

City of Rockingham

Strategic Asset Management Plan

July 2021





Alternative Formats

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Community Engagement

Admin use only: Please select all special interest groups that may be interested in this strategy. Groups selected will be notified using Rock Port.

- Aboriginal and Torres Strait Islanders
 Arts and Events
 Coastal and Marine Environment
- Community Development
- □ Community Safety
- □ Disability Access and Inclusion
- □ Environmental Interests
- □ Grants

- Heritage
 Libraries and Education
 New Community Plan Strategies
 New Infrastructure Projects
 Roads and Footpaths
 Safety Bay / Shoalwater Foreshore Revitalisation Masterplan
 Seniors Facilities and Activities
- Sporting Clubs and Facilities
 Strategic Community Planning
 Tenders and Quotations
 Tourism
 Volunteering
 Waste and Recycling
 Youth

Disability Access and Inclusion

Admin use only: Please consider and identify the elements from the City's current Disability and Inclusion Plan (DAIP) and identify those that are relevant to, or will be impacted by this strategy as per the table below. If you would like to discuss the impacts and relevance of the DAIP to your strategy, please contact the Manager Community Capacity Building.



The Seven Outcome Areas of the DAIP	Will the Key Element be impacted by this strategy? "Y" or "N"	If "Y", please explain how. the actions under this element will be impacted by this strategy
1. Access to City services and events		
2. Access to City buildings and facilities (including outdoor		
spaces)		
3. Access to information		
4. Access to quality service from City staff		
5. Access to equal complaints procedures		
6. Access to participation in public consultation		
7. Access to City employment opportunities		



TABLE OF CONTENTS

1.0	Introduction	6
2.0	Background	8
3.0	Current Strategic Context	. 11
3.1	Current Asset Portfolio and Performance	. 12
4.0	Current Strategic Issues	. 13
4.1	Demographics	. 13
4.2	Integration with Existing City Business Functions and Processes	. 13
4.3	Legislative Requirements	. 13
4.4	Climate Change	. 14
4.5	Economic Climate	. 14
4.6	Financial Constraints	. 14
4.7	Customer Expectations	. 15
4.8	Tourism	. 15
4.9	Asset Management System Roles and Responsibilities	. 16
4.1	0 Asset Management Performance	. 17
5.0	Asset Management Objectives	. 21
6.0	The Asset Management System and Asset Management Planning	. 26
6.1	Setting the Strategic Direction	. 26
6.2	Levels of Service	. 26
6.3	Future Demand and Demand Forecasting	. 28
6.4	Asset Register Data	. 28



6.5	5 Asset Condition	29
6.6	6 Decision-making	29
6.7	7 Asset Management Plans	31
6.8	3 Management Systems	33
6.9	9 Information Systems	33
6.′	10 Service Delivery Mechanisms	34
6.′	11 Improvement Planning	34
6.1	12 Risk Management	35
6.′	13 Operations and Maintenance Planning	35
6.1	14 Capital Investment - Capital Works Planning	36
6.1	15 Financial and Funding Strategies	40
6.′	16 Asset Management Teams	42
7.0	Current Financial Summary	43
8.0	Improvement Plan	46
9.0	Measuring Success	48
10.0	Strategic Asset Management Plan Risk Management	49
11.0	Stakeholder Engagement	50
12.0	References	51
Appe	ndix A Existing Strategies and Plans Relevant to Asset Management Planning	52
Appe	ndix B Legislation Impacting Asset Management	53
Appe	ndix C List of financial assumptions and clarifications:	54



1.0 Introduction

What is Asset Management?

The goal of asset management is to meet a required level of service in the most cost-effective way through management of assets for current and future customers.

Asset management aims to ensure that no generation is paying more than another for appropriate services. A common misconception is that asset management is about the maintenance of assets. However, asset maintenance is based on short-term planning whereas asset management is long-term planning and includes identifying the need for assets, the planning and control of new infrastructure, operation, maintenance, renewal, and disposal of assets. All these elements make up the asset lifecycle. The International Infrastructure Management Manual defines the key elements of infrastructure asset management as:

- Providing a defined level of service and monitoring performance;
- Managing the impact of demand changes through demand management, infrastructure investment and other strategies;
- Taking a lifecycle approach to developing cost-effective management strategies for the long-term that meet that defined level of service;
- · Identifying, assessing and appropriately managing risks; and
- Having a long-term financial plan which identifies required expenditure and how it will be funded.

Asset management, therefore, is not the domain of any one division at the City but requires a whole of organisation approach.

How can this Asset Management goal be achieved?

The goal of asset management can be achieved by developing a 'system' of objectives, transparent processes, tools, resources and information – collectively termed the Asset Management System (AMS). The AMS is designed to achieve asset management objectives and delivery of quality services to the community in line with the communities vision in the most cost-effective way. All the asset management practices, roles and responsibilities referred to in this Strategic Asset Management Plan (SAMP) form part of the AMS.

Why does the City need a Strategic Asset Management Plan?

The City is responsible for delivering a large number of services to the community. Many of these services require the acquisition, operation, maintenance, renewal and disposal of a wide range of physical



Figure 1 Asset Lifecycle (Source IPWEA IIMM 2015)



infrastructure assets. These assets have a significant financial value currently estimated at \$1.2bn and include buildings and facilities, parks and open spaces, road, footpath and stormwater drainage networks, providing services essential to the community's quality of life.

There is growing demand for services in the City of Rockingham and when the Council commits to new or upgraded assets, it is also committing to fund future operations, maintenance and renewal activities. To be cost-effective, the way the City plans, designs, constructs, operates, maintains, renews and disposes of assets is critical. Balancing risk, cost and performance is always the key challenge in asset management. This balance is perhaps even more pertinent now with financial constraints brought on because of COVID-19. Performed well and with a whole of organisation approach, asset management results in effective management of service delivery, strong governance and accountability, robust and sustainable decision-making, higher levels of customer service and effective risk management. It creates financial efficiencies providing justification and transparency for how public funds are used.

Deciding the direction and level of asset management to be achieved is a key strategic decision - it can be very costly and can take many years to achieve a fully advanced level of asset management performance which may not be appropriate for the organisation. This SAMP provides this direction.

How does this Strategic Asset Management Plan align with the City's vision?

This SAMP aims to deliver the following aspirations contained in the City's Strategic Community Plan 2019 - 2029:

- Aspiration 2: Grow and nurture community connectedness and wellbeing;
- Aspiration 3: Plan for future generations; and
- Aspiration 4: Deliver quality leadership and business expertise.

What is the Purpose of this SAMP?

This SAMP seeks to develop the AMS - transparent, consistent and effective asset management practices to ensure long-term financial sustainability for the City whilst delivering quality, cost-effective services to the community by:

- 1. Translating the City's strategic objectives into asset management objectives;
- 2. Developing and defining the functions, people, processes, information and tools required to deliver the asset management objectives; and
- 3. Providing direction for asset management practices at the City.



What asset classes and services are included in this SAMP?

This SAMP encompasses the infrastructure assets the City owns and also the service activities undertaken in operating the assets such as cleaning:

Local roads	Community centres and public halls	Boat ramps and jetties
Public toilets	Sporting facilities / Recreation centres	Footpaths and cycle ways
Parks, gardens and picnic areas	Foreshores	Stormwater drainage
Lighting	Litter management	Graffiti & vandalism management
Bridges and Underpasses	Caring for the environment	Coastal protection





2.0 Background

City of Rockingham Strategic Asset Management Framework

The Executive endorsed the Strategic Asset Management Framework in October 2019 and the Council Policy – Asset Management was most recently reviewed and adopted in August 2020. The Asset Management Plan is an operational plan updated and endorsed by Executive annually in November. The SAMP replaces the Asset Management Plan in the Strategic Planning Framework. The Asset Management Plan details how assets will be physically managed to meet level of service requirements whereas the SAMP discusses the 'system' required to achieve that aim. Figure 3 shows accountabilities for the key outputs of the Strategic Asset Management Framework.



Figure 2 Strategic Asset Management Framework



Activity	Description	Accountability	Review Period
Asset Management Policy	Outlines and demonstrates commitment to the Council's asset management vision, framework and principles to guide asset management planning and decision-making.	Council: adoption; The Executive: approval and action; Manager Asset Services: action, development and review.	Every 3 years
Strategic Asset Management Plan	Develops and documents asset management objectives. It defines the asset management system required to deliver the asset management objectives.	Council: adoption; The Executive: endorsement and action; Manager Asset Services: action, development and review; Divisions and Officers within the AMS: input and action.	Every 3 years
Asset Management Plan	Documents the City's defined levels of service and the long-term expenditure required to deliver them. It describes the asset activities for each asset class that will be undertaken to meet the asset management objectives and levels of service in the most cost-effective way. It reports on performance, both financially and against levels of service. Supplementary Lifecycle Management Plans contain more detail on the lifecycle activities of operations, maintenance and capital investment for individual asset classes.	The Executive: endorsement; Manager Asset Services: development, review and update; Engineering and Parks Services Division: input and action; Community Infrastructure Planning: input and action.	Annually
5 Year Capital Work Programs detailed in the Business Plan	5-year capital investment optimised and prioritised programs of work arising from the activities documented in the AMP. These programs are listed in the Business Plan.	Council: adoption through the Business Plan; The Executive: endorsement; Engineering and Parks Services Division: input and action; Community Infrastructure Planning: input and action.	Bi-Annually

Figure 3 Key Asset Management Outputs and Accountabilities



3.0 Current Strategic Context

The City provides essential services to residents, visitors, businesses and industries in Rockingham. The SAMP is relevant to:

- Sport and Recreation Facilities;
- Coastal Facilities;
- Community Facilities;
- Open Space Management;
- Transport Management; and
- Stormwater Management.



These services are an essential component to the liveability and economic prosperity of the community and can be impacted by a wide range of factors and both external and internal contexts must be considered when planning how to deliver the City's services. External factors include social, technological, cultural, regulatory and political environments and consideration needs to be given to elements such as demographic changes, legislative requirements, climate change and customer expectations. Internal factors include the City's strategic community objectives, the organisational structure and its capabilities.

KEY ISSUE 1: Ensuring services needed by the community are provided at an appropriate level of service in the most cost effective way.









3.1 Current Asset Portfolio and Performance



The forecast value of infrastructure assets covered by and over the period of this SAMP is just over \$1.2 bn. This amount excludes coastal protection infrastructure which has not currently been valued. These assets are forecast to depreciate by \$21m annually. Understanding the amount that assets depreciate is important as it enables the City to financially plan for their renewal.

State of the Assets

The City's assets are performing very well. Figure 4 shows the overall condition of all the City's infrastructure asset classes covered by this SAMP. The higher number of assets in poor and very poor condition in parks and open spaces are from the irrigation and lighting asset classes - investment in these areas has been adjusted accordingly in the current Business Plan. The challenge when renewing assets is to strike the correct balance and act at the optimal time to ensure the City is not over or under investing in it's asset base.



Figure 4 Asset Performance – Condition



4.0 Current Strategic Issues

Asset management is impacted by both external and internal contexts. Externally, the rapidly changing demands from social, political, legislative and business environments affect asset management. Internally, corporate goals, business frameworks, organisational culture, financial sustainability and customer expectations need to be considered. Good asset management should always consider all external and internal factors. The most significant issues impacting asset management at the City are discussed in more detail in the Asset Management Plan and include:

4.1 Demographics



Expected population increases will create the need for new services and place additional pressure on existing infrastructure networks, assets and services.

Population characteristics will also change and impact services with families being attracted by new residential developments and young singles and couples attracted to apartment living. The South Metropolitan TAFE Campus will attract young singles and there are substantial industrial and commercial areas in the City. Such demographics will increase demand for services such as recreational facilities, surf lifesaving and beach facilities and increase pressure on road, footpath and drainage networks.

4.2 Integration with Existing City Business Functions and Processes

A large number of existing strategies impact how the City manages its infrastructure assets and these must be considered when undertaking asset management activities and planning. A list of the key strategies and plans are listed at Appendix A.

4.3 Legislative Requirements

Legislative requirements which affect City operations are shown in Appendix B. At present, there are no known changes to legislation expected to impact asset portfolios other than the expectation of meeting requirements in land use changes over the next ten years creating costs for relocation of existing services and additional services.



4.4 Climate Change

Climate change can affect the lifespan and performance of some assets, increasing future maintenance and renewal costs.

- Increased temperatures can reduce service life and functionality of component and system, affect soil stability and cause ground movement and subsidence. Energy use increased due to reliance on cooling systems.
- Increased frequency and intensity of storm event lead to stormwater capacity overload and increased and prolonged inundation and erosion damage.
- Reduced groundwater supply will lead to increased costs due to failures caused by poorer water quality impurities and reduced volumes.



• Rising sea levels can lead to inundated drainage assets, separation to groundwater and increased salinity.

The impacts of climate change are explored in more detail in the Asset Management Plan, supplementary Lifecycle Management Plans and the City's response to rising sea levels and inundation are outlined in the Coastal Hazard Risk Management and Adaptation Plan.

4.5 Economic Climate

The City continues to experience higher than average population growth rates, with our resident population forecast to grow by 71.29% between 2021 (139,613) and 2046 (239,147). This in turn creates a rapid increase in demand for residential land, infrastructure and services. New infrastructure and services increase future operational, maintenance and renewal costs so understanding whole of lifecycle costs is essential when proposing new infrastructure. Proposed new infrastructure must consider the asset management principles set out in the Asset Management Policy, asset management objectives and sound economic principles to ensure they support economic growth. The City has seen an increase in development in the past year due to COVID-19 stimulus programs however this is not expected to continue at this level as these programs end, and while population growth is expected to be slower than previously anticipated the City continues to experience a high growth rate.

4.6 Financial Constraints

The City experienced significant financial impacts as a result of COVID-19 with revenues affected due to facility closures and the freeze in rates revenue and fees and charges. The impact of the rate freeze was most significant as this effect is ongoing and cumulative. Any future constraints in the level of rate rises above CPI will have an impact on the City's ability to adequately fund the Asset Management Plan. In response to COVID-19 all levels of government have initiated stimulus programs that have resulted in significant funding for new capital works which has required changes to the timing of scheduled asset renewals and new infrastructure.



4.7 Customer Expectations

Customer expectations can increase because of growing awareness through community consultation, advances in technological communications, high levels of service and high specification and attractive assets associated with land development. High levels of service lead to increased operational, maintenance and renewal costs and impact future financial sustainability. It is essential, therefore, to ensure levels of service are aligned with strategic priorities and asset management objectives. The City will achieve this through development of its levels of service and striking the correct balance between cost and performance.

4.8 Tourism

As the City starts to implement actions from the Tourism Destination Strategy and focus on tourism destination marketing, increasing numbers of tourists will be attracted to the Rockingham region. Recent data released from Tourism Research Australia indicated domestic day trips to the City increased by an unprecedented 33% over the 2019/2020 financial year, from 774,738 in 2017/18 to 1,027,541 in 2019/20. Increases in seasonal visitors increase operational costs to provide additional associated services, for example, cleaning and litter removal services. It also leads to increased traffic congestion and pressure on parking facilities.





4.9 Asset Management System Roles and Responsibilities

Asset management is a Citywide activity with varied roles and responsibilities. Team responsibilities within the AMS are broadly illustrated in Figure 5.

Asset Management System Tasks	Council	Executive	Strategic Asset Management	Asset Maintenance	Parks Services	Engineering Services	Infrastructure Project Delivery	Community Infrastructure Planning	Financial Services	Land and Development Infrastructure	Business Systems	Customer Service	Strategic Planning & Environment	Major Planning Projects	Economic Development and Tourism	Strategy, Marketing and Communication
Setting the Strategic Direction	\checkmark	\checkmark	\checkmark										\checkmark		\checkmark	\checkmark
Levels of Service Development and Performance Management		\checkmark	✓	\checkmark	✓	✓		\checkmark		\checkmark		\checkmark				
Future Demand/Demand Forecasting			\checkmark	\checkmark	\checkmark	\checkmark		\checkmark		\checkmark			✓	\checkmark	\checkmark	
Asset Register Data			\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark					
Asset Condition			\checkmark	\checkmark	\checkmark	\checkmark		\checkmark								
Asset Management Decision-making	\checkmark	\checkmark	✓	\checkmark	✓	\checkmark	\checkmark	✓	\checkmark	✓			\checkmark	\checkmark	\checkmark	\checkmark
Asset Management Plans		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark						
Management Systems			\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark			\checkmark		\checkmark	\checkmark
Information Systems			\checkmark								\checkmark					
Service Delivery Mechanisms		\checkmark														
Improvement Planning			\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark			\checkmark	\checkmark		
Risk Management	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark			\checkmark	\checkmark	\checkmark	\checkmark
Operations and Maintenance Planning			\checkmark	\checkmark	✓	\checkmark	\checkmark									
Capital Investment Planning			\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark					\checkmark	\checkmark	\checkmark	
Financial and Funding Strategies	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark					\checkmark	

Figure 5 Asset Management Roles and Responsibilities



4.10 Asset Management Performance

Understanding current asset management performance enables opportunities for improvement to be identified by addressing gaps between current and desired target performance. Routine monitoring and review as part of the SAMP development and review results in a continual cycle of improvement.

The City is aiming to align its AMS with Organisation for Standardisation (ISO) 55001 standards. Performance of the AMS in turn, influences asset management performance, which is measured as a level of maturity.

An assessment of the City's asset management maturity has been undertaken against the internationally recognised International Infrastructure Management Manual (IIMM) maturity index and performance of the AMS has been assessed for alignment with ISO 55001. The assessments were undertaken by a certified asset management assessor.





Overall, the assessment has found that the City performs asset management effectively and is progressing very well in many practice areas with some very good processes in place to ensure services are delivered cost-effectively to meet community needs. However, there are gaps between current and desired performance and key issues have been identified and are discussed in more detail throughout this SAMP and included in the SAMP Improvement Plan.



4.10.1 Asset Management Maturity

The IIMM asset management maturity index measures asset management practice areas on a scale that starts at 'aware' and progresses through 'basic', 'core', 'intermediate' to 'advanced' level. The City is not aiming to achieve an advanced level in practice areas where it is not appropriate, cost beneficial, nor desirable. The City's asset management practices were assessed in December 2020 and the results are shown in Figure 7. The length of the blue bars indicates the extent to which the City has progressed through the level. A priority has been assigned to each practice area indicating the importance for improvement based on the risk posed by not advancing in maturity within the practice area. These practice areas and the actions needed to progress their maturity are explored in more detail in Section 6.0 and the SAMP Improvement Plan. This assessment will be undertaken every three years as part of the SAMP review to form a continual improvement process.



Maturity Level

Figure 7 Asset Management Maturity Assessment



4.10.2 Asset Management System Alignment with ISO 55001

The ISO published a series of International Standards for asset management in 2014 and the City is aiming for its AMS to align with these standards. An ISO 55001 assessment was carried out in October 2020 to determine how well the City's AMS is aligned with ISO 55001. This assessment provides a tool to enhance the AMS so asset management outcomes can be delivered more effectively, increasing the level of asset management maturity.

Figure 8 shows the highest performing areas of the AMS are leadership and support. This reflects the work undertaken with adoption of the Strategic Asset Management Framework and Asset Management Policy and the development of this SAMP. Performance evaluation and asset management planning require most improvement. However, adoption of this SAMP and the asset management objectives will quickly improve performance in these areas. Figure 9 shows the risk to the organisation from the current position for each practice area. The length of the blue bars indicates the priorities for improvement, with the improvement and operation practice areas identified as the highest priorities for development.



 Improvement
 Improvement

 Performance evaluation
 Improvement

 Operation
 Improvement

 Support
 Improvement

 Planning
 Improvement

 Leadership
 Improvement

 Organisational Context
 Improvement

 0
 10
 20
 30
 40
 50
 60

Figure 8 City of Rockingham ISO 55001 Alignment Assessment

Figure 9 City of Rockingham ISO 55001 Alignment Risk Summary



The following key issues have been identified from the assessment against ISO 55001 and are discussed throughout this SAMP:

KEY ISSUE 2:	Need for processes to proactively identify potential failures in asset performance and evaluate the need for preventive action.
KEY ISSUE 3:	Need for documented processes and methods to be employed in managing assets over their lifecycles.
KEY ISSUE 4:	Ensuring people are aware of their contribution to the effectiveness of the asset management system including the benefits of improved asset management performance.





5.0 Asset Management Objectives

The asset management objectives developed in this SAMP provide the essential link between the organisational objectives and the Plans that describe how those objectives are going to be achieved. They are developed from the City's strategic objectives and a range of requirements including corporate goals, stakeholder, regulatory and legislative requirements.



Figure 10 Development of Asset Management Objectives

Asset management objectives fall into two groups. Firstly, those objectives in relation to the performance of the City's services, physical assets and their networks. These asset management service performance objectives transform the required outcomes to be provided by the assets into activities documented and measured in the AMP as levels of service. The second group of objectives relate to performance of the AMS in supporting achievement of the strategic objectives and aspirations. The following tables illustrate the link between the City's strategic objectives relevant to this SAMP and the asset management objectives.



Aspiration 2: Grow and nurture community conr	nectedness and wellbeing
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Organisational Objective	Asset Management Service Performance Objectives	Asset Management System Objectives		
Services and facilities : Provide cost- effective services and facilities, which meet community needs.	Deliver good value services in the most cost- effective manner appropriate to the level of need for now and in the future.	Understand and align infrastructure financial needs with long term financial planning.		
Accessibility: Ensure that the City's infrastructure and services are accessible to seniors and to people with a disability	Deliver quality products and services that meet end user needs.	I he asset management system will support financia sustainability.		
Community engagement : Facilitate comprehensive community engagement on issues facing the City, ensuring that residents can provide input into shaping our future.	Manage services that are compliant with relevant laws, statutory plans, bylaws and industry standards. Be responsive to the needs of customers and stakeholders and communicate effectively with them.			





Aspiration 3: Plan for future generations

Organisational Objective	Asset Management Service Performance Objectives	Asset Management System Objectives
Infrastructure planning : Plan and develop sustainable and safe infrastructure which meet the current and future needs of the City's growing population.	Deliver good value services in the most cost- effective manner appropriate to the level of need for now and in the future. Deliver services in a way that is sustainable and, where possible, protects and enhances our natural	Asset management decision-making will be based on reliable asset management information and the asset management decision-making framework. The asset management system will support financial sustainability.
Alternative energy applications: Embrace new technology and apply alternative energy solutions to City facilities and services.	and built environment. Deliver quality products and services that meet end user needs.	Understand and align infrastructure asset financial needs with long term financial planning.
Livable suburbs : Plan for attractive sustainable suburbs that provide housing diversity, quality public open spaces, walkways, amenities and facilities for the community.		





Aspiration 4: Deliver quality leadership and business expertise

Organisational Objective	Asset Management Service Performance Objectives	Asset Management System Objectives
Management of current assets: Maintain civic buildings, sporting facilities, public places and road and cycle way infrastructure based on best practice principles and lifecycle cost analysis.	Deliver good value services in the most cost- effective manner appropriate to the level of need for now and in the future. Deliver quality products and services that meet end user needs.	Understand and align infrastructure asset financial needs with long term financial planning. Asset management processes and methodologies will be compliant, transparent, risk based and applied consistently.
Strategic and sustainable financial planning: Undertake long-term resource planning and allocation, with prioritised spending on core services, infrastructure development and asset management. Effective governance: Apply systems of governance, which empower the Council to make considered and informed decisions within a transparent, accountable, ethical and compliant environment.	 Deliver services in a way that is sustainable and, where possible, protects and enhances our natural and built environment. Be responsive to the needs of customers and stakeholders and communicate effectively with them. Manage services that are compliant with relevant laws, statutory plans, bylaws and industry standards. 	The asset management system will be maintained to a high standard. Practice continuous improvement. Asset management decision-making will be based on reliable asset management information and the asset management decision-making framework. The asset management system will support financial sustainability.





The asset management service performance objectives are explored in more detail as levels of service in the AMP, Community Infrastructure Plan and Lifecycle Management Plans. They will be measured through customer satisfaction results, performance measures, financial performance and non-conformance issues. The AMS objectives will be met through the following actions which direct the strategies and actions documented in this SAMP.

set Management System Objectives	Actions
Understand and align infrastructure	Financial modelling will be undertaken annually based on current condition, useful life and unit rate costs. The long-term financial forecasts are to be documented in the Asset Management Plan to ensure funding is in place to provide services to the appropriate standards.
financial needs with long term financial planning.	Levels of service to be developed, documented, measured and reported in the Asset Management Plan and reviewed every three years.
	Asset condition to be updated at appropriate intervals and to relevant standards to assist in forecasting asset needs.
Asset management processes and	Asset Management processes to be documented and reviewed at appropriate intervals.
methodologies will be compliant, transparent, risk based and applied	Risk management to be undertaken in line with the City's Risk Management Framework.
consistently.	Asset management practices and activities to be undertaken in line with statutory and reporting requirements.
The asset management system will be	Asset management maturity to be assessed every three years as part of the SAMP review.
maintained to a high standard.	The asset management system to be developed to align with ISO 55001 standards and performance reviewed every three years as part of the SAMP review.
	Review and improvement processes to be included as specific activities in asset management procedures, guidelines, processes and decision-making.
Practice continuous improvement.	SAMP Improvement Plan is to be developed, monitored and reviewed to support achievement of asset management objectives.
Asset management decision-making will be based on reliable asset management	The City's infrastructure asset register is to be developed and maintained to a high standard in line with industry standards.
decision-making framework.	Tailored decision-making matrices to be developed for different asset management practices.
	Financial performance and forecast future costs reported annually in the Asset Management Plan and review of alignment between future financial needs and long-term financial plan to be undertaken a minimum of every three years.
The asset management system will support financial sustainability.	Infrastructure requirements, defined levels of service and lifecycle costs will form the foundation of all asset management activities and decision-making.
	Capital investment projects and operational activities to be undertaken in line with asset management policy principles and asset management decision-making framework.
	set Management System Objectives Understand and align infrastructure financial needs with long term financial planning. Asset management processes and methodologies will be compliant, transparent, risk based and applied consistently. The asset management system will be maintained to a high standard. Practice continuous improvement. Asset management decision-making will be based on reliable asset management decision-making system will support financial sustainability.

Figure 11 Asset Management System Objectives





6.0 The Asset Management System and Asset Management Planning

This section of the SAMP sets out the proposed asset management system and practices required to effectively manage the lifecycle of assets and achieve the asset management objectives. It covers the asset management practice areas shown in Figure 7 that were assessed for current and target levels of maturity. Each practice area is discussed with a brief description and proposal on how the AMS can progress the current level of performance towards the target level. Those topics with high and medium priorities are included in the SAMP Improvement Plan and will be further developed in the Asset Management Plan, Lifecycle Management Plans and Community Infrastructure Plan.

6.1 Setting the Strategic Direction

This practice area comprises the development of the AMS, Asset Management Policy, asset management objectives and understanding of the internal and external environments that shape asset management. The Asset Management Policy is current and aligned with current industry standards and the Strategic Asset Management Framework was adopted in October 2019. The aim is for the Asset Management Policy and this SAMP to be fully integrated into the City's business processes.

Next Steps

The City is performing very well and is currently well progressed through the basic level of maturity. The development of this SAMP addresses much of this practice area and will assist in integrating asset management with the City's business processes demonstrating clear alignment with the strategic objectives. It is expected that adoption of this SAMP will progress performance through to an intermediate level of maturity.

6.2 Levels of Service

Levels of service are the key business drivers and influence all asset management decisions. They define the standards to which our assets and services will be delivered and provide transparency and justification for how money is spent on delivering those services. They provide the link between the level of service the City delivers with the levels of service expected by the community. When balancing the comparable needs of the City's services, the two key factors are cost of the service and quality of the service, including risk. Levels of service determine:

- the amount, type and standard of facilities provided and their distribution;
- how good the service is from the community perspective; and
- the effectiveness of organisational performance.





Effective asset management planning enables the relationship between cost, performance and risk to be determined. If set too high, levels of service can cause over investment in an asset base and unsustainable customer expectations and a dependence on a high level of future rates revenue. If set too low, under investment can create unsatisfied customers, a backlog of work increasing operations and maintenance costs, increasing levels of risk and increasing costs for future generations. Ensuring levels of service are appropriate is critical. Levels of service are categorised as follows:

- Provision levels of service determining the amount and type of assets and facilities provided. They determine distribution;
- Development levels of service identifying the range of assets provided along with quality and quantity;
- Operational levels of service measuring how the customer receives the service and whether value to the customer is provided; and
- Technical levels of service relating to the allocation of resources to service activities to best achieve the desired customer outcomes and demonstrate effective organisational performance.

Levels of service are currently considered basic with provision and development levels of service currently in development. Levels of service are developed, documented and measured in the Asset Management Plan.

Next Steps

The City is proposing to achieve a core level of maturity with levels of service developed for all infrastructure asset services, cost relationships fully understood and associated risks documented. Levels of service will be further developed as part of the Asset Management Plan encompassing both City constructed and developer gifted infrastructure and will give consideration to:

- Internal and external business contexts;
- Asset management objectives;
- Customer expectations identified from the Strategic Community Plan, analysis of the annual customer satisfaction survey and results of consultations undertaken during development of Community Plan Strategies;
- Cost including whole of life cycle costs;
- Quality, reliability, safety, responsiveness, function, capacity/utilisation, operation, maintenance, capital investment, sustainability, cost and efficiency;
- Measurable performance targets and monitoring; and
- Intervention levels which trigger operational, maintenance and capital investment activities based on:
 - Hierarchy developed in line with industry standards;
 - o Use;
 - o Criticality; and
 - o Risk.



6.3 Future Demand and Demand Forecasting

The ability to predict future demand for services enables the City to plan ahead and identify the best solutions to meet the demand. Population is an obvious driver for demand change but there are other factors too. Leisure trends can impact parks and recreational facilities, for example, an increased demand for female changing rooms, social trends, for example, more desire for apartment living and environmental trends. Section 4.0 of this SAMP, Strategic Issues, identifies a number of major considerations.

Realistic demand forecasting is critical - if demand increases fail to transpire, over investment may occur with the associated costs having to be borne by a smaller than predicted customer base. Unexpected increases in demand are difficult to deal with and may lead to increased costs to address the issue. Demand for new services is currently managed through a combination of managing existing assets, upgrading existing assets and providing new assets to meet demand. The Community Infrastructure Plan is a key outcome of this practice area.

Next Steps

The City is aiming ultimately to perform at an intermediate level of asset management maturity where demand management is routinely considered as an alternative to major project development and a range of scenarios are explored. For now, the demand drivers and demand management strategies pertinent to individual asset classes will be developed in more detail in the Community Infrastructure Plan and Capital Investment Lifecycle Management Plans.

6.4 Asset Register Data

A robust asset register is the foundation for enabling many asset management functions. Around 72,000 infrastructure assets are recorded in the asset register. Confidence in this asset data varies. The roads asset class is considered highly reliable but reliability of the stormwater drainage asset class is uncertain. All other asset classes are considered reliable and sufficient for basic decision making but gaps are known to exist. Measures are already in place to improve stormwater drainage asset data. Currently, gaps in the asset register include coastal protection assets and walls within the road reserve. This creates a risk for the City as unknown assets can deteriorate, fail and potentially harm the community without the City's knowledge. Asset data collection can be costly so it is important to ensure asset data collection is justified and completed to an appropriate level of detail.



KEY ISSUE 5: Ensuring asset data is current and provides a robust foundation for reliable decision–making.



Next Steps

An Asset Data Management Plan is to be developed to define and document data collection needs giving consideration to asset management objectives, levels of service, performance reporting requirements and risk. Gaps in the register will be identified and prioritised giving consideration to criticality and risk associated. The Plan will assess reliability of data and identify areas for improvement.

6.5 Asset Condition

Monitoring asset performance and condition enables the City to demonstrate it is delivering agreed levels of service. It provides evidence of actual performance against levels of service, providing accountability to customers and stakeholders and identifies areas for improvement. Understanding how assets perform guides maintenance and renewal programs enabling the City to be proactive when expected performance is not achieved. Currently the City is performing at a core level of maturity and has sufficient information to plan maintenance and renewals. Future condition is modelled to assess long-term requirements annually. The City is progressing well on its journey to an advanced level of maturity.

Next Steps

To perform at a higher level, additional contextual information needs to be monitored, for example, demand. An Asset Inspection Procedure is currently being developed to ensure condition is collected in a consistent manner and guiding frequency of inspections and detailing industry standards to be followed and risk.



Source: Walga Road Visual Condition Assessment Manual 2016





6.6 Decision-making

Asset management decision-making should be consistent, transparent and aligned with strategic and organisational objectives and should provide justification for how, why and when activities are undertaken. Transparent and fair decision-making based on robust information ensures activities are cost-effective, creating long-term financial sustainability. Currently, formal decision making techniques are inconsistently applied to projects and programs meaning transparency could be improved. However, work is progressing very well in developing decision-making criteria for identifying works to be included in five year work programs and for prioritising competing projects within the Business Plan.

KEY ISSUE 6: Ensuring decision–making about infrastructure services and assets is transparent and consistent.

Next Steps

To achieve a more mature approach, a decision-making framework will be implemented. It is designed to be applied throughout the lifecycle of assets. It helps identify what projects or activities need to be undertaken, how their needs compare with competing projects and activities and ensure all infrastructure assets are managed cost-effectively throughout their lifecycle.

The framework will form the foundation of decision-making processes to be followed for managing all infrastructure assets. It prompts the user to think about the cause or driver of any identified shortfall in service, problem, goal or opportunity. This helps identify the best possible solution to address the root cause or driver of the situation. All possible solutions should be explored to provide a number of options. Appropriate evaluation of these options is key to accountability and transparency, the complexity of which can range from a simple risk assessment to a multi criteria assessment or cost benefit analysis. It should be relative to the scale of the project, shortfall, problem, goal or opportunity being addressed. Once the best solution is chosen, it needs to be prioritised along with other competing projects.

The framework seeks to ensure that the following factors be considered throughout the decision-making process:

- Sustainability economic, social and environmental
- Compliance
- Integration

- Risk Management
- Stakeholder Engagement
- Levels of Service

It is proposed that the framework be implemented to formalise decision making criteria for identifying and prioritising operations, maintenance and capital investment activities providing consistency and justification around how funds are spent.



6.7 Asset Management Plans

The current Asset Management Plan is an operational plan and documents levels of service and describes how assets will be managed to meet them by addressing the key elements of asset management listed on Page 6 of this SAMP. It contains high level summaries of future demand, risk management and operations, maintenance and capital investment activities. It contains financial forecasts and an assessment of financial performance. However, because it is one document it lacks detail on decision-making criteria and methodologies, asset criticality and associated risk management and roles and responsibilities.

Next Steps

It is proposed that a suite of supplementary Lifecycle Management Plans are developed which will contain more detail on how future demand, levels of service, decision making, intervention levels, prioritisation criteria and risk management will be addressed for individual asset classes. These plans will be available to guide the activities of operational staff. The Asset Management Plan endorsed by Executive will contain high level summaries of these Plans.

The Plans will be broken down into Operations, Maintenance and Capital Investment Plans for individual asset classes. Capital Investment Plans for roads, buildings and lighting have been identified as priorities as these asset classes have the highest renewal values annually. The Plans will be clear, transparent and translate the proposed strategies outlined in Sections 6.2, 6.3, 6.6, 6.11, 6.12. 6.13 and 6.14 of this SAMP into actions. They will detail intervention levels, hierarchies, critical assets, risk management, decision-making methodologies, standards and criteria on how tasks will be prioritised. They will look to optimise the City's activities to ensure services are being provided in the most cost-effective manner.

Figure 12 illustrates the relationship between the Asset Management Plan, Community Infrastructure Plan and proposed Lifecycle Management Plans which will be broken down into separate asset classes and activities of operations, maintenance and capital investment. The financial implications of public building and spaces infrastructure constructed as part of the Community Infrastructure Plan are considered in the financial forecasts and financial summary process in the Asset Management Plan. The Community Infrastructure Plan also deals with the asset management areas of future demand for infrastructure and associated risk management.





Figure 12 Proposed Asset Management Plan Integration



6.8 Management Systems

This practice area looks at aligning the Asset Management System with other Management Systems in the City, for example, the Risk Management Framework with a key goal being to formalise processes and strengthening the organisation.

Next Steps

Key Issue 3 introduced the need for documented processes and methods to be employed in managing assets over their lifecycle and work is already underway to document many of the asset management processes along with alignment with other organisational management systems such as risk and financial management. This work will continue as this SAMP is adopted and implemented.

6.9 Information Systems

An asset management information system is essential for managing infrastructure assets and the associated analysis required to support the increasing maturity of asset management practices and the increasing size of the infrastructure networks. The City uses the following information systems for asset management:

- Road Assessment and Maintenance Management (RAMM): a database to record all road information;
- Authority[®]: the City's Enterprise Resource Planning (ERP) system used for all other infrastructure assets; and
- Intramaps; geographical information system (GIS) used to display assets and related attributes spatially.



These systems are enabling the City to achieve a basic level of maturity and while it is the City's desire to achieve an intermediate maturity level, a core target level is considered realistic. Due to legacy processes, the City is unable to implement a number of advanced asset management functions within Authority^{®.} These legacy processes include the City's deviation from vendor recommended or best practice configuration. There are also limitations to the financial modelling and valuation processes within RAMM. For these reasons, a number of additional software applications are used to complete some asset management tasks, for example, financial modelling and financial valuations. However, the systems and additional software and processes in place mean current needs are met so progress through this practice area is prioritised as low.



Strategic Asset Management Plan 2021

Source IPWEA, IIMM 2015

Develop Prioritise

mprovement Plar

Next Steps

Efforts will continue to improve existing processes to improve asset management functionality and this area will be further explored during development of the Asset Data Management Plan and reviewed in the next SAMP review process.

6.10 Service Delivery Mechanisms

The City operates a mixture of in-house and outsourcing delivery. Where services are outsourced, the primary driver is value for money. These arrangements are reviewed periodically and all outsourced activities follow the City's Executive Policy - Purchasing of Goods and Services. Whilst the City is performing at a basic level of maturity, current performance meets present needs and further progress is therefore a low priority.

Next Steps

Effectiveness of

mprovement Plan

Service delivery models will continue to be assessed for value as projects and contracts arise.

6.11 Improvement Planning



Next Steps

Adoption of this SAMP and the routine assessment of asset management practices to identify gaps to drive an Improvement Plan will advance the level of maturity in this area quickly.





6.12 Risk Management

Assessment of risks associated with service delivery from infrastructure assets is undertaken in line with the City's risk management framework. It identifies critical risks that will result in loss or reduction in service from infrastructure assets. Resilient infrastructure is imperative - critical assets must be robust during unanticipated shocks, for example, financial shock to the organisation. The risk assessment process identifies credible risks, the likelihood of the risk event occurring and the consequences should the event occur. It develops a risk rating, evaluates the risk and develops a risk treatment plan for non-acceptable risks.

Next Steps

Measures are already in place to continue to identify critical infrastructure assets and high risks and document their risk management strategies. To progress further, the City needs to explore its resilience level and ensure risk is integrated into all aspects of infrastructure asset management decision-making.



6.13 **Operations and Maintenance Planning**

Operational planning covers the daily activities carried out to keep assets in service and meet the asset management objectives. It includes operations and maintenance activities. Operation activities affect service levels including quality and function through activities such as street sweeping, opening hours, inspections, pest control, tree watering and mowing. Maintenance includes all actions necessary for retaining an asset as near as practicable to its original condition. It includes regular ongoing day-to-day work necessary to keep assets operating, for example, pothole repairs, painting and lighting repairs.



Next Steps

To advance in maturity, strategies to guide development of Operations and Maintenance Plans need to be developed to direct how levels of service will be achieved in the most cost efficient manner. These strategies will guide development of intervention levels, hierarchies, critical assets and risk, decision-making methodologies, standards and criteria on how tasks will be prioritised.

Proposed Operations and Maintenance Strategies:

- 1. Identify very high and high service risks;
- 2. Determine the extent and cause of asset/service failures;
- 3. Explore a range of solutions giving consideration to:
 - o lifecycle costs,
 - o risk,
 - o capability and available treatments;
- 4. Prioritise activities to deliver the defined level of service in the most efficient manner whilst considering risk;
- 5. Aim for higher levels of planned maintenance and less reactive maintenance to provide better customer service and minimise long term costs; and
- 6. Review current practices to identify opportunities for improvement and to ensure best value for resources used.



KEY ISSUE 7: Ensuring operations and maintenance activities are undertaken in the most cost-effective manner.

6.14 Capital Investment - Capital Works Planning

Capital investment activities include acquisition and renewal. Acquisition is the construction of new assets and upgrading of existing assets to increase current capacity. Renewal is major work that does not increase the asset's design capacity but restores, an existing asset to its original or lesser-required service potential. The City aims to prioritise its capital investment in these activities to achieve maximum value.

Capital investment projects can range from a public request for a new barbeque to the need for a new sporting facility. Project sources include strategic objectives, community requests, future demand, statutory requirements, officer inspections, the risk management process and opportunities to lower lifecycle costs through technological advances.



The aim of capital investment strategies is to create a clear, transparent and consistent approach to asset creation, asset upgrade and asset renewal. They provide direction for any Plans dealing with the planning and execution of infrastructure creation, upgrade or renewal. The process for capital investment projects starts with potential projects being identified as a deficiency in a level of service, problem, strategic objective or goal. Once projects are identified as justified against levels of service and strategic objectives they are prioritised across five years and sometimes longer if they form part of a long-term works program. Projects including infrastructure that are identified as part of Team Plans are also prioritised across the five years. All of these proposed projects are entered into the Draft Business Plan.

This Draft Business Plan therefore contains the infrastructure projects identified in the Community Infrastructure Plan and all the capital projects identified from the five year programs and Team Plans. This creates many competing projects and the Business Plan is optimised and prioritised with consideration of:

- Opportunities to minimise cost and disruption by identifying synergies with similar projects;
- Risk to service delivery and levels of service;
- Available physical and financial resources; and
- Grant funding opportunities;

This process ensures capital investment projects in the Business Plan are fully optimised and justified. The cycle of capital project identification, prioritisation and program optimisation is continual as projects are constantly entered into the cycle as assets deteriorate, different objectives are identified, strategic internal and external factors change and opportunities arise.

KEY ISSUE 8: Ensuring acquisition activities are undertaken in the most cost-effective manner.

KEY ISSUE 9: Ensuring renewal activities are undertaken in the most cost-effective manner.





Figure 13 Capital Projects and the Business Plan Process



Next Steps

To advance in maturity, strategies to guide development of Renewal and Acquisition Plans are needed to direct how levels of service will be achieved in the most cost-effective manner. They will guide development of intervention levels, treatment options, decision-making methodologies, standards and criteria on how tasks will be prioritised. The proposed strategies are designed to encourage thought about what has caused the fault, deficiency or need creating more understanding about an appropriate solution. The user is discouraged from simply replacing an asset like for like or upgrading an asset without giving consideration to a range of solutions to resolve the deficiency and identify the most appropriate treatment. For example, the cheapest solution will not always be the most cost-effective over the entire lifecycle of the asset. The approach will ensure that capital investment activities planned and undertaken by the City are justified, cost-effective, consistent and financially sustainable.

6.14.1 Proposed Acquisition Strategies

For asset creation and upgrade projects which sit outside the Community Infrastructure Plan, the aim is for a bottom up approach where needs are identified and a work bank of projects compiled which are then entered into the City's Business Plan, prioritised, then funding allocated until the budget is reached. The program of works identified in the Community Infrastructure Plan is reviewed annually and adopted by Council. Proposed strategies for asset creation and upgrade activities are:

- 1. Plan and schedule projects to deliver the defined levels of service in the most efficient manner;
- 2. Identify service delivery deficiencies, needs, present risk and required timeline for delivery of the new asset or upgrade;
- 3. Identify objectives to rectify the deficiency;
- 4. Explore a wide range of solutions giving consideration to:
 - a. estimated project and lifecycle costs for each option that could address the deficiency;
 - b. risk; and
 - c. appropriate evaluation methodology;
- 5. Select the best option for inclusion in the work bank;
- 6. Prioritise projects in the work bank for inclusion in the Business Plan based on criticality, available resources, integration and opportunities for efficiency savings; and
- 7. Review acquisition strategies and processes to ensure best value is being achieved.





6.14.2 Proposed Renewal Strategies

The aim is for a bottom up approach where needs are identified and a work bank of projects compiled which are then entered into the City's Business Plan, prioritised, then funding allocated until the budget is reached. Deterioration and financial modelling undertaken on robust asset data will guide budgets. Proposed strategies for renewing infrastructure assets are:

- 1. Plan and schedule projects to deliver the defined levels of service in the most efficient manner;
- 2. Identify service delivery deficiencies, present risk and optimum time for renewal activities;
- 3. Determine the extent and cause of asset/service failure;
- 4. Explore a range of solutions giving consideration to:
 - a. estimated project and lifecycle costs,
 - b. risk,
 - c. optimal methods and timing;
- 5. Select the best renewal solution for inclusion in the work bank;
- 6. Prioritise projects in the work bank for inclusion in the Business Plan based on criticality, available resources, integration and opportunities for efficiency savings; and
- 7. Review renewal strategies and processes to ensure best value is being achieved.

6.15 Financial and Funding Strategies

Elements included in effective financial planning are asset lifecycle costs, asset valuation and long term financial forecasts. Lifecycle costing recognises the longer-term operational, maintenance and renewal costs that arise from new assets. For example, a project that upgrades an under used area with high specification assets, increasing its use may result in cleaning activities being undertaken daily rather than weekly. High specification materials will also cost more to renew in the future. Depreciated Replacement Cost is the valuation approach for the City's infrastructure assets, which enables funding streams to be secured for future renewal requirements. Future financial requirements are detailed in the Asset Management Plan. The forecast costs include operations, maintenance, capital investment activity and disposal costs, including those projects identified in the Community Infrastructure Plan and the future financial impacts of new assets created by the City or donated through land development. They are based on 20-year financial forecasts with detailed supporting assumptions and reliability factors. There is currently a high level of confidence in the financial modelling that is being undertaken with consistent figures being produced.





Infrastructure funding mechanisms to fund the City's infrastructure services include:

- User fees and charges;
- Rates;
- Subsidies or grants from Federal and State government;
- Contributions from property developers for infrastructure upgrades required as a result of development;
- Reserves held by the City; and
- Borrowing.

Financial performance is measured in the Asset Management Plan as:



- Asset Renewal Funding Ratio the City's ability to fund its projected asset renewals over the next ten years;
- Medium Term Forecast Costs the City's ability to fund the cost to operate, maintain and renew its assets to the defined level of service over the next ten years.

KEY ISSUE 10: Ensuring appropriate funding is available at the optimum time to manage assets in a cost-effective manner.

Next Steps

It is proposed that, following end of financial year valuations and financial modelling, the Asset Management Plan financial summary be updated with the forecast costs to provide all asset infrastructure services over 10 and 20-year periods and financial performance ratios. In addition, a major review will be undertaken every three years to ensure the City's long term financial planning is aligned with the financial forecasts unless a significant change is identified in the interim. Future asset renewal needs will be based on robust and current information so funds are directed at those asset classes with most need, ensuring all assets are receiving appropriate levels of investment. Improving the accuracy of financial forecasting is inextricably linked with the key issues identified throughout this SAMP.

Strategies the City intends to follow in dealing with funding constraints include:

- Giving priority to asset renewal expenditure over proposals to construct new assets;
- Reviewing levels of service
- Ensuring projects involving new assets are subject to lifecycle costing;



- Ensuring renewal activities are undertaken at optimum time;
- Disposal of assets no longer required;
- Searching out grant funding opportunities; and
- Considering non-asset solutions to demand issues.

6.16 Asset Management Teams

Asset management is decentralised at the City of Rockingham. The assessment of current performance in this practice area reflects Key Issue 4 which identified the need for ensuring people are aware of their contribution to the effectiveness of the asset management system. Delivering effective asset management requires coordination and integration across the entire organisation and with asset management tasks decentralised within the organisation, strong cross-organisation asset management coordination is essential.

Next Steps

Educational and promotional opportunities will be identified to increase awareness of asset management across the organisation. The adoption and implementation of this SAMP will assist in achieving this.



7.0 Current Financial Summary

The total cost to operate, maintain, renew, create, upgrade and dispose of all infrastructure assets to current levels of service is estimated to be **\$586m** over the next ten years. Planned expenditure is currently forecast to be **\$568m**, leaving a financial gap of \$18m over this same period. However, planned expenditure excludes any grant funding streams that may already be in place or planned. Grant funding applicable to the activities covered by this SAMP is estimated to be a minimum of \$15.5m during 2021/2022 - normally it is in the region of \$5m. These figures are based on the current Business Plan adopted in February 2021. This Plan includes a reduction in the value of previously planned projects to upgrade existing and create additional new assets. This reduction was made to accommodate the desire for lower rate increases over the coming years and also account for the impacts of COVID-19. The impact of this level of service reduction will be monitored and investigated as part of both the Asset Management Plan review process and alignment with the financial planning process.

Figure 14 illustrates the breakdown of the forecast costs against the current planned budget, excluding grant funding. Asset management activities are always shown in this format because the first financial priority is to cover operations costs, then maintenance and then renewal costs. In the interests of sustainability, asset creation and asset upgrade should only ever be considered when all other costs can be covered. Therefore, any financial shortfall in planned expenditure will always impact the City's ability to complete asset creation and asset upgrade projects rather than its ability to maintain its existing assets. Currently, future planned expenditure for operations and maintenance activities is considered sufficient to cover increasing costs for both existing and proposed assets. Forecast funding for asset renewals, excluding possible grant funding streams, does not cover all forecast renewal needs and therefore, this impacts the City's ability to fund all new and upgraded infrastructure as desired. The City needs to continue to pursue possible grant funding streams where possible.

Performance Indicators - Sustainable Service Delivery

The two key asset management indicators of sustainable service delivery are the asset renewal-funding ratio and medium term forecast costs.

Asset renewal funding ratio:	88%
Medium term 10-year indicator:	96%

This means the City expects to have 88% of the funds required for the optimal renewal of assets over the next ten years – a financial gap of \$17m in real values. However, this may become a minimal gap when considered with the incoming grant funding streams. The medium term 10-year indicator is showing that 96% of the forecast costs needed to provide infrastructure services will be funded over the next ten years. These results are based on the Business Plan adopted in February 2021. The City remains in a strong and sustainable financial position over the long-term recognising that this reflects a lower level of service in terms of asset upgrade and asset creation. However, this has the potential to increase when considered with grant funding opportunities and adoption of the optimised capital investment processes within this SAMP.



However, it must be noted that a number of assumptions are made when preparing forecasts of required and planned expenditures. The information upon which these projections are made are more reliable for the first five years because it is easier to predict the deterioration of assets over the shorter term. The requirements and planned expenditures used for years 6 to 10 are based on averages from years 1 to 5. Knowing these assumptions helps create understanding of the levels of confidence in the data behind these financial forecasts and are attached at Appendix C.



Figure 14 Forecast Ten Year Costs



Current Risk

Current forecast budget levels place the City in a strong financially sustainable position. Currently, there is no risk of the City not being able to fund operations, maintenance and renewal activities for its existing asset base. The only risk lies with its ability to fund all desired new infrastructure projects in the long term. There is a risk of over investing in the renewal of some asset classes currently but adoption of this SAMP and the SAMP Improvement Plan will reduce the likelihood of this happening, ensuring funds are diverted to where they are most needed.

Next Steps

Implementation of the SAMP Improvement Plan and strategies will ensure that transparent and consistent processes are in place to ensure that services are delivered to the community in the most cost-effective manner. It will ensure that the costs associated with the levels of service being delivered to the community are understood and that the risks associated with any increases or decreases to these levels are fully understood.





8.0 Improvement Plan

Key issues have been identified throughout this SAMP and are summarised as follows:

- 1. Ensuring services needed by the Community are provided at an appropriate level of service in the most cost-effective way;
- 2. A need for processes to proactively identify potential failures in asset performance and evaluate the need for preventive action;
- 3. A need for documented processes and methods to be employed in managing assets over their lifecycle;
- 4. Ensuring people are aware of their contribution to the effectiveness of the AMS including the benefits of improved asset management performance;
- 5. Ensuring asset data is current and provides a robust foundation for reliable decision-making;
- 6. Ensuring decision-making about infrastructure services and assets is transparent and consistent;
- 7. Ensuring operations and maintenance activities are undertaken in the most cost-effective manner;
- 8. Ensuring acquisition activities are undertaken in the most cost-effective manner;
- 9. Ensuring renewal activities are undertaken in the most cost-effective manner; and
- 10. Ensuring appropriate funding is available at the optimum time to manage assets in a cost-effective manner.

Next Steps

Actions to address all key issues and those practice areas identified for improvement as a medium or high priority in this SAMP have been developed into the following Improvement Plan to ensure the asset management objectives can be achieved. None of the actions has financial implications, all forming part of AMS roles and processes. However, physical and financial resource gaps will likely be identified during development and implementation of the processes, strategies and plans identified below. Project briefs will be prepared for each of the actions and progress will be reported as part of the SAMP review process. Figure 15 illustrates.



Key Issue	Practice Area No.	Asset Management System Action	Responsibility	Timescale
		Annual monitoring and reporting on levels of service performance.	Managers - Asset Services, Parks Services; Engineering Services.	Annually
1	6.2	Further development of provision levels of service, infrastructure quality and standards levels of service, customer and technical levels of service and understanding of the associated cost and performance implications.	Managers - Asset Services, Parks Services; Engineering Services.	2020-2022
2, 7	6.5, 6.8 6.13	Develop Inspection Procedure and Guidelines to ensure defects are identified for appropriate action in a timely manner by qualified personnel and ensuring statutory and duty of care obligations are met.	Coordinator - Strategic Asset Management.	2020-2022
3, 6, 7, 8, 9	6.3, 6.7, 6.8, 6.12, 6.13, 6.14	Develop Lifecycle Management Plans for Operations and Maintenance, Renewal and Capital Investment activities documenting intervention levels, optimal treatments, prioritisation criteria, roles and responsibilities and risk.	Coordinator - Strategic Asset Management, Managers - Asset Services, Parks Services; Engineering Services.	2021-2023
4	6.16	Create a training/awareness program to communicate asset management to relevant stakeholders.	Coordinator – Strategic Asset Management.	2020-2022
5	6.4, 6.8	Develop an Asset Data Management Plan.	Coordinator - Strategic Asset Management.	2020-2022
6	6.6	Incorporate Decision-making Framework into all asset management decision-making and practices.	Managers - Community Infrastructure Planning, Parks Services, Engineering Services, Asset Services.	2020-2021
10	6.15	Undertake annual deterioration and financial modelling.	Coordinator - Strategic Asset Management.	Annually
		Review/align Asset Management financial needs with long term financial planning annually.	Director - Engineering and Parks Services; Director - Corporate Services.	Annually

Figure 15 SAMP Improvement Plan



9.0 Measuring Success

What will be measured?	Asset management maturity and alignment with ISO 55001
When will it be measured?	Every 3 years as part of the SAMP review
Who will it be reported to?	Council
How will it be reported to Council?	As part of the SAMP review process
What will be measured?	Performance against levels of service
When will it be measured?	Annually
Who will be reported to?	Executive
How will it be reported to Executive	Inclusion in the Asset Management Plan
What will be measured?	Financial Performance - asset renewal ratio and medium term costs
When will it be measured?	Annually
When will it be measured? Who will it be reported to?	Annually Council



10.0 SAMP Risk Management

Figure 16 shows the residual risk rating to the City if this SAMP is implemented. All financial risks have the potential for high impact on the City's finances even after risk treatment actions are undertaken but the proposed controls substantially reduce the likelihood of the risk event occurring.

Risk Description	Cause	Initial Risk Rating	Risk Treatment Actions	Residual Risk Rating
	Inability to fund all capital acquisition projects	Extreme	 Develop provision levels of service; Identify grant funding streams; Optimise projects in the Business Plan. 	Medium
	Levels of service set too high	Extreme	 Develop costed levels of service based on robust information; Develop Inspection Procedure and Guideline and Asset Data Management Plan to ensure quality asset register and condition data. 	Medium
	Over or under investment in assets	Extreme	 Monitor asset performance, undertake financial modelling and prioritise funding for assets with most need Develop Inspection Procedure and Guideline and Asset Data Management Plan to ensure quality asset register and condition data. 	Medium
	Operations and maintenance activities not undertaken cost-effectively	High	Develop operations and maintenance lifecycle plans documenting decision-making criteria.	Medium
Unsustainable long term finances	New assets causing increased operations, maintenance and renewal costs.	High	Ensure lifecycle costs are considered in all decision-making	Medium
	Poor decision-making	High	Implement SAMP decision-making framework	Medium
	Poor asset data	High	Develop Inspection Procedure and Guideline and Asset Data Management Plan to ensure quality asset register and condition data	Medium
	Asset needs not aligned with long term financial planning	High	Document financial modelling and future asset financial needs in the Asset Management Plan annually.	Medium
	Renewal activities not undertaken at the optimum time	High	 Develop Capital Investment Lifecycle Management Plans documenting decision-making criteria; Develop Inspection Procedure and Guideline and Asset Data Management Plan to ensure quality asset register and condition data. 	Medium
	Inability to fund all capital renewal and acquisition activities due to reduction in budgets	High	 Develop Capital Investment Lifecycle Management Plan for renewal activities, documenting prioritisation criteria and optimisation methodologies; Seek alternative funding streams where possible; and Prioritise renewal activity needs over asset creation and upgrade. 	Medium
Not reacting	City not delivering levels of service	High	Monitor performance against levels of service	Medium
customer needs	Not understanding customer needs	High	 Develop asset management objectives that align with strategic community objectives; Analyse customer satisfaction survey responses. 	Medium
	Levels of service set too low	Medium	Develop costed levels of service based on robust information	Medium
Personal Injury	Ineffective asset management practices	High	Implementation of this SAMP and associated SAMP Improvement Plan	Medium

Figure 16 Strategic Asset Management Risks



11.0 Stakeholder Engagement

Key Stakeholders Invited to Participate	Contributed/ (Yes/No)	Engagement Method Used
Financial Services	Yes	Internal Discussions / Email
Asset Services	Yes	Internal Discussions / Email
Infrastructure Project Delivery Team	Yes	Email
Community Infrastructure Planning Services	Yes	Internal Discussions / Email
Parks Services	Yes	Internal Discussions / Email
Engineering Services	Yes	Internal Discussions / Email
Land and Development Infrastructure	Yes	Email
Business Systems	Yes	Email
Customer Services	No	Email
Strategic Planning and Environment	Yes	Email
Major Planning Projects	Yes	Email
Strategy, Marketing and Communication	Yes	Email



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Appendix A Existing Strategies and Plans Relevant to Asset Management Planning

Strategic Community Plan	Rockingham Beach Foreshore Master Plan
Economic Development Strategy	Safety Bay/Shoalwater Foreshore Revitilisation Master Plan
Tourist Destination Strategy	Rockingham Strategic Metropolitan Centre - Activity Centre Plan
Rockingham Strategic Metropolitan Centre Public Parking	Heritage Strategy
Seniors Strategy	Sustainability Strategy
Children and Young People Strategy	Coastal Hazard Risk Management and Adaptation Plan
Disability and Access Inclusion Plan	Natural Area Conservation Strategy
Library and Information Services Strategy	Bushfire Risk Mitigation Strategy
Cultural Development and the Arts Strategy	Greening Plan
Health and Wellbeing Strategy	Public Open Space Strategy
Community Safety Strategy	Foreshore Management Plan
Community Infrastructure Plan	Ten Year Integrated Business Plan
Environmental Planning Strategy	Bushland Management Plan
Tamworth Hill Swamp Management Plan 2019	Wetland Management Plan
Lake Richmond Management Plan	Dixon Road Conservation Precinct Management Plan
Karnup Nature Reserve Management Plan	Baldivis Tramway Master Plan
Floodlighting Plan 2020	Asset Management Plan



Appendix B Legislation Impacting Asset Management

Local Government Act 1995; Australian Standards (guidelines); Disability Services Act (1993); Disability Services Regulations (2004); Planning and Development Act 2005; Workplace Health and Safety Act and Regulations 2020; Road Traffic Act 1974; Aboriginal Heritage Act 1972 and Regulations; Western Australian Main Roads Act 1930; Building Code of Australia; Building Act 2011; Road Traffic Code 2000; Land Administration Act 1997; Health (Pesticides) Regulations 1956; Health (Miscellaneous Provisions) Act 1911; Main Open Spaces Act 1930; Open Space Traffic Act 1974; Rights in Water and Irrigation Act 1914; Dividing Fences Act 1961; Wildlife Conservation Act 1950; Environmental Protection Act 1986; Public Health Act 2016.



APPENDIX C List of Financial Assumptions and Clarifications:

1	Renewal requirement figures have been obtained using Moloney financial modelling software and are accurate as at July 2020.
2	Planned capital expenditure for years 2021/2022 onwards was obtained from the adopted December 2020 City of Rockingham Business Plan 2021/2022 to 2030/2031
3	Road pavement value and depreciation is based on revised figures that have not been subject to formal audit.
4	Engineering and Parks Services planned expenditure for year 2020/2021 was obtained from the Engineering and Parks Services (EPS) Project Mix section of the Business Plan prepared for December 2020 and includes carry over of funds from 2019/2020 for capital investment activities.
5	Figures are shown in real values and include an annual increase of 2% to cover growth and inflation.
6	Where planned expenditure is available for 3 or 5 years only, the available figures are averaged and used for the remaining years.
7	For major projects which are a mixture of renewal and new/upgrade activities, the percentage of expenditure which accounts for renewal has been estimated. It should be noted that of the \$19.1m of work scheduled to be undertaken as part of the Aqua Jetty Stage 2 project, \$6.8m will encompass renewal of existing assets.
8	Car park renewal requirements are based on surface needs only as the pavement has a much longer useful life and would not require attention in the next ten years.
9	Synthetic grass in the sports surfaces asset class is modelled only on the surface as it is assumed the concrete base will not require renewal in the next twenty years due to its very long useful life.
10	Renewal modelling for lighting is based on pole condition as this is assumed to be the biggest driver to overall renewal.
11	Customised park shelters are modelled at the average renewal cost as the customised unit rate is considerably higher than the average unit rate and any customised shelters will be replaced with standard shelters in future.
12	Intervention levels for deterioration modelling are set at condition 5 (very poor) when there is generally 2 to 3 years of useful life remaining in the asset.
13	Renewal rates are mostly based on gross replacement costs. Roads are modelled on actual average project costs to account for any necessary kerbing or pavement works. Because they form part of road renewal projects, road pavement and kerbing have not been modelled separately.
14	Planned expenditure includes \$2.3m listed for a new jetty at Waikiki/Warnbro Sound, which is subject to a feasibility study.
16	Planned expenditure excludes design and feasibility studies, coastal protection items, sea dredging, scoping, soft landscaping, public art, revegetation projects, weed control, greening plans, tree planting and traffic management projects, a lighting upgrade which is to be handed over to Western Power and intersection upgrades.
17	Although there is some element of resurfacing undertaken in road upgrades, these have been counted as upgrade projects as any resurfacing is not driven by condition but by other needs.

