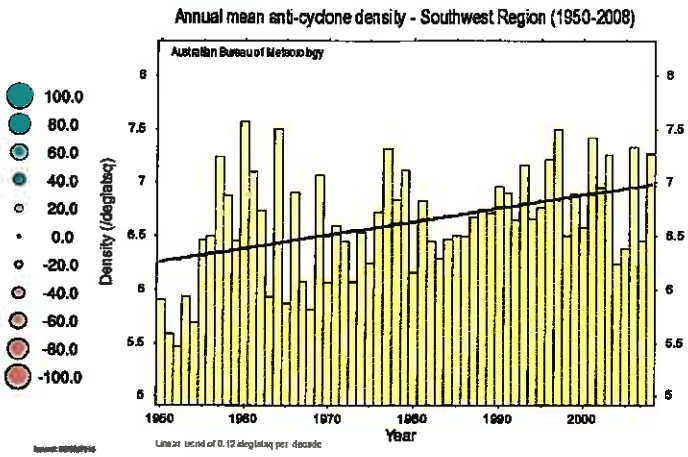

Australian Government
Bureau of Meteorology
10.0
8.0
6.0
4.0
2.0
0.0
-2.0
-4.0
-6.0
-8.0
-10.0
Trend in number of cold days
1970-2015 (days/10yr)


Australian Government
Bureau of Meteorology
12.5
10.0
7.5
5.0
2.5
0.0
-2.5
-5.0
-7.5
-10.0
-12.5
Trend in number of cold nights
1970-2015 (days/10yr)


Australian Government
Bureau of Meteorology
20.0
16.0
12.0
8.0
4.0
0.0
-4.0
-8.0
-12.0
-16.0
-20.0
Trend in growing season length
1970/71-2014/15 (days/10yr)


Australian Government
Bureau of Meteorology
15.0
12.0
9.0
6.0
3.0
0.0
-3.0
-6.0
-9.0
-12.0
-15.0
Trend in consecutive wet days
1970-2015 (days/100yrs)

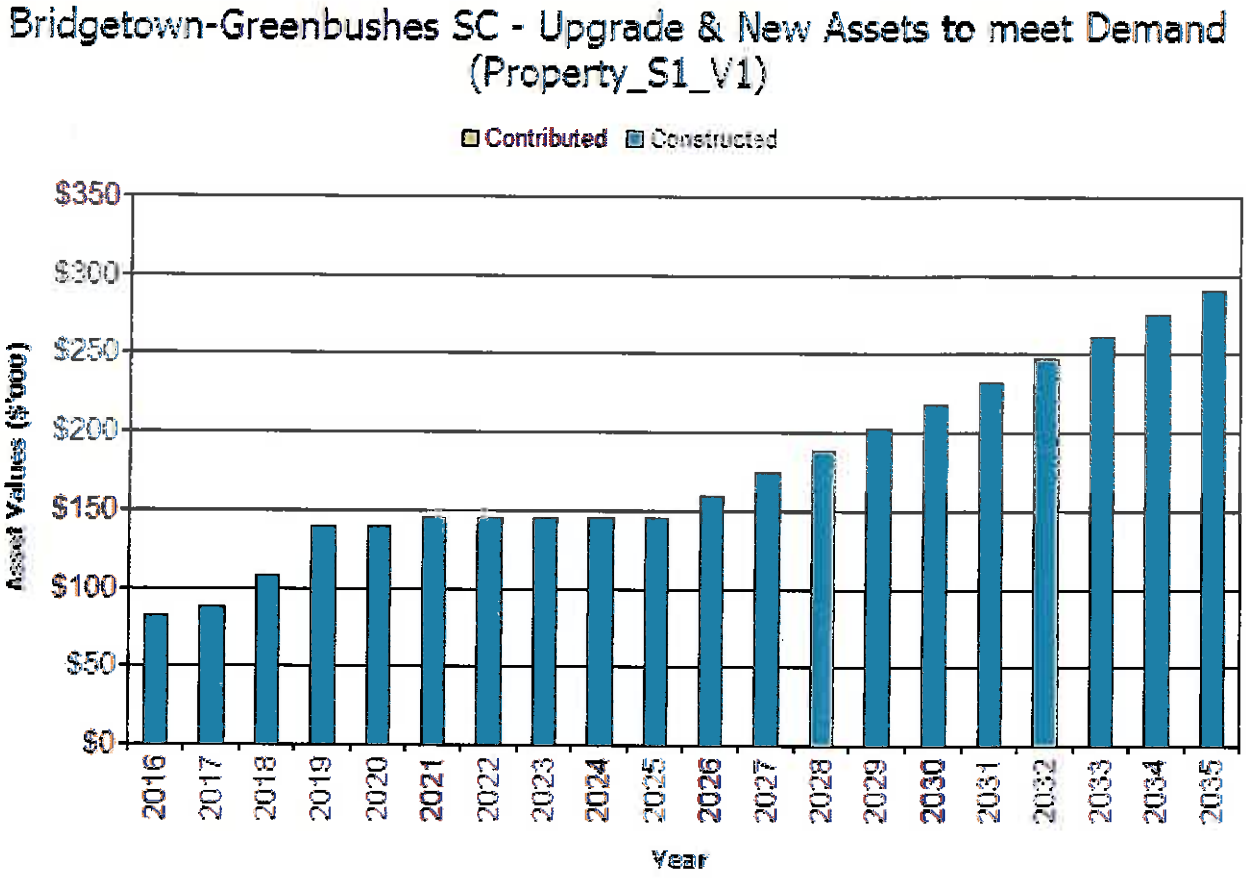

Australian Government
Bureau of Meteorology
100.0
80.0
60.0
40.0
20.0
0.0
-20.0
-40.0
-60.0
-80.0
-100.0
Trend in number of wet days
1970-2015 (days/100yrs)


Annual mean anti-cyclone density - Southwest Region (1950-2008)
Australian Bureau of Meteorology
Density (/degSatac)
8
7.5
7
6.5
6
5.5
5
1950
1960
1970
1980
1990
2000
Year

4.5 Asset Programs to meet Demand

The new assets required to meet growth will be acquired free of cost from land developments and constructed/acquired by the organisation. New assets constructed/acquired by the organisation are discussed in Section 5.5. The cumulative value of new contributed and constructed asset values are summarised in Figure 1.

Figure 1: Upgrade and New Assets to meet Demand



Acquiring these new assets will commit the organisation to fund ongoing operations, maintenance and renewal costs for the period that the service provided from the assets is required. These future costs are identified and considered in developing forecasts of future operations, maintenance and renewal costs in Section 5.

5. LIFECYCLE MANAGEMENT PLAN

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

5.1 Background Data

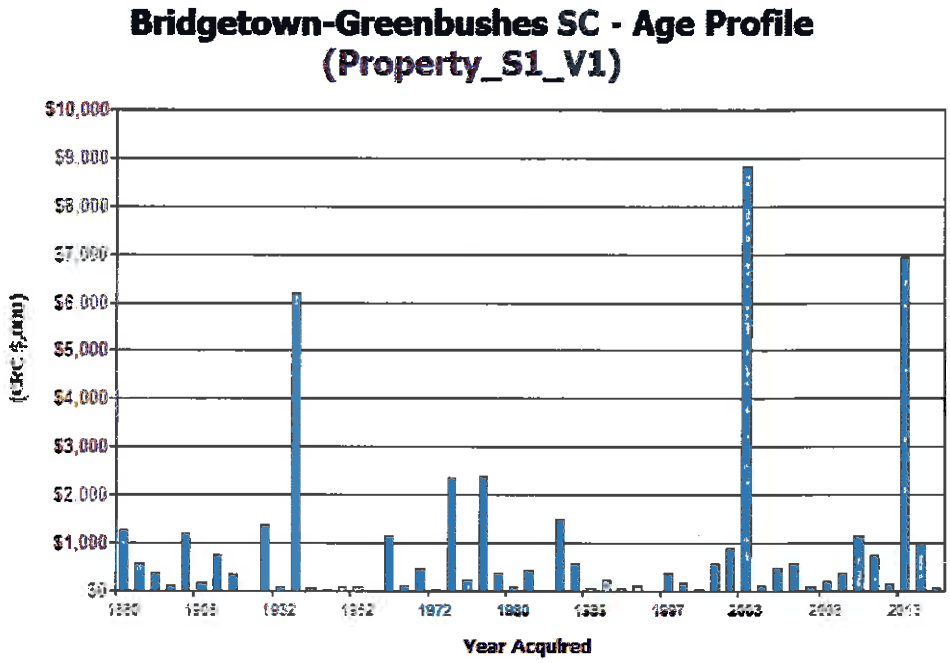
5.1.1 Physical parameters

The assets covered by this asset management plan are shown below.

Asset category	Number
Community Use	6
Council Administration & Operations	17
Emergency Services	12
Historical	6
Libraries	1
Public Conveniences	7
Public Halls	5
Residential Property	3
Sport and Recreation	31
Tourism	1
Furniture & Equipment	74
Land	85
TOTAL	**248**

The age profile of the assets included in this AM Plan is shown in Figure 2.

Figure 2: Asset Age Profile



Plans showing the Property Infrastructure assets are not available for existing assets, however future assets should have appropriate plans developed:

5.1.2 Asset capacity and performance

The organisation's services are generally provided to meet design standards where these are available. An analysis of current property and in particular, building capacity and utilisation is required to determine the existence of any deficiencies in service performance.

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

Table 5.1.2: Known Service Performance Deficiencies

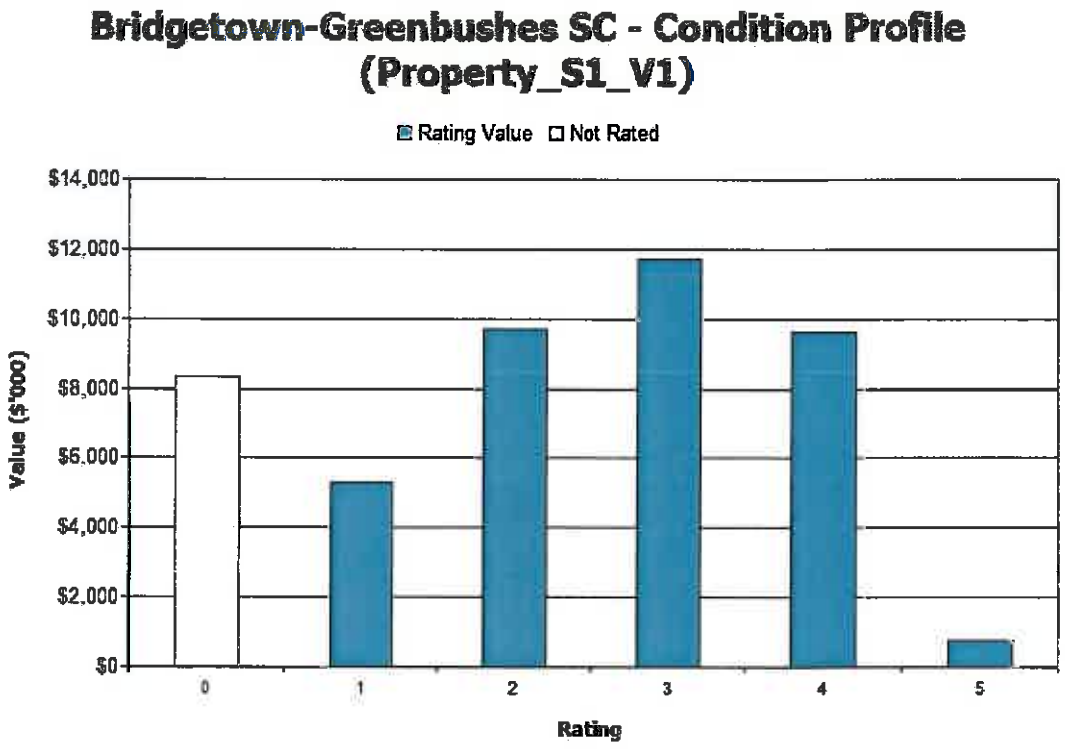
Location	Service Deficiency
Not currently known	

5.1.3 Asset condition

Comprehensive condition rating is currently determined via ad hoc inspections by Council's building department staff. High level (not at component level) condition rating data is also provided every three years during independent assessment for fair value accounting purposes. It is identified that a formal condition assessment process is required to be implemented for all Council property infrastructure.

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[7] as detailed in Table 5.1.3.

Assets shown as "Not Rated" in above graph are primarily furniture and equipment which form a small percentage of the total of Property assets.

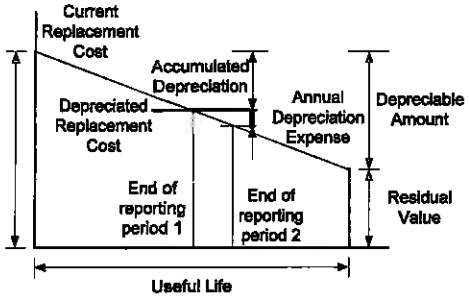
Table 5.1.3: Simple Condition Grading Model

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

5.1.4 Asset valuations

The value of assets recorded in the asset register as at 30th June 2015 covered by this asset management plan is shown below. Assets were last revalued at 2014. Assets are valued at fair value at cost to replace service capacity.

	$,000
Current Replacement Cost	$45,599
Depreciable Amount	$42,980
Depreciated Replacement Cost[8]	$28,658
Annual Depreciation Expense	$ 667



Useful lives were reviewed in June 2014[9] by fair value assessment.

Key assumptions made in preparing the valuations were:

- All properties are compliant with regulatory and government statutes
- All properties have been subject to normal wear and tear
- All properties have been properly maintained
- Assets have been valued as being wholly owned and free of all encumbrances

Major changes from previous valuations are due to previous valuations being based on historical cost and the current valuations being based on current replacement cost.

Various ratios of asset consumption and expenditure have been prepared to help guide and gauge asset management performance and trends over time.

Rate of Annual Asset Consumption (Depreciation/Depreciable Amount)	1.6%
Rate of Annual Asset Renewal (Capital renewal exp/Depreciable amount)	0.5%

[7] IPWEA, 2011, IIMM, Sec 2.5.4, p 2|79.
[8] Also reported as Written Down Current Replacement Cost (WDCRC).
[9] AssetVal Pty Ltd

In 2016 the organisation plans to renew assets at 35.1% of the rate they are being consumed and will be increasing its asset stock by 0.2% in the year.

5.1.5 Historical Data

The data as shown in the table below was sourced from the Shire of Bridgetown-Greenbushes' Annual Financial Reports for the relevant years.

Annual Consumption & Renewal (% of Asset Value)	LG Accounting Manual Range	Year 2012-13	2013-14	2014-15
Asset Consumption Ratio (ACR)	≥ 50%	0.71	0.73	0.79
Asset Renewal Funding Ratio (ARFR)	75% - 95%	n/a	n/a	n/a
Asset Sustainability Ratio (ASR)	90% - 110%	n/a	n/a	n/a

Note: Above ratios are sourced from the Shire of Bridgetown-Greenbushes Annual Financial Reports and cover ALL assets. No separate ratios are available for individual asset classes as yet.

5.2 Infrastructure Risk Management Plan

An assessment of risks[10] associated with service delivery from infrastructure assets has identified critical risks that will result in loss or reduction in service from infrastructure assets or a 'financial shock' to the organisation. The risk assessment process identifies credible risks, the likelihood of the risk event occurring, the consequences should the event occur, develops a risk rating, evaluates the risk and develops a risk treatment plan for non-acceptable risks.

Critical risks, being those assessed as 'Very High' - requiring immediate corrective action and 'High' – requiring prioritised corrective action identified in the Infrastructure Risk Management Plan, together with the estimated residual risk after the selected treatment plan is operational are summarised in Table 5.2. These risks are reported to management and Council.

Table 5.2: Critical Risks and Treatment Plans

Service or Asset at Risk	What can Happen	Risk Rating (VH, H)	Risk Treatment Plan	Residual Risk *	Treatment Costs
Asset management system	Inconsistent LOS delivery	High	Develop building hierarchy	Low	Nil
Asset management - condition rating and inspections	Assets become unsafe, and/or are replaced at sub-optimum times	Very High	Develop and implement annual inspection program	Low	Nil
Levels of Service	Levels of service not acceptable to the community	High	Undertake community consultation to develop levels of service and incorporate into integrated planning documents	Low	$10,000
Forward works planning and	Lack of funding, insufficient resources being	High	Undertake annual community survey on levels of service, review resources	Low	$65,000

[10] Shire of Bridgetown-Greenbushes Property Infrastructure Risk Management Plan 2016-2026 as footnote

budgeting	available to deliver agreed service levels		available to meet expected LOS, provide additional resources or adjust levels of service in consultation with the community.		
Asset management - strategic	Asset management system breakdowns due to lack of focus by staff	Very High	Provide training to relevant staff and Councillors. Include KPI's in staff job descriptions and annual performance reviews	Low	$20,000

Note * The residual risk is the risk remaining after the selected risk treatment plan is operational.

5.3 Routine Operations and Maintenance Plan

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

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

5.3.1 Operations and Maintenance Plan

Operations activities affect service levels including quality and function through street sweeping and grass mowing frequency, intensity and spacing of street lights and cleaning frequency and opening hours of building and other facilities.

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, e.g. road patching 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 management system (MMS). MMS activities include inspection, assessing the condition against failure/breakdown experience, prioritising, scheduling, actioning the work and reporting what was done to develop a maintenance history and improve maintenance and service delivery performance.

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

Actual past maintenance expenditure is shown in Table 5.3.1.

Table 5.3.1: Maintenance Expenditure Trends

Year	Maintenance Expenditure	
	Planned and Specific	Unplanned
2013/2014	$58,582	$81,410
2014/2015	$76,237	$87,799

Planned maintenance work is currently 42% of total maintenance expenditure.

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 AM Plan and service risks considered in the Infrastructure Risk Management Plan.

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

5.3.2 Operations and Maintenance Strategies

The organisation 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 infrastructure 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 utilisation to identify underutilised assets and appropriate remedies, and over utilised 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 Council is obtaining best value for resources used.

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 does not currently have a formal adopted property hierarchy. A property hierarchy will be developed as part of the improvement strategy contained within this asset management plan.

The organisation's draft property (includes the land, building & furniture and equipment assets) service hierarchy is shown is Table 5.3.2.

Table 5.3.2: Asset Service Hierarchy (Draft)

Hierarchy	Asset Category	Target Functional Level of Service
Core	Administration Facilities	Provides a place for governance and opportunity for residents and visitors to gain information on the Shire within a safe, convenient and comfortable environment.
Core	Works Depots	To provide facilities for the maintenance of Council plant & equipment, storage of machinery & materials.
Core	Waste Management	To provide the community access to waste management facilities that are safe and assist in meeting their waste & recycling requirements
Non-Core	Emergency Services	Provides a place for volunteer bush fire brigade assets

Priority 1	Buildings	and for operational and training requirements of members within a safe, convenient and comfortable environment.
Non-Core Priority 1	Library Services	To provide the opportunity for the community to access information and meet within a safe, convenient and comfortable environment.
Non-Core Priority 1	Sport & Recreation	To provide opportunity for residents and visitors to the community to meet and undertake recreational activities within a safe, convenient and comfortable environment.
Non-Core Priority 1	Town Hall	To provide the community with reasonable access to the principal town hall facilities that are safe, convenient and comfortable and enable the conduct of community activities and events.
Non-Core Priority 2	Public Conveniences	To provide the community and visitors with sufficient access to public toilets that are safe, clean and convenient.
Non-Core Priority 2	Staff Housing	To provide executive/managerial staff accommodation in a safe, convenient and comfortable environment.
Non-Core Priority 3	Senior Citizens Services	To provide senior citizens access to facilities that are safe, comfortable and assist in meeting their recreational and social pursuits.
Non-Core Priority 3	Tourism	To provide tourist facilities that are safe, comfortable and meet the functional requirements of staff, users and visitors.
Non-Core Priority 4	Community Facility	To provide the community with reasonable access to facilities that are safe, convenient and comfortable and enable the conduct of community activities and events.
Non-Core Priority 4	Other Public Halls	To provide the community with reasonable access to hall facilities that are safe, convenient and comfortable and enable the holding of community activities.

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, organisations can target and refine investigative activities, maintenance plans and capital expenditure plans at the appropriate time.

Operations and maintenances 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 once identified will be detailed in Table 5.3.2.1.

Table 5.3.2.1: Critical Assets and Service Level Objectives

Critical Assets	Critical Failure Mode	Operations & Maintenance Activities
To be developed	To be developed	To be developed

Standards and specifications

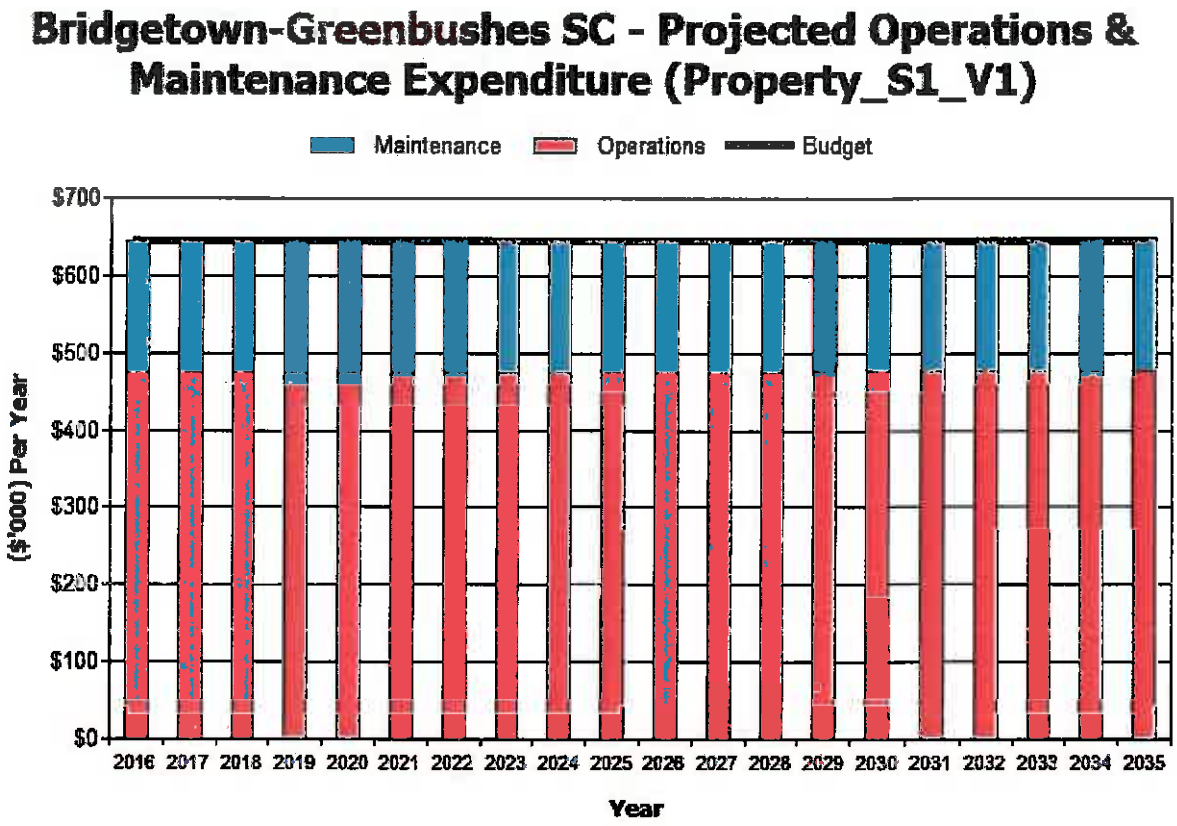
Maintenance work is carried out in accordance with the following Standards and Specifications.

- Building Code of Australia
- Disability Discrimination Act
- Occupational Safety and Health
- Manufacturer's requirements for property products

5.3.3 Summary of future operations and maintenance expenditures

Future operations and maintenance expenditure is forecast to trend in line with the value of the asset stock as shown in Figure 4. Note that all costs are shown in current 2016 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. This is further discussed in Section 6.2.

5.4 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 or lesser required service potential. Work over and above restoring an asset to original service potential is upgrade/expansion or new works expenditure.

5.4.1 Renewal plan

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

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

Method 1 was used for this asset management plan.

The useful lives of assets used to develop projected asset renewal expenditures are shown in Table 5.4.1. Asset useful lives were last reviewed in June 2014.[11]

Table 5.4.1: Useful Lives of Assets

Asset (Sub)Category	Type	Useful life
Long Life Structure	Masonry/steel walls, concrete floor, steel/timber roof frame	60 years and over
Medium Life Structure	Timber framed walls, timber floors, timber roof frame, timber cladding	40 to 59 years
Short Life Structure	Steel walls, concrete floor / dirt floor, steel cladding	15 to 39 years

As part of a review of property assets, the useful lives will be aligned to the condition of the asset at the sub-category level to provide a more accurate assessment of when planned maintenance/renewal processes need to be undertaken to maintain or extend the functionality and therefore the utilisation of the assets for an extended period.

5.4.2 Renewal and Replacement Strategies

The organisation will plan capital renewal and replacement projects to meet level of service objectives and minimise 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 evaluation criteria adopted by the organisation, 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 infrastructure risk register for assets and service risks associated with providing services from infrastructure 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 Council is obtaining best value for resources used.

[11] AssetVal Pty Ltd Buildings Fair Value Report as at June 2014

Renewal ranking criteria

Asset renewal and replacement is typically undertaken to either:

- Ensure the reliability of the existing infrastructure to deliver the service it was constructed to facilitate (e.g. replacing a bridge that has a 5 t load limit), or
- To ensure the infrastructure is of sufficient quality to meet the service requirements (e.g. roughness of a road).[12]

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 a high utilisation and subsequent impact on users would be greatest,
- The total value represents the greatest net value to the organisation,
- Have the highest average age relative to their expected lives,
- Are identified in the AM Plan as key cost factors,
- Have high operational or maintenance costs, and
- Where replacement with modern equivalent assets would yield material savings.[13]

The ranking criteria that will be used to determine priority of identified renewal and replacement proposals will be detailed in Table 5.4.2.

At present no formalised process exists to prioritize property renewal and replacements. Operational staff undertake an assessment and prioritisation of renewal and replacement of assets using experience and judgement. A forward works programme for property infrastructure is compiled in an MS Excel spreadsheet for a 10 year period which is used as a decision-making tool for renewal and maintenance actions.

Ranking criteria to determine priority of identified renewal and replacement proposals will be developed in the future and has been listed as an improvement action.

Table 5.4.2: Renewal and Replacement Priority Ranking Criteria

Criteria	Weighting
To be developed	To be developed ("[Enter ranking weighting (%)]")
Total	**100%**

Renewal and replacement standards

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

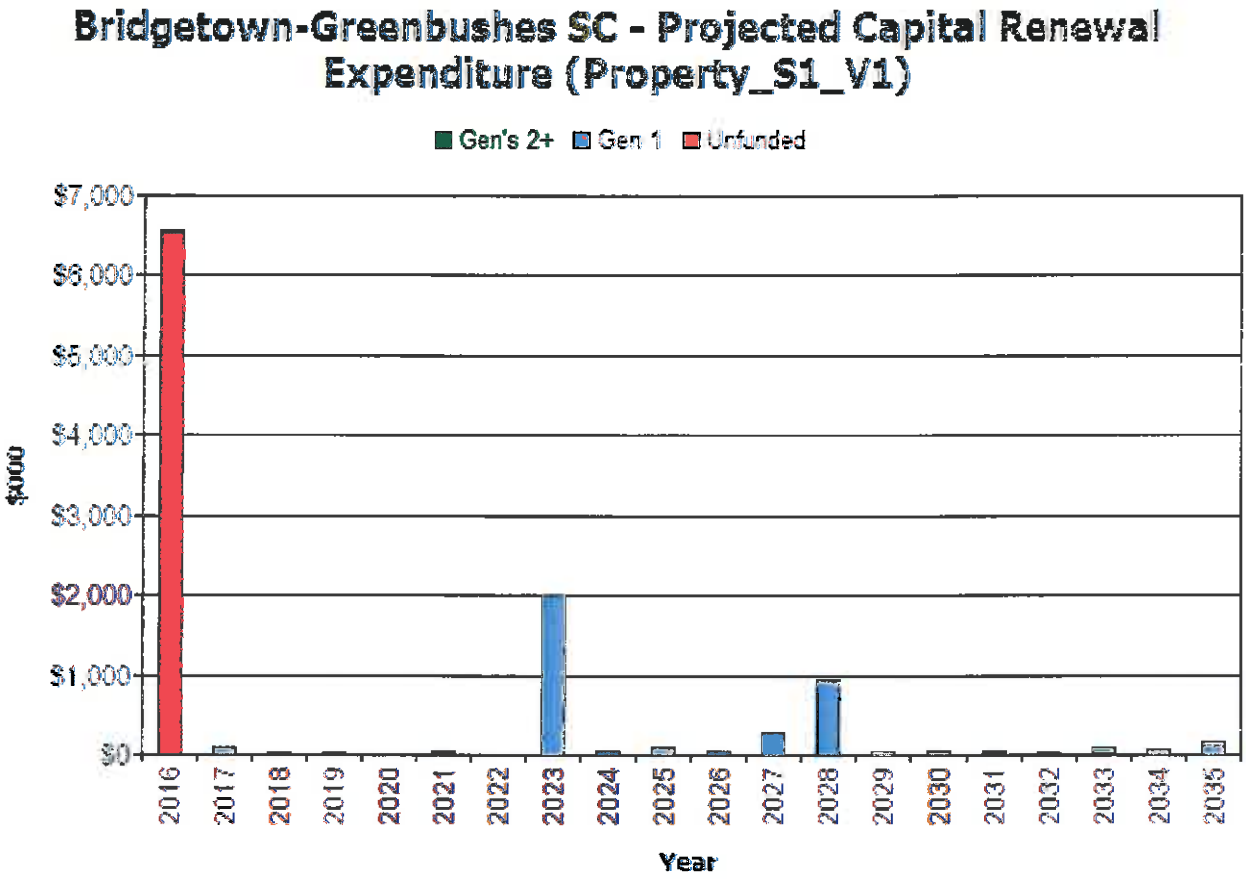
- Building Code of Australia
- Disability Discrimination Act
- Occupational Safety and Health
- Manufacturer's requirements for property products

5.4.3 Summary of future renewal and replacement expenditure

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

[12] IPWEA, 2011, IIMM, Sec 3.4.4, p 3|60.
[13] Based on IPWEA, 2011, IIMM, Sec 3.4.5, p 3|66.

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 organisation's capital works program will be accommodated in the long term financial plan. This is further discussed in Section 6.2.

5.5 Creation/Acquisition/Upgrade Plan

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

5.5.1 Selection criteria

New assets and upgrade/expansion of existing assets are identified from various sources such as councillor or community requests, proposals identified by strategic plans, partnerships with other organisations or as part of operational staff assessments. No formalised process exists for the ranking and selection of property upgrades or construction of new assets.

The priority ranking criteria, once defined will be detailed in Table 5.5.1 below.

Table 5.5.1: New Assets Priority Ranking Criteria

Criteria	Weighting
To be developed	To be developed
Total	**100%**

5.5.2 Capital Investment Strategies

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

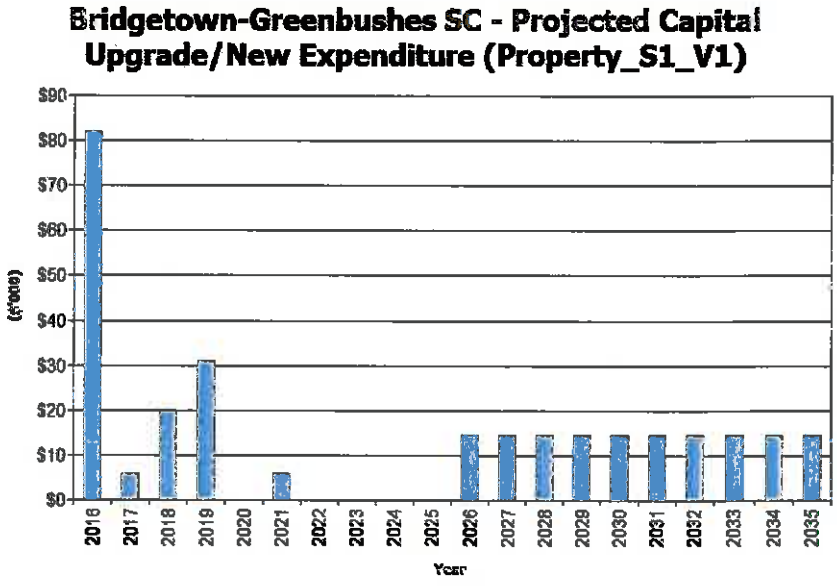
- Planning and scheduling capital upgrade and new projects to deliver the defined level of service in the most efficient manner,
- Undertake project scoping for all capital upgrade/new projects to identify:
- the service delivery 'deficiency', present risk and required timeline for delivery of the upgrade/new 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.

Standards and specifications for new assets and for upgrade/expansion of existing assets are the same as those for renewal shown in Section 5.4.2.

5.5.3 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



Expenditure on new assets and services in the organisation's capital works program will be accommodated in the long term financial plan. This is further discussed in Section 6.2.

5.6 Disposal Plan

Disposal includes any activity associated with disposal of a decommissioned asset including sale, demolition or relocation.

At present no properties have been identified for future disposal during the term of the AMP. This has been listed as an improvement action.

Assets identified for possible decommissioning and disposal will be shown in Table 5.6, together with estimated annual savings from not having to fund operations and maintenance of the assets. These assets will be further reinvestigated to determine the required levels of service and see what options are available for alternate service delivery, if any. Any revenue gained from asset disposals is accommodated in Council's long term financial plan.

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

Table 5.6: Assets Identified for Disposal

Asset	Reason for Disposal	Timing	Disposal Expenditure	Operations & Maintenance Annual Savings
To be developed	To be developed			

5.7 Service Consequences and Risks

The organisation has prioritised decisions made in adopting this AM Plan to obtain the optimum benefits from its available resources. Decisions were made based on the development of 3 scenarios of AM Plans.

Scenario 1 - What we would like to do based on asset register data

Scenario 2 – 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.

Scenario 3 – What we can do and be financially sustainable with AM Plans matching long-term financial plans.

The development of scenario 1 and scenario 2 AM Plans provides the tools for discussion with the Council and community on trade-offs between what we would like to do (scenario 1) and what we should be doing with existing budgets (scenario 2) by balancing changes in services and service levels with affordability and acceptance of the service and risk consequences of the trade-off position (scenario 3).

5.7.1 What we cannot do

While this asset management plan suggests Council does not currently provide sufficient funding to maintain and renew existing property infrastructure in the medium to long term, the lack of condition data, accurate useful life information, maintenance and renewal plans to support this projection is questionable.

As part of identifying current condition data and updating Council records for future revisions of this asset management plan, it is anticipated that the funding level may in fact, still be insufficient over the life cycle of the assets.

5.7.2 Service consequences

Operations and maintenance activities and capital projects that cannot be undertaken will maintain or create service consequences for users. These include:

To be determined after Council consideration and, at a later stage, with information gained through community consultation.

5.7.3 Risk consequences

The operations and maintenance activities and capital projects that cannot be undertaken may maintain or create risk consequences for the organisation. These include:

To be determined after Council consideration and, at a later stage, with information gained through community consultation.

Risks have been included with the Infrastructure Risk Management Plan summarised in Section 5.2 and risk management plans actions and expenditures included within projected expenditures.

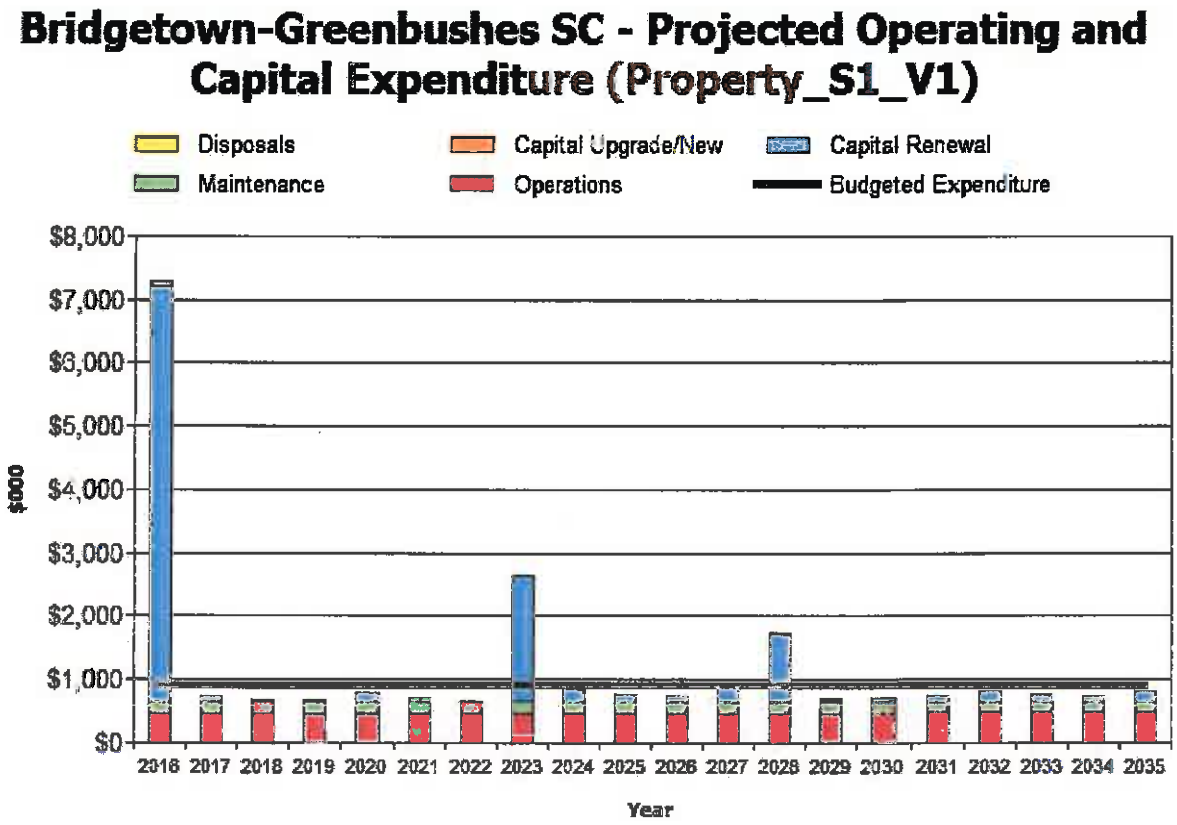
6. FINANCIAL SUMMARY

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

6.1 Financial Statements and Projections

The financial projections are shown in Fig 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



6.1.1 Sustainability of service delivery

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

Asset Renewal Funding Ratio

Asset Renewal Funding Ratio[14] 23%

The Asset Renewal Funding Ratio[15] is the most important indicator and reveals that over the next 10 years, Council is forecasting that it will have 23% of the funds required for the optimal renewal and replacement of its assets. The

[14] AIFMG, 2012, Version 1.3, Financial Sustainability Indicator 4, Sec 2.6, p 2.16
[15] WA Local Government Asset Renewal Funding Ratio range is 95% to 105%

target range set by the WA Department of Local Government within the Integrated Financial Planning Framework is 95% to 105%. The Shire of Bridgetown-Greenbushes ARFR (23%) is significantly less than the target range which reflects the under-investment in capital renewal work.

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). The life cycle cost for the services covered in this asset management plan is $1,313,000 per year (average operations and maintenance expenditure plus depreciation expense projected over 10 years).

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 expenditure over the 10 year planning period is $878,000 per year (average operations and maintenance plus capital renewal budgeted expenditure in LTFP over 10 years).

A shortfall between life cycle cost and life cycle expenditure is the life cycle gap. The life cycle gap for services covered by this asset management plan is -$435,000 per year (-ve = gap, +ve = surplus).

Life cycle expenditure is 67% of life cycle costs.

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

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

Medium term – 10 year financial planning period

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

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

The projected operations, maintenance and capital renewal expenditure required over the 10 year planning period is $1,564,000 on average per year.

Estimated (budget) operations, maintenance and capital renewal funding is $878,000 on average per year giving a 10 year funding shortfall of -$686,000 per year. This indicates that Council expects to have 56% of the projected expenditures needed to provide the services documented in the asset management plan.

Medium Term – 5 year financial planning period

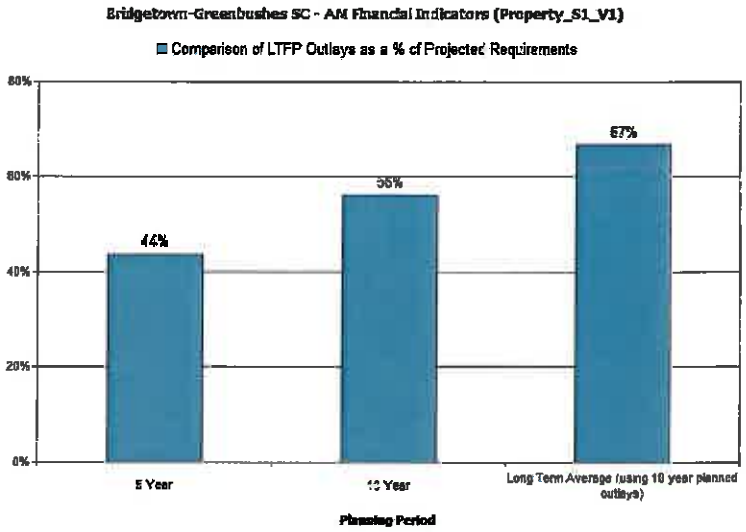
The projected operations, maintenance and capital renewal expenditure required over the first 5 years of the planning period is $2,007,000 on average per year.

Estimated (budget) operations, maintenance and capital renewal funding is $878,000 on average per year giving a 5 year funding shortfall of -$1,129,000. This indicates that Council expects to have 44% of projected expenditures required to provide the services shown in this asset management plan.

Asset management financial indicators

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

Figure 7A: Asset Management Financial Indicators



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

Figure 8 shows the projected asset renewal and replacement expenditure over the 20 years of the AM Plan. The projected asset renewal and replacement expenditure is compared to renewal and replacement expenditure in the capital works program, which is accommodated in the long term financial plan

Figure 8: Projected and LTFP Budgeted Renewal Expenditure

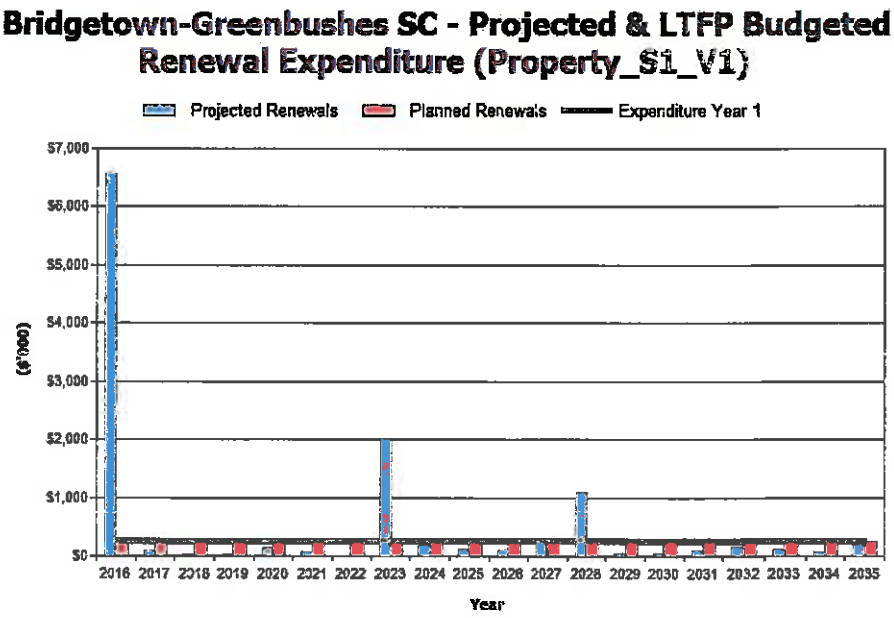


Table 6.1.1 shows the shortfall between projected renewal and replacement expenditures and expenditure accommodated in long term financial plan. Budget expenditures accommodated in the long term financial plan or extrapolated from current budgets are shown in Appendix D.

Table 6.1.1: Projected and LTFP Budgeted Renewals and Financing Shortfall

Year	Projected Renewals ($000)	LTFP Renewal Budget ($000)	Renewal Financing Shortfall ($000) (-ve Gap, +ve Surplus)	Cumulative Shortfall ($000) (-ve Gap, +ve Surplus)
2016	$6,563	$234	$-6,329	$-6,329
2017	$83	$234	$151	$-6,178
2018	$16	$234	$218	$-5,959
2019	$15	$234	$219	$-5,741
2020	$135	$234	$99	$-5,641
2021	$67	$234	$167	$-5,475
2022	$11	$234	$223	$-5,251
2023	$2,007	$234	$-1,773	$-7,024
2024	$185	$234	$49	$-6,975
2025	$103	$234	$131	$-6,844
2026	$87	$234	$147	$-6,697
2027	$279	$234	$-45	$-6,742
2028	$1,071	$234	$-837	$-7,578
2029	$38	$234	$196	$-7,382
2030	$47	$234	$187	$-7,195
2031	$79	$234	$155	$-7,041
2032	$159	$234	$75	$-6,966
2033	$102	$234	$132	$-6,834
2034	$75	$234	$159	$-6,676
2035	$165	$234	$69	$-6,607

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

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

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

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

6.1.2 Projected expenditures for long term financial plan

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

Expenditure projections are in 2016 real values.

Table 6.1.2: Projected Expenditures for Long Term Financial Plan ($000)

Year	Operations ($000)	Maintenance ($000)	Projected Capital Renewal ($000)	Capital Upgrade/ New ($000)	Disposals ($000)
2016	$474	$170	$6,563	$82	$0
2017	$475	$170	$83	$6	$0
2018	$475	$170	$16	$20	$0
2019	$475	$170	$15	$31	$0
2020	$475	$171	$135	$0	$0
2021	$475	$171	$67	$6	$0
2022	$476	$171	$11	$0	$0
2023	$476	$171	$2,007	$0	$0
2024	$476	$171	$185	$0	$0
2025	$476	$171	$103	$0	$0

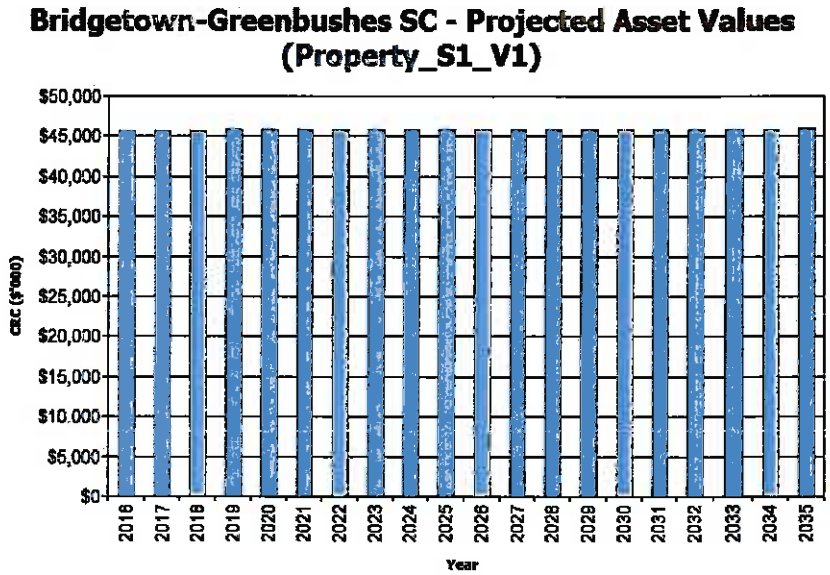
6.2 Funding Strategy

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

6.3 Valuation Forecasts

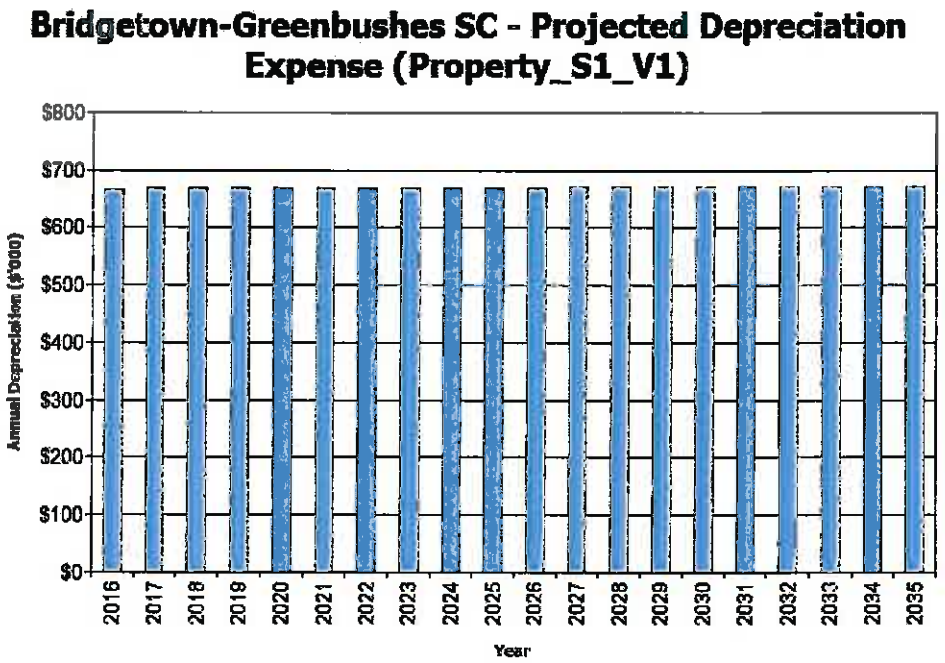
Asset values are forecast to increase as additional assets are added to the asset stock from construction and acquisition by Council and from assets constructed by land developers and others and donated to Council. Figure 9 shows the projected replacement cost asset values over the planning period in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

Figure 9: Projected Asset Values



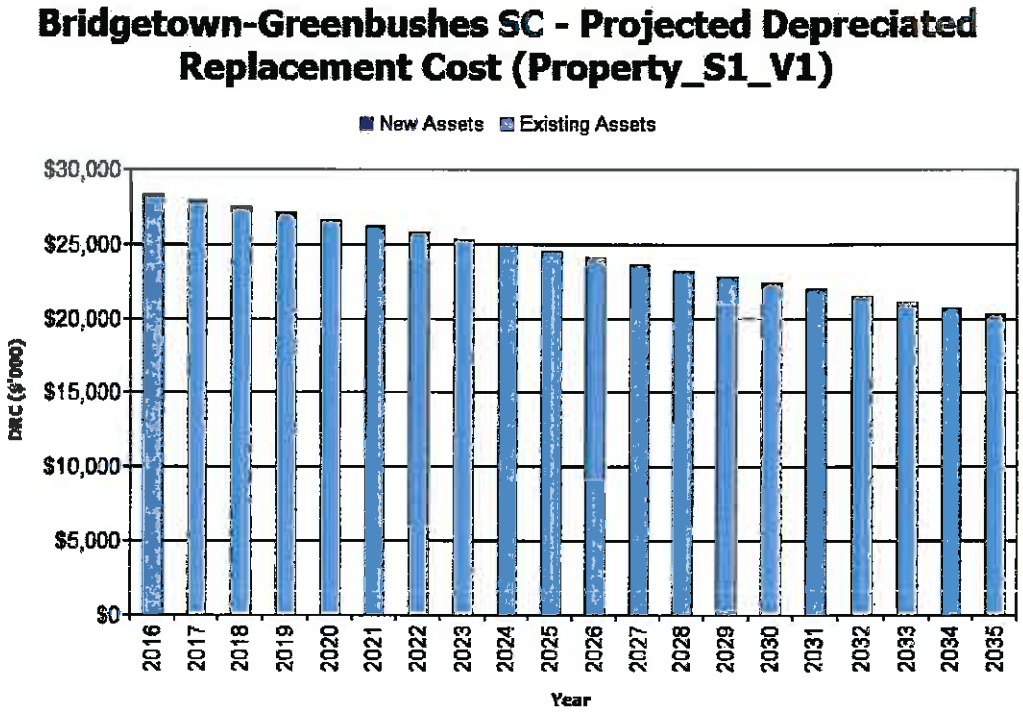
Depreciation expense values are forecast in line with asset values as shown in Figure 10.

Figure 10: Projected Depreciation Expense



The depreciated replacement cost will vary over the forecast period depending on the rates of addition of new assets, disposal of old assets and consumption and renewal of existing assets. Forecast of the assets' depreciated replacement cost is shown in Figure 11. The depreciated replacement cost of contributed and new assets is shown in the darker colour and in the lighter colour for existing assets.

Figure 11: Projected Depreciated Replacement Cost



6.4 Key Assumptions made in Financial Forecasts

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

Key assumptions made in this asset management plan and risks that these may change are shown in Table 6.4.

Table 6.4: Key Assumptions made in AM Plan and Risks of Change

Key Assumptions	Risks of Change to Assumptions
Budgeted expenditure amounts are accurate as at 2015/16 year	Future budget allocations may alter as a result of Council decision
Future planned operations and maintenance expenditure is based on an average of planned expenditure for the years 2015/16 to 2023/24	Future budget allocations may alter as a result of Council decision resulting in a review of planned expenditures
The asset register and valuation is correct as at 30 June 2014	Change in asset values and holdings since June 2014 not incorporated
The current levels of service will remain constant throughout the useful life of the assets	Service levels may change as a result of community consultation and review
Rate of property depreciation is constant throughout the useful life of the asset	Depreciation rates may change as a result of periodic reviews of valuation and remaining useful lives
All predicted financial figures are based on 2016 rates and are not adjusted by the inflation rate for the particular year of works	Fluctuations in inflation (CPI) from year to year

6.5 Forecast Reliability and Confidence

The expenditure and valuations projections in this AM 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[16] in accordance with Table 6.5.

Table 6.5: Data Confidence Grading System

Confidence Grade	Description
A Highly reliable	Data based on sound records, procedures, investigations and analysis, documented properly and recognised as the best method of assessment. Dataset is complete and estimated to be accurate ± 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 ± 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 ± 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 ± 40%
E Unknown	None or very little data held.

The estimated confidence level for and reliability of data used in this AM Plan is shown in Table 6.5.1.

[16] IPWEA, 2011, IIMM, Table 2.4.6, p 2|59.

Table 6.5.1: Data Confidence Assessment for Data used in AM Plan

Data	Confidence Assessment	Comment
Demand drivers	Reliable	Main drivers currently influencing demand within Shire – reviewed at the time of reviewing AMP
Growth projections	Highly reliable	Based on ABS & Department of Planning projections
Operations expenditures	Reliable	Projections entirely based on historical levels of expenditure
Maintenance expenditures	Uncertain	Projections are based on preliminary assessment of asset conditions
Projected Renewal expenditures. - Asset values	Uncertain	Projections are based on preliminary assessment of asset conditions
- Asset residual values	Reliable	Residual values based on a high level assessment of the building as supplied in Fair Value reports where assessed.
- Asset useful lives	Very uncertain	Useful lives and age of individual assets are to be reviewed and updated where necessary to better reflect actual condition of assets
- Condition modelling	Unknown	Condition modelling may be implemented once accurate condition data is known
- Network renewals	Very uncertain	Renewal expenditures not supported by data held - primarily re-active renewal process is utilised
- Defect repairs	Unknown	Not currently used
Upgrade/New expenditures	Very uncertain	Very little data exists to support future requirements
Disposal expenditures	Unknown	No asset disposal identification process has been undertaken

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

7. PLAN IMPROVEMENT AND MONITORING

7.1 Status of Asset Management Practices

7.1.1 Accounting and financial systems

Council uses IT Vision's SynergySoft as their accounting software. The general ledger module provides a breakdown of costings for each individual general ledger account for each month over a particular financial year together with details of the current allocated budget and total current expenditure.

Accountabilities for financial systems

The Executive Manager of Corporate Services is accountable for the accuracy and level of confidence in the accounting and financial systems of the Shire. The CEO is required to undertake reviews of the financial management systems every 4 years.

Accounting standards and regulations

Council operates under the:

- *Local Government Act 1995;*
- *Local Government (Financial Management) Regulations 1996*; and
- Western Australian Local Government Accounting Manual (Edition 3)

The Shire complies with the above standards, legislation & regulations and produces an Annual General Purpose Financial Report in accordance with Australian Accounting Standards.

Capital/maintenance threshold

The Shire of Bridgetown-Greenbushes has adopted the following capitalisation thresholds[17]:

Property, Plant and Equipment assets	$2,000
Infrastructure assets	$5,000

Required changes to accounting financial systems arising from this AM Plan

Amending the chart of account and job ledger to reflect nature of expenditure into Operations, Planned, Reactive & Specific Maintenance, Capital Renewal and Capital Upgrade/New/Expansion.

Implement a single asset management system that holds all relevant data (asset id, asset name/description, year acquired, updated useful life, current replacement cost, renewal/replacement cost, condition, function, utilization, accumulated depreciation, annual depreciation & written down value etc.) to ensure continuity of asset management procedures and the facilitation of data transfer for the Long Term Financial Plan.

7.1.2 Asset management system

Council currently has the following Asset Management Systems being utilized:

ROMAN II/RAMM GIS	all road infrastructure assets
SynergySoft – Asset Register	all non- road infrastructure assets
Microsoft Excel	holds some asset data (exported from ROMAN II & SynergySoft) for data analysis purposes.

[17] Shire of Bridgetown-Greenbushes Annual Budget 2015/16

The asset management data held in relation to buildings has been provided in support of recent Fair Value measurements. The level of data confidence has been assessed as 'uncertain'.

Data held in the asset register within the SynergySoft system for all assets, requires a more detailed and in-depth review to ensure it is accurate and up-to-date, in particular the date of construction. Currently there are a significant number of assets that appear to have a default date of acquisition being the date the asset was entered into the system rather than the actual construction date.

Confidence in the SynergySoft data is therefore 'Uncertain'.

Data exported to spreadsheets from the SynergySoft data would also be rated as 'Uncertain' until such time as it has been analysed and corrected.

Asset registers

All building asset data is held in SynergySoft primarily for accounting purposes and supported by Excel spread sheets where applicable.

Linkage from asset management to financial system

There is very little asset management data held in relation to buildings. Data held is for accounting purposes. Following the implementation of a single asset management system linkages to the financial system can then achieved.

Accountabilities for asset management system and data maintenance

The Executive Manager of Corporate Services is accountable for the accuracy and level of confidence in property infrastructure financial data. New processes are required for collection and recording of more comprehensive asset management data. The responsibility for this data collection and maintenance will rest with the Principal Building Surveyor.

Required changes to asset management system arising from this AM Plan

It would be desirable if all asset data could be centralized into the one asset management system. Identification and implementation of such a system is yet to be fully evaluated.

7.2 Improvement Plan

The asset management improvement plan generated from this asset management plan is shown in Table 7.2.

Table 7.2: Improvement Plan

Task No	Task	Responsibility	Resources Required
1	Develop a process for community engagement on Levels of Service including a survey to determine community service level expectations delivered via Council's property assets	Senior Management Group	Staff time/ Consultants ($10,000)
2	Implement a suitable system and process to record property utilisation and booking request levels	Senior Management Group	Staff time
3	Develop a hierarchy for all property assets identifying parent/child relationships, and link to Levels of Service	Principal Building Surveyor	Staff time
4	Develop a data collection procedure to ensure repeatability and on-going improvement of condition data collection and modelling processes	Principal Building Surveyor/Asset Management Group	Staff time
5	Implement the condition inspection programme for all property infrastructure assets	Principal Building Surveyor	Staff time
6	Greater degree of componentisation in the condition rating process i.e. structure, roof, services and fit out	Principal Building Surveyor	Staff time

7	Review the Shire's year acquired date for all property assets	Principal Building Surveyor/Executive Manager Corporate Services	Staff time
8	Determine useful lives and remaining useful lives of Council's property infrastructure and adopt consistent unit rates	Principal Building Surveyor	Staff time
9	Configure the Shire's corporate financial system to record asset expenditure at the individual asset level according to maintenance type and activity	Executive Manager Corporate Services	Staff time
10	Identify and improve capture of operational expenditure in the organisation financial system to enable more accurate reporting of operational expenditure	Executive Manager Corporate Services	Staff time
11	Develop and implement safety and maintenance inspection programmes and methodologies for property assets	Principal Building Surveyor	Staff time
12	Identify and assess critical property assets for failure modes e.g. backup power facilities in the event of prolonged power outages	Principal Building Surveyor	Staff time
13	Identify buildings for possible future disposal	Senior Management Group	Staff time
14	Develop staff AM performance measures and link KPI's to individual job descriptions	Human Resource Officer	Staff time
15	Provide asset management training to relevant staff and Councillors	Human Resource Officer	Training Course Fees ($20,000)
16	Determine split in costs between renewal and upgrades for all future upgrades in Council's planning documents	Senior Management Group	Staff time
17	Develop a long term capital works programme after undertaking condition inspections	Principal Building Surveyor/ Chief Executive Officer	Staff time
18	Develop a ranking criteria for assessing renewal/replacement priorities	Asset Management Working Group	Staff time
19	Develop a ranking criteria for assessment and selection of new/upgrade assets in forward planning documents	Asset Management Working Group	Staff time
20	Analyse demand impacts as a result of increased tourism	Executive Manager Community Services	Staff time
21	Analyse demand impacts as a result of age demographic changes	Manager Planning & Development/Chief Executive Officer	Staff time
22	Create Sustainable Property Infrastructure Policy and an associated action plan	Senior Management Group	Staff time
23	Investigate alternative power generation technologies to help reduce the Shire's carbon footprint and operating costs	Principal Building Surveyor	Staff time
24	Investigate and implement a suitable asset management software program to consolidate all asset classes into one integrated database	Asset Management Working Group/Senior Management Group	Staff time/ Consultants

7.3 Monitoring and Review Procedures

This asset management plan will be reviewed during annual budget planning processes and amended to recognise any material changes in service levels and/or resources available to provide those services as a result of budget decisions.

The AM 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 organisation's long term financial plan.

The AM Plan has a life of 4 years (Council election cycle) and is due for complete revision and updating within 12 months of each Council election.

7.4 Performance Measures

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

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

8. REFERENCES

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Sample Council, 'Strategic Plan 20XX – 20XX',

Sample Council, 'Annual Plan and Budget'.

9. APPENDICES

Appendix A	Maintenance Response Levels of Service
Appendix B	Projected 10 year Capital Renewal and Replacement Works Program
Appendix C	Projected 10 year Capital Upgrade/New Works Program
Appendix D	LTFP Budgeted Expenditures Accommodated in AM Plan
Appendix E	Abbreviations
Appendix F	Glossary

Appendix A Maintenance Response Levels of Service

To be developed.

Appendix B Projected 10 year Capital Renewal and Replacement Works Program

To be developed once all data has been validated to ensure correct condition rating and useful lives of assets are correct.

Appendix C Projected Upgrade/Exp/New 10 year Capital Works Program

Year	Item	Description	Estimate
2016	1	Buildings	$82
	2		
2016		**Total**	**$82**
2017	1	Buildings	$6
	2		
2017		**Total**	**$6**
2018	1	Buildings	$20
	2		
2018		**Total**	**$20**
2019	1	Buildings	$31
	2		
2019		**Total**	**$31**
2020	1	Buildings	
	2		
2020		**Total**	**$0**
2021	1	Buildings	$6
	2		
2021		**Total**	**$6**
2022	1	Buildings	
	2		
2022		**Total**	**$0**
2023	1	Buildings	
	2		
2023		**Total**	**$0**
2024	1	Buildings	
	2		
2024		**Total**	**$0**
2025	1	Buildings	
	2		
2025		**Total**	**$0**

Appendix D Budgeted Expenditures Accommodated in LTFP

NAMS.PLUS3 Asset Management **Bridgetown-Greenbushes SC**

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Property_S2_V1 **Asset Management Plan**

First year of expenditure projections **2016** (financial yr ending)

Property

Asset values at start of planning period

			Calc CRC from Asset Register
Current replacement cost	$45,599	(000)	$0 (000)
Depreciable amount	$42,980	(000)	This is a check for you.
Depreciated replacement cost	$28,658	(000)	
Annual depreciation expense	$667	(000)	

Operations and Maintenance Costs for New Assets

	% of asset value
Additional operations costs	1.04%
Additional maintenance	0.37%
Additional depreciation	1.55%

Planned renewal budget (information only)

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

Planned Expenditures from LTFP

20 Year Expenditure Projections Note: Enter all values in current **2016** values

Financial year ending	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
	$000	$000	$000	$000	$000	$000	$000	$000	$000	$000
Expenditure Outlays included in Long Term Financial Plan (in current $ values)										
Operations										
Operations budget	$474	$474	$474	$474	$474	$474	$474	$474	$474	$474
Management budget	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
AM systems budget	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total operations	$474	$474	$474	$474	$474	$474	$474	$474	$474	$474
Maintenance										
Reactive maintenance budget	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Planned maintenance budget	$170	$170	$170	$170	$170	$170	$170	$170	$170	$170
Specific maintenance items budget	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total maintenance	$170	$170	$170	$170	$170	$170	$170	$170	$170	$170
Capital										
Planned renewal budget	$234	$234	$234	$234	$234	$234	$234	$234	$234	$234
Planned upgrade/new budget	$15	$15	$15	$15	$15	$15	$15	$15	$15	$15
Non-growth contributed asset value	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Asset Disposals										
Est Cost to dispose of assets	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Carrying value (DRC) of disposed assets	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0

Additional Expenditure Outlays Requirements (e.g from Infrastructure Risk Management Plan)										
Additional Expenditure Outlays required and not included above	2016 $000	2017 $000	2018 $000	2019 $000	2020 $000	2021 $000	2022 $000	2023 $000	2024 $000	2025 $000
Operations	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Maintenance	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Capital Renewal	to be incorporated into Forms 2 & 2.1 (where Method 1 is used) OR Form 2B Defect Repairs (where Method 2 or 3 is used)									
Capital Upgrade	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
User Comments #2										

Forecasts for Capital Renewal using Methods 2 & 3 (Form 2A & 2B) & Capital Upgrade (Form 2C)										
	2016 $000	2017 $000	2018 $000	2019 $000	2020 $000	2021 $000	2022 $000	2023 $000	2024 $000	2025 $000
Forecast Capital Renewal from Forms 2A & 2B	$511	$144	$164	$153	$110	$60	$72	$39	$161	$113
Forecast Capital Upgrade from Form 2C	$82	$6	$20	$31	$0	$6	$0	$0	$0	$0

Appendix E Abbreviations

AAAC	Average annual asset consumption
AM	Asset management
AM Plan	Asset management plan
ARI	Average recurrence interval
ASC	Annual service cost
BOD	Biochemical (biological) oxygen demand
CRC	Current replacement cost
CWMS	Community wastewater management systems
DA	Depreciable amount
DRC	Depreciated replacement cost
EF	Earthworks/formation
IRMP	Infrastructure risk management plan
LCC	Life Cycle cost
LCE	Life cycle expenditure
LTFP	Long term financial plan
MMS	Maintenance management system
PCI	Pavement condition index
RV	Residual value
SoA	State of the Assets
SS	Suspended solids
vph	Vehicles per hour
WDCRC	Written down current replacement cost

Appendix 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. Infrastructure assets are a sub-class of property, plant and equipment which are non-current assets with a life greater than 12 months and enable services to be provided.

Asset category

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

Asset class

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

Asset condition assessment

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

Asset hierarchy

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

Asset management (AM)

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

Asset renewal funding ratio

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

Average annual asset consumption (AAAC)*

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

Borrowings

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

Capital expenditure

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

Capital expenditure - expansion

Expenditure that extends the capacity of an existing asset to provide benefits, at the same standard as is currently enjoyed by existing beneficiaries, to a new group of users. It is discretionary expenditure, which increases future operations and maintenance costs, because it increases the organisation's asset base, but may be associated with additional revenue from the new user group, 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 organisation's 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
Monies received generally tied to the specific projects for which they are granted, which are often upgrade and/or expansion or new investment proposals.

Capital investment expenditure
See capital expenditure definition

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

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

Class of assets
See asset class definition

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

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

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

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

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

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

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

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

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

Economic life
See useful life definition.

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

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

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

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

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

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

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

Investment property
Property held to earn rentals or for capital appreciation or both, rather than for:
(a) use in the production or supply of goods or services or for administrative purposes; or
(b) sale in the ordinary course of business.

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

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

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

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

Loans / borrowings
See borrowings.

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

- **Planned maintenance**
  Repair work that is identified and managed through a maintenance management system (MMS). MMS activities include inspection, assessing the condition against failure/breakdown criteria/experience, prioritising scheduling, actioning the work and reporting what was done to develop a maintenance history and improve maintenance and service delivery performance.
- **Reactive maintenance**
  Unplanned repair work that is carried out in response to service requests and management/ supervisory directions.
- **Specific maintenance**
  Maintenance work to repair components or replace sub-components that needs to be identified as a specific maintenance item in the maintenance budget.
- **Unplanned maintenance**
  Corrective work required in the short-term to restore an asset to working condition so it can continue to deliver the required service or to maintain its level of security and integrity.

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

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

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

Net present value (NPV)
The value to the organisation of the cash flows associated with an asset, liability, activity or event calculated using a discount rate to reflect the time value of money. It is the net amount of discounted total cash inflows after deducting the value of the discounted total cash outflows arising from 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 to the Council, 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 renewal expenditure definition above.

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

Renewal
See capital renewal expenditure definition above.

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

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

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

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

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

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

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

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

Sub-component
Smaller individual parts that make up a component part.

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

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

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

Source: IPWEA, 2009, Glossary

Additional and modified glossary items shown *