

Strategic Asset Management Plan

2019-2024



1 Contents

1	Contents	2	7.5	Consolidated Budget	20
2	Introduction	3	7.6	Systems	21
2.1	Our Organisational Structure	4	7.7	Training and Education	22
3	Integrated Strategic Planning	5	7.8	Procedure Review	22
3.1	Background	5	7.9	Business Continuity Plans	22
4	What is Strategic Asset Management	6	7.10	Risk Assessments	22
4.1	Strategic Asset Management Framework	6	7.11	Improvement Plan	23
4.2	How we measure our progress	8	8	Asset Management Plans	24
4.3	Key Performance Indicators	8	9	Road Assets	25
4.4	Level of Service Framework	9	10	Footpath Assets	34
5	Governance	11	11	Drainage Assets	42
5.1	Asset Management Working Groups	12	12	Building Assets	50
6	Demand Management	13	13	Park, Recreation and Open Space Assets	60
6.1	Key Stakeholders	14	14	Airport Assets	72
7	Life Cycle Management	15	15	Waste Assets	79
7.1	Asset Performance and Condition	17	16	Appendices	86
7.2	Asset Valuation	18	16.1	Appendix A – Asset Expenditure Detail	87
7.3	Asset Management Strategies	19	16.2	Appendix B - Important Documents	94
7.4	Financial Strategy	20	16.3	Appendix C – Glossary	95

2 Introduction

The City of Karratha (the City) is located approximately 1,535km north of Perth in the dynamic Pilbara region of Western Australia. The City encompasses a total land area of 15,882 square kilometres and is home to approximately 22,400 residents across the five town sites of Karratha, Dampier, Roebourne, Wickham, Point Samson and the historic village of Cossack.

A graphic will be inserted here showing the town sites of Karratha, Dampier, Roebourne, Wickham, Point Samson and Cossack

The City is home to a number of significant resource companies as well as a higher incidence of service delivery by State and Federal Government authorities. This is particularly evident in the towns of Dampier and Wickham, where the majority of properties are owned by Rio Tinto and its subsidiaries. In addition, the City is home to four industrial ports and contributes approximately \$8.76 billion to the national economy each year. These factors make for a dynamic managerial environment which necessitates the City to work towards preparing clear and concise agreements with various authorities in order to manage assets with joint responsibility in a more structured and uniform way. Significant progress has been made toward the normalisation process via both the transfer of asset ownership to the City or via maintenance and renewal funding arrangements which aid to formally define responsibilities.

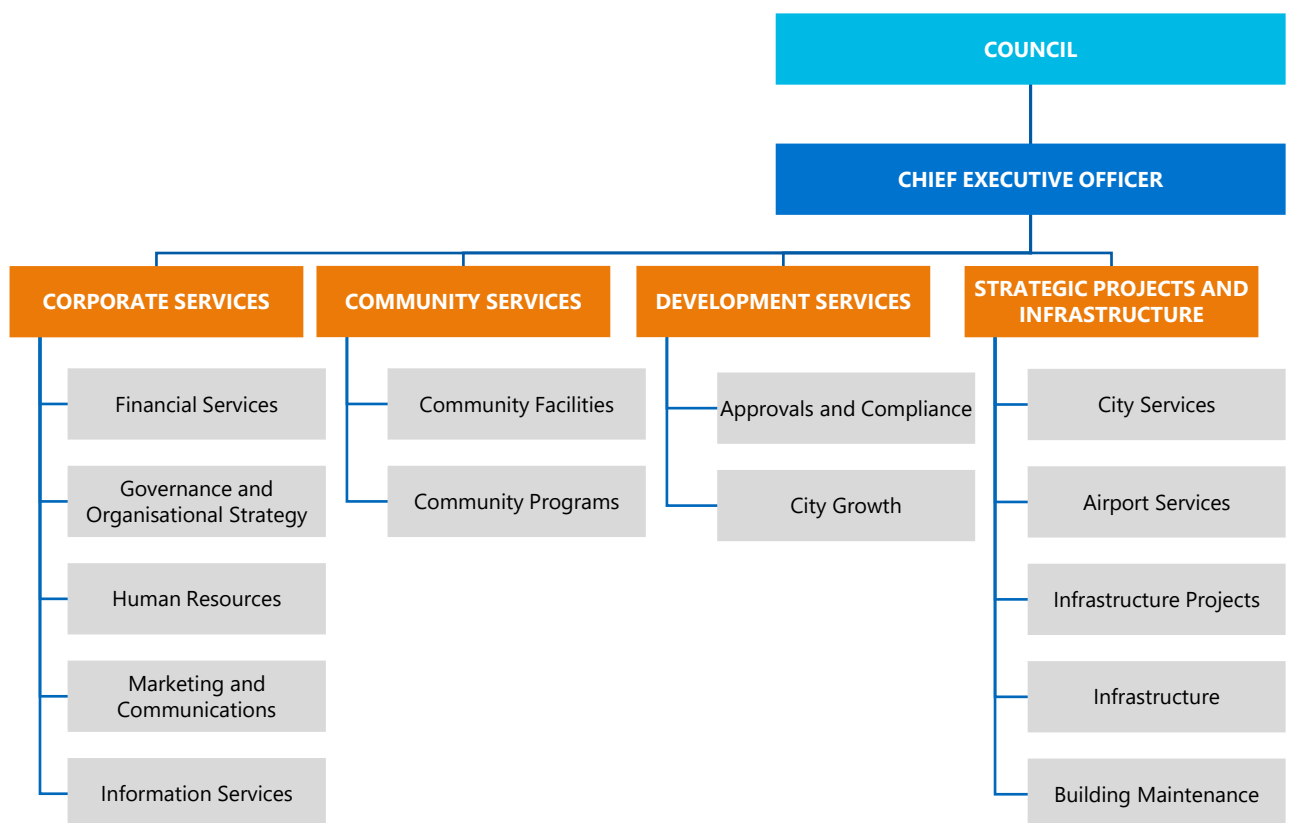
A graphic will be inserted here showing industry in the region

2.1 Our Organisational Structure

The City offers a number of core services essential to providing support and infrastructure to our communities.

Over 290 (FTE) staff are employed by the City of Karratha in varying capacities to deliver services across the City.

Our organisational structure is outlined below.



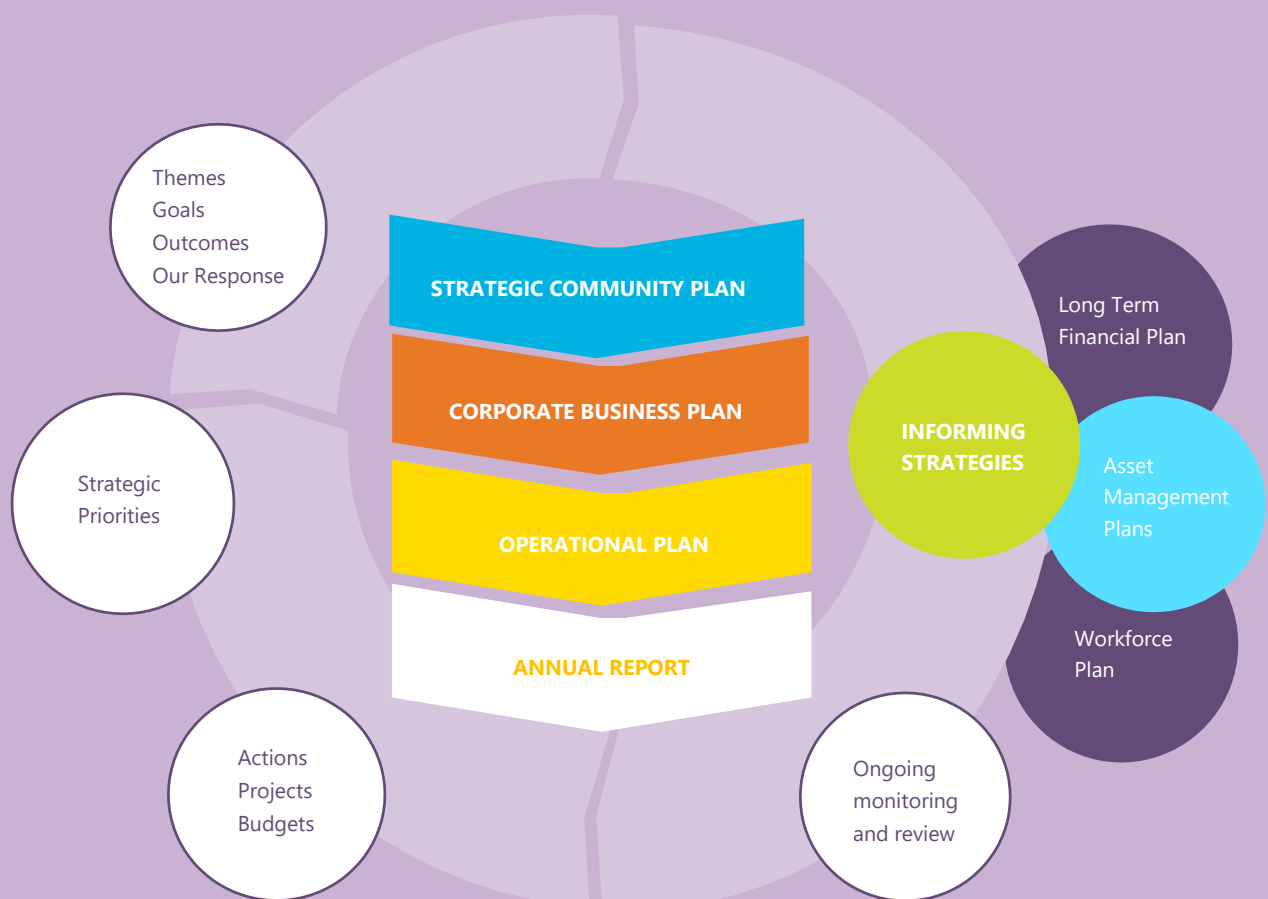
3 Integrated Strategic Planning



3.1 Background

The Strategic Planning Framework outlines the method to achieve a sustainable local government through adopting a holistic approach to planning and reporting.

It involves improving integration of various statutory planning and reporting processes undertaken by the local government through streamlining business and reporting processes with the involvement of the community.



4 What is Strategic Asset Management

Strategic asset management is a framework used to manage local government assets in order to ensure they meet the community's requirements and expectations both now and in the future. This framework consists of a number of documents, systems and processes that address an organisation's asset management responsibilities. These documents, systems and processes are coordinated to translate the organisation's strategic goals, as identified in the Strategic Community Plan, into day-to-day activities.

The City has recognised that asset planning is an important organisational responsibility and has undertaken efforts to improve its asset management practices and processes. This will be achieved by utilising the asset management framework.

4.1 Strategic Asset Management Framework

The figure below depicts the hierarchy of the asset management framework. It shows the Organisational Strategic Plan visions, goals and objectives driving the asset management directives for the organisation.



The Organisational Strategic Plan in the City of Karratha's case is the Strategic Community Plan 2016-2026 (SCP) and the Corporate Business Plan 2016-2021 (CBP). Asset management planning commences by identifying the community needs and expectations and incorporating them into the SCP. The vision, goals and objectives are then incorporated into the CBP.

The Asset Management Policy outlines the principles for undertaking asset management across the organisation in a structured and coordinated way. It provides direction to the appropriate focus and level of asset management practice undertaken by the City.

This Strategic Asset Management Plan is used to:

- Translate our City's strategic objectives from the SCP into asset management objectives;
- Implement the framework as set out in our Asset Management Policy and explain how the various planning, operational and financial documents are linked;
- Provide direction for the individual Asset Management Plans and programs of work to achieve the asset management objectives;
- Define the level of service to be provided to the community by each asset class;
- Define the roles and responsibilities for asset management;
- Inform what asset management information systems and processes are used by the City; and
- Highlight financial constraints the City must take into consideration when managing assets.

The specific City of Karratha strategic outcomes that require good asset management planning and level of service focus are highlighted below. These outcomes will be addressed further in the level of service drivers for each asset class.

Theme	Goal	Outcome (Asset LOS drivers)
Our Community <i>Diverse & Balanced</i>	To create safe, healthy and liveable communities	1.a Quality Community Facilities
Our Economy <i>Well Managed and Diversified</i>	To attract diverse and sustainable business and employment opportunities	2.c Good Infrastructure to support business investment
Our Natural and Built Environment <i>Thriving and Sustainable</i>	To protect our natural and built environment	3.a Appropriately managed natural assets 3.b Greater energy efficiency 3.c Improved recycling and waste management 3.d Sustainable use and management of resources
Our Leadership <i>Responsive & Accountable</i>	To provide accessible, transparent and responsive leadership	4.c Financial sustainability 4.e Services that meet community needs

4.2 How we measure our progress

Each year Council produces an annual report which provides an assessment of the City's performance during the past financial year through four strategic pillars: Our Community, Our Economy, Our Natural and Built Environment, and Our Leadership.

The indicators described below contribute to an overall assessment of the City's performance and progress towards achieving the City's vision to become Australia's most liveable regional city.

Plan	What is Measured	Reporting Method
Strategic Community Plan		
Strategic Indicators	Outcomes - progress towards achieving target outcomes	Community progress report
Corporate Business Plan		
Program indicators	Outcomes - progress towards achieving strategic indicators Performance - delivery of program activities and implementation of priorities	Annual Report Periodic reporting to Council
Operational Plan		
Service indicators	Performance - delivery of identified services and projects for each program	Periodic reporting to Council

4.3 Key Performance Indicators

The performance of infrastructure assets is measured in comparison with desired levels of service. This includes community satisfaction surveys, customer action requests, level of service manuals and safety and legal requirements.

In addition to levels of service, performance is also measured using the Key Performance Indicators (KPIs) provided in the asset management guidelines for Western Australian local governments to measure and report on overall asset management sustainability. The KPI's include three asset sustainability ratios to measure the asset management efforts of the local government. Recent results for these ratios are detailed below.

Financial Management Performance Indicators	Target	Actual as at 30 June 2019
Asset consumption ratio <i>Shows the written down value of assets relative to their "as new" value</i>	50% - basic standard	81%
Asset sustainability ratio <i>Measures the extent to which assets are being replaced as they reach the end of their useful life</i>	90% - basic standard	91%
Asset renewal funding ratio <i>Indicates if Council has capacity to fund asset renewal as required and continue to provide existing service levels</i>	75% - basic level	100%

4.4 Level of Service Framework

The Asset Management Plan for each asset class defines the level of service the City plans to deliver to the community from that asset. The aim of this Strategic Asset Management Plan is to move the City towards a service-centric asset management approach rather than an asset-centric approach. This means the existence of assets should not determine service provision, rather assets should be provided to meet service needs. Examples of services currently provided by City assets are:

- Roads and footpaths meet transport and access needs;
- Public buildings provide for cultural, community and civic purposes;
- Staff housing facilities provide for clean, safe, ambient and sanitised habitation for staff members;
- Leisure facilities provide for recreational and health outcomes;
- Parks and open spaces provide active recreational opportunities and enhance community life;
- Underground drainage provides storm water access, public safety, health and the protection of property damage; and
- Waste assets provide sanitary and health benefits.

Levels of service must be monitored to assess the service performance. To provide a base framework for level of service for this Strategic Asset Management Plan, three level of service performance measures have been established:

- **Reliability/Safety:** Assets should be reliable and safe. Council's customers will require assets that can be relied upon to deliver the services. Where available, the operational service standards have been utilised to define the level of service outcomes.
- **Quality:** Quality relates to the type of the asset and the extent to which it is fit for purpose rather than its condition. An asset may be poor in quality yet have a condition that is described as good.
- **Capacity:** Assets must have the capacity to meet the needs of the current and future populations.

Level of service can also be divided into and measured by three aspects:

- Customer levels of service – measured by how the customer experiences the service
- Technical levels of service – measured by technical condition inspections and renewal programs
- Operational levels of service – measured by operational/maintenance programs and maintenance response times

Concept	Definition	Examples
Service attributes	What the asset is intended to provide to the community. The aspects or characteristics of a service.	Reliability/Safety – Safe and reliable to deliver the service required Quality – condition is acceptable or fit for the purpose it is providing Capacity – meets the demand needs of the current and future community
Levels of service	What the City intends to deliver Levels of Service describe attributes of the service from the customer point of view	Provision of high quality housing Provision of quality sporting and recreation facilities that are safe, functional and appealing to customers
Customer performance measures	How the customer receives or experiences the service These focus on the customer expectations of the service and can be both tangible (such as appearance and frequency of service), or intangible such as ease of use. Customer levels of service should be developed in consultation with the community.	Tangible measures Appearance of facilities; frequency of disruptions; incidence of illness Intangible measures City staff attitude; ease of dealing with the City
Technical performance measures	What the City does to deliver the service These measures support customer measures and tend to be used internally to measure performance against service levels. These focus on the how the organisation delivers the service and tend to relate to actions undertaken by the Council. These also include the technical condition of the assets and risk assessment of the assets.	Condition audits Assessment of asset useful lives Renewal/replacement programs Safety audits/risk assessments
Operational performance measures	These focus on how the organisation manages day-to-day operational activities for asset maintenance. These include operational Levels of Service for inspection and maintenance regimes.	Frequency public toilets are cleaned; average wait time for building repairs

5 Governance

Key stakeholders in the support, promotion and administration of contemporary asset management practices within the City are included in the following table:

Stakeholder	Role
Councillors	<ul style="list-style-type: none"> • Represent needs of community
Executive Management Team	<ul style="list-style-type: none"> • Oversee the development of asset management plans and strategies • Facilitate community involvement in asset management • Allocate resources to meet the organisation's objectives in providing services while managing risks • Ensure organisation is financially sustainable
Manager Financial Services/CFO	<ul style="list-style-type: none"> • Oversee the inclusion of accurate financial asset data for financial reporting and the development of asset management plans and future projections • Oversee the implementation of asset management plans and strategies • Providing input to the budget process related to assets in consultation with service managers
Asset Management Coordinator	<ul style="list-style-type: none"> • Implementation and administration of the asset management and predictive modelling systems • Maintaining the asset database and enhancing the asset data quality • Implementing and applying strategic asset management approach that includes whole of life cycle costs for the asset acquisition, renewals and disposals • Implementing corporate guidelines, policies and strategies relating to asset management • Developing and implementing agreed plans and strategies in relation to future asset needs
Manager Governance and Organisational Strategy	<ul style="list-style-type: none"> • Administer and provide guidance regarding asset management compliance requirements
Manager Infrastructure Services/Manager Building Maintenance/Manager Human Resources/Manager Community Facilities	<ul style="list-style-type: none"> • Review and monitor the implementation of asset management • Oversee the optimisation and enhancement of asset management practices to ensure efficient and competent operations • Provide direction and support to deliver the best asset management practice that is in line with strategic planning documents • Oversee the planning and implementation of all reactive and proactive maintenance and operational activities • Provide input for establishing, monitoring and reviewing asset levels of service in order to assist for ongoing development of the asset management plans, policies and guidelines
Manager Information Services	<ul style="list-style-type: none"> • Provide support in the implementation and control of asset management and predictive modelling systems • Providing support in maintaining spatial database (GIS) • Providing technical support and advice in relation to information technology sources, systems and resources to encourage better asset management practices • Provide implementation guidelines and procedures for the use of

Stakeholder	Role
	information technology for asset management
Asset Custodians	<ul style="list-style-type: none"> Plan, deliver and manage the provision of services to the community in line with relevant plans and strategies Provide input to support planning for future services required including the level and standard of the service Managing service user's compliance with relevant regulations Liaising with service users in relation to all aspects of the service Report all issues in relation to asset non compliance

5.1 Asset Management Working Groups

To support its endeavours to meet best practice asset management principles identified in the National Asset Management Framework, the City has established two Asset Management Working Groups.

The membership of these groups currently encompasses:

Strategic Asset Management Working Group	Operational Asset Management Working Group
Asset Management Coordinator	Airport Terminal and Compliance Coordinator
Director Corporate Services	Asset Management Coordinator
Director Strategic Projects and Infrastructure	Building Maintenance Technical Officer
Manager Airport	Business Systems Architect
Manager Building Maintenance	Fleet and Plant Coordinator
Manager City Services	Governance Officer - Procurement
Manager Financial Services/CFO	HR Officer – Payroll & Housing
Manager Human Resources	Management Accountant
Manager Information Services	Operations Coordinator
Manager Infrastructure	Parks and Gardens Coordinator
Manager Community Programs	Parks and Gardens Technical Support Officer
Manager Community Facilities	Recreation Facilities Coordinator
	Technical Services Coordinator
	Technical Services Supervisor - REAP
	Technical Support Officer

5.1.1 Strategic Asset Management Working Group

The overall aim of the Strategic Asset Management Working Group is to provide strategic direction to the organisation and promote better asset management practices within the City. This group has the following activities related to asset management, with membership outlined in the City's Asset Management Policy:

- Define asset management roles and responsibilities within the organisation;

- Show transparency and improve decision-making processes through the collection and use of asset data;
- Review training and development plan for asset management;
- Ensure adequate resources are allocated to asset management to enable achievement of organisation strategic objectives; and
- Promote continual improvement in asset management activities.

5.1.2 Operational Asset Management Working Group

The Operational Asset Management Working Group has been established to provide operational assistance and professional input into the management of assets of which the City is the custodian. The Operational Asset Management Working Group drives the implementation of asset management across the organisation and ensures a team approach.

The Operational Asset Management Working Group seeks to ensure that:

- The principles and standards of best practice asset management are applied appropriately and in a uniform manner;
- Organisational confidence in data quality and subsequent information is built and maintained at an acceptable level; and
- The appropriate professional input is applied to the asset management procedures/practices and documentation.

6 Demand Management

Demand for assets is determined by the frequency and extent to which customers use the assets. Increases or decreases in demand will affect the type, size, and number of assets that will be required in the future. Key factors affecting the overall provision of assets in the City of Karratha are outlined in the following table.

Demand Factor	Present Position	2036 Projection	Impact on Services
Population growth	21,472 residents	27,049 residents	<ul style="list-style-type: none"> • Increased demand on existing infrastructure such as roads • Increased demand for community facilities and services • Larger local government presence required to provide services impacting on service delivery assets such as council offices and operations centers
FIFO workforce	4000-5000	Stable or reducing	<ul style="list-style-type: none"> • Reducing or stable impact as projects come online and move into operational phase however decrease in airport revenue and FIFO work camp rate revenue

Demand Factor	Present Position	2036 Projection	Impact on Services
Construction workforce	1000-2000	Stable or reducing	<ul style="list-style-type: none"> Reducing or stable impact as projects come online and move into operational phase however decrease in airport revenue and FIFO work camp rate revenue
Industry development (major mining, inland and offshore oil and gas, and infrastructure projects)	<ul style="list-style-type: none"> Carnarvon Offshore Basin - Barrow Island - Gorgon Project Pilbara - Burrup Industrial Estate Site D - Burrup Nitrates 	<ul style="list-style-type: none"> Scarborough Field – Woodside Oil & Gas expansion Browse Basin – Woodside Oil & Gas pipeline construction Barrow Island - Gorgon Project expansion Port & Rail project – Balla Balla Iron Ore South Flank Iron Ore – BHP project 	<ul style="list-style-type: none"> Increase in network infrastructure to support growth, particularly road and waste management infrastructure
Main Roads/Other Transport Channels	Traffic volumes on Dampier Road and Burrup Peninsula Road at 9,000-10,000 vehicles a day	Traffic volumes on Dampier Road and Burrup Peninsula Road at 30,000-35,000 vehicles a day	<ul style="list-style-type: none"> Increasing demand on road network due to growth in resource, commercial and industrial sector

Source: Id Consulting Projection 2017 (City of Karratha), REMPLAN

6.1 Key Stakeholders

There are a number of key stakeholder groups with an interest in how the City operates and maintains its asset portfolio. Consultation with and consideration of these groups is ongoing in the planning and daily management pertaining to the City's assets and includes:

- Department of Local Government, Sport and Cultural Industries;
- Main Roads Western Australia;
- Department of Transport;
- Airservices Australia;
- Domestic airlines;
- Department of Water Environment and Regulation;
- Department of Health;
- Department of Commerce;
- Department of State Development;
- Local residents;
- Local businesses;
- Ratepayers;
- Employees;
- Industry including, mining, oil and gas, transport and processing;
- Contractors;
- Visitors; and
- Tourists

7 Life Cycle Management

Life cycle management refers to the management and operation of assets throughout all stages of an asset's useful life; acquisition, maintenance, renewal and disposal.

The objectives of life cycle management are to:

- Establish the total cost of an asset over its useful life;
- Establish a sound basis on which asset management decisions are made;
- Plan for the impact of refurbishment, maintenance and renewals; and
- Increase the service delivery capacity for the asset.

The achievement of efficient life cycle management is dependent on the knowledge base the City has regarding its assets. The knowledge base can be described in the table below:

Parameter	Description																								
Asset data and identification	<ul style="list-style-type: none">• Data used to identify, describe, and locate each asset• Data also defines each asset in terms of its position in the asset hierarchy• Fields may include asset number, description, GIS location, asset class• Data to assist in identifying each asset from other assets• Fields may include size, length, location, construction material																								
Condition data	<ul style="list-style-type: none">• Asset condition reflects the physical state of the asset, which is different from asset performance that measures whether the asset is delivering the level of service requirements• Knowledge of asset condition assists:<ul style="list-style-type: none">- Mitigating the risk of asset failure;- Avoiding unplanned outages;- Allowing for pre-emptive remediation which is often more cost effective than reactive maintenance;- Predicting renewal and replacement expenditure requirements; and- Providing opportunities to extend the asset life through effective proactive management. <p>A standard five point condition rating scale is proposed and in use for some assets, with the remainder of assets to be transitioned to this scale. Assets with multiple components or defects are given an overall condition score based on the below methodology:</p> <table><tr><th>Condition</th><th>Condition Rating</th><th>Risk Level</th><th>Maintenance Cost</th></tr><tr><td>1</td><td>Excellent</td><td>Lowest</td><td>Negligible</td></tr><tr><td>2</td><td>High</td><td>Low</td><td>Low</td></tr><tr><td>3</td><td>Acceptable</td><td>Medium</td><td>Medium</td></tr><tr><td>4</td><td>Low</td><td>High</td><td>High</td></tr><tr><td>5</td><td>Not fit for purpose</td><td>Highest</td><td>Very High</td></tr></table>	Condition	Condition Rating	Risk Level	Maintenance Cost	1	Excellent	Lowest	Negligible	2	High	Low	Low	3	Acceptable	Medium	Medium	4	Low	High	High	5	Not fit for purpose	Highest	Very High
Condition	Condition Rating	Risk Level	Maintenance Cost																						
1	Excellent	Lowest	Negligible																						
2	High	Low	Low																						
3	Acceptable	Medium	Medium																						
4	Low	High	High																						
5	Not fit for purpose	Highest	Very High																						
Valuation data	<ul style="list-style-type: none">• WA Local Government financial reporting requires revaluation of asset classes should occur every three to five years on a rolling cycle• Accurate asset data allows the organisation to value the assets, record and track depreciation, and understand asset lives• Fields include construction date, standard asset life, remaining life, replacement value, valuation value, date, and method																								

Parameter	Description
Asset management strategies	<p>Asset management activities to achieve the Level of Service are identified as one of the following work categories:</p> <p>Operations: Operational costs include the running costs associated with utilising the asset in service provision</p> <p>Maintenance: Maintenance is defined as all repairs/maintenance, which are not classified as rehabilitation. Routine maintenance includes the day-to-day work required to keep assets operating at required service levels, and falls into two broad categories:</p> <ul style="list-style-type: none"> Planned (proactive) maintenance: Proactive inspection and maintenance works planned to prevent asset failure (i.e. preventative maintenance) Unplanned (reactive) maintenance: Reactive action to correct asset malfunctions and failures on an as required basis (i.e. emergency repairs). <p>Renewal: Renewal works are defined as being:</p> <ul style="list-style-type: none"> The rehabilitation of existing assets to their original size and capacity; or, The replacement of the entire component of the asset with the equivalent size or capacity; or, The replacement component of capital works on assets, which does not increase the capacity of the assets. <p>New Works: New works are defined as new projects (including land purchase) for assets required to cater for growth or improved levels of service, including:</p> <ul style="list-style-type: none"> Works which create an asset that did not previously exist in any shape or form <p>Upgrades or Expansions: Upgrades or Expansion works are defined as projects for the extension or upgrading of assets required to cater for growth or improved levels of service, including:</p> <ul style="list-style-type: none"> Works which improve an asset beyond its original size or capacity; or Upgrade works which increase the capacity of an asset; or Works designed to produce an improvement in the standard and operation of the asset beyond its original capacity.
Financial Information	<p>The Australian Infrastructure Financial Management Guidelines state that providing services from infrastructure requires funding of the whole of life costs of the assets and consists of the following stages:</p> <ol style="list-style-type: none"> 1. Capital investment in the asset required to provide the service; 2. Ongoing operational and maintenance funding to provide the service at a desired service level; 3. Future capital funding to renew the asset when the Level of Service falls below intervention service levels and continuance of the service is required; and 4. Funding for the demolition or disposal of the asset when the service provided by the asset is no longer required. <p>To meet this, the Council must record and report on the financial expenditure for each of the components identified above. This financial information assists the asset manager in determining optimal asset management strategies, balancing maintenance, renewal, and replacement costs.</p> <p>Asset related expenditure is classified in accordance with Council Policy CF-01 <i>Local Government Accounting Directions</i>.</p>

7.1 Asset Performance and Condition

In order to manage assets effectively, the asset condition must be known. Asset condition reflects the physical state of the asset, which is different from asset performance that measures whether the asset is delivering the level of service requirements. Knowledge of asset condition assists the City in:

- Mitigating the risk of asset failure;
- Avoiding unplanned outages;
- Allowing for pre-emptive remediation which is often more cost effective than reactive maintenance;
- Predicting renewal and replacement expenditure requirements; and
- Providing opportunities to extend the asset life through effective proactive management.

Condition assessment programs should identify which assets require preventative or remedial action through a risk-based assessment, focusing on assets that are critical assets (those with a high consequence if they were to fail) and older assets (which may be more likely to fail). The following standard five-point condition rating scale is currently in use for the majority of assets, with the remainder to implement the five-point rating scale at the next condition assessment. In cases where a variety of components or defects have individual condition ratings, the individual component or defect condition rating will be converted to an overall condition rating on the five-point rating scale.

Condition Score	Condition Rating	Description	Risk Level	Maintenance Cost
1	Excellent	Asset is new or near new with minimal signs of wear or use	Lowest	Negligible
2	High	Asset has limited signs of wear and use that only require routine maintenance	Low	Low
3	Acceptable	Asset has numerous signs of wear and use. While the condition is still acceptable for normal use, minor capital works required to prevent further deterioration	Medium	Medium
4	Low	Asset has considerable signs of wear and use. The condition is impacting on the use of the asset and major capital works are required to return the asset to an acceptable condition	High	High
5	Not fit for purpose	Asset is near the end of its useful life and only provides a severely degraded service. It requires replacement in the near future	Highest	Very High

The City has regular condition and inventory data pick up scheduled for all asset classes in alignment with the valuation process. Proactive asset inspection regimes have been established for buildings and park, recreation and open space asset classes in order to ensure the compliance and determine risk items. Issues outside of these are reported as they are identified by staff or the community.

Following condition assessment regimes, the City would like to adopt as a guide:

- All assets with the condition rating of level 5 and that present the highest risk to the community are dealt within the first 12 months after the engineering asset evaluation with an overall goal will be to avoid assets reaching condition rating level 5 but if they do reach this they should be acted upon within first 12 months;
- Assets with a condition rating level of 4 should be assessed on at least an annual basis with plans put in place to either renew, decommission or transfer the assets as soon as feasible, preferably within the current planning cycle. If the assets should degrade to a condition rating of 5 then they should be acted upon within first 12 months; and
- Assets with a condition rating level of 3 or above a random sampling procedure should be put in place depending on the type of asset and its current condition rating level to monitor the asset degradation.
- For all assets, a predictive modelling for lifecycle costing should be prepared to inform the long-term renewal and maintenance plan based on engineering evaluation and degradation path and aligning it with a budgeting strategy.

Regular and systematic assessment of the condition ratings of assets is essential for the City to move from a reactive to proactive asset management position. It is the City's intent that in future years, condition data will, in collaboration with community consultation, support the formulation of an asset renewal program, taking into account potential synergies relating to scheduling of works.

7.2 Asset Valuation

In accordance with Regulation 17A of the *Local Government (Financial Management) Regulations 1996*, assets are revalued on a three to five year basis, with the most recent revaluation on 30 June 2018. The value of the City's assets as at June 2019 is as follows:

Asset Class	Replacement Value	Accumulated Depreciation	Fair Value
Plant and Equipment	\$7,878,970	\$0	\$7,878,970
Land	\$12,335,317	\$0	\$12,335,317
Building	\$258,590,259	\$38,298,395	\$220,291,864
Road	\$265,128,695	\$40,420,628	\$224,708,066
Footpath	\$52,605,147	\$13,323,031	\$39,282,116
Drainage	\$22,477,630	\$4,539,912	\$17,937,718
Park, Recreation and Open Space	\$63,464,022	\$17,178,298	\$46,285,723
Airport	\$126,521,667	\$26,885,555	\$99,636,113
Waste	\$16,521,608	\$5,206,219	\$11,315,390
Artwork	\$1,898,021	\$37,435	\$1,860,586
Total	\$827,421,337	\$145,889,473	\$681,531,864

NB: These balances remain subject to final year-end adjustments and audit.

The City utilises a combination of internal and external valuations on a fair value basis in accordance with the guidelines provided by the Department of Local Government. As part of this process, a valuation of all asset classes and subclasses is undertaken through:

- Establishing a precise list of the assets owned and operated by the City;
- Establishing the condition ratings of the assets;
- Providing a fair value for each of the assets in addition to establishing the remaining life, replacement cost and depreciation for each asset; and
- Providing key inputs for the calculation of the key performance indicators Asset Consumption Ratio (ACR), Asset Sustainability Ratio (ASR) and Asset Renewal Funding Ratio (ARFR) as dictated by the Advisory Standard.

7.3 Asset Management Strategies

Asset management activities to achieve the level of service are identified as one of the following work categories:

- Operations;
- Maintenance;
- Renewal; and
- New works.

Operations: Operational costs include the running costs associated with utilising the asset in service provision, and exclude depreciation and finance charges, which are associated with the funding of the asset rather than its operation.

Maintenance: Maintenance is defined as repairs or maintenance, which are not classified as rehabilitation. Routine maintenance includes the day-to-day work required to keep assets operating at required service levels, and falls into two broad categories:

- Proactive (planned) maintenance: Proactive inspection and maintenance works planned to prevent asset failure (i.e. preventative maintenance).
- Reactive (unplanned) maintenance: Reactive action to correct asset malfunctions and failures on an as required basis (i.e. emergency repairs).

A key element of advanced asset management planning is determining the most cost-effective mix of planned and unplanned maintenance. Ideally, the maintenance plan should identify the maintenance approach (e.g. servicing, compliance based, frequency based, condition based, risk based, and opportunist) for each asset defining the timeframes for the maintenance.

Planned maintenance regimes have been established for buildings as well as park, recreation and open space asset classes. Where the City does not have a planned maintenance regime for the asset class, the works are primarily carried out on a reactive basis. The City's asset management system records maintenance activities but at this point does not capture costs for all maintenance activities.

Renewal: Renewal works are defined as being:

- The rehabilitation of existing assets to their original size and capacity; or,
- The replacement of the entire component of the asset with the equivalent size or capacity; or,
- The replacement of the entire component of the asset with the modern equivalent where standards have changed since initial construction; or,
- The replacement component of capital works on assets, which does not increase the capacity of the assets.

Rehabilitation/renewal activities are carried out to extend the economic life of an asset. Therefore, the asset net book value will increase and the condition of the asset is readjusted. Asset rehabilitation should be carried out at the appropriate time as delays beyond optimal renewal timeframes have the potential to cause rapid deterioration and considerably increase the cost of rehabilitation.

New works: New works are defined as new projects (including land purchase) for assets required to cater for growth or improved levels of service, including:

- Works which create an asset that did not previously exist in any shape or form

Upgrades or expansions: Upgrades or expansion works are defined as projects for the extension or upgrading of assets required to cater for growth or improved levels of service, including:

- Works which improve an asset beyond its original size or capacity; or
- Upgrade works which increase the capacity of an asset; or
- Works designed to produce an improvement in the standard and operation of the asset beyond its original capacity.

7.4 Financial Strategy

The operating and maintenance cost is incorporated into the cost centre for the activity that uses the asset to deliver the service, which is the usual practice amongst local governments. Maintenance budgeting is forecast utilising the works management module of the asset management system as well as partially on the basis of historical cost and staff estimates for those assets.

7.5 Consolidated Budget

The City's budget process is consistent with the Integrated Planning Guidelines.

- Council sets long-term priorities in the Strategic Community Plan and short-term priorities annually based on progress towards the long-term priorities.
- The programs and service levels within each priority will be fully resourced with assets, staff (full time equivalents) and ancillaries.

- The costs for each program will then be able to be calculated explicitly by each directorate with depreciation, finance costs, operational expenditure and overhead costs.
- The costs for each program will be aggregated by the executive management team and compared to forecast revenue streams to produce a long-term financial plan and gap analysis.
- If there is a shortfall in revenue that creates an unsustainable financial position, the programs and priorities will be transparently ranked and put on hold unless suitable funding can be found. Deficits will only be acceptable as long as the debt financial sustainability indicators remain within acceptable levels.
- The budget will then be derived from the long-term financial plan for that year with deficits and surpluses measured against the plan's predictions.

7.6 Systems

The City maintains its asset and financial data across two systems, Assetic's MyData and IT Vision's SynergySoft. Asset data includes information such as asset location, condition, attributes and value. Both asset and financial data for the following assets are held and maintained in the City's primary Asset Management System, MyData:

- Infrastructure
- Land and Buildings
- Artwork
- Fleet (Fleet Management data only)

Asset and financial data for the plant, furniture and equipment assets are held and maintained in the City's primary financial management system, SynergySoft.

While spatial data pertaining to assets was also previously contained within MyData, this data was not updated on a regular basis, resulting in obsolete data being retained. As part of the 2018 condition rating and valuation exercise, spatial data pertaining to infrastructure assets was validated migrated to the City's current GIS system, Intramaps, permitting future use to support asset identification for renewal and maintenance purposes.

The City has recently commenced the process of updating its asset management system, with a high level of consideration given to features that would facilitate an increased level of data collection processes. This included the inclusion of a mobile application for use by in-field maintenance and assessment personnel. The availability of current condition data will support the City's ability to improve its asset management maturity through the use of forward planning analysis tools.

7.7 Training and Education

The City has high levels of training and education for its staff. There is currently a dedicated budget set aside for training. Training and education opportunities are provided to the staff as and when required, enabling the upskilling, training and education of staff in order to perform their duties to the full of their ability.

With the move to a new asset management system, a significant investment into the training of a wider range of staff in the use of the new software is being made to support the City's endeavours to improve its asset management maturity.

7.8 Procedure Review

The City is currently in a process to undertake regular process reviews and is implementing an annual planning cycle for the Corporate Business Plan and the supporting Strategic Asset Management Plan. Regular reviews will take place after the City's Annual Community Survey to monitor the performance of the Strategic Asset Management Plan. This timetable is compliant with the Asset Management Framework, Guidelines, and the Advisory Standard for Integrated Planning and Reporting.

7.9 Business Continuity Plans

The City is in the process of reviewing and updating its business continuity plan.

7.10 Risk Assessments

The City undertakes risk assessments of its playgrounds, staff housing, community facilities, and transportation and drainage infrastructure and is working towards recording all the risk assessments in its asset management system.

7.11 Improvement Plan

The City aims to put in place 'best appropriate' asset management strategies and practices. This means that the City will continually develop and improve its knowledge, systems, processes and strategies to ensure it is providing the level of asset management necessary to competently, responsibly and sustainably manage the community's assets now and into the future.

The City's short to medium term goal is to achieve a solid 'competence' level of asset management practice, which is defined as 'core plus' level based on levels of asset management maturity identified in the International Infrastructure Management Manual (IIMM).

The City's medium to longer term goal is to achieve 'advanced' asset management practice in a range of asset management areas including key areas of asset knowledge, strategic asset planning and operations, maintenance and works processes. Key short-term improvement actions from the Asset Management Improvement program are detailed below in Table 8.

Action	Timeframe	Responsible Officers
Review and further develop levels of service	January 2021	Service Managers / Asset Management Working Group
Implementation of regular data collection outside valuation process	January 2021	Service Managers / Asset Management Working Group
Develop condition data assessment manuals	January 2022	AM Coordinator/ Service Managers/ Maintenance Managers
Develop monitoring and reporting process for levels of service	January 2022	Service Managers / Asset Management Working Group
Incorporate technical levels of service into service agreements and maintenance, operational and capital renewal procedures.	January 2022	Service Managers / Asset Management Working Group
Implement processes to support to calculation of ASR at Asset Class level as well as to streamline calculation for Annual Financial Statements	January 2022	Asset Management Coordinator, Management Accountant
Define and document procedures for determining asset replacement and treatment unit rates and store in the system	January 2023	Asset Management Working Group / Manager Infrastructure Services
Revise position descriptions to include clearly defined asset management functions, responsibilities, and skill requirements	January 2023	Executive Management Team

8 Asset Management Plans

Asset Management Plans (AMPs) are long-term plans outlining the asset activities for each service. The IIMM defines an Asset Management Plan as *“a written representation of the intended asset management programs for management of infrastructure assets based on the organisation’s understanding of service level requirements and the network’s capability to meet those requirements”*.

Local governments may choose a single plan that encompasses all the assets under its control, or a series of plans for each asset class or asset group. The City of Karratha has chosen to endorse a Strategic Asset Management Plan that encompasses all of its infrastructure and building assets, and develop separate operational plans for these assets at asset portfolio level. Complex assets such as airports and waste sites will have individual business/master plans developed.

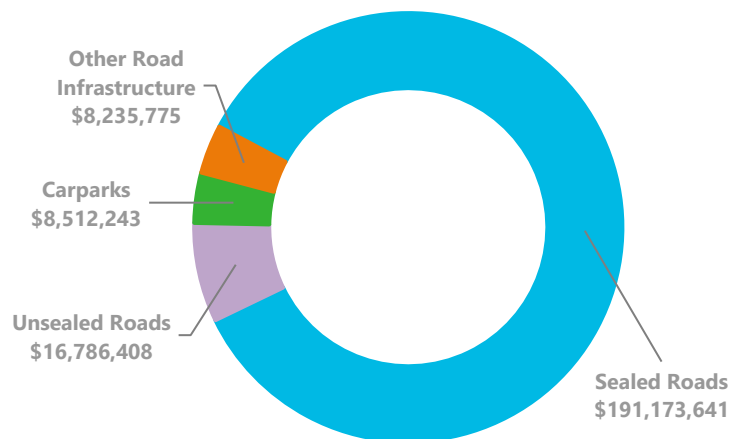
Overall, the intent of this plan is to identify the City’s assets and manage the use of these with reference to levels of service, life cycle costing and risk management.

Assets covered by this plan are as follows:

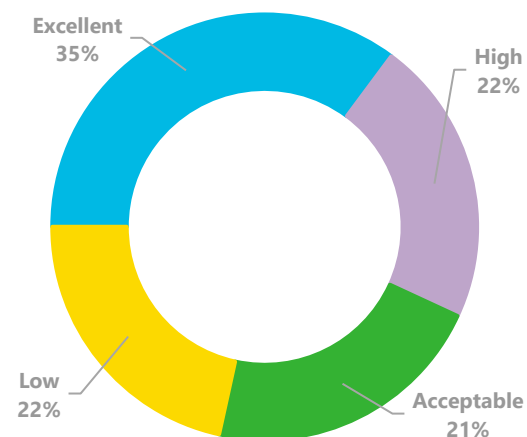
Asset Class	Inclusions
Roads	Sealed and unsealed roads and associated assets such as roundabouts, vehicular bridges, carparks, bus bays, structures, lighting, guardrails and signage
Footpaths	Footpaths and associated assets such as pedestrian bridges, lighting, bollards and handrails
Drainage	Stormwater drainage found within the City’s road reserves, open spaces, carparks and community facilities with the exception of those located at Karratha Airport
Buildings	Building assets that are utilised for the delivery of community services, including facilities for community, recreational, commercial and council operational use
Park, recreation and open space	Wide variety of sport and recreation areas, marine and coastal infrastructure, community parks and playgrounds, town infrastructure and cemeteries
Airport	Assets contained within the airport precinct that are utilised for the delivery of airport services to the region, encompassing civil infrastructure, airport terminal and other buildings, plant, equipment and other infrastructure including utility related assets and airfield lighting
Waste	Assets for waste management including landfill cells, evaporation ponds, site offices, skips, bins and other infrastructure associated with the provision of waste services to the district

9 Road Assets

The City has a road network in excess of **670km** valued at over **\$224m**. It comprises both sealed and unsealed roads as well as carparks, and other road related assets.



At the most recent condition assessment in 2018, **78%** of the City's road assets were rated as acceptable or higher.

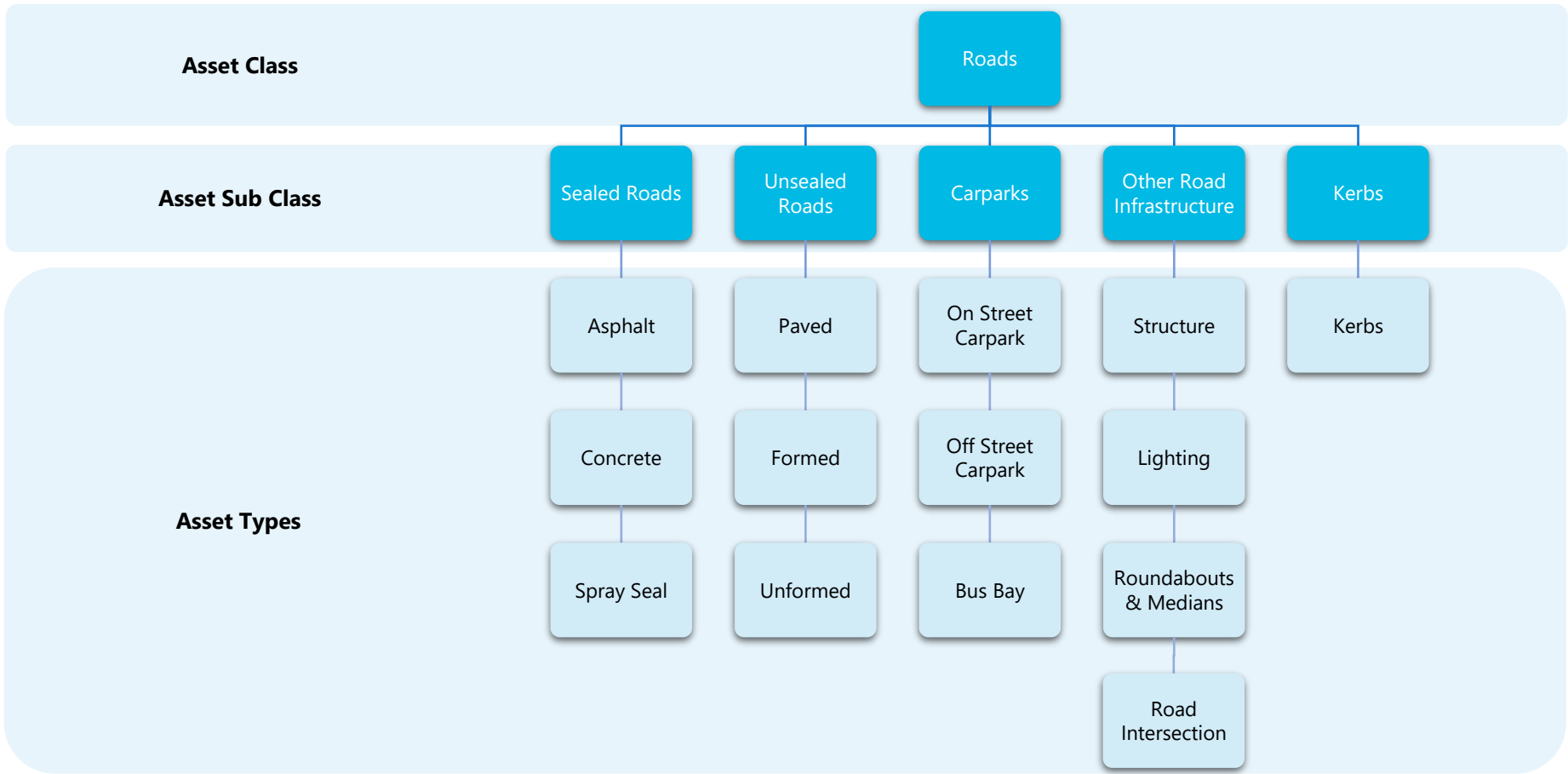


In order to ensure the City's road asset portfolio continues to meet community expectations, the following provides a summary of major expenditure items over the next five years that are included in this plan.



9.1 Asset Classification and Hierarchy

The City’s road assets are classified into groupings by asset types as shown in the figure below.



To assist in the prioritisation of road funding, maintenance and renewal activities, as well as to support the determination of appropriate response times, the City has established an asset hierarchy which is in line with that utilised by Main Roads Western Australia. The following table defines the road hierarchy, its function and significance to the City.

Road Hierarchy	Road Function	Significance
Access Road	Providing access to the property	Low
Local Distributor	Providing access to the property as well as linking other types of roads in the hierarchy (Access Roads, District Distributor B, District Distributor A, Primary Distributor and Private Roads)	High
District Distributor B	Providing access to the property as well as linking other types of roads in the hierarchy (Access Roads, Local Distributor, District Distributor A, Primary Distributor and Private Roads)	Very High
District Distributor A	Providing access to the property as well as linking other types of roads in the hierarchy (Access Roads, Local Distributor, District Distributor B, Primary Distributor and Private Roads)	Very High
Primary Distributor	Main Roads Western Australia roads that connect towns	None
Private Roads	Private property roads and not a City responsibility	None

9.2 Financial Information

9.2.1 Asset Valuation

The last infrastructure asset revaluation occurred in June 2018. The value of the City's road assets as at June 2019 is shown below.

Asset Sub Class	Replacement Value	Accumulated Depreciation	Fair Value	In Year Depreciation
Sealed Roads	\$225,175,790	\$34,002,148	\$191,173,641	\$3,917,256
Unsealed Roads	\$18,664,131	\$1,877,723	\$16,786,408	\$78,577
Carparks	\$10,659,117	\$2,146,874	\$8,512,243	\$180,296
Other Road Infrastructure	\$10,629,658	\$2,393,883	\$8,235,775	\$362,969
Total	\$265,128,695	\$40,420,628	\$224,708,066	\$4,539,097

NB: These balances remain subject to final year-end adjustments and audit.

9.2.2 Expenditure Projections

Renewal expenditure is the cost of the capital works program to restore the condition of the assets to as-new condition in order to sustain the community and technical service levels of the asset class. The following capital works renewal program is based on condition data obtained at the most recent condition assessment and has been planned precisely. New, renewal and maintenance asset works scheduled in the first year have been validated in the field and have been submitted for budget approval. The works renewal programs in years 2–5 are subject to a field validation prior to them being confirmed and submitted for budget approval.

New capital works projects are based on needs identified through community engagement or discussions with industry, community or government partners. The timing on the latter is often subject to funding allocations and agreement negotiation.

The following table indicates current road asset expenditure projections in order to sustain the community and technical service levels of the asset class.

Asset Sub Class	2019/20	2020/21	2021/22	2022/23	2023/24
Sealed Roads	\$2,330,701	\$11,341,484	\$8,036,866	\$861,544	\$903,758
Unsealed Roads	\$431,768	\$559,000	\$731,000	\$559,000	\$731,000
Carparks	\$29,976	\$30,000	\$30,000	\$30,000	\$30,000
Kerbs	\$295,000	\$675,000	\$375,000	\$375,000	\$375,000
Other Road Infrastructure	\$343,300	\$250,000	\$250,000	\$250,000	\$250,000
Total	\$3,430,745	\$12,855,484	\$9,422,866	\$2,075,544	\$2,289,758

Classification	2019/20	2020/21	2021/22	2022/23	2023/24
Renewal	\$2,843,843	\$10,630,484	\$4,197,866	\$1,850,544	\$2,064,758
New	\$411,902	\$2,050,000	\$5,050,000	\$50,000	\$50,000
Maintenance	\$175,000	\$175,000	\$175,000	\$175,000	\$175,000
Total	\$3,430,745	\$12,855,484	\$9,422,866	\$2,075,544	\$2,289,758

Significant expenditure in the 2020-21 and 2021-22 years are attributable to works relating to Murujuga National Park Access Road. This project is being undertaken by the Murujuga Tourism Activation Project Team and at the time of publication of this plan the extent/responsibility of the City was yet to be determined.

Further details of the projects included here are included in Appendix A.

9.2.3 Funding Strategy

Maintenance and capital expenditure on the City's road assets is funded in the first instance using a combination of rates revenue and grant funding. The development, operation and maintenance of the Karratha Airport (and therefore road assets within the airport precinct) are funded via the established Aerodrome Reserve. In addition, Council can elect to fund the enhancement, replacement, refurbishment and purchase of infrastructure assets via Infrastructure Reserve funds.

Where there is overall expenditure that creates an unsustainable financial position, projects will be transparently ranked in order to permit the prioritisation of funding. This may result in the delay of projects. Deficits will only be acceptable as long as financial sustainable indicators remain within acceptable levels.

Funding Source	2019/20	2020/21	2021/22	2022/23	2023/24
General Revenue	\$461,252	\$1,114,528	\$1,485,411	\$453,089	\$667,303
Grants and Subsidies	\$2,101,397	\$5,340,956	\$5,622,455	\$1,122,455	\$1,122,455
Reserve Funds	\$868,096	\$6,400,000	\$2,315,000	\$500,000	\$500,000
Total	\$3,430,745	\$12,855,484	\$9,422,866	\$2,075,544	\$2,089,758

9.3 Asset Performance

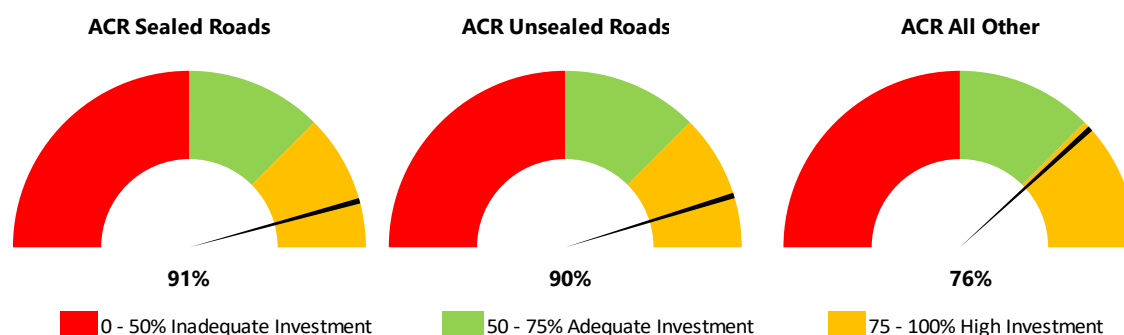
9.3.1 Historic and Current Performance

To understand the condition of the City's road network, it is necessary to break the assets down into manageable elements. While it may be convenient to consider each individual road as a separate asset, there can be too much variance along a single road for this to be practical. Good practice therefore is to break each road into segments.

With many road segments to assess, the City requires a rigorous condition assessment process that is repeatable and reliable. Most importantly, it must allow for comparisons between segments to enable prioritisation of remedial works. These requirements are most efficiently fulfilled using a numerical scoring system. The condition scoring scale used to assess the condition of the City's road assets is a standard five-point condition rating scale as per that detailed earlier in this document. The condition audit process is documented in the *City's Roads and Pathways Condition Audit Collection Manual*.

The most recent condition assessment of the City's road assets was undertaken in alignment with the 2018 valuation process. This condition data shows that per the City's guide, 8% of the road network excluding carparks and kerbs was condition rated at low or not fit for purpose. This information has informed the renewal program included in this plan, with some assets identified as such having been treated in some way since the inspection.

The current Asset Consumption Ratio (ACR) figures indicate a high level of investment for road assets.



9.4 Levels of Service

Currently documented levels of service for road assets are due for review and have been identified as an area for further development to achieve robustness in the asset management process and to head towards a service centric approach.

9.4.1 Customer Levels of Service

Customer levels of service relate to how the community perceives the service in terms of safety, quality, quantity, reliability, responsiveness, cost, efficiency and legislative compliance. These focus on the customer expectations of the service and can be both tangible (such as appearance and frequency of service), or intangible such as ease of use.

Feedback regarding customer levels of service is obtained via community engagement in the form of community surveys and feedback received in the form of customer action requests either directly or via the City's online reporting system, Report It.

The City undertook an Annual Community Survey in March and April 2019. Of the 1430 respondents, 78.2% rated local roads to be a service of high importance, while 73.2% of respondents believed local roads were performing adequately.

Service Attributes	Service Objectives	Performance Measure Process	Current Performance
Reliability/Safety	Road assets provide a reliable and safe method to deliver the service required	Maintain or improve a positive gap between performance and importance in Annual Community Survey for local roads	-5%
Quality	Road assets are in a condition that is acceptable or fit for the purpose it is providing	<i>Per Reliability/Safety</i>	<i>Per Reliability/Safety</i>
Capacity	Road assets have the capacity to meet the needs of the current and future community	<i>Per Reliability/Safety</i>	<i>Per Reliability/Safety</i>

9.4.2 Technical Levels of Service

These measures support customer measures and tend to be used internally to measure performance against service levels. These focus on the how the organisation delivers the service and tend to relate to actions undertaken by the City. These also include the technical condition of the assets and risk assessment of the assets.

Service Attributes	Service Objectives	Activity Measure Process	Current Performance
Operation	Road assets meet user's needs	Inspection of unsealed road network	Safety – 6 monthly all roads Condition - triennially
		Inspection of sealed road network	Condition - triennially
Maintenance	Road assets are suitable for purpose	Reactive service requests completed within adopted time frames	98% of service requests completed within Operational Levels of Service
Renewal	Road assets meet user's needs	Road renewals required are funded in the budget	100% of renewals identified for 2019/20 are included in budget

*Service request performance data is for the 12 months to April 2019

9.4.3 Operational Levels of Service

In addition to triennial condition inspections for all road assets, operational levels of service focus on how the organisation manages day-to-day operational activities for asset maintenance. These include operational levels of service for inspection and maintenance regimes. Further detail of these activities included in the City's *Road Reserve and Associated Infrastructure Levels of Service* document.

Asset	Type	Activity	Detail of task	Frequency			
Sealed Roads	Reactive Inspection	Asset inspections following notification from stakeholders	Assess impact of surface defects on water penetration and/or structural integrity of pavement		District Dist.	Local Dist.	Access Road
				Working days	<3	<5	>7
			Working days	<1			
			Assess impact of surface defects on road safety				
	Reactive Maintenance	Asset maintenance to take remedial action following identification of defect on inspection	Any surface or pavement defect identified as a result of an inspection beyond the levels identified in Operational LOS	Take remedial action within 10 working days of inspection and/or carry out permanent repairs within 30 working days of inspection			
Unsealed Roads	Reactive Inspection	Asset Inspection to determine compliance with approved intervention levels	Assess defects and determine the works requirement to ensure fitness for purpose		District Dist.	Local Dist.	Access Road
				Months	6		
			Working days	<2	<4	<6	
			Assess impact of pavement defects on road safety				
	Reactive Maintenance	Asset maintenance to take remedial action following identification of defect on inspection	Any surface or pavement defect identified as a result of an inspection beyond the levels identified in Operational LOS	Take remedial action within 30 working days of the inspection and/or include in a standard routine of unsealed grading regime			
Kerbing	Reactive Inspection	Asset inspections following notification from stakeholders	Assess impact of kerbing defects on drainage of road or potential for safety hazard		Safety Hazard	Drainage Impact	
				Working days	<1	<20	
	Reactive Maintenance	Asset maintenance to take remedial action following identification of defect on inspection	Any kerb defect identified as a result of an inspection beyond the levels identified in Operational LOS	Take remedial action within 5 working days of inspection and/or carry out permanent repairs within 60 working days of inspection			

9.5 Strategic Analysis

9.5.1 Strategic Outlook

Based on trends outlined in the Strategic Community Plan, it is prudent to consider upcoming challenges and risks that face the management of this asset portfolio.

Trend	Risk	Risk Mitigation and Impacts
Increased population	Increase in vehicular traffic so that pavement loading exceeds design capacity	Comprehensive and appropriate design and construction notes
Declining financial assistance grants	Lower level of funding for road maintenance	Higher degree of prediction modelling input to asset renewal and maintenance programs
Increased operational expenditure	Lower level of funding available for road maintenance	Higher degree of prediction modelling input to asset renewal and maintenance programs

9.5.2 Links to the Strategic Community Plan

Currently documented levels of service for road assets are due for review and have been identified as an area for further development to achieve robustness in the asset management process and to head towards a service centric approach. This review will give consideration to the following goals and objectives identified in the Strategic Community Plan.

Strategic Community Goal	Outcome	Response
To create safe, healthy and liveable communities	Quality community facilities	A full range of city-standard facilities and community infrastructure are provided
		Future facility needs are planned for and developed in line with industry best practice
To protect our natural and built environment	Attractive built environment	Good citizenship and pride in the City is fostered and encouraged

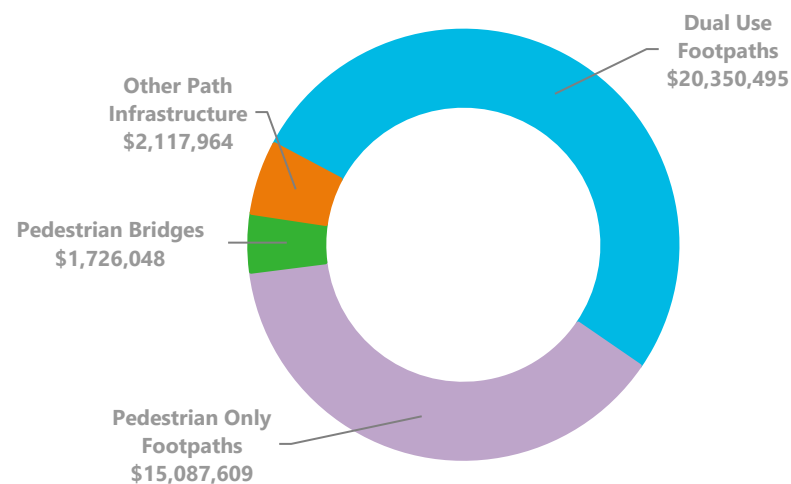
9.5.3 Improvement Plan

A summary of improvement actions in relation to road assets are listed in the following table:

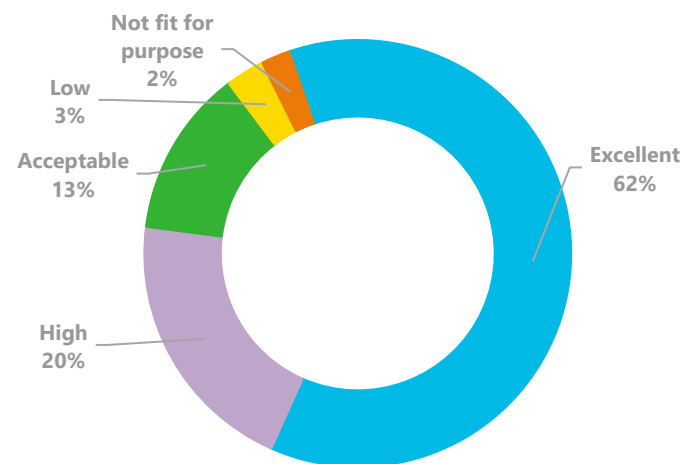
Action	Timeframe	Responsible Officers
Review and further develop levels of service	January 2021	Manager Infrastructure Services, Asset Management Coordinator
Implementation of regular data collection outside valuation process	January 2021	Service Managers / Asset Management Working Group
Implement predictive modelling for road assets to improve forecasting capabilities	January 2021	Asset Management Coordinator, Manager Infrastructure Services
Review all road assets with a condition rating of 5 within the first 12 months of this plan in order to improve service delivery and reduce risk	January 2021	Manager Infrastructure Services, Operations Coordinator
Review all road assets with a condition rating of 4 within the term of this plan in order to improve service delivery and reduce risk	January 2025	Manager Infrastructure Services, Operations Coordinator

10 Footpath Assets

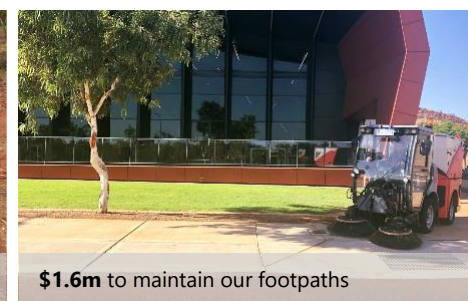
The City has a footpath network in excess of **150km** valued at over **\$39m**. It comprises footpaths and associated assets such as pedestrian bridges, lighting, bollards and handrails.



At the most recent condition assessment in 2018, **95%** of the City's footpaths were rated as acceptable or higher.

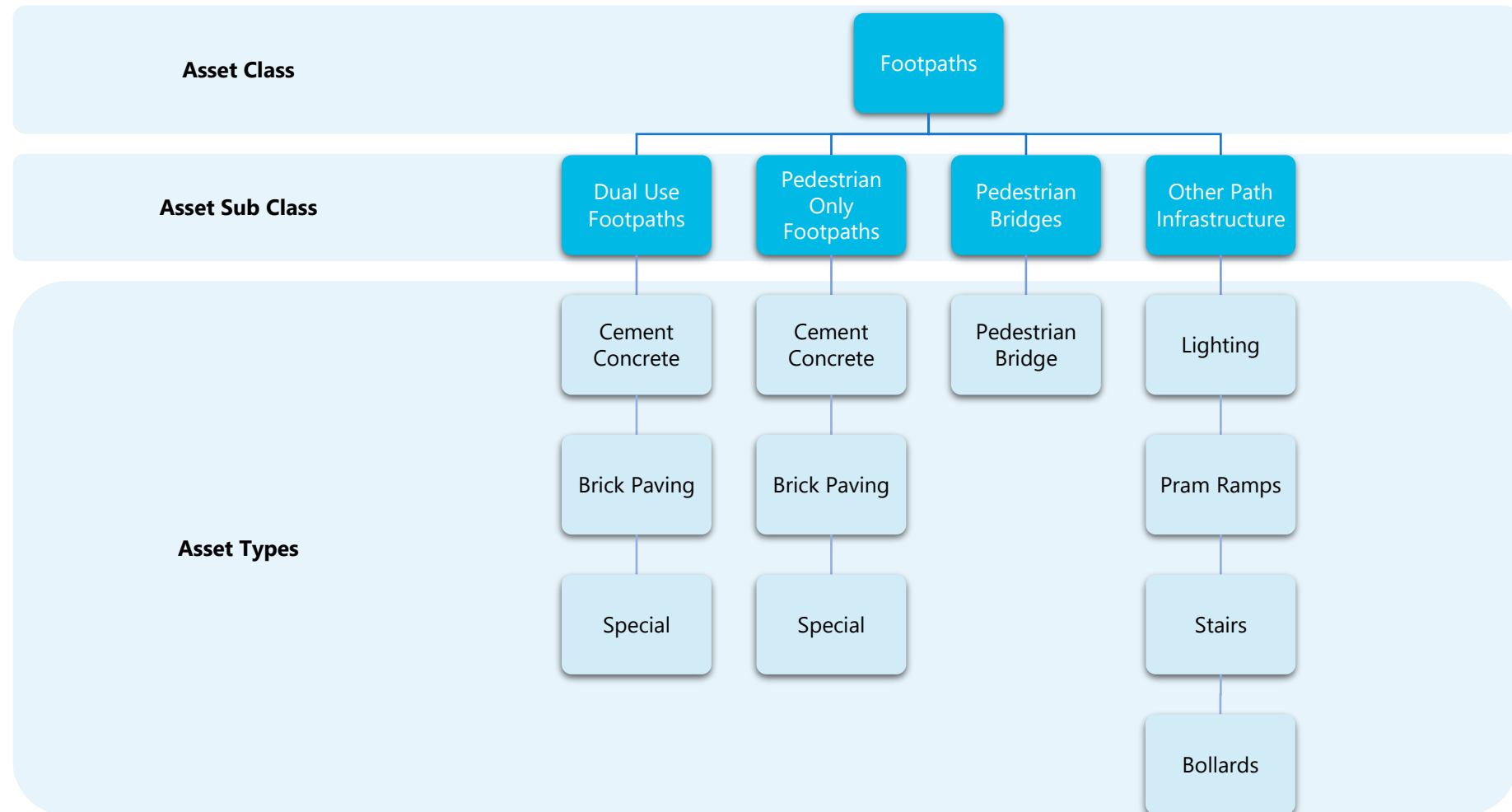


In order to ensure the City's footpath asset portfolio continues to meet community expectations, the following provides a summary of major expenditure items over the next five years that are included in this plan.



10.1 Asset Classification and Hierarchy

The City's footpath assets are classified into groupings by asset types as shown in the figure below.



To assist the prioritisation of footpath funding, response times and decide appropriate maintenance and renewal activities, the City has established a hierarchy in line with Main Roads Western Australia's road hierarchy. The following table defines the footpath hierarchy, which ensures the best path is constructed in the best area for accessibility and pedestrians. A higher level in the footpath hierarchy places a higher priority and therefore a higher level of service when considering work programs and budget allocations.

Footpath Hierarchy	Road Hierarchy	Road Function	Path Width
A) Main	Primary Distributor	The primary road network for the movement of goods and people by motor vehicle. These roads are managed by Main Roads Western Australia and generally have a speed limit of 70km/hour and above	2.5m
B) Sub-Main	District Distributor A	A road that has been identified as being of regional importance for longer distance pedestrian movements. These roads are managed by the Local Government and have a speed limit of 70km/hour	2.5m
C) Link Road	District Distributor B	These roads link to Main and Sub-Main roads and have a speed limit of 60km/hour.	2.0m
D) Inter-Suburb	Local Distributor	These roads connect to Linkages and Neighbourhood roads and have a general speed limit of 50–60km/hour	2.0m
E) Neighbourhood	Local Distributor	These roads connect Inter-Suburb roads and Local streets and have a general speed limit of 50km/hour	1.8m
F) Local	Access Road	Local streets primarily provide access to residences	1.8m

NB: Some roads may cross more than one definition and may require a different speed limit to what is stated – the roads are categorised on the basis of their intended purpose.

10.2 Financial Information

10.2.1 Asset Valuation

The last infrastructure asset revaluation occurred in June 2018. The value of the City's footpath assets as at June 2019 is shown below.

Asset Sub Class	Replacement Value	Accumulated Depreciation	Fair Value	In Year Depreciation
Dual Use Footpaths	\$24,844,803	\$4,494,308	\$20,350,495	\$301,282
Pedestrian Only Footpaths	\$21,483,514	\$6,395,904	\$15,087,609	\$265,844
Pedestrian Bridges	\$3,638,624	\$1,912,576	\$1,726,048	\$58,570
Other Path Infrastructure	\$2,638,206	\$520,243	\$2,117,964	\$115,233
Total	\$52,605,147	\$13,323,031	\$39,282,116	\$740,929

NB: These balances remain subject to final year-end adjustments and audit.

10.2.2 Expenditure Projections

Renewal expenditure is the cost of the capital works program to restore the condition of the assets to as-new condition in order to sustain the community and technical service levels of the asset class. In previous years, footpath renewal expenses have been grouped with maintenance costs as a result of the non-availability of reliable spatial asset data. As a result, the capital works renewal program included in this plan is based on trends in recent financial years as well as specific projects identified by City officers. New, renewal and maintenance asset works scheduled in the first year have been submitted for budget approval.

New capital works projects are based on the City's commitment to increase path infrastructure following the recommendations of *Karratha 2020*, the *City of North Plan* and other future implementation strategies. These commitments are referred to in the *City of Karratha Footpath Strategy* and *Footpath Lighting Strategy* which includes specific locations for future construction.

Classification	2019/20	2020/21	2021/22	2022/23	2023/24
Pedestrian Only Footpaths	\$325,315	\$747,539	\$615,420	\$307,500	\$397,530
Dual Use Footpaths	\$841,800	\$180,000	\$267,450	\$645,920	\$726,267
Pedestrian Bridges	\$0	\$222,000	\$270,000	\$192,000	\$0
Other Path Infrastructure	\$600,000	\$200,000	\$200,000	\$200,000	\$200,000
Total	\$1,767,115	\$1,349,539	\$1,352,870	\$1,345,420	\$1,323,797

Classification	2019/20	2020/21	2021/22	2022/23	2023/24
Renewal	\$217,115	\$125,000	\$125,000	\$125,000	\$125,000
New	\$1,225,000	\$899,539	\$902,870	\$895,420	\$873,797
Maintenance	\$325,000	\$325,000	\$325,000	\$325,000	\$325,000
Total	\$1,767,115	\$1,349,539	\$1,352,870	\$1,345,420	\$1,323,797

Further details of the projects included here are included in Appendix A.

10.2.3 Funding Strategy

Maintenance and capital expenditure on the City's footpath assets is funded in the first instance using a combination of rates revenue and grant funding. In addition, Council can elect to fund the enhancement, replacement, refurbishment and purchase of infrastructure assets via Infrastructure Reserve funds.

Where there is an overall expenditure that creates an unsustainable financial position, projects will be transparently ranked in order to permit the prioritisation of funding. This may result in the delay of projects. Deficits will only be acceptable as long as financial sustainable indicators remain within acceptable levels.

Funding Source	2019/20	2020/21	2021/22	2022/23	2023/24
General Revenue	\$1,178,841	\$1,134,646	\$1,158,078	\$1,118,881	\$1,020,588
Grants & Subsidies	\$213,274	\$214,893	\$194,792	\$226,539	\$303,209
Reserve Funds	\$375,000	\$0	\$0	\$0	\$0
Total	\$1,767,115	\$1,349,539	\$1,352,870	\$1,345,420	\$1,323,797

10.3 Asset Performance

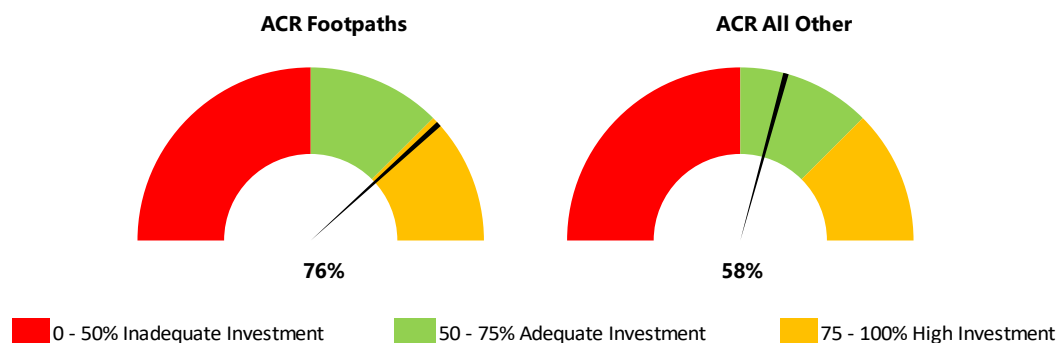
10.3.1 Historic and Current Performance

To understand the condition of the City's footpath network, it is necessary to break the assets down into manageable elements. While it may be convenient to consider each individual footpath as a separate asset, there can be too much variance along a footpath for this to be practical. Good practice therefore is to separate each footpath into segments.

With many segments to assess, the City requires a rigorous condition assessment process that is repeatable and reliable. Most importantly, it must allow for comparisons between segments to enable prioritisation of remedial works. These requirements are most efficiently fulfilled using a numerical scoring system. The condition scoring scale used to assess the condition of the City's footpath assets is a standard five-point condition rating scale as per that detailed earlier in this document. The condition audit process is documented in the City's *Roads and Pathways Condition Audit Collection Manual*.

The most recent condition assessment of the City's footpath assets was undertaken in alignment with the 2018 valuation process. This condition data shows that per the City's guide, 5% of the footpath network was condition rated at low or not fit for purpose.

The current Asset Consumption Ratio (ACR) figures indicate a high level of investment for footpath assets.



10.4 Levels of Service

Currently documented levels of service for footpath assets are due for review and have been identified as an area for further development to achieve robustness in the asset management process and to head towards a service centric approach.

10.4.1 Customer Levels of Service

Customer levels of service relate to how the community perceives the service in terms of safety, quality, quantity, reliability, responsiveness, cost, efficiency and legislative compliance. These focus on the customer expectations of the service and can be both tangible (such as appearance and frequency of service), or intangible such as ease of use.

Feedback regarding customer levels of service is obtained via community engagement in the form of community surveys and feedback received in the form of customer action requests either directly or via the City's online reporting system, Report It.

The City undertook an Annual Community Survey in March and April 2019. Of the 1430 respondents, 72.4% rated footpaths and cycleways to be a service of high importance, while 76.8% believed footpaths and cycleways were performing adequately.

Service Attributes	Service Objectives	Performance Measure Process	Current Performance
Reliability/ Safety	Footpath assets provide a reliable and safe method to deliver the service required	Maintain or improve a positive gap between performance and importance in Annual Community Survey for footpaths and cycleways	4.4%
Quality	Footpath assets are in a condition that is acceptable or fit for the purpose it is providing	<i>Per Reliability/Safety</i>	<i>Per Reliability/Safety</i>
Capacity	Footpath assets have the capacity to meet the needs of the current and future community	<i>Per Reliability/Safety</i>	<i>Per Reliability/Safety</i>

10.4.2 Technical Levels of Service

These measures support customer measures and tend to be used internally to measure performance against service levels. These focus on the how the organisation delivers the service and tend to relate to actions undertaken by the City. These also include the technical condition of the assets and risk assessment of the assets.

Service Attributes	Service Objectives	Activity Measure Process	Current Performance
Operation	Footpath assets meet user's needs	Inspection of footpath network	Condition -triennially
Maintenance	Footpath assets are suitable for purpose	Reactive service requests completed within adopted time frames	98% of service requests completed within Operational Levels of Service
Renewal	Footpath assets meet user's needs	Footpath renewals required are funded in the budget	Funding included in budget for footpath renewal

**Service request performance data is for the 12 months to April 2019*

10.4.3 Operational Levels of Service

In addition to triennial condition inspections for all footpath assets, operational levels of service focus on how the organisation manages day-to-day operational activities for asset maintenance. These include operational levels of service for inspection and maintenance regimes. Further detail of these activities is included in the City's *Road Reserve and Associated Infrastructure Levels of Service* document.

Type	Activity	Detail of task	Frequency
Reactive Inspection	Asset inspections following notification from stakeholders	All footpath defects	Within 2 working days
Reactive Maintenance	Asset maintenance to take remedial action following identification of defect on inspection	Any footpath defect identified as a result of an inspection beyond the levels identified in Operational LOS	Take remedial action and/or undertake temporary repairs within five working days of inspection and/or if permanent works required place on budgeted works program as far as possible

10.5 Strategic Analysis

10.5.1 Strategic Outlook

Based on the trends given in the Strategic Community Plan, it is prudent to consider some of the upcoming challenges and risks that face the management of this asset portfolio.

Trend	Risk	Risk Mitigation and Impacts
Increased Population	Changes in pedestrian traffic requirements so that current path network no longer meets community needs	Continual community engagement to ensure requirements are met
Declining Financial Assistance Grants	Lower level of funding for footpath maintenance	Higher degree of prediction modelling input to asset renewal and maintenance programs
Increased Operational Expenditure	Lower level of funding available for footpath maintenance	Higher degree of prediction modelling input to asset renewal and maintenance programs

10.5.2 Links to the Strategic Community Plan

Currently documented levels of service for footpath assets are due for review and have been identified as an area for further development to achieve robustness in the asset management process and to head towards a service centric approach. This review will give consideration to the following goals and objectives identified in the Strategic Community Plan.

Strategic Community Goal	Outcome	Response
To create safe, healthy and liveable communities	Quality community facilities	A full range of city-standard facilities and community infrastructure are provided Future facility needs are planned for and developed in line with industry best practice
	Improved community safety	High quality environmental design is employed to prevent crime
	Accessible services	Best practice community engagement methods are employed to determine community needs
		Partnerships are established with key stakeholders to deliver services
To protect our natural and built environment	Greater energy efficiency	Energy efficiency of Council assets is continuously improving
		Sustainable energy sources and providers are actively sought and partnered
	Sustainable use and management of resources	Efficiency of electrical usage is continually improving
	Attractive built environment	Good citizenship and pride in the City is fostered and encouraged

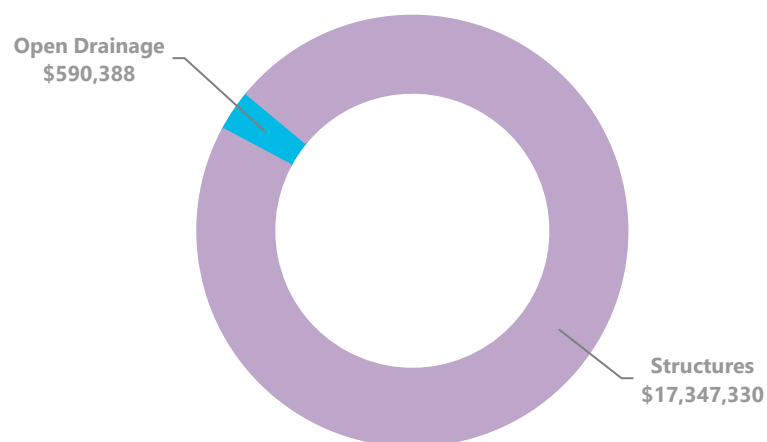
10.5.3 Improvement Plan

A summary of improvement actions in relation to road assets are listed in the following table:

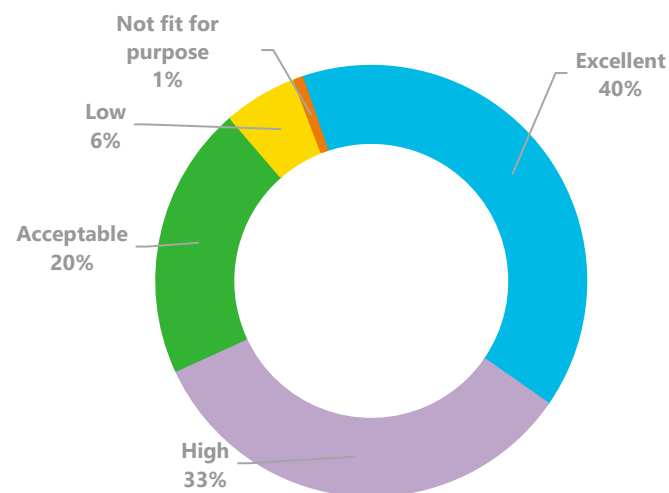
Action	Timeframe	Responsible Officers
Review and further develop levels of service	January 2021	Manager Infrastructure Services, Asset Management Coordinator
Implement predictive modelling for footpath assets to improve forecasting capabilities	January 2021	Asset Management Coordinator, Manager Infrastructure Services
Review all footpath assets with a condition rating of 5 within the first 12 months of this plan in order to improve service delivery and reduce risk	January 2021	Manager Infrastructure Services, Operations Coordinator
Review all footpath assets with a condition rating of 4 within the term of this plan in order to improve service delivery and reduce risk	January 2025	Manager Infrastructure Services, Operations Coordinator

11 Drainage Assets

The City has a drainage network in excess of **15km** valued at over **\$17m**. It comprises stormwater drainage found within the City's road reserves, open spaces, carparks and community facilities.



At the most recent condition assessment in 2018, **93%** of the City's drainage structures were rated as acceptable or higher.

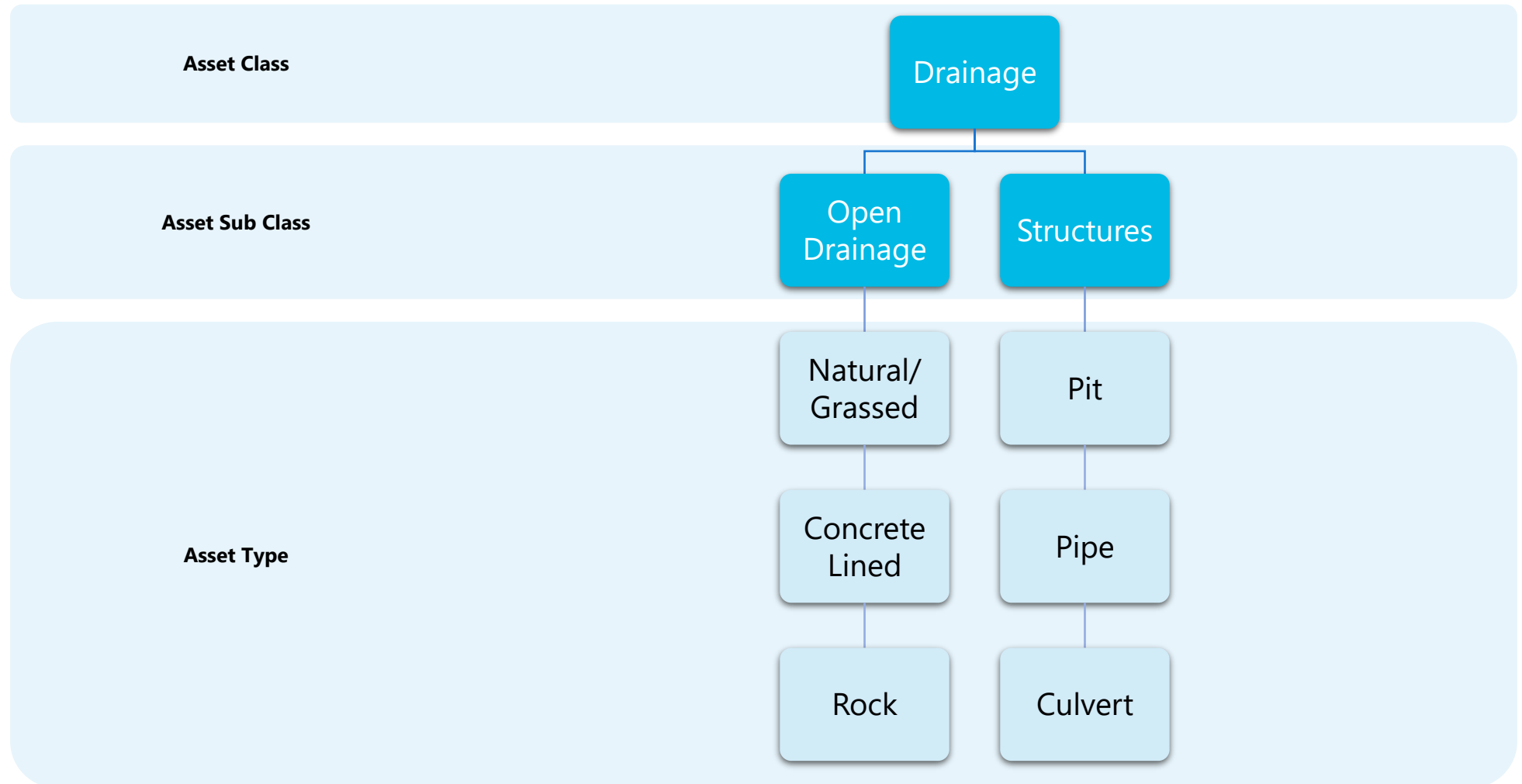


In order to ensure the City's drainage asset portfolio continues to meet community expectations, the following provides a summary of major expenditure items over the next five years which are included in this plan.



11.1 Asset Classification and Hierarchy

The City's drainage assets are classified into groupings by asset types as shown in the figure below.



To assist the prioritisation of drainage funding, maintenance and renewal activities, as well as to support the determination of appropriate response times, the City has established a hierarchy which is in line with the Main Roads Western Australia road hierarchy. The following table defines the drainage hierarchy, its function and the significance to the City.

A higher drainage significance places a higher priority and therefore a higher level of service when considering work programs and budget allocations.

Road Hierarchy	Road Function	Significance
Access Road	Providing access to the property	Low
Local Distributor	Providing access to the property as well as linking other types of roads in the hierarchy (Access Roads, District Distributor B, District Distributor A, Primary Distributor and Private Roads)	High
District Distributor B	Providing access to the property as well as linking other types of roads in the hierarchy (Access Roads, Local Distributor, District Distributor A, Primary Distributor and Private Roads)	Very High
District Distributor A	Providing access to the property as well as linking other types of roads in the hierarchy (Access Roads, Local Distributor, District Distributor B, Primary Distributor and Private Roads)	Very High
Primary Distributor	Main Roads Western Australia roads that connect towns	None
Private Roads	Private property roads and not a City responsibility	None

11.2 Financial Information

11.2.1 Asset Valuation

The last infrastructure asset revaluation occurred in June 2018. The value of the City's drainage assets as at June 2019 is shown below.

Asset Sub Class	Replacement Value	Accumulated Depreciation	Fair Value	In Year Depreciation
Open Drainage	\$1,046,029	\$455,642	\$590,388	\$263,262
Structures	\$21,431,601	\$4,084,270	\$17,347,330	\$304,961
Total	\$22,477,630	\$4,539,912	\$17,937,718	\$568,223

NB: These balances remain subject to final year-end adjustments and audit.

11.2.2 Expenditure Projections

Renewal expenditure is the cost of the capital works program to restore the condition of the assets to as-new condition in order to sustain the community and technical service levels of the asset class. The capital works renewal program included in this plan is based on trends in recent financial years as well as specific projects identified by Council officers. New, renewal and maintenance asset works scheduled in the first year have been submitted for budget approval. The works renewal programs in years 2 – 5 are subject to a field validation prior them being confirmed and submitted for budget approval.

The following table indicates current drainage asset expenditure projections in order to sustain the community and technical service levels of the asset class.

Asset Sub Class	2019/20	2020/21	2021/22	2022/23	2023/24
Open Drainage	\$87,750	\$37,750	\$37,750	\$37,750	\$37,750
Structures	\$917,247	\$1,155,290	\$1,050,747	\$1,699,287	\$1,394,397
Total	\$1,004,997	\$1,193,040	\$1,088,497	\$1,737,037	\$1,432,147

Classification	2019/20	2020/21	2021/22	2022/23	2023/24
Renewal	\$250,000	\$438,043	\$333,500	\$982,040	\$677,150
New	\$0	\$0	\$0	\$0	\$0
Maintenance	\$754,997	\$754,997	\$754,997	\$754,997	\$754,997
Total	\$1,004,997	\$1,193,040	\$1,088,497	\$1,737,037	\$1,432,147

Further details of the projects outlined here are included in Appendix A.

11.2.3 Funding Strategy

Maintenance and capital expenditure on the City's drainage assets is funded in the first instance using a combination of rates revenue and grant funding. In addition, Council can elect to fund the enhancement, replacement, refurbishment and purchase of infrastructure assets via Infrastructure Reserve funds.

Where there is an overall expenditure that creates an unsustainable financial position, projects will be transparently ranked in order to permit the prioritisation of funding. This may result in the delay of projects. Deficits will only be acceptable as long as financial sustainable indicators remain within acceptable levels.

Funding Source	2019/20	2020/21	2021/22	2022/23	2023/24
General Revenue	\$1,004,997	\$1,193,040	\$1,088,497	\$1,737,037	\$1,432,147
Grants & Subsidies	\$0	\$0	\$0	\$0	\$0
Reserve Funds	\$0	\$0	\$0	\$0	\$0
Total	\$1,004,997	\$1,193,040	\$1,088,497	\$1,737,037	\$1,432,147

11.3 Asset Performance

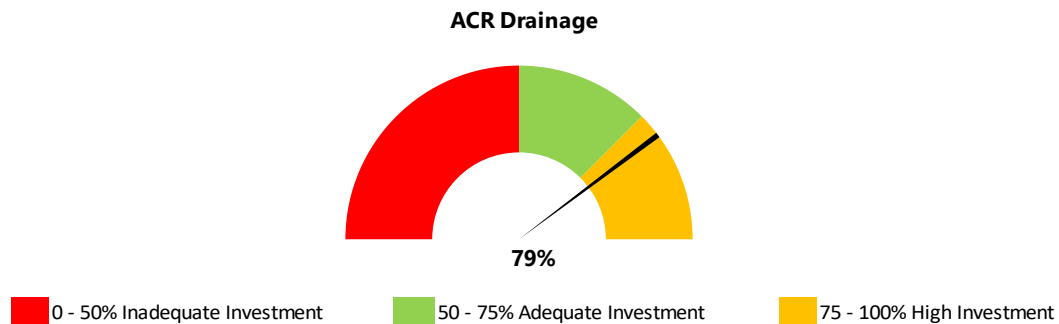
11.3.1 Historic and Current Performance

For the purpose of condition assessment, the City's drainage assets are categorised to support the capture of asset specific data applicable to the type of drainage asset. Categories used include open drainage, pits and pipes. Categorisation at this level is necessary to ensure accurate maintenance programs and allocation of depreciation throughout an assets useful life.

With many drainage assets to assess, the City requires a rigorous condition assessment process that is repeatable and reliable. Most importantly, it must allow for comparisons between assets to enable prioritisation of remedial works. These requirements are most efficiently fulfilled using a numerical scoring system. The condition scoring scale used to assess the condition of the City's drainage assets is a standard five-point condition rating scale as per that detailed in this document.

The most recent condition assessment of the City's drainage assets was undertaken in alignment with the 2018 valuation process. This condition data shows that per the City's guide, 7% of the drainage network was condition rated at low or not fit for purpose.

The current Asset Consumption Ratio (ACR) figures indicate a high level of investment for drainage assets.



11.4 Levels of Service

Currently documented levels of service for drainage assets are due for review and have been identified as an area for further development to achieve robustness in the asset management process and to head towards a service centric approach.

11.4.1 Customer Levels of Service

Customer levels of service relate to how the community perceives the service in terms of safety, quality, quantity, reliability, responsiveness, cost, efficiency and legislative compliance. These focus on the customer expectations of the service and can be both tangible (such as appearance and frequency of service), or intangible such as ease of use.

Feedback regarding customer levels of service is obtained via community engagement in the form of community surveys and feedback received in the form of customer action requests either directly or via the City's online reporting system, Report It.

Service Attributes	Service Objectives	Performance Measure Process	Current Performance
Reliability/Safety	Drainage assets provide a reliable and safe method to deliver the service required	<i>Per technical levels of service</i>	<i>Per technical levels of service</i>
Quality	Drainage assets are in a condition that is acceptable or fit for the purpose it is providing	<i>Per technical levels of service</i>	<i>Per technical levels of service</i>
Capacity	Drainage assets have the capacity to meet the needs of the current and future community	<i>Per technical levels of service</i>	<i>Per technical levels of service</i>

11.4.2 Technical Levels of Service

These measures support customer measures and tend to be used internally to measure performance against service levels. These focus on how the organisation delivers the service and tend to relate to actions undertaken by the City. These also include the technical condition of the assets and risk assessment of the assets.

Service Attributes	Service Objectives	Activity Measure Process	Current Performance
Operation	Drainage assets meet user's needs	Inspection of drainage network	Condition - triennially
Maintenance	Drainage assets are suitable for purpose	Reactive service requests completed within adopted time frames	No service requests received in last 12 months
Renewal	Drainage assets meet user's needs	Drainage renewals required are funded in the budget	Funding included in budget for drainage renewal

**Service request performance data is for the 12 months to April 2019*

11.4.3 Operational Levels of Service

In addition to triennial condition inspections for all drainage assets, operational levels of service focus on how the organisation manages day-to-day operational activities for asset maintenance. These include operational Levels of Service for inspection and maintenance regimes. Further detail of these activities is included in the *City's Road Reserve and Associated Infrastructure Levels of Service* document.

Type	Activity	Detail of task	Frequency	
Reactive Inspection	Asset inspections following notification from stakeholders	All drainage defects	Major Culvert	Bridge\Culvert
			Within one working day	Within one working day
Reactive Maintenance	Asset maintenance to take remedial action following identification of defect on inspection	Any drainage defect identified as a result of an inspection	Major Culvert	Bridge/ Culvert
			Take remedial action within two hours and/or undertake temporary repairs within 10 working days and/or carry out permanent repairs within 30 working days	Take precautionary action within one working day

11.5 Strategic Analysis

11.5.1 Strategic Outlook

Based on the trends given in the Strategic Community plan, it is prudent to consider some of the upcoming challenges and risks that face the management of this asset portfolio.

Trend	Risk	Risk Mitigation and Impacts
Increased Operational Expenditure	Lower level of funding available for footpath maintenance	Higher degree of prediction modelling input to asset renewal and maintenance programs

11.5.2 Links to the Strategic Community Plan

Currently documented levels of service for footpath assets are due for review and have been identified as an area for further development to achieve robustness in the asset management process and to head towards a service centric approach. This review will give consideration to the following goals and objectives identified in the Strategic Community Plan.

Strategic Community Goal	Outcome	Response
To create safe, healthy and liveable communities	Quality community facilities	A full range of city-standard facilities and community infrastructure are provided
		Future facility needs are planned for and developed in line with industry best practice

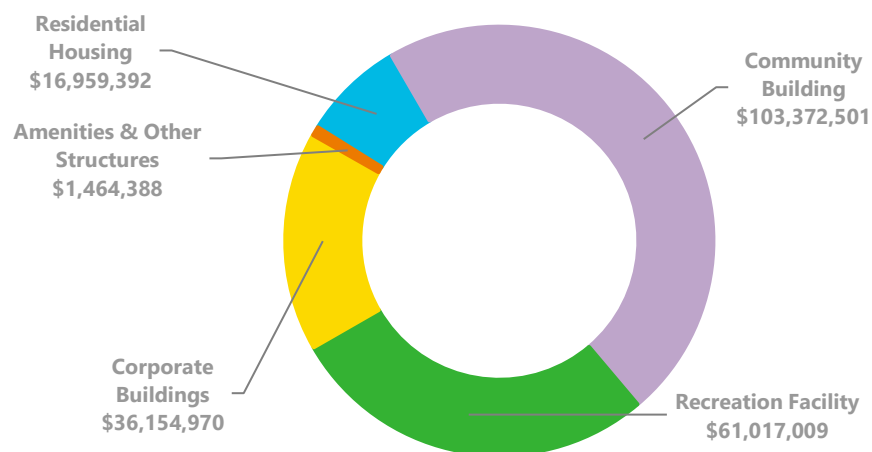
11.5.3 Improvement Plan

A summary of improvement actions in relation to road assets are listed in the following table:

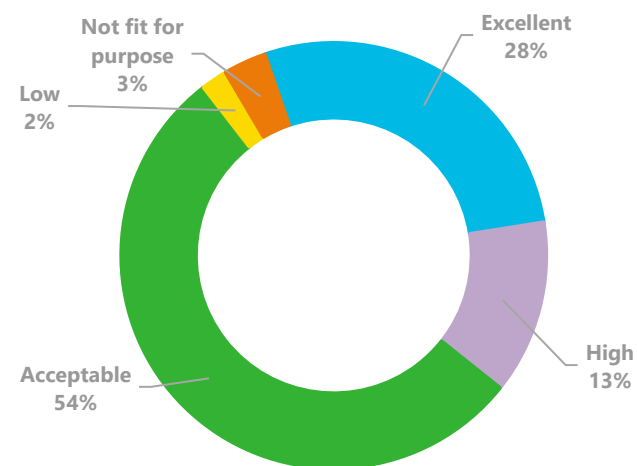
Action	Timeframe	Responsible Officers
Review and further develop levels of service	January 2021	Manager Infrastructure Services, Asset Management Coordinator
Implement predictive modelling for drainage assets to improve forecasting capabilities	January 2021	Asset Management Coordinator, Manager Infrastructure Services
Review all drainage assets with a condition rating of 5 within the first 12 months of this plan in order to improve service delivery and reduce risk	January 2021	Manager Infrastructure Services, Operations Coordinator
Review all drainage assets with a condition rating of 4 within the term of this plan in order to improve service delivery and reduce risk	January 2025	Manager Infrastructure Services, Operations Coordinator

12 Building Assets

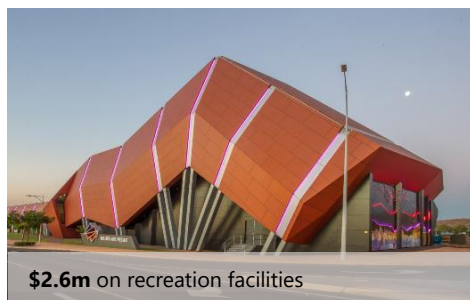
The City is the owner and custodian of a substantial portfolio of buildings valued in excess of **\$220m** that supports the community's recreational, health and educational needs.



At the most recent condition assessment in 2017, **95%** of the City's buildings were rated as acceptable or higher.

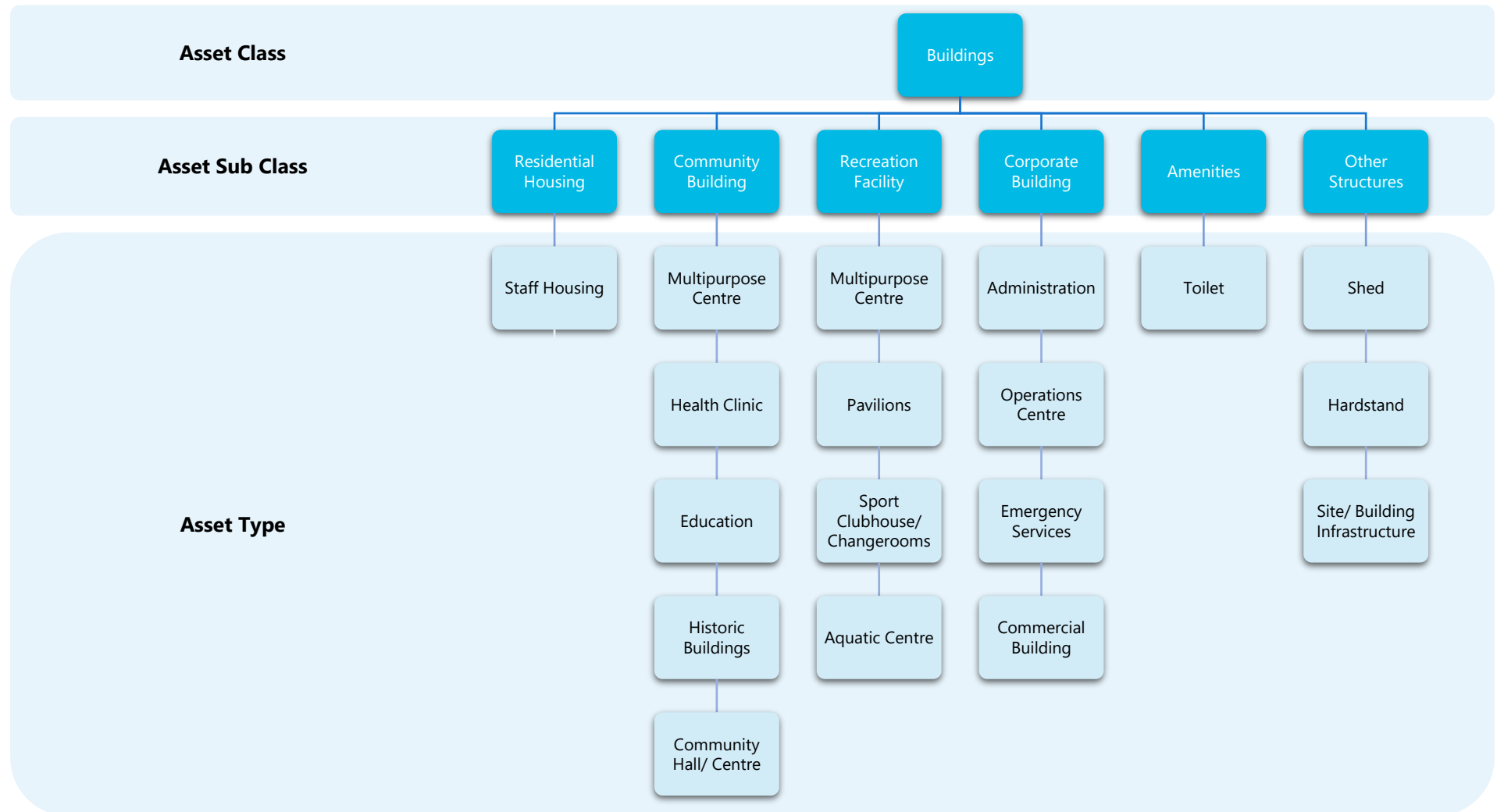


In order to ensure the City's building asset portfolio continues to meet community expectations, the following provides a summary of major expenditure items over the next five years which are included in this plan.



12.1 Asset Classification and Hierarchy

The City's building assets are classified into groupings by asset types as shown in the figure below.



To assist the prioritisation of building funding, response times and decide appropriate maintenance and renewal activities, the City has established a hierarchy of importance with relation to its building assets. The following table defines the building hierarchy, its function and the significance to the City. A higher level of significance places higher priority and therefore a higher level of service when considering work programs and budget allocations.

Building Hierarchy	Description	Standard	Example Facilities
Type A	High profile facility with "critical" results; facilities with major local or regional significance; facilities with major public interface; facilities that must meet very rigorous special requirements; assets of high capability and construction/ finish; Criticality Rating Very High.	Building to be in best possible condition. Only minimal deterioration will be allowed	<ul style="list-style-type: none"> • Red Earth Arts Precinct • The Quarter • Karratha Airport terminal
Type B	Facilities very important to government operations including significant facilities; facilities with significant public interface; facilities needing to meet special requirements; facilities needing good public presentation and high quality working environment; Criticality Rating High.	Building to be in good to very good condition operationally and aesthetically, benchmarked against industry standards for that class of asset	<ul style="list-style-type: none"> • Dampier Community Hub • Wickham Community Hub • Karratha Leisureplex
Type C	Non-critical facilities including most buildings supporting typical/standard government service delivery functions; functionally focused buildings; the lowest possible category for community facilities; Criticality Rating Medium.	Building to be in reasonable to good condition, fully meeting operational requirements	<ul style="list-style-type: none"> • Administration Office • Oval Pavilions • Residential Housing
Type D	Non-critical facilities where very basic functional performance is acceptable; facilities that can reasonably operate in very basic condition; Criticality Rating Low.	Building to meet minimum operational requirement	<ul style="list-style-type: none"> • Plant rooms • Storage buildings • Shelters • Pump houses • Sheds/ bin stores • Kiosks
Type E	Building is no longer operational; it is dormant, pending disposal, demolition etc.; Criticality Rating Minimum.	Building can be allowed to deteriorate, however, must be marginally maintained to meet minimum statutory, safety and aesthetic requirements	

12.2 Financial Information

12.2.1 Asset Valuation

The last building asset revaluation occurred in June 2017. The value of the City's building assets as at June 2019 is shown below.

Asset Sub Class	Replacement Value	Accumulated Depreciation	Fair Value	In Year Depreciation
Residential Housing	\$17,531,360	\$571,968	\$16,959,392	\$290,411
Community Building	\$124,127,402	\$20,754,901	\$103,372,501	\$2,074,848
Recreation Facility	\$71,409,079	\$10,392,070	\$61,017,009	\$1,439,259
Corporate Buildings	\$41,616,549	\$5,461,579	\$36,154,970	\$424,642
Amenities	\$2,035,065	\$570,677	\$1,464,388	\$40,791
Other Structures	\$1,870,804	\$547,200	\$1,323,604	\$55,936
Total	\$258,590,259	\$38,298,395	\$220,291,864	\$4,325,887

NB: These balances remain subject to final year-end adjustments and audit.

12.2.2 Expenditure Projections

Renewal expenditure is the cost of the capital works program to restore the condition of the assets to as-new condition in order to sustain the community and technical service levels of the asset class. The capital works renewal program is based on condition data obtained at the most recent condition assessment and has been planned precisely. Renewal works scheduled in the first year have been validated in the field to confirm the requirement for renewal and have been submitted for budget approval. The capital works renewal programs in years 2 – 5 are subject to a field validation prior them being confirmed and submitted for budget approval.

The following table indicates current building asset expenditure projections in order to sustain the community and technical service levels of the asset class.

Classification	2019/20	2020/21	2021/22	2022/23	2023/24
Residential Housing	\$766,000	\$953,320	\$780,786	\$788,402	\$796,170
Community Building	\$1,029,291	\$656,937	\$695,376	\$670,044	\$636,945
Recreation Facility	\$685,463	\$1,319,672	\$656,086	\$783,707	\$1,064,542
Corporate Building	\$618,630	\$825,603	\$1,119,755	\$745,090	\$543,612
Amenities	\$271,400	\$75,628	\$274,881	\$111,158	\$289,461
Total	\$3,370,784	\$3,831,160	\$3,526,884	\$3,098,401	\$3,330,729

Classification	2019/20	2020/21	2021/22	2022/23	2023/24
Renewal	\$1,160,000	\$1,686,000	\$1,393,000	\$861,000	\$1,120,000
New	\$163,568	\$0	\$0	\$0	\$0
Maintenance	\$2,047,216	\$2,145,160	\$2,133,884	\$2,237,401	\$2,210,729
Total	\$3,370,784	\$3,831,160	\$3,526,884	\$3,098,401	\$3,330,729

Further details of the projects outlined here are included in Appendix A.

12.2.3 Funding Strategy

Maintenance and capital expenditure on the City's building assets is funded in the first instance using rates revenue. The development, operation and maintenance of the Council's waste management facilities and the Karratha Airport are funded via the established Waste Management and Aerodrome reserves respectively. In addition, Council can elect to fund the enhancement, replacement, refurbishment and purchase of infrastructure assets via Infrastructure Reserve funds.

Where there is an overall expenditure that creates an unsustainable financial position, projects will be transparently ranked in order to permit the prioritisation of funding. This may result in the delay of projects. Deficits will only be acceptable as long as financial sustainable indicators remain within acceptable levels.

In addition to other revenue sources, additional funding for specific projects is available through the Community Infrastructure and Services Partnership. As part of this agreement, the City and Rio Tinto have agreed to work together to revitalise existing and develop new civic, sporting and community facilities and programs in the Pilbara coastal towns of Dampier, Wickham and Karratha.

Funding Source	2019/20	2020/21	2021/22	2022/23	2023/24
General Revenue	\$2,982,616	\$3,434,841	\$3,122,242	\$2,685,261	\$2,908,913
Proceeds from Sale	\$388,168	\$396,319	\$404,642	\$413,140	\$421,816
Grants & Subsidies	\$0	\$0	\$0	\$0	\$0
Reserve Funds	\$0	\$0	\$0	\$0	\$0
Total	\$3,370,784	\$3,831,160	\$3,526,884	\$3,098,401	\$3,330,729

12.3 Asset Performance

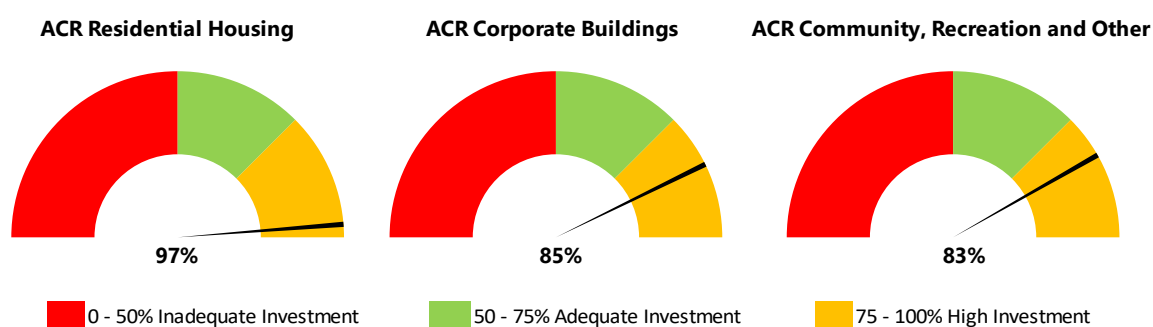
12.3.1 Historic and Current Performance

For the purpose of condition assessment, the City's building assets are componentised to permit accurate useful lives to be assigned to each component of a building asset. Components used include sub-structure, super-structure, fit out, site infrastructure and services. Componentisation at this level is necessary to ensure accurate depreciation is allocated to assets throughout their lives.

With many building assets to assess, the City requires a rigorous condition assessment process that is repeatable and reliable. Most importantly, it must allow for comparisons between assets to enable prioritisation of remedial works. These requirements are most efficiently fulfilled using a numerical scoring system. The condition scoring scale used to assess the condition of the City's building assets is a standard five-point condition rating scale as per that detailed earlier in this document.

The most recent condition assessment of the City's building assets was undertaken in alignment with the 2017 valuation process. This condition data shows that per the City's guide, 5% of the building portfolio was condition rated at low or not fit for purpose. This information has informed the renewal program included in this plan, with some assets identified as such having been treated in some way since the inspection.

The current Asset Consumption Ratio (ACR) figures indicate a high level of investment



12.4 Levels of Service

Currently documented levels of service for building assets are due for review and have been identified as an area for further development to achieve robustness in the asset management process and to head towards a service centric approach.

12.4.1 Customer Levels of Service

Customer levels of service relate to how the community perceives the service in terms of safety, quality, quantity, reliability, responsiveness, cost, efficiency and legislative compliance. These focus on the customer expectations of the service and can be both tangible (such as appearance and frequency of service), or intangible such as ease of use.

Feedback regarding customer levels of service is obtained via community engagement in the form of community surveys and feedback received in the form of customer action requests either directly or via the City's online reporting system, Report It.

The City undertook an Annual Community Survey in March and April of 2019. As part of the survey, 1430 respondents provided feedback on the level of service provided by a number of the City's building assets.

Services included in Community Survey	Importance	Performance	Gap
Karratha Leisureplex	73 %	84.8 %	11.8 %
Libraries	67.4 %	84.8 %	17.4 %
Wickham Recreation Precinct	59.4 %	73.4 %	14 %
Provision and maintenance of public toilets	75.4 %	70.6 %	(4.8 %)
Youth Services and activities	76.4 %	68.4 %	(8.4 %)

Service Attributes	Service Objectives	Performance Measure Process	Current Performance
Reliability/ Safety	Building facilities provide a reliable and safe environment for users	Maintain or improve a positive gap between performance and importance in Annual Community Survey for public toilets	-4.8 %
Quality	Building facilities are clean and in good condition for users	<i>Per Reliability/ Safety</i>	<i>Per Reliability/ Safety</i>
Capacity	Facilities meet users' and program delivery needs	<i>Per Reliability/ Safety</i>	<i>Per Reliability/ Safety</i>

**NB: Community feedback via the community survey is for building assets is included in the performance feedback for the facility located within the building assets*

12.4.2 Technical Levels of Service

These measures support customer measures and tend to be used internally to measure performance against service levels. These focus on the how the organisation delivers the service and tend to relate to actions undertaken by the City. These also include the technical condition of the assets and risk assessment of the assets.

Service Attributes	Service Objectives	Activity Measure Process	Current Performance
Operation	Building facilities meet users' needs	Inspection of all components of building assets	Condition – 12 monthly
Maintenance	Building facilities are clean and in good condition for users	Reactive service requests completed within adopted time frames	91% of service requests completed within Operational levels of service
Renewal	Building facilities meet users' and program delivery needs	Building renewals required are funded in the budget	100% of renewals identified for 2019/20 are included in budget

**Service request performance data is for the 12 months to April 2019*

12.4.3 Operational Levels of Service

In addition to triennial condition inspections for all building assets, operational levels of service focus on how the organisation manages day-to-day operational activities for asset maintenance. These include operational levels of service for inspection and maintenance regimes. Further detail of these activities is included in the City's *Buildings Operational Levels of Service* document.

Type of Inspection	Activity	Detail and frequency of task				
Reactive Inspection	Asset inspections following notification from stakeholders	Assess impact of defect or damage related to asset for the following components:				
		Component	Unit	Type A	Type B/ C	Type D
		Structure, floor and roof	Working days	1	2	3
		Envelope and cladding	Working days	1	2	3
		Floor covering, painting and finishing	Working days	1	2	3
		Electrical, mechanical and plumbing	Working days	1	1	1
		Fittings, fixtures and miscellaneous	Working days	2	3	5
		Building related vandalism	Working days	1	1	1
		Building related graffiti	Working days	1	1	1
Reactive Maintenance	Asset maintenance to take remedial action following identification of defect on inspection	Any reactive work carried out as a consequence of customer request and/or findings from inspections to keep the asset safe, fit for purpose and maintains the asset service levels and standards.				
			Type A	Type B/ C	Type D	
		Structure, floor and roof	Take remedial action and refer to risk assessment table for relevant response time			
		Envelope and cladding				
		Floor covering, painting and finishing				
		Electrical, mechanical and plumbing				
		Fittings, fixtures and miscellaneous				
		Building related vandalism				
		Building related graffiti	Take remedial action and/or undertake temporary repairs within 24 hours			

*Risk assessment table included in *Buildings Operational Levels of Service* document

12.5 Strategic Analysis

12.5.1 Strategic Outlook

Based on the trends given in the Strategic Community Plan, it is prudent to consider some of the upcoming challenges and risks that face the management of this asset portfolio.

Trend	Risk	Risk Mitigation and Impacts
Increased Operational Expenditure	Lower level of funding available for building maintenance	Higher degree of prediction modelling input to asset renewal and maintenance programs

12.5.2 Links to the Strategic Community Plan

Currently documented levels of service for footpath assets are due for review and have been identified as an area for further development to achieve robustness in the asset management process and to head towards a service centric approach. This review will give consideration to the following goals and objectives identified in the Strategic Community Plan.

Strategic Community Goal	Outcome	Response
To create safe, healthy and liveable communities	Quality community facilities	A full range of city-standard facilities and community infrastructure are provided Future facility needs are planned for and developed in line with industry best practice
	Healthy residents	Residents are empowered to enhance their health and wellbeing
	Accessible services	Partnerships are established with key stakeholders to deliver services
To protect our natural and built environment	Greater energy efficiency	Energy efficiency of Council assets is continuously improving
	Sustainable use and management of resources	Efficiency of electrical usage is continually improving
		Efficiency of water usage is continually improving

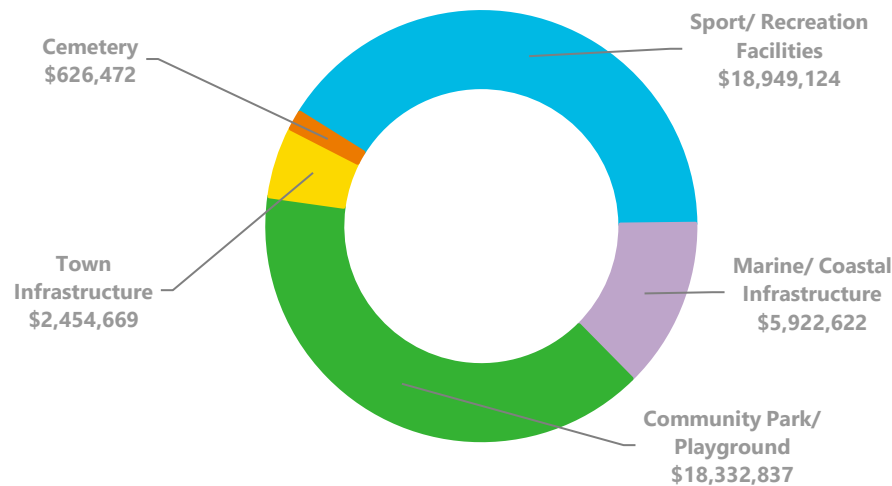
12.5.3 Improvement Plan

A summary of improvement actions in relation to building assets are listed in the following table:

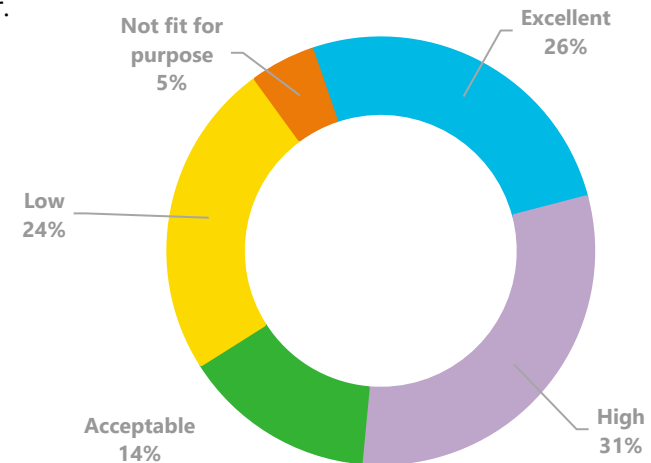
Action	Timeframe	Responsible Officers
Review and further develop levels of service	January 2021	Manager Building Maintenance, Asset Management Coordinator
Improve utilisation of condition data to formulate asset renewal program	January 2021	Manager Building Maintenance, Asset Management Coordinator
Review all building assets with a condition rating of 5 within the first 12 months of this plan in order to improve service delivery and reduce risk	January 2021	Manager Building Maintenance Manager Human Resources Manager Community Facilities
Review all building assets with a condition rating of 4 within the term of this plan in order to improve service delivery and reduce risk	January 2025	Manager Building Maintenance Manager Human Resources Manager Community Facilities

13 Park, Recreation and Open Space Assets

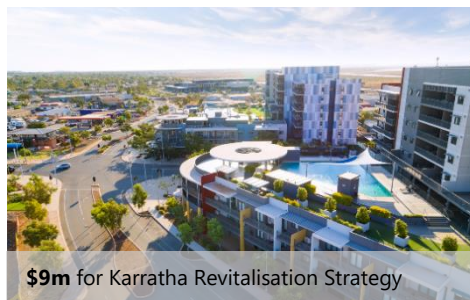
The City is the owner and custodian of a substantial portfolio of park, recreation and open space assets valued in excess of **\$46m**.



At the most recent condition assessment in 2018, **71%** of the City's park, recreation and open space assets were rated as acceptable or higher.

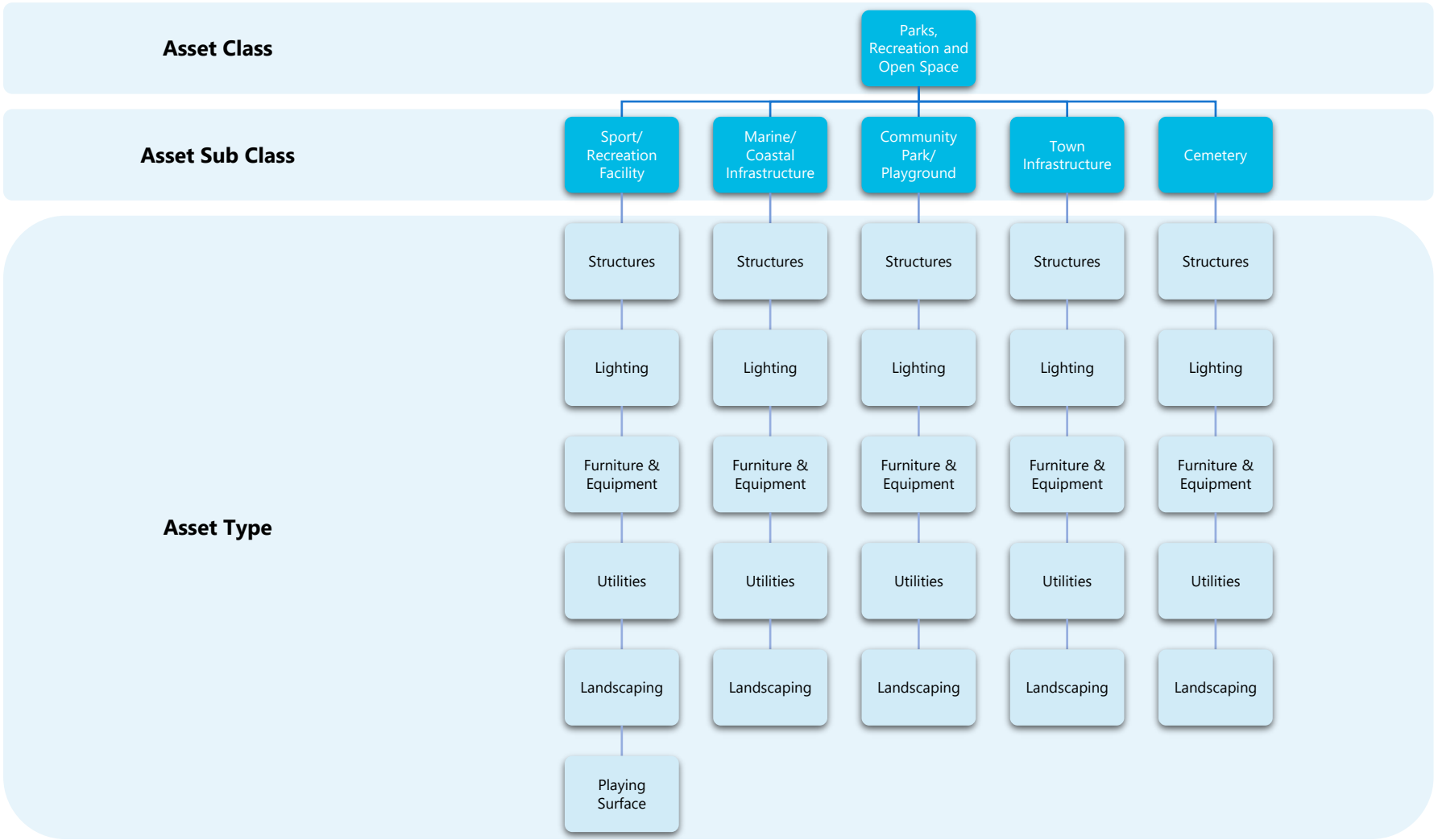


In order to ensure the City's park, recreation and open space asset portfolio continues to meet community expectations, the following provides a summary of major expenditure items over the next five years which are included in this plan.



13.1 Asset Classification and Hierarchy

The City’s park, recreation and open space assets are classified into groupings by asset types as shown in the figure below.



To assist in the prioritisation of funding, maintenance and renewal activities, as well as to support the determination of appropriate response times, the City has established a hierarchy of importance with relation to its park, recreation and open space assets. The following table defines the park, recreation and open space hierarchy, its function and the significance to the City.

A higher level of significance places a higher required level of service and therefore places a higher priority in regards to budget allocations for maintenance and capital renewal activities.

Open Space Hierarchy	Description	Significance	Example Facilities
Type A	Active showpiece parks (regional or district) with gardens with intensive maintenance regimes, significant to the presentation and promotion of the City. Parks that offer significantly more activities than local parks, regionally significant open space facilities and that community travel to utilise	Extreme	<ul style="list-style-type: none"> • Cattrall Park • Dampier Palms • Bulgarra Play Space
Type B1	Active ovals – sporting fields	High	<ul style="list-style-type: none"> • Bulgarra Oval • Pegs Creek Oval • Tambrey Oval • Millars Well Oval • Leisureplex Oval • Baynton West Oval • Wickham Oval • Roebourne Oval
Type B2	Major community facilities with garden and lawn areas	High	<ul style="list-style-type: none"> • Leisureplex Pool area • Roebourne Pool • City Administration Building • Red Earth Arts Precinct
Type C1	Local neighbourhood parks which contain tree/shrub plantings, lawn areas, mulched gardens, reticulation and may contain playground equipment	Medium	<ul style="list-style-type: none"> • Richardson Park • Waters Park • Ausburn Park • Lewandowski Park
Type C2	Council facilities with landscaping	Medium	<ul style="list-style-type: none"> • Youth Shed • Dampier Hub gardens
Type D	Verges, roundabouts, medians and street trees	Medium	<ul style="list-style-type: none"> • Dampier Road streetscape and roundabouts • Wickham entry statement • Street Trees
Type E	Maintained and revegetated foreshore reserves	Medium	<ul style="list-style-type: none"> • Shark Cage Beach • Point Samson dune protection and walkways
Type F	Natural areas - Formally managed natural areas that attract public use and visitation and bush land	Low	<ul style="list-style-type: none"> • 40 Mile Beach • Honeymoon Cove • Arid Gardens

13.2 Financial Information

13.2.1 Asset Valuation

The last infrastructure asset valuation occurred in June 2018. The value of the City's park, recreation and open space assets as at June 2019 is shown below.

Asset Sub Class	Replacement Value	Accumulated Depreciation	Fair Value	In Year Depreciation
Sport/Recreation Facilities	\$25,748,914	\$6,799,790	\$18,949,124	\$1,032,421
Marine/Coastal Infrastructure	\$8,851,873	\$2,929,251	\$5,922,622	\$317,215
Community Park/Playground	\$24,910,017	\$6,577,180	\$18,332,837	\$987,977
Town Infrastructure	\$2,995,474	\$540,805	\$2,454,669	\$148,003
Cemetery	\$957,744	\$331,272	\$626,471	\$37,861
Total	\$63,464,022	\$17,178,298	\$46,285,723	\$2,523,477

NB: These balances remain subject to final year-end adjustments and audit.

13.2.2 Expenditure Projections

Renewal expenditure is the cost of the capital works program to restore the condition of the assets to as-new condition in order to sustain the community and technical service levels of the asset class. The capital works renewal program included in this plan is based on trends in recent financial years as well as specific projects identified by Council officers. New, renewal and maintenance asset works scheduled in the first year have been submitted for budget approval.

New capital works projects are based on needs identified through community engagement and included in documents such as the *Sport, Recreation and Leisure Plan* or the *Community Facilities Plan*. The timing on the latter of these is often subject to funding allocations and agreement negotiation.

The following table indicates current park, recreation and open space asset expenditure projections in order to sustain the community and technical service levels of the asset class.

Classification	2019/20	2020/21	2021/22	2022/23	2023/24
Sport/Recreation Facility	\$3,913,020	\$4,071,791	\$7,168,654	\$1,108,796	\$378,699
Marine/Coastal Infrastructure	\$1,361,299	\$11,965,678	\$11,300,000	\$1,106,000	\$256,000
Community Park/Playground	\$14,497,978	\$830,000	\$1,973,640	\$230,000	\$260,000
Cemetery	\$0	\$300,000	\$0	\$1,000,000	\$1,000,000
Town Infrastructure	\$90,000	\$4,350,000	\$1,350,000	\$5,250,000	\$2,720,760
Total	\$19,862,297	\$21,517,469	\$21,792,294	\$8,694,796	\$4,615,459

Classification	2019/20	2020/21	2021/22	2022/23	2023/24
Renewal	\$4,877,930	\$9,711,791	\$9,418,654	\$5,544,796	\$2,838,699
New	\$12,654,978	\$11,700,000	\$10,800,000	\$3,150,000	\$1,300,000
Maintenance	\$2,329,389	\$105,678	\$1,573,640	\$0	\$476,760
Total	\$19,862,297	\$21,517,469	\$21,792,294	\$8,694,796	\$4,615,459

Significant expenditure in the 2020-21 and 2021-22 financial years are attributable to works relating to the Dampier Marina Project and the Roebourne Recreation Precinct, both of which are anticipated to be delivered as part of funding agreements with external organisations.

Further details of the projects outlined here are included in Appendix A.

13.2.3 Funding Strategy

Maintenance and capital expenditure on the City's park, recreation and open space assets is funded in the first instance using a combination of rates revenue and grant funding. In addition, Council can elect to fund the enhancement, replacement, refurbishment and purchase of infrastructure assets via Infrastructure Reserve funds.

Where there is an overall expenditure that creates an unsustainable financial position, projects will be transparently ranked in order to permit the prioritisation of funding. This may result in the delay of projects. Deficits will only be acceptable as long as financial sustainable indicators remain within acceptable levels.

In addition to other revenue sources, additional funding for specific projects is included as part of the Community Infrastructure and Services Partnership. As part of this agreement, the City and Rio Tinto have agreed to work together to revitalise existing and develop new civic, sporting and community facilities and programs in the Pilbara coastal towns of Dampier, Wickham and Karratha.

Funding Source	2019/20	2020/21	2021/22	2022/23	2023/24
General Revenue	\$3,686,020	\$15,709,425	\$12,892,294	\$8,664,796	\$4,535,459
Grants & Subsidies	\$2,607,222	\$5,808,044	\$8,900,000	\$30,000	\$80,000
Reserve Funds	\$13,569,055	\$0	\$0	\$0	\$0
Total	\$19,862,297	\$21,517,469	\$21,792,294	\$8,694,796	\$4,615,459

13.3 Asset Performance

13.3.1 Historic and Current Performance

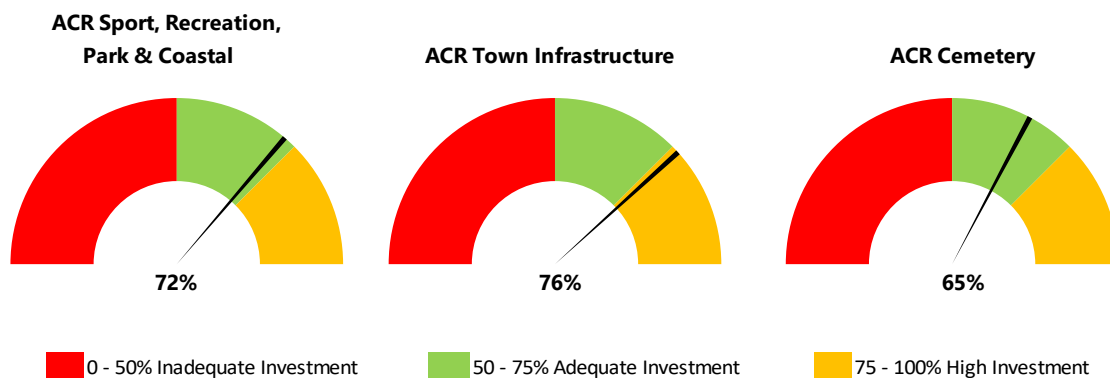
For the purpose of condition assessment, the City's park, recreation and open space assets are categorised to support the capture of asset specific data applicable to the type of open space asset. Categories used include pool, building and other structures, fencing, lighting and park furniture and equipment. Categorisation at this level is necessary to ensure accurate maintenance programs and allocation of depreciation throughout an assets useful life.

With many open space assets to assess, the City requires a rigorous condition assessment process that is repeatable and reliable. Most importantly, it must allow for comparisons between assets to enable prioritisation of remedial works. These requirements are most efficiently fulfilled using a numerical scoring system. The condition scoring scale used to assess the condition of the City's

parks, recreation and open space assets is a standard five-point condition rating scale as per that detailed earlier in this document.

The most recent condition assessment of the City's park, recreation and open space assets was undertaken in alignment with the 2018 valuation process. This condition data shows that per the City's guide, 29% of the park, recreation and open space portfolio was condition rated at low or not fit for purpose. This calculation is based on asset numbers including park furniture and is therefore not reflective of asset area.

The current Asset Consumption Ratio (ACR) figures indicate an adequate level of investment for park, recreation and open space assets.



13.4 Levels of Service

Currently documented levels of service for park, recreation and open space assets are due for review and have been identified as an area for further development to achieve robustness in the Asset Management process and to head towards a service centric approach.

13.4.1 Customer Levels of Service

Customer levels of service relate to how the community perceives the service in terms of safety, quality, quantity, reliability, responsiveness, cost, efficiency and legislative compliance. These focus on the customer expectations of the service and can be both tangible (such as appearance and frequency of service), or intangible such as ease of use.

Feedback regarding customer levels of service is obtained via community engagement in the form of community surveys and feedback received in the form of customer action requests either directly or via the City's online reporting system, Report It.

The City undertook an Annual Community Survey in March and April of 2019. As part of the survey, 1430 respondents provided feedback on the level of service provided by a number of the City's parks, recreation and open space assets.

Services included in Annual Community Survey	Importance	Performance	Gap
Karratha Leisureplex	73%	84.8%	11.8%
Wickham Recreation Precinct	59.4%	73.4%	14%
Parks, gardens and open space	79.2%	78.8%	(0.4%)
Streetscapes and verges	71%	71.8%	0.8%
Tracks and trails	65%	70.4%	5.4%
Sports fields	76.6%	79.2%	2.6%
Foreshore and beach amenity	78.4%	74%	(4.4%)

Service Attributes	Service Objectives	Performance Measure Process	Current Performance
Reliability/Safety	Park, recreation and open space assets provide a reliable and safe environment for users	Maintain or improve a positive gap between performance and importance in Annual Community Survey for Karratha Leisureplex	11.8 %
		Maintain or improve a positive gap between performance and importance in Annual Community Survey for Wickham Recreation Precinct	14 %
		Maintain or improve a positive gap between performance and importance in Annual Community Survey for parks, gardens and open space	(0.4 %)
		Maintain or improve a positive gap between performance and importance in Annual Community Survey for streetscapes and verges	0.8 %
		Maintain or improve a positive gap between performance and importance in Annual Community Survey for tracks and trails	5.4 %
		Maintain or improve a positive gap between performance and importance in Annual Community Survey for sports fields	2.6 %
		Maintain or improve a positive gap between performance and importance in Annual Community Survey for foreshore and beach amenity	(4.4 %)

Service Attributes	Service Objectives	Performance Measure Process	Current Performance
Quality	Park, recreation and open space assets are clean and in good condition for users	<i>Per Reliability/Safety</i>	<i>Per Reliability/Safety</i>
Capacity	Park, recreation and open space assets meet users' and program delivery needs	<i>Per Reliability/Safety</i>	<i>Per Reliability/Safety</i>

13.4.2 Technical Levels of Service

These measures support customer measures and tend to be used internally to measure performance against service levels. These focus on how the organisation delivers the service and tend to relate to actions undertaken by the City. These also include the technical condition of the assets and risk assessment of the assets.

Service Attributes	Service Objectives	Activity Measure Process	Current Performance
Operation	Park, recreation and open space assets meet user's needs	Inspection of park, recreation and open space network	Condition - triennially Safety – Fortnightly (Weekly for Regional irrigation)
Maintenance	Park, recreation and open space assets are suitable for purpose	Reactive service requests completed within adopted time frames	91% of service requests completed within Operational Levels of Service
Renewal	Park, recreation and open space assets meet user's needs	Park, recreation and open space renewals required are funded in the budget	Funding included in budget for asset renewal for items identified in Playground Replacement program.

**Service request performance data is for the 12 months to April 2019*

13.4.3 Operational Levels of Service

In addition to triennial condition inspections for all park, recreation and open space assets, operational levels of service focus on how the organisation manages day-to-day operational activities for asset maintenance. These include operational levels of service for inspection and maintenance regimes. Further detail of these activities is included in the City's *Parks and Open Space Operational Levels of Service*, *Parks, Gardens and Open Space Maintenance Level of Service* and *Play Space Standards* documents.

Type of Inspection	Activity	Detail and frequency of task					
Reactive Inspection	Asset inspections following notification from stakeholders	Assess impact of defect or damage related to asset for the following tasks/ asset type:					
			Frequency	Regional	District	N/hood	Local
		Play Equipment	Working days	1	1	1	1
		Reticulation	Working days	1	1	1	1
		Amenities	Working days	1	2	3	3
		Lighting or electrical services	Hours	<24	<24	<24	<24
Reactive Maintenance	Asset maintenance to take remedial action following identification of defect on inspection	Any reactive work carried out as a consequence of customer request and/or findings from inspections to keep the asset safe, fit for purpose and maintains the asset service levels and standards.					
			Regional	District	N/hood	Local	
		Play Equipment	Take remedial action straight away, and undertake temporary repair within 2 days. Permanent repair depends on availability of materials and resources				
		Reticulation	Take remedial action straight away, and undertake temporary repair within 1 day. Permanent repair within 30 days depends on availability of materials and resources				
		Amenities	Take remedial action straight away, and undertake temporary repair within 5 days. Permanent repair depends on availability of materials and resources	Take remedial action straight away, and undertake temporary repair within 7 days. Permanent repair depends on availability of materials and resources			

Type of Inspection	Activity	Detail and frequency of task						
Proactive Maintenance	Routine maintenance carried out to comply with legislation, keep the asset fit for purpose, make it safe or ensure safety for the user and maintaining the asset service levels at regular intervals.	Any proactive work carried out as a routine maintenance to keep the asset safe, fit for purpose and maintains the asset service levels and standards. It also reduces the possibility of reactive maintenance.						
			Type A	Type B	Type C	Type D	Type E	Type F
		Mowing	Weekly	Weekly	Fortnightly	N/A	As Required	As Required
		Gardening	2x Week	Fortnightly	Fortnightly	Monthly	As Required	N/A
		Planting	As Required	Bi-Annually	Annually	Annually	Annually	Project Based
		Turf Renovation	Annually	Annually	Annually	N/A	N/A	N/A
		Mulching	Bi-Annually	Annually	Annually	Annually	As Required	Project Based
		Top Dressing	Annually	Annually	Annually	N/A	N/A	N/A
		Reticulation	Weekly	Weekly	Fortnightly	Fortnightly	As Required	As Required
		Spraying	Quarterly	Bi-Annually	Annually	Quarterly	Quarterly	As Required
		Fertilising	Tri-Annually	Tri-Annually	Annually	Annually	N/A	N/A
		Playground/ Park Furniture	Weekly	Weekly	Fortnightly	N/A	N/A	N/A

13.5 Strategic Analysis

13.5.1 Strategic Outlook

Based on the trends given in the Strategic Community plan it is prudent to consider some of the upcoming challenges and risks that face the management of this asset portfolio.

Trend	Risk	Risk Mitigation and Impacts
Increased Operational Expenditure	Lower level of funding available for parks maintenance	Higher degree of prediction modelling input to asset renewal and maintenance programs

13.5.2 Links to the Strategic Community Plan

Currently documented levels of service for footpath assets are due for review and have been identified as an area for further development to achieve robustness in the asset management process and to head towards a service centric approach. This review will give consideration to the following goals and objectives identified in the Strategic Community Plan.

Strategic Community Goal	Outcome	Response
To create safe, healthy and liveable communities	Quality Community Facilities	A full range of city-standard facilities and community infrastructure are provided Future facility needs are planned for and developed in line with industry best practice
	Healthy Residents	Residents are empowered to enhance their health and wellbeing
	Accessible Services	Best practice community engagement methods are employed to determine community needs
		Partnerships are established with key stakeholders to deliver services
	Improved Community Safety	High quality environmental design is employed to prevent crime
	Connected Communities	Social interaction is fostered across the community
To protect our natural and built environment	Appropriately managed natural assets	Natural assets are well-managed and promoted
	Greater energy efficiency	Energy efficiency of Council assets is continuously improving Sustainable energy sources and providers are actively sought and partnered
		Efficiency of electrical usage is continually improving Efficiency of water usage is continually improving
	Attractive built environment	Good citizenship and pride in the City is fostered and encouraged

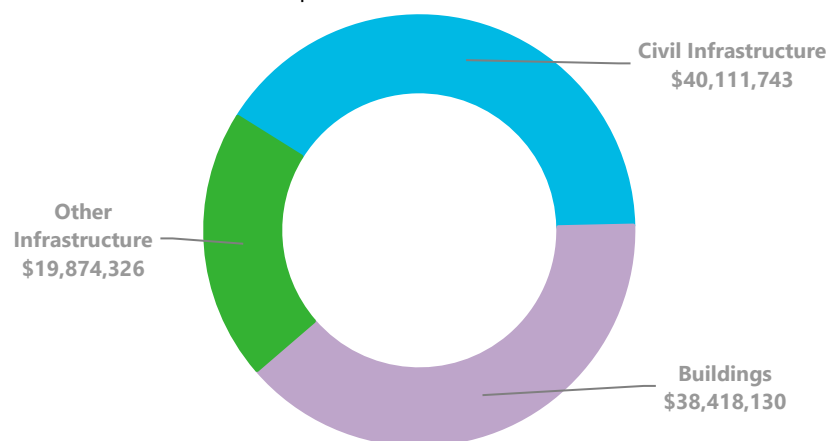
13.5.3 Improvement Plan

A summary of improvement actions in relation to park, recreation and open space assets are listed in the following table:

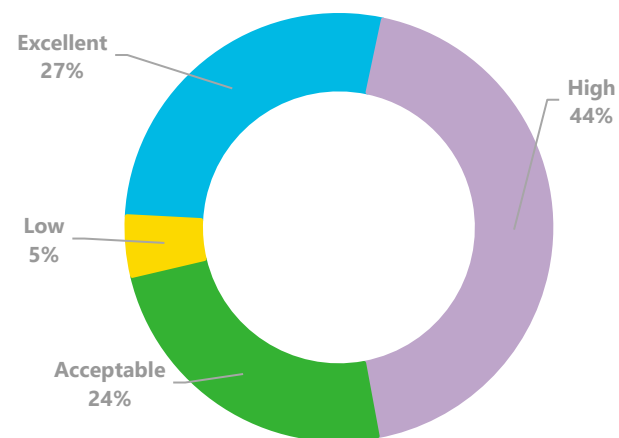
Action	Timeframe	Responsible Officers
Review and further develop Levels of Service	January 2021	Manager Infrastructure Services, Asset Management Coordinator
Improve utilisation of condition data to formulate asset renewal program	January 2021	Manager Infrastructure Services, Operations Coordinator
Review all park, recreation and open space assets with a condition rating of 5 within the first 12 months of this plan in order to improve service delivery and reduce risk	January 2021	Manager Infrastructure Services, Parks & Gardens Coordinator
Review all park, recreation and open space assets with a condition rating of 4 within the term of this plan in order to improve service delivery and reduce risk	January 2025	Manager Infrastructure Services, Parks & Gardens Coordinator

14 Airport Assets

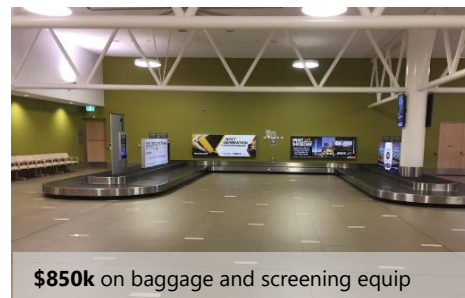
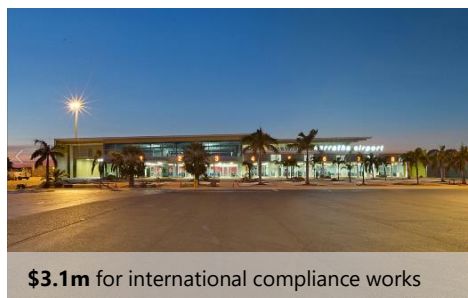
The City owns and operates the only public airport within the district, Karratha Airport, a key asset of the City that provides a vital economic and social service to the area. Assets contained within the airport precinct that are utilised for the delivery of airport services to the region are valued in excess of **\$99m**.



At the most recent condition assessment in 2017 & 2018, **95%** of the City's airport assets were rated as acceptable or higher.

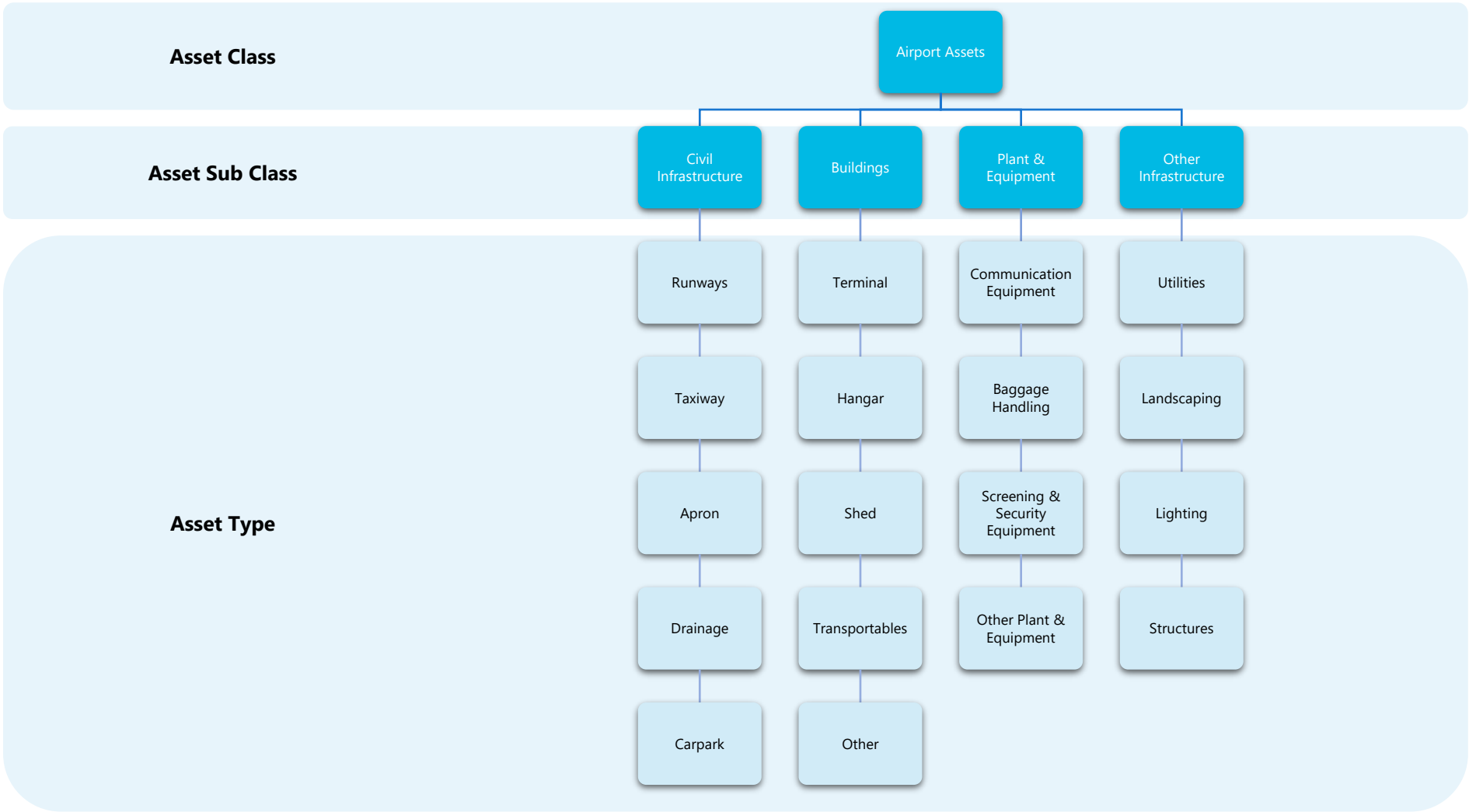


In order to ensure the City's airport asset portfolio continues to meet community expectations, the following provides a summary of major expenditure items over the next 5 years which are included in this plan



14.1 Asset Classification and Hierarchy

The City’s airport assets are classified into groupings by asset types as shown in the figure below.



To assist the prioritisation of airport funding, maintenance and renewal activities, as well as to support the determination of appropriate response, the City has established a hierarchy of importance with relation to its assets. A higher level of significance places a higher priority and therefore a higher level of service when considering work programs and budget allocations. For airport assets, the asset hierarchy of select assets is determined in line with that applicable to the relevant asset class. For example, airport building hierarchies are in accordance with the hierarchy applied to building assets.

In addition to this, it is the intent of the City to establish an airport asset specific hierarchy in order to prioritise airport funding, response times and decide appropriate maintenance and renewal activities for all airport assets. This hierarchy is anticipated to achieve this in line with the following table.

Airport Hierarchy	Description	Example Assets
A) Airside	Includes all assets within security controlled areas.	<ul style="list-style-type: none"> • Runways • Taxiways • RPT, GA and Helicopter Aprons
B) Landside	Includes all assets in areas to which the general public has unrestricted access	<ul style="list-style-type: none"> • Long and short term car parks • Access Roads • Power System
C) Terminal	Includes all assets within the Airport terminal	<ul style="list-style-type: none"> • Baggage handling system • Security and CCTV • Check in facilities

14.2 Financial Information

14.2.1 Asset Valuation

The last infrastructure asset valuation occurred in June 2018, and the last building asset valuation in June 2017. The value of the City's airport assets as at June 2019 is shown below.

Asset Sub Class	Replacement Value	Accumulated Depreciation	Fair Value	In Year Depreciation
Civil Infrastructure	\$56,463,523	\$16,351,779	\$40,111,743	\$1,084,139
Buildings	\$44,351,362	\$5,933,232	\$38,418,130	\$938,088
Plant & Equipment	\$1,458,242	\$226,328	\$1,231,914	\$126,547
Other Infrastructure	\$24,248,541	\$4,374,214	\$19,874,326	\$849,341
Total	\$126,521,667	\$26,885,555	\$99,636,113	\$2,998,115

NB: These balances remain subject to final year-end adjustments and audit.

14.2.2 Expenditure Projections

Renewal expenditure is the cost of the capital works program to restore the condition of the assets to as-new condition in order to sustain the community and technical service levels of the asset class. New, renewal and maintenance asset works included in this plan are as identified in the

Karratha Airport business plan, with those items scheduled in the first year having been submitted for budget approval.

The following table indicates current airport asset expenditure projections in order to sustain the community and technical service levels of the asset class.

Classification	2019/20	2020/21	2021/22	2022/23	2023/24
Civil Infrastructure	\$211,000	\$3,617,320	\$3,068,666	\$7,568,666	\$7,568,666
Buildings	\$244,000	\$2,318,080	\$5,662,242	\$382,242	\$272,242
Plant & Equipment	\$748,300	\$1,239,266	\$95,251	\$68,934	\$190,251
Other Infrastructure	\$71,000	\$1,172,420	\$773,868	\$293,868	\$273,868
Total	\$1,274,300	\$8,347,086	\$9,600,027	\$8,313,710	\$8,305,027

Classification	2019/20	2020/21	2021/22	2022/23	2023/24
Renewal	\$870,000	\$1,970,000	\$365,000	\$7,878,683	\$7,870,000
New	\$15,000	\$5,850,000	\$8,300,000	\$0	\$0
Maintenance	\$389,300	\$527,086	\$935,027	\$435,027	\$435,027
Total	\$1,274,300	\$8,347,086	\$9,600,027	\$8,313,710	\$8,305,027

Further details of the projects included here are included in Appendix A.

14.2.3 Funding Strategy

Maintenance and capital expenditure on the City's airport assets is funded in the first instance using airport revenue. The City has also established and continues to maintain an Aerodrome Reserve for the purpose of funding the development, operation and maintenance of the Karratha Airport. In addition, Council can elect to fund the enhancement, replacement, refurbishment and purchase of infrastructure assets via Infrastructure Reserve funds.

Where there is an overall expenditure that creates an unsustainable financial position, projects will be transparently ranked in order to permit the prioritisation of funding. This may result in the delay of projects. Deficits will only be acceptable as long as financial sustainable indicators remain within acceptable levels.

Funding Source	2019/20	2020/21	2021/22	2022/23	2023/24
Fees & Charges	\$1,159,300	\$8,037,086	\$9,450,027	\$8,143,710	\$8,245,027
Grants & Subsidies	\$0	\$0	\$0	\$0	\$0
Reserve Funds	\$115,000	\$310,000	\$150,000	\$170,000	\$60,000
Total	\$1,274,300	\$8,347,086	\$9,600,027	\$8,313,710	\$8,305,027

14.3 Asset Performance

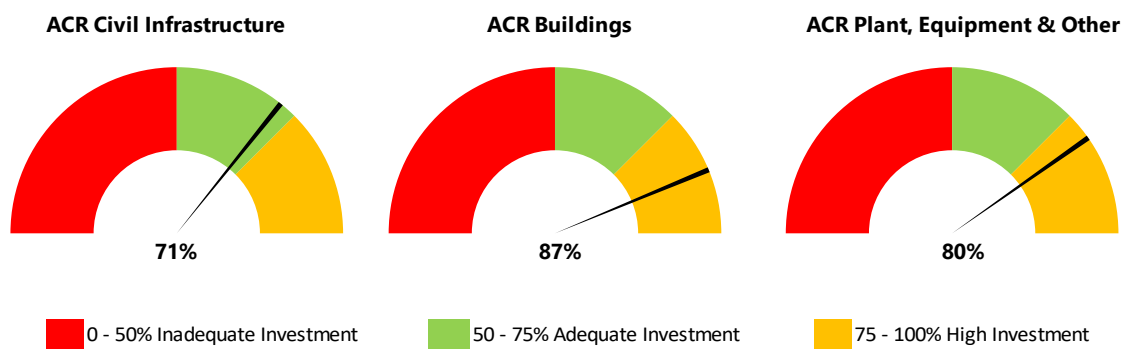
14.3.1 Historic and Current Performance

For the purpose of condition assessment, the City's airport assets are componentised to permit accurate useful lives to be assigned to each component of assets. Components used include sub-structure, super-structure, fit out, site infrastructure and services. Componentisation at this level is necessary to ensure accurate depreciation is allocated to assets throughout their lives.

With many airport assets to assess, the City requires a rigorous condition assessment process that is repeatable and reliable. Most importantly, it must allow for comparisons between assets to enable prioritisation of remedial works. These requirements are most efficiently fulfilled using a numerical scoring system. The condition scoring scale used to assess the condition of the City's airport assets is a standard five-point condition rating scale as per that detailed earlier in this document.

The most recent condition assessment of the City's airport assets was undertaken in alignment with the 2017 & 2018 valuation process (for buildings and infrastructure assets respectively). This condition data shows that per the City's guide, 5% of the airport assets were condition rated at low or not fit for purpose.

The current Asset Consumption Ratio (ACR) figures indicate an adequate level of investment for airport assets.



14.4 Levels of Service

The City currently does not have a documented level of service for airport specific assets, however civil infrastructure and building airport assets are included within the level of service documents for road and building assets respectively.

14.4.1 Customer Levels of Service

Customer levels of service relate to how the community perceives the service in terms of safety, quality, quantity, reliability, responsiveness, cost, efficiency and legislative compliance. These focus on the customer expectations of the service and can be both tangible (such as appearance and frequency of service), or intangible such as ease of use.

Feedback regarding customer levels of service is obtained via community engagement in the form of community surveys and feedback received in the form of customer action requests either directly or via the City's online reporting system, Report It.

The City undertook an Annual Community Survey in March and April of 2019. Of the 1430 respondents, 81.2% rated airport services to be a service of high importance, while 72.8% believed that airport services were performing adequately.

Service Attributes	Service Objectives	Performance Measure Process	Current Performance
Reliability/ Safety	Airport assets provide a reliable and safe environment for users	Maintain or improve a positive gap between performance and importance in Annual Community Survey for Airport services	-8.4 %
Quality	Airport assets are clean and in good condition for users	<i>Per Reliability/Safety</i>	<i>Per Reliability/Safety</i>
Capacity	Airport assets meet users' and program delivery needs	<i>Per Reliability/Safety</i>	<i>Per Reliability/Safety</i>

14.4.2 Technical Levels of Service

These measures support customer measures and tend to be used internally to measure performance against service levels. These focus on the how the organisation delivers the service and tend to relate to actions undertaken by the City. These also include the technical condition of the assets and risk assessment of the assets.

Service Attributes	Service Objectives	Activity Measure Process	Current Performance
Operation	Airport assets meet user's needs	Inspection of airport assets	Condition - triennially
Maintenance	Airport assets are suitable for purpose	Reactive service requests completed within adopted time frames	No service requests received in last 12 months
Renewal	Airport assets meet user's needs	Airport renewals required are funded in the budget	Funding included in budget for asset renewal for items identified in Airport Business Plan and Fleet Replacement Program.

14.4.3 Operational Levels of Service

In addition to triennial condition inspections for all assets, operational levels of service focus on how the organisation manages day-to-day operational activities for asset maintenance. These include operational levels of service for inspection and maintenance regimes.

The City currently does not have a documented levels of service for airport specific assets, however civil infrastructure and building airport assets are included within the level of service documents for road and building assets respectively.

14.5 Strategic Analysis

14.5.1 Strategic Outlook

Based on the trends given in the Strategic Community plan it is prudent to consider some of the upcoming challenges and risks that face the management of this asset portfolio.

Trend	Risk	Risk Mitigation and Impacts
Increased Operational Expenditure	Lower level of funding available for parks maintenance	Higher degree of prediction modelling input to asset renewal and maintenance programs

14.5.2 Links to the Strategic Community Plan

Currently documented levels of service for footpath assets are due for review and have been identified as an area for further development to achieve robustness in the asset management process and to head towards a service centric approach. This review will give consideration to the following goals and objectives identified in the Strategic Community Plan.

Strategic Community Goal	Outcome	Response
To create safe, healthy and liveable communities	Quality Community Facilities	A full range of city-standard facilities and community infrastructure are provided
		Future facility needs are planned for and developed in line with industry best practice
To protect our natural and built environment	Greater energy efficiency	Energy efficiency of Council assets is continuously improving
		Sustainable energy sources and providers are actively sought and partnered
	Sustainable use and management of resources	Efficiency of electrical usage is continually improving
		Efficiency of water usage is continually improving

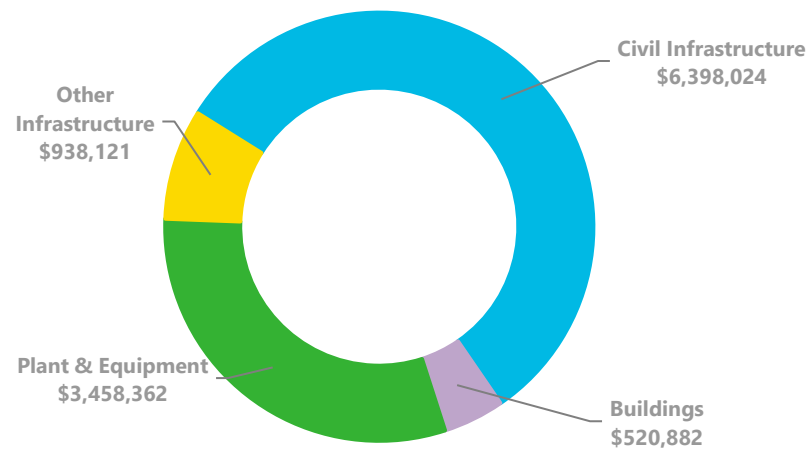
14.5.3 Improvement Plan

A summary of improvement actions in relation to airport assets are listed in the following table:

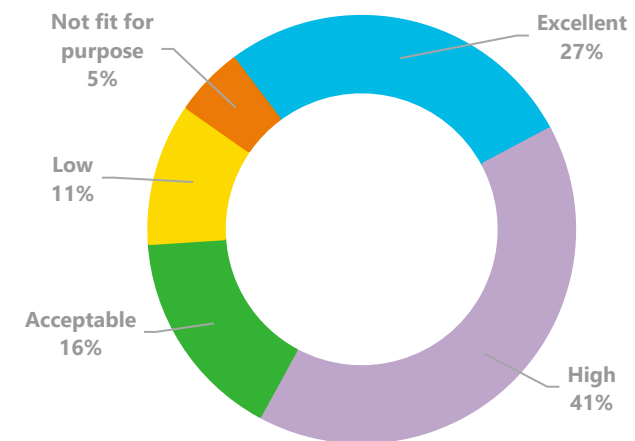
Action	Timeframe	Responsible Officers
Review and further develop Levels of Service	January 2021	Manager Airport Services, Asset Management Coordinator
Improve utilisation of condition data to formulate asset renewal program	January 2021	Manager Airport Services, Asset Management Coordinator

15 Waste Assets

The City owns and operates two waste facilities, the 7 Mile Waste Facility in Gap Ridge and Wickham Transfer Station. Waste assets includes all those associated with the provision of waste services to the district and are valued in excess of **\$11m**.



At the most recent condition assessment in 2017 & 2018, **84%** of the City's waste assets were rated as acceptable or higher.

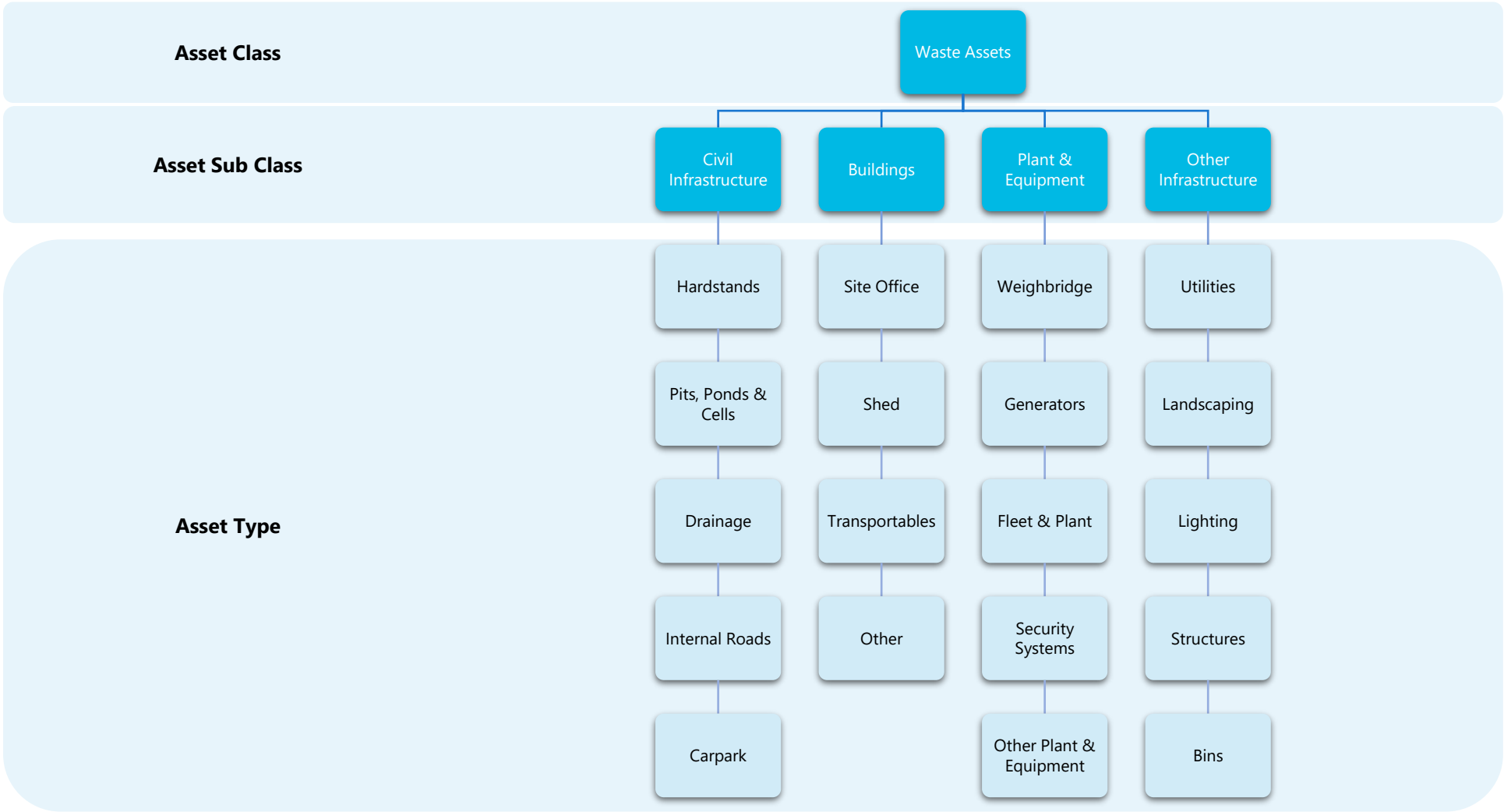


In order to ensure the City's waste asset portfolio continues to meet community expectations, the following provides a summary of major expenditure items over the next 5 years which are included in this plan



15.1 Asset Classification and Hierarchy

The City’s waste assets are classified into groupings by asset types as shown in the figure below.



To assist the prioritisation of waste funding, maintenance and renewal activities, as well as to support the determination of appropriate response times, the City has established a hierarchy of importance with relation to its assets. A higher level of significance places higher priority and higher level of service when considering work programs and budget allocations. For waste assets, the asset hierarchy of select assets is determined in line with that applicable to the relevant asset class. For example, waste building hierarchies are in accordance with the hierarchy applied to building assets.

15.2 Financial Information

15.2.1 Asset Valuation

The last infrastructure asset valuation occurred in June 2018. The value of the City's waste assets as at June 2019 is shown below.

Asset Sub Class	Replacement Value	Accumulated Depreciation	Fair Value	In Year Depreciation
Civil Infrastructure	\$10,953,653	\$4,555,629	\$6,398,024	\$305,634
Buildings	\$682,024	\$161,142	\$520,882	\$17,232
Plant & Equipment	\$3,550,102	\$91,740	\$3,458,362	\$23,564
Other Infrastructure	\$1,335,830	\$397,708	\$938,122	\$52,827
Total	\$16,521,608	\$5,206,219	\$11,315,390	\$399,257

NB: These balances remain subject to final year-end adjustments and audit.

15.2.2 Expenditure Projections

Renewal expenditure is the cost of the capital works program to restore the condition of the assets to as-new condition in order to sustain the community and technical service levels of the asset class. New, renewal and maintenance asset works included in this plan are based on trends in recent financial years as well as specific projects identified by Council officers. Those forecasted to take place in the first year have been submitted for budget approval.

The following table indicates current waste asset expenditure projections in order to sustain the community and technical service levels of the asset class.

Classification	2019/20	2020/21	2021/22	2022/23	2023/24
Civil Infrastructure	\$366,678	\$10,200	\$1,612,155	\$20,400	\$30,600
Buildings	\$9,000	\$10,000	\$0	\$20,000	\$30,000
Plant & Equipment	\$577,850	\$1,580,544	\$730,000	\$280,000	\$1,375,000
Other Infrastructure	\$50,000	\$0	\$0	\$0	\$0
Total	\$1,003,528	\$1,600,744	\$2,342,155	\$320,400	\$1,435,600

Classification	2019/20	2020/21	2021/22	2022/23	2023/24
Renewal	\$394,000	\$1,590,544	\$730,000	\$280,000	\$1,405,000
New	\$571,250	\$0	\$0	\$0	\$0
Maintenance	\$38,278	\$10,200	\$1,612,155	\$40,400	\$30,600
Total	\$1,003,528	\$1,600,744	\$2,342,155	\$320,400	\$1,435,600

Further details of the projects included here are included in Appendix A.

15.2.3 Funding Strategy

Maintenance and capital expenditure on the City's waste is funded in the first instance using waste revenue. The City has also established and continues to maintain a Waste Management Reserve for the purpose of funding the development, operation and maintenance of the Council's Waste Management facilities. In addition, Council can elect to fund the enhancement, replacement, refurbishment and purchase of infrastructure assets via Infrastructure Reserve funds.

Where there is an overall expenditure that creates an unsustainable financial position, projects will be transparently ranked in order to permit the prioritisation of funding. This may result in the delay of projects. Deficits will only be acceptable as long as financial sustainable indicators remain within acceptable levels.

Funding Source	2019/20	2020/21	2021/22	2022/23	2023/24
Fees & Charges	\$68,278	\$20,200	\$1,612,155	\$40,400	\$60,600
Grants & Subsidies	\$100,000	\$0	\$0	\$0	\$0
Reserve Funds	\$835,250	\$1,580,544	\$730,000	\$280,000	\$1,375,000
Total	\$1,003,528	\$1,600,744	\$2,342,155	\$320,400	\$1,435,600

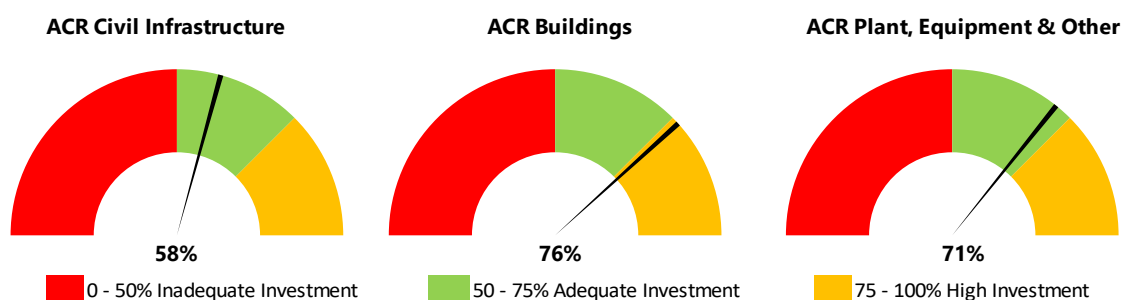
15.3 Asset Performance

15.3.1 Historic and Current Performance

With many waste assets to assess, the City requires a rigorous condition assessment process that is repeatable and reliable. Most importantly, it must allow for comparisons between assets to enable prioritisation of remedial works. These requirements are most efficiently fulfilled using a numerical scoring system. The condition scoring scale used to assess the condition of the City's waste assets is a standard five-point condition rating scale as per that detailed earlier in this document.

The most recent condition assessment of the City's airport assets was undertaken in alignment with the 2017 & 2018 valuation process (for buildings and infrastructure assets respectively). This condition data shows that per the City's guide, 16% of the waste assets were condition rated at low or not fit for purpose.

The current Asset Consumption Ratio (ACR) figures indicate an adequate level of investment for waste assets.



15.4 Levels of Service

The City currently does not have a documented levels of service for waste specific assets, however civil infrastructure and building waste assets are included within the level of service documents for road and building assets respectively.

15.4.1 Customer Levels of Service

Customer levels of service relate to how the community perceives the service in terms of safety, quality, quantity, reliability, responsiveness, cost/efficiency and legislative compliance. These focus on the customer expectations of the service and can be both tangible (such as appearance and frequency of service), or intangible such as ease of use.

Feedback regarding customer levels of service is obtained via community engagement in the form of community surveys and feedback received in the form of customer action requests either directly or via the City's online reporting system, Report It.

The City undertook an Annual Community Survey in March and April of 2019. As part of the survey, 1430 respondents provided feedback on the level of service provided by a number of the City's waste assets.

Services included in Annual Community Survey	Importance	Performance	Gap
Household bin collection	77.4%	82.4%	5%
Tip Services	73.4%	82.6%	9.2%

Service Attributes	Service Objectives	Performance Measure Process	Current Performance
Reliability/Safety	Waste facilities and services are reliable and safe for users	Maintain or improve a positive gap between performance and importance in Annual Community Survey for bin collection	5%
		Maintain or improve a positive gap between performance and importance in Annual Community Survey for tip services	9%
Quality	Airport assets are clean and in good condition for users	<i>Per Reliability/Safety</i>	<i>Per Reliability/Safety</i>
		<i>Per Reliability/Safety</i>	<i>Per Reliability/Safety</i>
Capacity	Airport assets meet users' and program delivery needs	<i>Per Reliability/Safety</i>	<i>Per Reliability/Safety</i>
		<i>Per Reliability/Safety</i>	<i>Per Reliability/Safety</i>

15.4.2 Technical Levels of Service

These measures support customer measures and tend to be used internally to measure performance against service levels. These focus on the how the department delivers the service and tend to relate to actions undertaken by the City. These also include the technical condition of the assets and risk assessment of the assets.

Service Attributes	Service objective	Activity Measure Process	Current Performance
Operation	Waste facilities and collection services meet users' needs	Inspection of waste assets	Condition - triennially
Maintenance	Waste assets are suitable for purpose	Reactive service requests completed within adopted time frames	
Renewal	Waste assets meet user's needs	Waste asset renewals required are funded in the budget	Funding included in budget for renewal items identified in Fleet Replacement Program and by Building Maintenance assessment

15.4.3 Operational Levels of Service

In addition to triennial condition inspections for all infrastructure assets, operational levels of service focus on how the organisation manages day-to-day operational activities for asset maintenance. These include operational Levels of Service for inspection and maintenance regimes.

The City currently does not have a documented levels of service for waste specific assets, however civil infrastructure and building waste assets are included within the level of service documents for road and building assets respectively.

15.5 Strategic Analysis

15.5.1 Strategic Outlook

Based on the trends given in the Strategic Community Plan, it is prudent to consider some of the upcoming challenges and risks that face the management of this asset portfolio.

Trend	Risk	Risk Mitigation and Impacts
Increased Operational Expenditure	Lower level of funding available for waste asset maintenance	Higher degree of prediction modelling input to asset renewal and maintenance programs

15.5.2 Links to the Strategic Community Plan

Currently documented levels of service for footpath assets are due for review and have been identified as an area for further development to achieve robustness in the asset management process and to head towards a service centric approach. This review will give consideration to the following goals and objectives identified in the Strategic Community Plan.

Strategic Community Goal	Outcome	Response
To create safe, healthy and liveable communities	Quality community facilities	A full range of city-standard facilities and community infrastructure are provided
		Future facility needs are planned for and developed in line with industry best practice
To protect our natural and built environment	Improved recycling and waste management	Investigate and implement new waste management technologies to improve resource recovery and recycling outcomes
		Enhance community use of waste and recycling facilities through promotional activities

15.5.3 Improvement Plan

A summary of improvement actions in relation to waste assets are listed in the following table:

Action	Timeframe	Responsible Officers
Review and further develop levels of service	January 2021	Manager City Services, Asset Management Coordinator
Improve utilisation of condition data to formulate asset renewal program	January 2021	Manager City Services, Asset Management Coordinator

16 Appendices

16.1 Appendix A – Asset Expenditure Detail

Road Asset Expenditure Projection

Project Name	2019/20	2020/21	2021/22	2022/23	2023/24
40 Mile Beach Road	86,881	-	97,000	-	97,000
Anderson Road	322,417	-	-	-	-
Archipelago Road	-	-	-	-	34,500
Atkinson Way	-	3,120	3,120	-	-
Balla Balla Road	-	97,000	-	97,000	-
Balmoral Road	-	66,500	-	-	46,550
Bayly Avenue	85,000	2,400,000	2,315,000	-	-
Baynton Drive	64,781	-	-	-	16,660
Birch Place	-	-	-	-	16,560
Brockman Street	-	-	-	-	30,240
Brolga Meander	-	-	-	92,148	-
Brooks Way	-	1,810	-	-	-
Buchanan Circuit	-	-	56,730	-	-
Bus Shelters	143,300	50,000	50,000	50,000	50,000
Calliance Way	-	-	-	-	11,060
Campbell Crescent	-	-	86,380	-	-
Cape Lambert Road	-	93,600	174,720	-	-
Cassia Close	13,704	-	-	-	-
Central Avenue	-	-	-	-	43,000
Cherratta Road	-	-	21,316	-	-
Church Way	-	-	11,900	-	-
Cleaverville Road	76,305	-	172,000	-	172,000
Conzinc Bay Road	268,602	2,000,000	5,000,000	-	-
Coolawanyah Road	-	6,027,750	-	-	-
Cossack Road	173,646	-	-	-	-
Crane Circle	-	122,100	-	-	-
Dampier Road	-	4,000	8,000	6,800	16,000
Degrey Place	40,466	-	-	-	-
Dewitt Road	-	-	-	10,800	-
Egret Green	-	-	-	11,120	-
Emma Street	-	-	61,060	-	-
Exploration Drive	-	-	-	-	73,112
Falcon Parade	-	-	-	65,942	-
Fantail Bend	-	-	-	43,014	-
Farwig Court	-	-	-	5,200	-
Featherby Way	-	-	19,680	-	-
Forrest Crescent	-	-	-	36,000	-
Gammon Court	-	-	8,100	-	-
Goshawk Circle	-	-	-	-	32,260
Hampton Street South	-	-	-	28,800	-
Harding Way	-	99,360	-	-	-
Harriet Way	-	-	-	15,078	30,204
Hill Road	-	18,000	19,440	-	-
Hillview Road	-	32,000	-	-	-
Honeyeater Corner	-	-	-	-	54,612
Jacaranda Place	99,523	-	-	-	-
Kerbs	295,000	675,000	375,000	375,000	375,000
King Bay Road	-	-	11,200	-	-
Kingfisher Way	-	-	-	57,738	-
Koolinda Parade	-	-	-	17,800	48,800
Lathwell Close	-	-	17,360	-	-

Project Name	2019/20	2020/21	2021/22	2022/23	2023/24
Locke Place	-	-	-	4,800	-
Lockyer Way	-	-	-	-	29,880
Lovat Street	-	-	-	16,952	-
Maitland Road	-	18,000	34,080	-	11,360
Marsh Way	-	-	-	-	75,200
Matebore Street	-	-	15,000	-	45,000
Mccamey Loop	-	-	-	-	37,920
Meares Drive	-	-	-	-	48,160
Millstream Road	-	-	-	26,000	19,600
Mooligunn Road	937,483	-	-	-	-
Mudlark Turn	-	-	-	48,640	-
Munga Way	-	23,100	-	-	-
Mystery Road	-	6,720	-	-	-
Nelley Way	80,424	-	-	-	-
Norman Road	-	90,554	-	-	-
Orkney Road	126,538	-	-	-	-
Parker Close	-	-	-	-	8,820
Peirl Way	33,515	-	-	-	-
Pinnacle Street	-	-	-	26,866	-
Queen Street	-	-	-	-	29,400
Radley Drive	-	-	49,020	-	-
Raeburn Court	-	-	-	-	2,400
Ridge Elbow	-	-	-	13,616	-
Roebourne Wittenoom Road	152,497	290,000	290,000	290,000	290,000
Rosewood Place	-	95,950	-	-	-
Roundabouts and medians	200,000	200,000	200,000	200,000	200,000
Sandpiper Turn	-	-	-	31,038	-
Searipple Road	-	56,000	42,640	40,000	-
Shadwick Drive	70,898	-	-	-	-
Shakespeare Street	-	-	-	-	17,040
Straker Road	-	-	-	-	7,500
Tambrey Drive	-	-	-	54,400	-
The Esplanade	-	137,000	41,080	36,200	-
Carpark Reseal	29,976	30,000	30,000	30,000	30,000
Treetop Crescent	-	-	-	68,064	-
Village Road	-	14,400	-	-	-
Walcott Drive	-	-	-	-	111,280
Warrier Street	-	-	15,840	-	-
Wattle Place	13,704	-	-	-	-
Welcome Road	-	31,520	25,200	-	-
Wickham Drive	-	-	-	-	6,640
Woodbrook Road	116,085	172,000	172,000	172,000	172,000
Woodswallow Bend	-	-	-	41,716	-
Zanetti Way	-	-	-	62,812	-

Footpath Asset Expenditure Projection

Project Name	2019/20	2020/21	2021/22	2022/23	2023/24
Angel Street to Middleton Way	11,260	-	-	-	-
Ausburn Place to Lewis Drive	33,780	-	-	-	-
Austen Loop to Tambrey Drive	16,890	-	-	-	-
Bathgate Road - Existing Path North of Gawthorne to Bayview Road	-	-	-	-	194,205
Bayview Road - Boyd Close to Lewis Drive	-	-	-	305,360	-
Bayview Road - Lewis Drive to Legendre Road	-	-	-	352,560	-
Bayview Road - Maitland Road to Searipple Path	-	-	-	-	352,062
Bayview Road - Searipple Camp to ex High-School Site	-	-	562,020	-	-
Bayview Road Stage 5a	250,000	-	-	-	-
Brooks Way to Austen Loop	16,890	-	-	-	-
Brooks Way to Brooks Way	16,890	-	-	-	-
Caporn Place to Broadhurst Road	5,630	-	-	-	-
Carse Street - Precinct to Shopping Centre	-	-	17,400	-	-
Cleaverville Road - Andover Way to Cleaver Terrace	-	-	-	-	63,030
Dampier Road - Rosemary Road to High School	-	699,539	-	-	-
Dampier Road - Dampier Road to Welcome Road	-	-	123,450	-	-
Dampier Road to Int. of Warbler Loop and Mudlark Turn	5,630	-	-	-	-
Dampier Road to Strickland Drive	11,260	-	-	-	-
Delambre Drive through park to Aldag Court	11,260	-	-	-	-
Dwyer Place to Millars Well Primary School	22,520	-	-	-	-
Ettie Close to Walkington Circle	39,410	-	-	-	-
Farwig Court to Broadhurst Road	37,000	-	-	-	-
Flannelbush Turn through Tambery Park	39,410	-	-	-	-
Footpath Lighting	-	200,000	200,000	200,000	200,000
Footpath Maintenance	325,000	325,000	325,000	325,000	325,000
Footpath Renewals	217,115	125,000	125,000	125,000	125,000
Law Court to O'neil Court	22,520	-	-	-	-
Lawrence Way to Atkinson Way	11,260	-	-	-	-
Leonard Way to Enderby Street	5,630	-	-	-	-
Lewis Drive to Zanetti Way	33,780	-	-	-	-
Malus Road to Brooks Way	16,890	-	-	-	-
Millstream Road - Lockyer St to Maitland Road	375,000	-	-	-	-
O'neil Court to Strickland Drive	22,520	-	-	-	-
Parton Close to Matebore Street	39,410	-	-	-	-
Buller Court to Footpath	5,630	-	-	-	-
Swetman Way to Ryder Court	5,630	-	-	-	-
Strickland Drive to Wedge Place	45,040	-	-	-	-
Trevally Court to Law Court	16,890	-	-	-	-
Tue Place to Badock Place	22,520	-	-	-	-
Veall Close to Garland Place	11,260	-	-	-	-

Project Name	2019/20	2020/21	2021/22	2022/23	2023/24
Warbler Loop to Gecko Circle	16,890	-	-	-	-
Warrier Street - Millstream Road to existing	-	-	-	37,500	-
Wedge Place to Strickland Drive	22,520	-	-	-	-
Wickham Drive - Adjacent to Mulga Way	-	-	-	-	64,500
Zanetti Way to Ausburn Place	33,780	-	-	-	-

NB: Footpath lighting programs, although included and prioritised in the Footpath Lighting Strategy, are yet to be allocated a financial year for implementation, and are therefore included on an annual allocation basis

Drainage Asset Expenditure Projection

Project Name	2019/20	2020/21	2021/22	2022/23	2023/24
Culvert - 40 Mile Beach Access Road	-	198,668	-	50,910	-
Culvert - Alexander Stephen Court Footbridge	-	-	-	7,410	-
Culvert - Balla Balla Road	-	-	-	38,880	-
Culvert - Bayview Road	-	42,800	-	27,460	-
Culvert - Brolga Meander	-	-	-	46,900	-
Culvert - Coolawanyah Road Driveway	-	-	-	300,175	-
Culvert - Crawford Way	-	-	-	23,450	-
Culvert - Footbridge Between Nairn Street and Viveash Way	-	-	-	-	18,830
Culvert - Footbridge Between Queen Street and Degrey Street	-	-	-	-	583,000
Culvert - Footbridge Between Rosemary Road and Reed Court	-	15,430	-	-	-
Culvert - Footbridge Between Shakespeare Street and Viveash Way	-	-	-	-	33,650
Culvert - Footbridge North Of Plumegrass Way Linking Footpath In Drainage Reserve	-	22,000	-	-	-
Culvert - Footbridge Shakesphere Street	-	-	-	-	18,830
Culvert - Footbridge Wickerson Way	-	-	-	-	22,840
Culvert - Gregory Way South	-	-	-	29,800	-
Culvert - Hardey Crescent	-	35,480	-	-	-
Culvert - Hearson Cove Road	-	-	-	27,460	-
Culvert - Irwin Crescent	-	-	-	33,475	-
Culvert - Karasek Way	-	-	-	70,000	-
Culvert - Lambert Road	-	-	-	27,460	-
Culvert - Lyndon Crescent	-	33,475	-	-	-
Culvert - Norman Road Driveway Unsealed	-	-	-	27,460	-
Culvert - Pemberton Way	-	-	-	27,460	-
Culvert - Shallow Well Road	-	-	-	19,440	-
Culvert - Spillway Off Lockyer Street	-	-	19,500	-	-
Culvert - Spillway Off Lyndon Crescent	-	7,200	-	-	-
Culvert - The Esplanade	-	-	-	23,450	-
Culvert - Village Road	-	-	-	200,850	-
Culvert - West Avenue	-	35,480	-	-	-
Culvert - Wickham Drive	-	-	314,000	-	-
Culvert - Williams Court	-	47,510	-	-	-
Drainage Maintenance	754,997	754,997	754,997	754,997	754,997

Project Name	2019/20	2020/21	2021/22	2022/23	2023/24
Searipple Road	100,000	-	-	-	-
Warambie Road Rock Protection	50,000	-	-	-	-
West Avenue - Dampier	100,000	-	-	-	-

Building Asset Expenditure Projection

Project Name	2019/20	2020/21	2021/22	2022/23	2023/24
Andover Park Public Toilet	-	-	-	5,000	-
Baynton West Park Toilets	10,000	-	-	-	-
Bulgarra Daycare Building	30,000	-	-	-	-
Bulgarra Oval Change rooms	-	-	-	-	26,000
Cleaverville Toilets	-	13,000	-	-	10,000
Dalgety House	-	32,000	20,000	-	-
Dampier Community Hub	-	-	20,000	20,000	-
Dampier Park (Lions) Public Toilet	-	-	-	3,000	-
Dampier Shark Cage Beach Public Toilets	-	-	-	30,000	-
Frank Butler Community Centre	75,000	-	-	-	-
Frank Butler Community Centre Change Rooms	45,000	-	-	-	-
Honeymoon Cove Toilet	50,000	-	-	-	-
Jarman Island Lighthouse	-	-	200,000	-	-
Johns Creek Public Toilet	-	-	8,000	-	-
Karratha Cemetery Toilet	-	-	-	-	5,000
Karratha Depot	20,000	53,000	25,000	29,000	28,000
Karratha Indoor Cricket Facility - Public Toilet	-	-	-	8,000	-
Karratha Landfill Weigh Bridge Control Room	-	5,000	-	-	-
Karratha Landfill Lunchroom	-	-	-	15,000	-
Karratha Landfill Tip Shop Storage Shed and Office	-	-	8,000	5,000	-
Karratha Leisureplex	105,000	764,000	85,000	222,000	486,000
Karratha Main Admin Annexe	30,000	110,000	40,000	-	-
Karratha Main Admin Building	90,000	115,000	380,000	220,000	30,000
Maintenance Costs	1,947,216	51,000	459,000	272,340	53,040
Millars Well Clinic Building	25,000	-	-	-	-
Millars Well Daycare Building	25,000	16,000	-	-	-
Pam Buchanan Family Centre - External Areas, Admin, Workshop Rooms, Hallways	130,000	-	-	20,000	-
Pegs Creek Pavilion	25,000	15,000	20,000	-	200,000
Point Samson Toilet Building	150,000	-	-	-	-
Red Earth Arts Precinct	21,000	30,000	30,000	30,000	30,000
Residential Housing	400,000	580,000	400,000	400,000	400,000
Roebourne Centenary Park Toilet	-	-	-	-	5,000
Roebourne Library	-	7,000	3,000	-	3,000
Roebourne Old Shire Office	-	85,000	-	-	-
Tambrey Oval Changerooms	-	-	-	20,000	-
Tambrey Oval Pavilion	-	20,000	-	-	-
Tambrey Oval Toilet Block	-	-	200,000	-	-
The Youth Shed	-	-	30,000	5,000	-
Records Storage	30,000	-	-	-	-
Wickham Bistro	25,000	-	12,000	-	-
Wickham Community Hub	82,568	-	-	-	-

Project Name	2019/20	2020/21	2021/22	2022/23	2023/24
Wickham Recreation Precinct Gym and Pool Buildings	55,000	-	20,000	-	-

Park, Recreation and Open Space Asset Expenditure Projection

Project Name	2019/20	2020/21	2021/22	2022/23	2023/24
40 Mile Foreshore Works	55,000	108,000	-	6,000	-
Andover Park Redevelopment	1,900,000	-	-	-	-
Cattrall Park	-	40,000	-	-	-
Church Way Park	-	-	60,000	-	-
Cleaverville Foreshore Works	30,000	158,000	150,000	-	6,000
Cossack - Wharf Structure and Wall	-	150,000	-	-	-
Dampier Boat Ramp	150,000	-	-	-	-
Dampier Marina Project	-	8,000,000	8,000,000	-	-
Dampier Palms and Hampton Oval Redevelopment	11,149,978	-	-	-	-
Dampier Road Streetscape Master Plan	-	50,000	50,000	50,000	50,000
Dampier Townsite Foreshore Enhancement Plan	-	150,000	150,000	1,000,000	150,000
Effluent Reuse Scheme - Effluent Reuse Plan - Stage 2 (Karratha)	-	-	-	2,000,000	-
Flannelbush Turn Park	-	-	60,000	-	-
Hearson Cove Foreshore Management Plan	-	300,000	500,000	-	-
Johns Creek Boat Ramp	976,299	-	-	-	-
Jurat Park	-	40,000	-	-	-
Karratha Bowling Club - Green and Shade Upgrade	20,000	-	-	-	-
Karratha Caravan Park	-	-	-	-	1,000,000
Karratha Foreshore Management Plan	-	600,000	1,000,000	100,000	100,000
Karratha Golf Course Redevelopment	-	450,000	-	450,000	-
Karratha Off Road Vehicle Area	-	-	100,000	50,000	-
Karratha Revitalisation Strategy	-	4,000,000	1,000,000	3,000,000	1,000,000
Kevin Richards Memorial Park	-	-	-	-	50,000
Malster Park	-	-	-	-	80,000
Miles Loop	-	-	50,000	-	-
Millars Well Oval Redevelopment	875,000	-	-	-	-
New Rex Webb Park	-	500,000	-	-	-
Ovals - General Equipment	43,000	-	-	-	-
Playground Equipment Program	100,000	-	-	-	-
Point Samson Beautification	-	-	1,000,000	-	-
Point Samson Entry Statement	90,000	-	-	-	-
Point Samson Viewing Platform/Jetty	60,000	2,000,000	-	-	-
Richardson Way Park	-	-	80,000	-	-
Roebourne Recreation Precinct	-	1,200,000	6,500,000	-	-
Roebourne Youth Precinct - Shade Structure	-	-	-	60,000	-
Saylor Park	-	-	-	-	80,000
Shakespeare Park	-	-	-	50,000	-
Stove Court Park	-	100,000	-	-	-
Cemetery Upgrade	-	300,000	-	200,000	200,000
Town Entry Statements / Visitor Information Bays	-	200,000	200,000	1,000,000	1,000,000

Airport Asset Expenditure Projection

Project Name	2019/20	2020/21	2021/22	2022/23	2023/24
Additional Apron Lighting	-	-	500,000	-	-
Airside Roads	-	250,000	-	-	-
Baggage Storage Lockers	15,000	-	-	-	-
Baggage System	505,000	-	-	-	-
Car Park Expansion	-	300,000	-	-	-
Car Park System	24,000	-	-	-	-
Chiller Replacement 2	-	350,000	-	-	-
Conveyor Main Control Panel	150,000	-	-	-	-
Equipment and Fit Out (International)	-	500,000	-	-	-
Fencing Replacement	-	-	200,000	200,000	200,000
Fire System	15,000	-	-	-	-
Freight Terminal	-	-	1,000,000	-	-
Ga Apron	130,000	2,000,000	2,000,000	-	-
General Maintenance	12,300	397,086	405,027	405,027	405,027
Hanger	-	-	2,500,000	-	-
Helicopter Terminal	-	500,000	500,000	-	-
Airport Indoor Playground	-	-	-	20,000	-
International Terminal Compliance Works	-	1,300,000	1,300,000	-	-
Karratha Airport - Terminal Building	40,000	310,000	150,000	170,000	60,000
PAPI Lens Replacement	20,000	-	-	-	-
Pavements and drainage	10,000	-	-	-	-
Plant	35,000	140,000	45,000	18,683	140,000
Primary Cable Circuit Upgrade	-	1,000,000	-	-	-
Rehab to Drying Pond and Jet Boat Facilities	-	100,000	-	-	-
Road Maintenance	56,000	-	500,000	-	-
RPT Expansion 1 - Provision of 1 Bay	-	500,000	-	-	-
Runway	-	500,000	500,000	7,500,000	7,500,000
Screening Equipment	-	200,000	-	-	-
Spray Seal Taxiway Shoulders	15,000	-	-	-	-
Terminal Building	204,000	-	-	-	-
Utility Provision Assets	43,000	-	-	-	-

Waste Asset Expenditure Projection

Project Name	2019/20	2020/21	2021/22	2022/23	2023/24
7 Mile Road Work Extension	341,250	-	-	-	-
Fleet Replacement	385,000	1,580,544	730,000	280,000	1,375,000
External Stairs and Handrails	-	-	-	-	30,000
Operations Office	-	-	-	20,000	-
Internal Roads - 7 Mile	25,428	10,200	1,612,155	20,400	30,600
Landfill Fencing	30,000	-	-	-	-
Purchase Of 12T Digger	180,000	-	-	-	-
Replace Minor Plant/Equipment	12,850	-	-	-	-
Replacement Ac Units	9,000	-	-	-	-
Weighbridge Office Surface Protectant	-	10,000	-	-	-
Wickham Transfer Station-Electronic Gates	20,000	-	-	-	-

16.2 Appendix B - Important Documents

This document should be read in conjunction with the following City documents:

- Council Policy CF-13 Asset Management Policy
- Council Policy CF-01 Local Government Accounting Directions
- Council Policy CF-17 Disposal of Assets Policy
- Strategic Community Plan 2016-2026
- Corporate Business Plan 2016-2021
- Operational Plan 2019-2020
- Roads, Kerbs and Pathways Segmentation Rules 2013
- Roads and Pathways Condition Audit Collection Manual
- Road Reserve and Associated Infrastructure Levels of Service
- Footpath Strategy 2018 – 2028
- Footpath Lighting Strategy
- Parks and Open Space Operational Levels of Service
- Parks, Gardens and Open Space Maintenance Level of Service and Play Space Standards
- Play Space Standards
- Shire Buildings Operational Levels of Service
- 10-Year Playground Management Plan

16.3 Appendix C – Glossary

Term	Definition
Annual service cost (ASC)	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 operating, maintenance, depreciation, finance/opportunity and disposal costs, less revenue.
Asset class	Grouping of assets of a similar nature and use in an entity's operations (AASB 166.37).
Asset condition assessment	The process of continuous or periodic inspection, assessment, measurement and interpretation of the resultant data to indicate the condition of a specific asset so as to determine the need for some preventative or remedial action.
Asset management	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.
Assets	Property, plant and equipment including infrastructure and other assets (such as furniture and fittings) with benefits expected to last more than 12 month.
Average annual asset consumption (AAAC)	The amount of a local government's asset base consumed during a year. This may be calculated by dividing the Depreciable Amount (DA) by the Useful Life and totalled for each and every asset OR by dividing the Fair Value (Depreciated Replacement Cost) by the Remaining Life and totalled for each and every asset in an asset category or class.
Asset consumption ratio (ACR) **	The Asset Consumption Ratio seeks to highlight the aged condition of a local government's stock of physical assets. The ratio can be calculated by dividing the depreciated replacement cost of assets by the current replacement cost. Standard is met if the ratio can be measured and is 50% or greater, the standard is improving if the ratio is between 60% and 75%.
Asset renewal funding ratio (ARFR) **	The Asset Renewal Funding Ratio indicates whether the local government has the financial capacity to fund asset renewal as required, and can continue to provide existing levels of services in the future, without additional operating income; or reductions in operating expenses. The ratio can be calculated by dividing the net present value of planned capital renewals over the next 10 years by the net present value of required capital renewals over the next 10 years. Standard is met if the ratio is between 75% and 95%, the standard is improving if the ratio is between 95% and 105%, and the ASR falls within the range 90% to 110% and ACR falls within the range 50% to 75%.
Asset sustainability ratio (ASR) **	The Asset Sustainability Ratio is an approximation of the extent to which assets managed by a local government are being replaced as these reach the end of their useful lives. The ratio can be calculated by dividing the capital renewal and replacement expenditure, less expenditure on new/upgraded assets and proceeds on disposal of renewed assets, by depreciation expense. Standard is met if the ratio can be measured and is 90%, the standard is improving if this ratio is between 90% and 110%.
Capital expansion expenditure	Expenditure that extends an existing asset, at the same standard as is currently enjoyed by residents, to a new group of users. It is discretionary expenditure, which increases future operating, and maintenance costs, because it increases council's asset base. The expenditure may be associated with additional revenue from the new user group.

Term	Definition
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 funding	Funding available 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 new expenditure	Capital expenditure that creates a new asset providing a new service to the community that did not exist beforehand. As it increases service potential it may impact revenue and will increase future operating and maintenance expenditure.
Capital renewal expenditure	Capital expenditure on an existing asset that returns the service potential or the life 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 of the asset being renewed. As it reinstates existing service potential, it has no impact on revenue, but may reduce future operating and maintenance expenditure if completed at the optimum time. Where capital projects involve a combination of renewal, expansion and/or upgrade expenditures, the total project costs needs to be allocated accordingly.
Capital upgrade expenditure	Expenditure, which enhances an existing asset to provide a higher level of service, and 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 operating and maintenance expenditure in the future because of the increase in the council's asset base. Where capital projects involve a combination of renewal, expansion and/or upgrade expenditures, the total project costs needs to be allocated accordingly.
Carrying amount	The amount at which an asset is recognised after deducting any accumulated depreciation / amortisation and accumulated impairment losses thereon.
Component	An individual part of an asset which contributes to the composition of the whole and can be separated from or attached to an asset or a system.
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, plus any costs necessary to place the asset into service. This includes one-off design and project management costs.
Current replacement cost (CRC)	The cost the entity would incur to acquire the asset on the reporting date. The cost is measured by reference to the lowest cost at which the gross future economic benefits could be obtained in the normal course of business or the minimum it would cost to replace the existing asset with a technologically modern equivalent new asset (not a second hand one) with the same economic benefits (gross service potential) allowing for any differences in the quantity and quality of output and in operating costs.
Current replacement cost "As New" (CRC)	The current cost of replacing the original service potential of an existing asset, with a similar modern equivalent asset, i.e. the total cost of replacing an existing asset with an as new or similar asset expressed in current dollar values.

Term	Definition
Cyclic maintenance	Replacement of components/sub-components of assets that is undertaken on a regular cycle including repainting, building roof replacement, replacement of air conditioning equipment, etc. This work generally falls below the capital threshold and needs to be identified in a specific maintenance budget allocation.
Depreciable amount	The cost of an asset, or other amount substituted for its cost, less its residual value (AASB 116.6)
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.
Expenditure	The spending of money on goods and services. Expenditure includes recurrent and capital.
Fair value	The amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties, in an arm's length transaction.
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 of the entity or of another entity that contribute to meeting the public's need for access to major economic and social facilities and services, e.g. roads, drainage, footpaths and shared paths. 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 often have no market value.
Investment property	Property held to earn rentals or for capital appreciation or both, rather than for use in the production or supply of goods or services or for administrative purposes; or sale in the ordinary course of business (AASB 140.5).
Level of service	The defined service quality for a particular service against which service performance may be measured. Service levels usually relate to quality, quantity, reliability, responsiveness, environmental, acceptability and cost.
Life cycle cost**	The Life Cycle Cost (LCC) is average cost to provide the service over the longest asset life cycle. It comprises annual maintenance and asset consumption expense, represented by depreciation expense. The LCC does not indicate the funds required to provide the service in a particular year.
Life cycle expenditure**	The Life Cycle Expenditure (LCE) is the actual or planned annual maintenance and capital renewal expenditure incurred in providing the service in a particular year. LCC may be compared to LCE to give an initial indicator of life cycle sustainability in service provision.
Loans / borrowings	Loans result in funds being received which are then repaid over a period of time with interest (an additional cost). Their primary benefit is in 'spreading the burden' of capital expenditure over time. Although loans enable works to be completed sooner, they are only ultimately cost effective where the capital works funded (generally renewals) result in operating and maintenance cost savings, which are greater than the cost of the loan (interest and charges).

Term	Definition
Maintenance and renewal gap	Difference between estimated budgets and projected expenditures for maintenance and renewal of assets, totalled over a defined time (e.g. 5, 10 and 15 years).
Maintenance and renewal sustainability index	Ratio of estimated budget to projected expenditure for maintenance and renewal of assets over a defined time (e.g. 5, 10 and 15 years).
Maintenance expenditure	Recurrent expenditure, which is periodically or regularly required as part of the anticipated schedule of works required to ensure that the asset achieves its useful life and provides the required Level of Service. It is expenditure, which is anticipated in determining the asset's useful life.
Materiality	An item is material if its omission or misstatement could influence the economic decisions of users taken on the basis of the financial report. Materiality depends on the size and nature of the omission or misstatement judged in the surrounding circumstances.
Modern equivalent asset	A structure similar to an existing structure and having the equivalent productive capacity, which could be built using modern materials, techniques and design. Replacement cost is the basis used to estimate the cost of constructing a modern equivalent asset.
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.
Operating expenditure	Recurrent expenditure continuously required to enable the asset to operate excluding maintenance and depreciation, e.g. electricity, water and fuel. It relates to operations and not the condition of the asset.
Pavement management system	The Pavement Management System (PMS) is a systematic process for measuring and predicting the condition of road pavements and wearing surfaces over time and recommending corrective actions.
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.
PMS score	A measure of condition of a road segment determined from a Pavement Management System (PMS).
Rate of annual asset consumption*	A measure of Average Annual Asset Consumption (AAAC) expressed as a percentage of the Depreciable Amount (AAAC/ DA). Depreciation may be used for AAAC.
Rate of annual asset renewal*	A measure of the rate at which assets are being renewed per annum expressed as a percentage of Depreciable Amount (capital renewal expenditure/DA).
Rate of annual asset upgrade	A measure of the rate at which assets are being upgraded and expanded per annum expressed as a percentage of Depreciable Amount (capital upgrade and expansion expenditure/DA).
Reactive maintenance	Unplanned repair work that is carried out in response to service requests and management/supervisory directions.
Recoverable amount	The higher of an asset's fair value net of sales costs 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 operating and maintenance expenditure.

Term	Definition
Recurrent funding	Funding to pay for recurrent expenditure.
Remaining life	The time remaining until an asset ceases to provide the required service level or economic usefulness. Age plus remaining life is economic life.
Residual value	The net amount which an entity expects to obtain for an asset at the end of its useful life after deducting the expected costs of disposal.
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, 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 capacity to provide goods and services in accordance with the entity's objectives, whether those objectives are for the generation of net cash inflows or the provision of goods and services of a particular volume and quantity to the beneficiaries thereof.
Service potential remaining*	A measure of the remaining life of assets expressed as a percentage of economic life. It is also a measure of the percentage of the asset's potential to provide services that are still available for use in providing services (DRC/DA).
Sub-component	Smaller individual parts that make up a component part.
Useful life	<p>Either:</p> <ul style="list-style-type: none"> • The period over which an asset is expected to be available for use by an entity; or • The number of production or similar units expected to be obtained from the asset by the entity. <p>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. It is the same as the economic life.</p>
Value in use	The present value of estimated future cash flows expected to arise from the continuing use of an asset and from its disposal at the end of its useful life. 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 new cash flows, where if deprived of the asset its future economic benefits would be replaced.

Source: DVC 2006 Glossary

Note: Items show * modified to use DA instead of CRC, Additional glossary items shown **