ASSET MANAGEMENT STRATEGY
(2024 - 2029)

SHIRE of CAPEL

Acknowledgement to Country

We wish to acknowledge the traditional custodians of the land we are meeting on, the Wadandi people. We wish to acknowledge and respect their continuing connection to the land, waters and community.

We pay our respects to all members of the Aboriginal communities and their culture; and to Elders past and present, their descendants who are with us today, and those who will follow in their footsteps
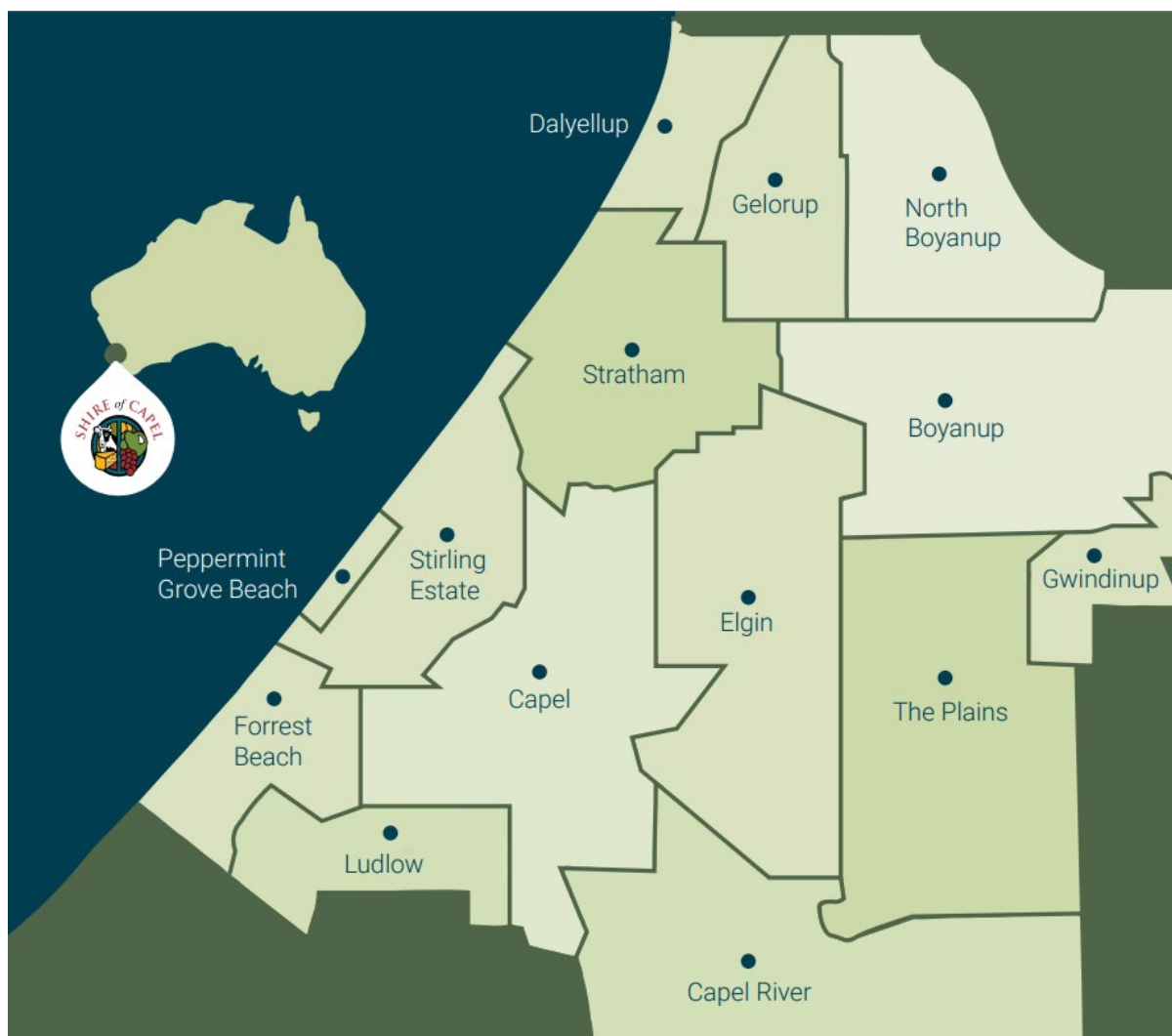
Document Control

Document Control					

Rev No	Date	Revision Details	Author	Reviewer	Approver
Ver 1.0	October 2011	Adopted Strategy	AMO	AM (Asset Management) Working Group	
Revision 1.0	January 2016	First Review	AMC	Executive Manager, Engineering & Development Services	
Revision 2.0	June 2018	Second Review	MTS	Executive Manager, Engineering & Development Services	
Revision 3.0	August 2020	Third Review	MTS	Director Infrastructure and Development	
Ver 2.0	January 2024	Strategy Review & Rewrite	AIO MPEA	Director Infrastructure and Development	
Revision 2.0	September 2024	Strategy Rewrite	AIO MPEA	Director Infrastructure and Development	

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Introduction

The Shire of Capel region spans 558km², is home to approximately 19,000[1] people and includes vast stretches of pristine coastland, high quality urban and leafy rural areas, historic country towns and natural forests. The Shire is one of the most bio-diverse areas globally, home to the world's last remaining Tuart Forest and containing:

- New and modern urban developments.
- New and existing rural developments.
- Country towns.
- Rural heritage areas.
- Seaside settlements.
- Natural environment including wetlands and native forest.

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[1] Shire of Capel Integrated Growth Framework and Plan, 2024

Infrastructure assets are vital to the quality of life in the Shire's communities. These assets impact all areas of local government service delivery, with residents, businesses, and visitors relying on them for essential activities such as driving, walking, cycling, accessing community services, and enjoying recreational and leisure activities.

Dalyellup Beach Boardwalk at Sunset.

The Shire is responsible for community assets with a current replacement value of approximately $314 million. This portfolio continues to grow as the Shire's urban areas expand. The Shire's largest and fastest growing suburb, Dalyellup, has seen assets with a value of over $88 million donated to the Shire since 1999.

The Asset Management Strategy is a key part of the Shire's asset management planning framework; it establishes the guidance required to manage Shire assets taking into account the challenges of growth, financial sustainability and community expectations. The following key headings expand on these considerations:

Challenges of Sustained Population Growth

- Sustained population growth presents challenges in providing quality infrastructure to service new and expanding communities while effectively managing existing assets.
- From 2001 to 2021, the Shire's population increased by 279% from 6,517 to 18,175 (ABS Census).
- Population projections estimate growth to 21,724 by 2031 and 26,434 by 2041 (WA Tomorrow Report No.12 Population Forecast and Shire Integrated Growth Framework and Plan, 2023).

Community Vision and Expectations

- The Shire's Sense of Place Statement identifies 'A Lifestyle of Choice: Connecting Community, Culture and Country,' emphasising great places, services, and amenities as key community priorities.
- As community expectations evolve with social change and technological advances, there is a growing demand for greater choice, flexibility, engagement, and transparency in decision-making.
- Changes in community expectations must be reflected in our asset management approaches through the development of asset management objectives that align with the Shire's broader strategies.

Ensuring Long-term Financial Sustainability

- Balancing the community's infrastructure aspirations with the Shire's financial capacity is essential for long-term sustainability.
- Asset management practices are the mechanisms to achieve this balance.
- Asset management is the systematic and coordinated organisational approach to activities and practices that deliver objectives optimally and sustainably through the cost-effective lifecycle management of assets (IPWEA, 2015).
- Asset management must focus on asset optimisation throughout the entire asset lifecycle from provision or construction to operation, maintenance, and replacement or disposal at the end of their useful life.
- This approach is underpinned by a commitment to transparent governance and continuous improvement.

Asset Management Strategy Overview

The Asset Management Strategy is a key component of the Shire's asset management planning framework. This 5-year strategy outlines how the Shire will manage its assets throughout their entire lifecycle and translates the high-level direction set by the community and Council through the Strategic Community Plan and Asset Management Policy into an asset management context.

Weld Road widening and gravel re-sheet

Shire Location signage

Dalyellup District Centre Shire infrastructure

Context

The Shire must incorporate certain internal and external factors into asset management with key considerations including:

Legislation

Local governments are required to "plan for the future" in accordance with s5.56 of the Local Government Act (1995).

In addition, the Department of Local Government, Sport & Cultural Industries (DLGSC) Integrated Planning and Reporting Framework (IPR) guides local governments on what plans and strategies are required to meet the legislative requirements; asset management planning is a core requirement of IPR.

Other legislation applies to specific asset classes such as the Road Traffic Act 1974, Building Act 2011 and Environmental Protection Act 1986.

Integrated Planning and Reporting Framework (IPR)

The *Local Government Act, 1995* requires all local governments to plan for the future by adopting an integrated framework for corporate planning and reporting. This framework provides local governments with the mechanism for capturing aspirations and priorities of the
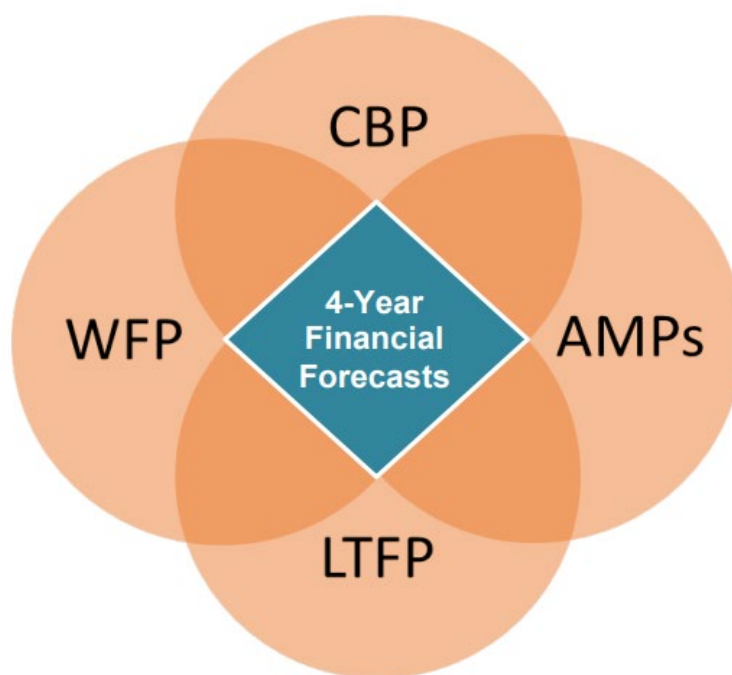
community and translating them into operational objectives and actions, and for tracking progress on delivery.
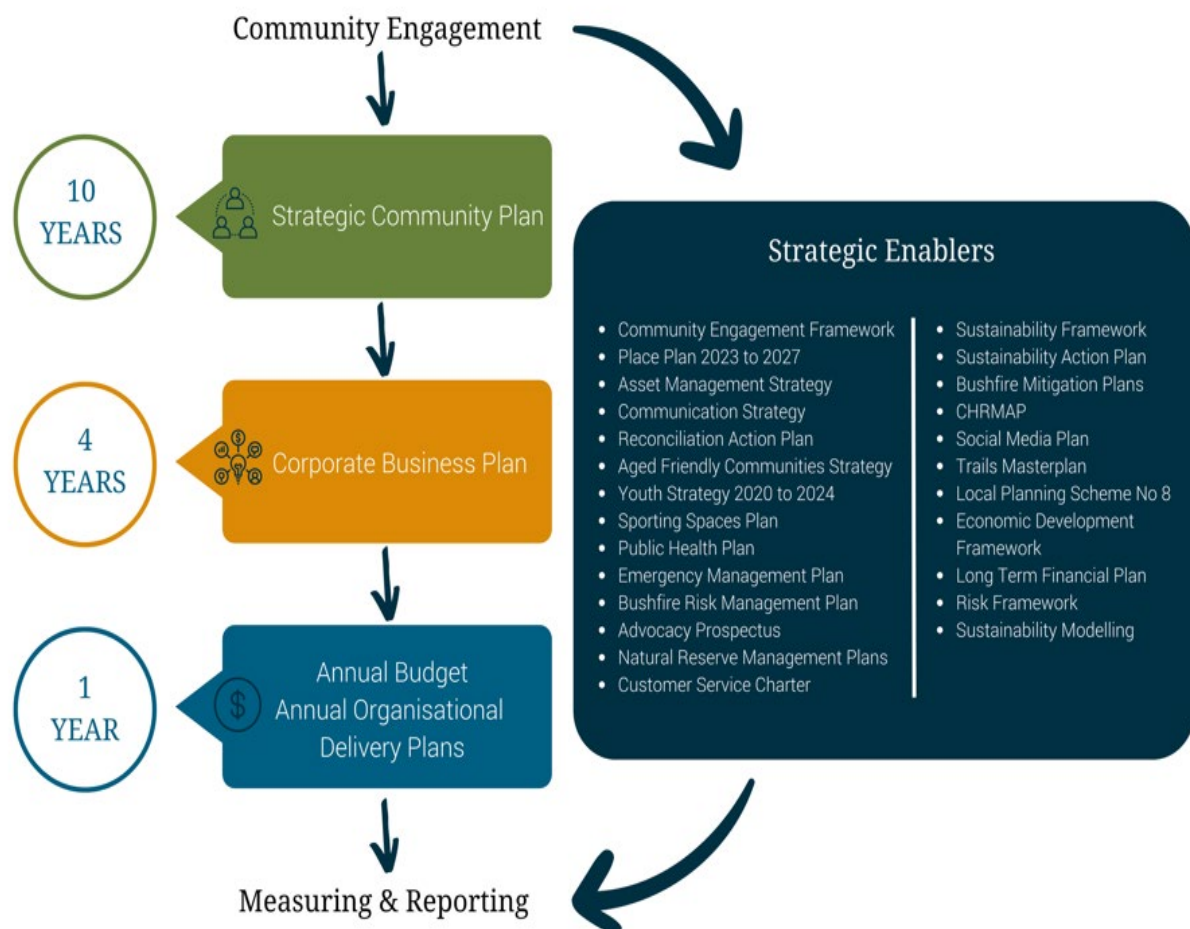
The principal foundation documents are the Strategic Community Plan and the Corporate Business Plan. The Strategic Community Plan covers a 10-year period and sets the strategic direction for the Shire that reflects the aspirations, goals and priorities of the community. The Corporate Business Plan is a four-year operational document that outlines the strategic initiatives, major projects and resources (financial, assets and workforce) required to deliver the Strategic Community Plan and meet the community's aspirations. The CBP also guides and is guided by the development of various informing strategies and strategic enablers.

IPR provides local governments with the framework to translate community priorities into operational objectives and track progress in delivering these objectives over time.

Asset management planning is used to inform the Long Term Financial Plan (LTFP) to develop the Shire's ten (10) year financial forecast requirements for asset maintenance and operation as well as renewal and upgrade. The integration of these, along with the Workforce Plan, is shown below and illustrates how each component provides the required inputs in detail to facilitate detailed four (4) year financial forecasting.

Four-year financial forecasts – core mechanism for integration

Community Engagement

- 10 YEARS — Strategic Community Plan
- 4 YEARS — Corporate Business Plan
- 1 YEAR — Annual Budget / Annual Organisational Delivery Plans

Measuring & Reporting

Strategic Enablers

- Community Engagement Framework
- Place Plan 2023 to 2027
- Asset Management Strategy
- Communication Strategy
- Reconciliation Action Plan
- Aged Friendly Communities Strategy
- Youth Strategy 2020 to 2024
- Sporting Spaces Plan
- Public Health Plan
- Emergency Management Plan
- Bushfire Risk Management Plan
- Advocacy Prospectus
- Natural Reserve Management Plans
- Customer Service Charter

- Sustainability Framework
- Sustainability Action Plan
- Bushfire Mitigation Plans
- CHRMAP
- Social Media Plan
- Trails Masterplan
- Local Planning Scheme No 8
- Economic Development Framework
- Long Term Financial Plan
- Risk Framework
- Sustainability Modelling

The Shire undertakes a minor review of the Strategic Community Plan every two years and a major review every four years. The Corporate Business Plan is reviewed annually.

Informing plans and strategic enablers cover asset management, workforce planning and long-term financial planning, as well as specific areas of need that the local community is focussed on. Combined, these inform Annual Operational Service Plans, Core Business Activities and Budgets.

Measurement, assessment and reporting are also logically part of the planning process and are critical components of the continuous improvement cycle. Progress towards the Shire's strategic goals and objectives is reported quarterly to Council and in the published Annual Report.

During 2022 and 2023 the Shire developed its 'Plan for the Future', a modified Strategic Community Plan (2023-2033) modelled on the proposed reforms and focussed on Council's priorities of:

- Bringing the community together and creating opportunities.
- Enhancing local places and helping the community enjoy positive lifestyles.

***'Plan for the Future'* Vision**

Council's vision of 'A Lifestyle of Choice: Connecting Community, Culture and Country' underpinned by the Local Priorities of Natural Environment, Built Environment and Infrastructure and Community is supported by the following 6 key themes:

1. People - Strengthen and enhance the well-being.
2. Planet - Manage and protect our environment.
3. Prosperity - Foster a dynamic, diverse, and strong.
4. Performance - Deliver good leadership, governance and decision making.
5. Places Provide - and maintain suitable infrastructure and facilities.
6. Relationships - Effective communication, engagement, and relationship development

Within this, identified asset management priorities include focussing on local roads, footpaths and cycleways; improving facilities and improving conservation and environmental management, whilst asset management directly impacts service delivery across all of the identified themes and priorities within the *'Plan for the Future'*.

Local Government Act, 1995 Reform

The *Local Government Act 1995* reforms propose changes to IPR that will impact the current requirements for the development of a Strategic Community Plan and Corporate Business Plan. These are proposed to be amalgamated into a simplified, short form Council Plan that sets high level objectives over an 8-year period, informed by simplified asset management and long-term financial planning that forecast the cost of maintaining and replacing assets and financial sustainability.
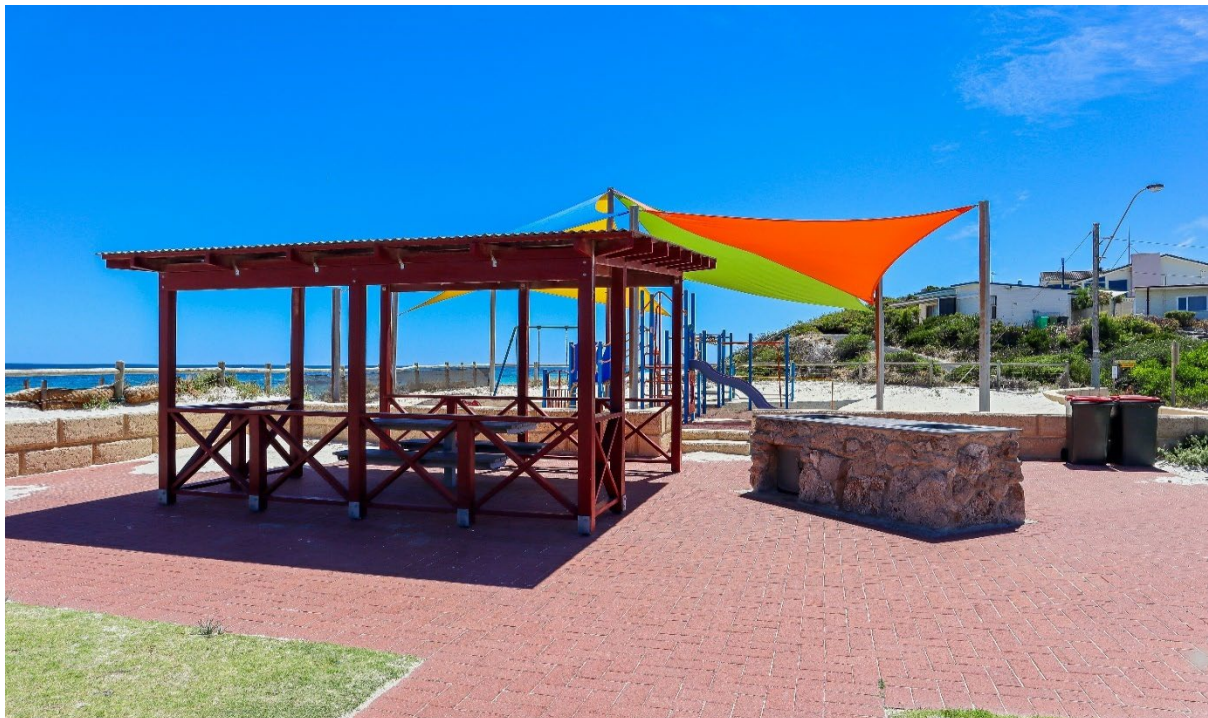
BBQ, Shade and Playground, Peppermint Grove Beach

Strategic Risks

Strategic risks apply to the Shire as a whole and have the potential to adversely affect the Shire's ability to achieve its strategic outcomes and/or damage the Shire's reputation.

Good asset management practices will support mitigating the following risks:

- Financial sustainability.
- Failure to provide and adapt services to meet changing community expectations.
- Failure to appropriately manage the natural environment for future generations.
- Failure to allocate sufficient resources to manage and maintain assets optimally.

IPWEA International Infrastructure Management Manual

The International Infrastructure Management Manual (IIMM) published by the Institute of Public Works Engineering Australasia (IPWEA) provides organisations with a comprehensive, internationally recognised resource for the development and implementation of best practice asset management and is aligned with ISO 55000 Asset Management.

The Shire aims to apply these best practice approaches to asset management.

Preston River Ramble – Seating and Shade structure

Asset Management Framework

State legislation through the Local Government Act 1995 and IPR provide high level direction whilst the IIMM provides asset management specific guidance.

Using these, the Shire's Asset Management Framework translates these requirements into specific approaches to the management of Shire assets.

The Shire's Asset Management Framework comprises:

1. **Asset Management Policy**

   The Shire Asset Management Policy sets Council's direction for asset management.

2. **Asset Management Strategy**

   The Strategy is a public document that translates Council and community direction through the Policy and *'Plan for the Future'* into asset management focussed objectives, asset service levels and improvement opportunities across all asset classes.

3. **Asset Management Plans**

   Asset management plans detail asset class specific approaches to the management of assets, levels of service, funding requirements and improvement actions.

The framework integrates with the Shire's overall planning and delivery framework as set out below:

Organisational Strategic Risk
Organisational vision, goals and objectives

AM Policy. Principles, requirements and responsibilities for AM, linked to organisational strategic objectives.

AM Strategy
AM objectives, practices and action plans for AM improvement. Audit and Review processes and organisational strategic objectives

AM plans, Asset/Service Description
Levels of service, demand forecasts, lifecycle activity and cashflow forecasts

Operational Plans and Work Programs
Guide day to day activities for staff and contractors

Asset Management Roles

Asset management is a community, Council and organisational responsibility.

- ✓ The community sets service expectations and requirements.
- ✓ Council sets policy and provides strategic guidance and is the steward of the Shire's assets.
- ✓ The organisation (the Shire) is responsible for implementing asset management processes.

	Role as defined by the CBP	Role in Asset Management
Council	Represents the community and provides strategic direction to the CEO and organisation	Represents the community and provides strategic direction to the CEO through asset management policy setting
Chief Executive Officer	Implements Council's direction through the management of the Shire administration	Implements Council's direction through the management of the Shire administration
Strategic Planning	Develop local, informing plans and strategies with and for the community	Translates medium and long term community priorities into strategies and actions for implementation through the organisation
Infrastructure & Development Directorate	Strategic management of the Shire's infrastructure assets including planning, design, construction, maintenance and disposal and the provision of Shire waste management services	Manages the Shire infrastructure assets including planning, design, construction, maintenance and disposal
Asset Management Business Unit	Medium and long term asset planning, asset data capture and management	Provides medium and long term planning for Shire assets; initiates processes for asset provision, renewal and disposal and establishes the requirements for asset maintenance
Projects, Facilities & Assets Business Unit	Construction and maintenance of the Shire's buildings and structures	Manages the maintenance of Shire buildings and structures and project manages the

		construction of new buildings and structures
Engineering/Works & Parks/ Natural Reserves Business Units	Construction and maintenance of the Shire's civil infrastructure assets	Manages the maintenance of the Shire's civil infrastructure assets and provides the resources for the construction of new assets
Finance Business Unit	Long term financial management and planning	Allocates appropriate funds through the annual budget and long-term financial plan to support the sustainable and responsible management of Shire assets
Other Shire Business Units	Various	Use Shire assets to provide services to the community.

Governance and Management

The Shire's Asset Management Policy establishes the governance framework for managing assets; this Strategy defines the strategic approach to how the Shire will implement the requirements and objectives of the Policy. Individual Asset Management Plans for each asset class provide the level of detail required for the organisation and Council to make informed, decisions using accurate asset data to manage, maintain, operate and renew or dispose of assets throughout the asset lifecycle.

Levels of Service definition

The IIMM Condition Rating Scale is a high level, technical level of service indicator where maintenance and renewal interventions are made based on asset condition with conditions 1 to 4 the key indicators for maintenance and renewal planning requirements.

- Condition 1:   no maintenance required.
- Condition 2:   maintenance to minor defects as required.
- Condition 3:   maintenance to return to Condition 1.
- Condition 4:   plan for and deliver asset renewal or disposal.

Community satisfaction levels are used as indicators of community levels of service. These indicators show how the customer receives or experiences Shire services. These measures are generally used in strategic documents such as community perception surveys which are completed every two years and generally seek higher level responses to gauge customer satisfaction. The Shire will implement a targeted, biennial customer satisfaction survey to monitor asset performance commencing in 2025.

Fish Park, Dalyellup

Data and Systems

The Shire currently uses Asset Valuer Pro, this software is a value for money operating system that provides the following benefits:

- Protection from unintended changes to raw data.
- Tailored data to suit organisational specific requirements.
- Proper and fully compliant disaggregation.
- Mobile data capture capabilities (optional).
- Fully compliant with Australian accounting standards and optimised for external audit.
- Supports the consolidation of valuations and asset management within a single software platform.
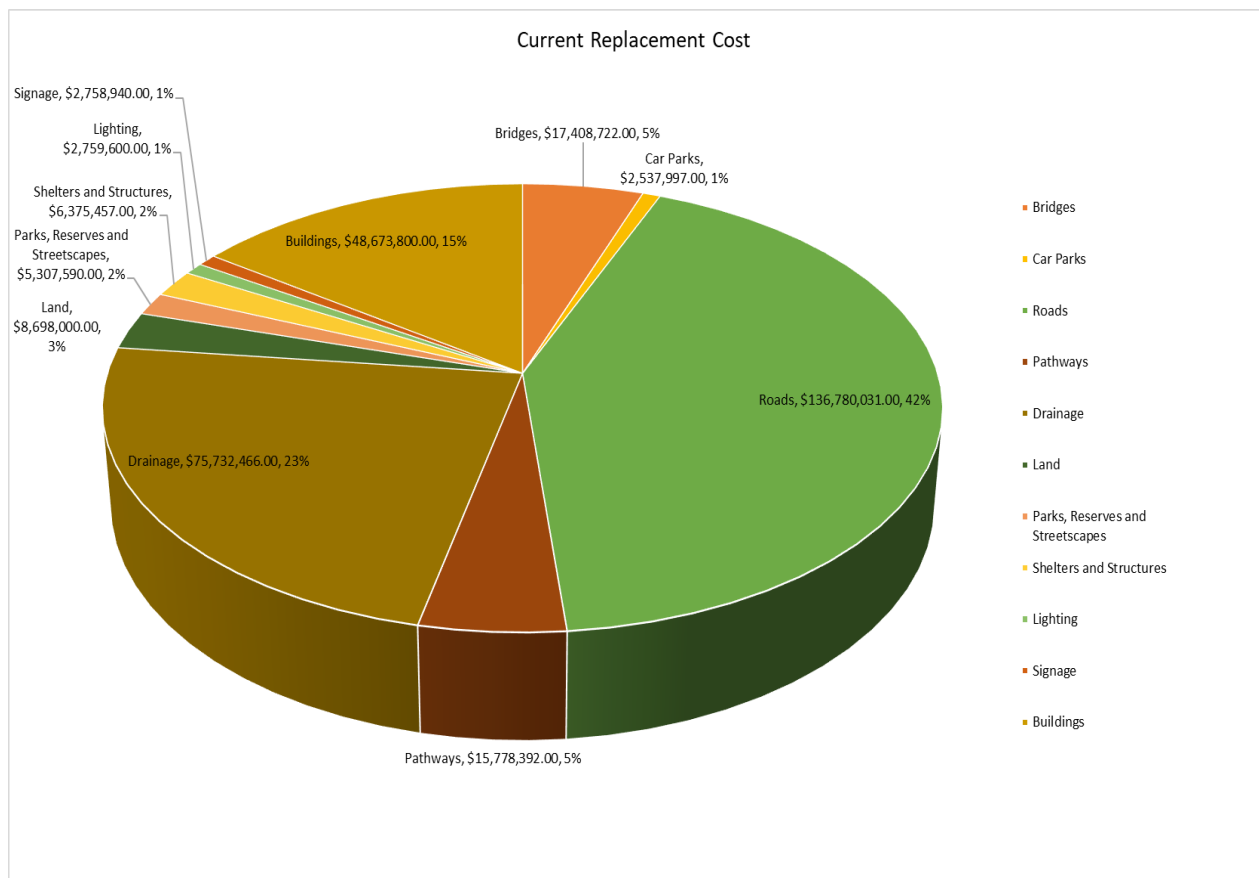- Ease of use and good aftermarket support.

The Shire of Capel is currently undertaking a full system audit and upgrade to its Enterprise Resource Planning system. This will result in the retention of Asset Valuer Pro as a third party asset management application or the transition to an integrated asset management application that delivers the same functions and outputs or better.

Asset Classification

The Shire manages approximately $314 million (Current Replacement Cost) of assets across eleven asset classes. Each asset type has an assumed useful life based on factors including the materials used and usage.
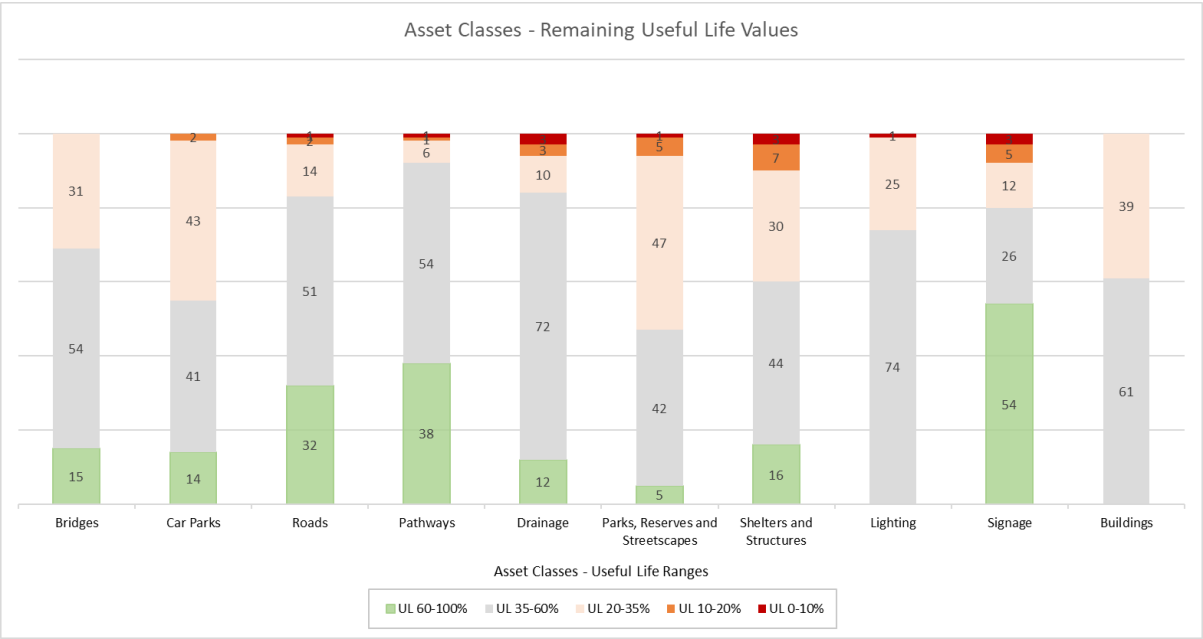
- Bridges
- Buildings
- Car Parks
- Drainage
- Land
- Parks, Reserves and Streetscapes (including verges/medians)
- Lighting
- Pathways
- Roads
- Signage
- Shelters and Structures

The current replacement cost (also identified as the replacement cost) is the cost to replace the existing asset with a new, modern equivalent with the same benefits as the replaced asset. These values are broken down by asset class as shown:

Current Replacement Cost

Signage, $2,758,940.00, 1%
Lighting, $2,759,600.00, 1%
Shelters and Structures, $6,375,457.00, 2%
Parks, Reserves and Streetscapes, $5,307,590.00, 2%
Land, $8,698,000.00, 3%
Buildings, $48,673,800.00, 15%
Bridges, $17,408,722.00, 5%
Car Parks, $2,537,997.00, 1%
Roads, $136,780,031.00, 42%
Drainage, $75,732,466.00, 23%
Pathways, $15,778,392.00, 5%

Legend:
- Bridges
- Car Parks
- Roads
- Pathways
- Drainage
- Land
- Parks, Reserves and Streetscapes
- Shelters and Structures
- Lighting
- Signage
- Buildings

The following table shows remaining useful life for each asset class. Where remaining useful life is high (green and grey), assets are generally relatively young in terms of their useful life and in, at least, good condition.

The table highlights the asset classes and their remaining useful lives as a percentage of condition rating. Assets rated as Condition 3: Fair (peach colour, 20%-35% useful life remaining range) indicate requirements for maintenance, and in some cases renewal planning, that should be commenced now. This will ensure that the Shire is able to meet its current and ongoing financial commitments for maintenance and renewal as they become due.

Chart: Asset Classes - Remaining Useful Life Values

Asset Class	UL 60-100%	UL 35-60%	UL 20-35%	UL 10-20%	UL 0-10%
Bridges	15	54	31		
Car Parks	14	41	43		2
Roads	32	51	14	2	1
Pathways	38	54	6		1
Drainage	12	72	10	3	
Parks, Reserves and Streetscapes	5	42	47	5	1
Shelters and Structures	16	44	30	7	
Lighting		74	25		1
Signage	54	26	12	5	
Buildings		61	39		

X-axis label: Asset Classes - Useful Life Ranges

Dalyellup Beach Access Point

Asset Condition

The table below shows the IIMM asset condition scale used by the Shire where asset condition is an indicator of level of service performance used to inform planning for maintenance and renewal.

| Condition Scale			Useful Life Remaining
1		Very good condition	60% - 100%
2		Good condition – minor defects only	35% - 60%
3		Fair conditions – maintenance required to return to an acceptable level of service	20% - 35%
4		Poor condition – consider renewal	10% - 20%
5		Very poor condition – approaching unserviceable	0% - 10%
		Unknown	

Asset Condition Breakdown

The charts on the following pages show asset condition by class and using the IIMM asset condition scale, the breakdown of condition for each asset class (where known) and the quantities of Shire assets within each asset class.
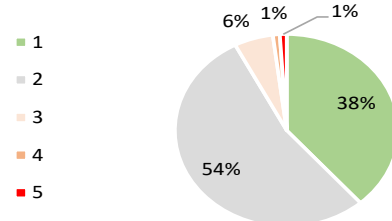
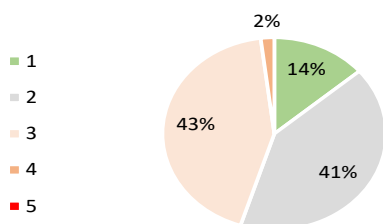

Erle Scott Reserve, Capel

Asset Class - Bridges

- 1: 15%
- 2: 54%
- 3: 31%
- 4
- 5
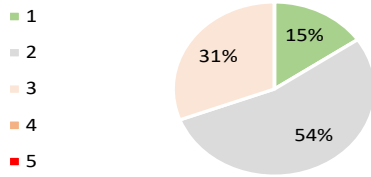
1 x Road Box Culvert Bridge
12 x Road Bridges

Asset Class - Car Parks

- 1: 14%
- 2: 41%
- 3: 43%
- 4: 2%
- 5

38 x Sealed Car Parks
13 x Unsealed Car Parks

Asset Class - Roads

- 1: 32%
- 2: 51%
- 3: 14%
- 4: 2%
- 5: 1%

331km Sealed Roads
161km Unsealed Roads
179 x Traffic Management Devices
131 x Miscellaneous Road Assets

Asset Class - Pathways

- 1: 38%
- 2: 54%
- 3: 6%
- 4: 1%
- 5: 1%

117km Pathways
56 x Pram Ramps

Asset Class - Drainage

- 1: 12%
- 2: 72%
- 3: 10%
- 4: 3%
- 5: 3%

110km Pipes
7717 x Pits
964 x Headwalls
87 x Detention Structures

Asset Class - Parks, Reserves and Streetscapes

- 1: 5%
- 2: 42%
- 3: 47%
- 4: 5%
- 5: 1%
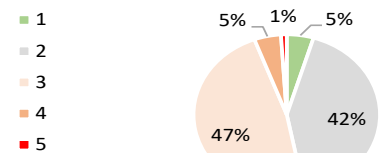
20 x Bores/Standpipes
26 x Major Parks
29 x Minor Parks
5 x Skate Parks

Asset Class - Shelters and Structures

- 1
- 2
- 3
- 4
- 5

7% 3%
16%
30%
44%
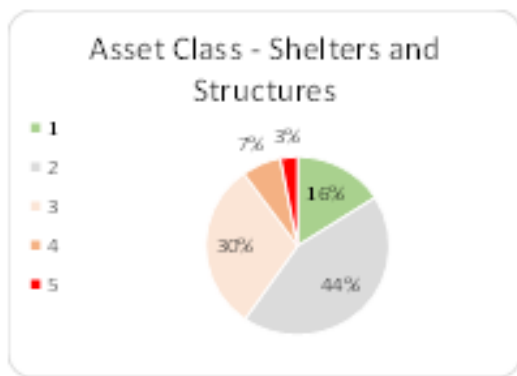
Bus Shelters
Sporting Areas
Retaining Walls
Shelters
Structures

Asset Class - Signage

- 1
- 2
- 3
- 4
- 5

5% 3%
12%
26%
54%

6705 Signs

Asset Class - Lighting

- 1
- 2
- 3
- 4
- 5

1%
25%
74%
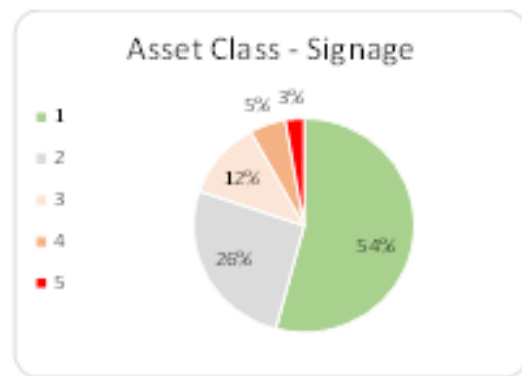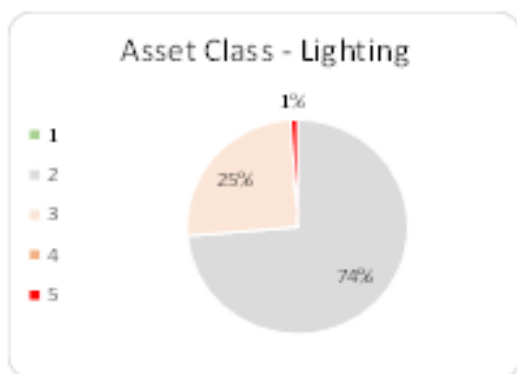
56 x Car Park Lights
89 x Open Space Lights
40 x Sports Lights
204 x Street Lights

Asset Class - Buildings

- 1
- 2
- 3
- 4
- 5

39%
61%
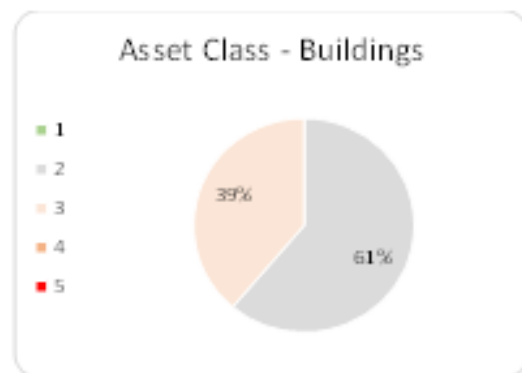
10 x Major Buildings
22 x Minor Buildings
14 x Toilet Blocks
3 x Houses

Asset Data Confidence

Asset management relies on good quality data to support Council making informed decisions in reference to this data. Data confidence is graded in accordance with IIMM.

The data shown in the table below reflects known asset data (January 2024); improving data confidence and associated maturity is identified as a key strategy improvement objective.

Current data confidence and maturity levels are shown in the table below, further work to improve known data is required where confidence levels are C (Uncertain) or below:

| Asset Class	Condition Data	Inventory Data	Financial Valuations	Asset Management Plan	Performance Ratio's
Bridges	B	C	B	B	E
Buildings	C	C	C	C	E
Drainage	B	C	B	D	E
Parks, Reserves and Streetscapes	D	D	D	D	E
Lighting	B	C	B	E	E
Pathways	B	C	B	C	E
Roads	B	C	B	B	E
Signage	C	C	C	E	E
Car Parks	C	C	C	E	E
Shelters and Structures	B	C	C	E	E

Asset Data Confidence Table.

Data Confidence Grade.	Grade Description.
A – Highly Reliable.	Based on sound records, procedures, investigations, and analysis. Data documented properly and recognised as the best method of assessment. Dataset is complete and estimated to be accurate ± 2%.
B – Reliable.	Based on sound records, procedures, investigations, and analysis. Data documented properly with minor shortcomings. Dataset is complete and estimated to be accurate ± 10%.
C – Uncertain.	Based on sound records, procedures, investigations, and analysis, which is incomplete or unsupported. Dataset is substantially complete, up to 50% may be extrapolated data and estimated to be accurate ± 25%.
D – Very Uncertain.	Based on unconfirmed verbal reports and/or cursory inspections. Dataset not fully completed, most data estimated or extrapolated. Data accuracy ± 40%.
E – Unknown.	Very little or no data held.

Data Confidence Grading system & definitions

Asset maturity assessments have been completed in 2015, 2018 and 2020 for core asset management competencies as shown on the following page.

The most current level of maturity (2020) is shown by the blue bar; the maturity gap to achieve core financial and asset management competency is shown by the red bar whilst full maturity alignment is shown by the green bar.

Improvements in maturity will be achieved through data gap closure, improved service level and asset condition monitoring, demand forecasting and performance monitoring.
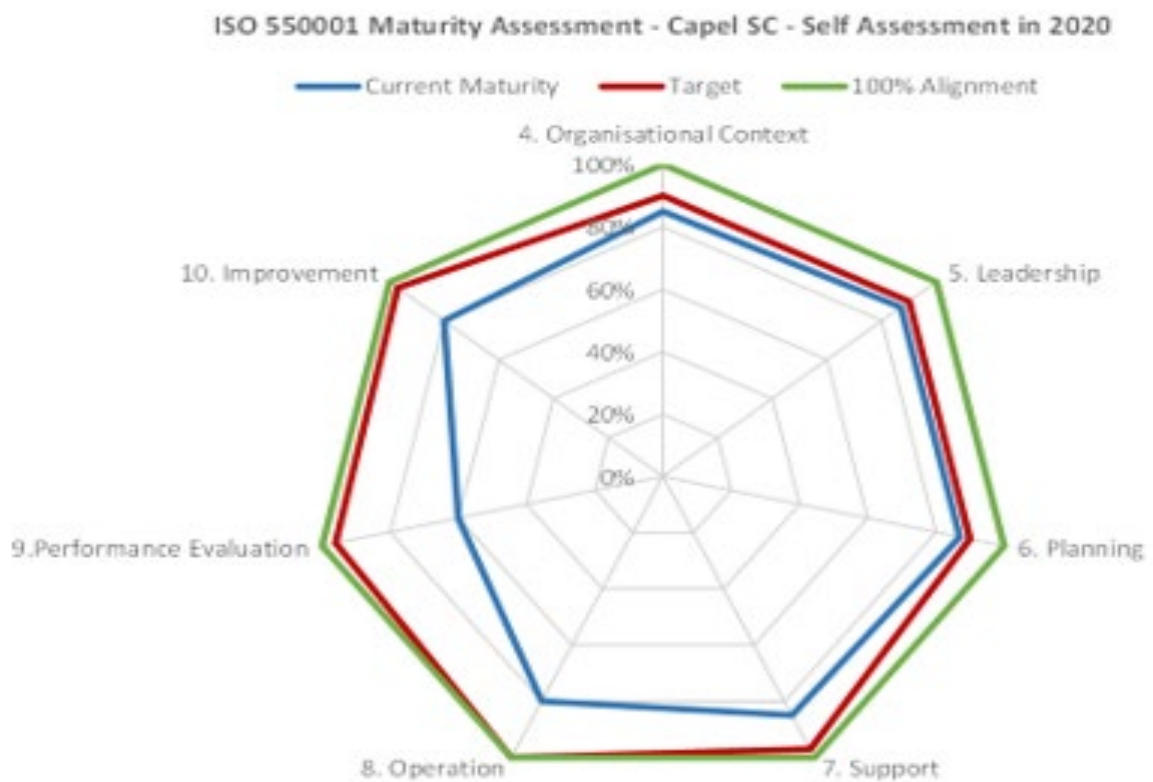
Resurfacing Elgin Road, Capel

Future Challenges

Many factors will influence the way the Shire manages its assets into the future including changing demand trends for services, population growth and adaptation to the impacts of climate change.

Asset management is integral to serviceability and will be subject to the following challenges:

Population Growth:

- o Managing infrastructure demands with projected population increases and expanding urban areas.

- o Managing infrastructure demands to support changing population age profiles.

- o *Population projections estimate growth to 21,724 by 2031 and 26,434 by 2041 (WA Tomorrow Report No.12 Population Forecast and Shire Integrated Growth Framework and Plan, 2023).

    *It should be noted that the Shire has experienced higher growth rates in recent years which may continue and see this number rise even higher.

Aging Infrastructure:

- o Addressing the maintenance, renewal, or replacement of aging assets to ensure continued service delivery.

Financial Sustainability:

- o Balancing community infrastructure needs with the Shire's financial resources and long-term budget constraints.

Technological Advancements:

- o Integrating emerging technologies into asset management practices for enhanced efficiency and decision-making.

Community Expectations:

- o Adapting to evolving community demands for greater choice, flexibility, and transparency in infrastructure services.

Environmental Sustainability:

- o Ensuring asset management practices contribute to the Shire's environmental goals and resilience to climate change impacts, particularly in the case of sea level rise and the potential impact on assets in Dalyellup and Peppermint Grove Beach.

Regulatory Compliance:

- o Meeting evolving legislative and regulatory requirements for asset management and service delivery

Ironstone Gully Falls

The Shire's Strategic Community Plan 2023-2033 *'Plan for the Future'* identifies Sustainable Growth as a key theme with a focus on:

- Managing growth in sympathy with the distinct local character.
- Living in harmony with the natural environment.
- Consolidating the urban centres of Boyanup, Capel, Dalyellup and Peppermint Grove Beach.

Asset Management Vision

The Shire's strategic direction as set through the Strategic Community Plan 2023-2033: '*Plan for the Future'*, the Asset Management Policy and the strategic risks identified by the organisation inform the overall vision for asset management:

"To effectively manage infrastructure assets to provide safe, efficient and reliable services to the community in the most cost-effective manner."

Asset Management Objectives

The asset management vision is supported through the following key objectives:

- Deliver the right type and quality of assets that provide for the needs of our communities
  - Set realistic levels of service that balance community expectation, provision, affordability & sustainability.
  - Investigate alternative options when intervention levels are reached to optimise asset use.
  - Ensure high quality data us available to make responsible decisions.

Dalyellup Lakes Public Open Space

- Continuously improve the Asset Management framework & practices
    - Develop & align policy, plans & processes with Shire strategies & high level plans.
    - Adhere to IIMM standards.
    - Continuously improve AM using accurate data and feedback from stakeholders.

- Provide excellent customer experience through effective communication, engagement and service to stakeholders.
    - Implement the Shire's Community Engagement Charter to support decision-making that affects the wider community
    - Provide ongoing asset planning & performance information to stakeholders.

Asset Management Strategies

Each Asset Management Plan (AMP) contains the relevant strategies that guide the specific approaches to the following activities for each asset class (IPWEA 2020).

Provision	Requirements for the planning, design and construction of new assets.
Operation	Active process of utilising assets that consume resources.
Maintenance	Requirements to retain assets at or as close to as possible, appropriate service conditions (examples include road patching, grading unsealed roads, cleaning stormwater drainage assets).

Renewal	Considerations and activities required to restore asset service capability to its original condition (examples include road resurfacing, building component replacement and playground equipment replacement).
Upgrade	Considerations required to provide a higher level of service or a new service that previously did not exist (examples include road widening or sealing a previously unsealed road).
Disposal	Considerations required to determine that an asset is no longer required.

Levels of Service

Levels of service define the standard to which the Shire aims to provide assets and inform the budget allocation of funding for maintenance and renewal across asset classes.

Levels of service must consider what level of provision, maintenance and renewal is appropriate and affordable within financial constraints.

Higher levels of service may see more assets provided and maintained at higher standards; however, this approach would come at a significantly higher financial cost to the community.

In real terms levels of service are most commonly based on achieving industry benchmarked, technical levels of service and financial affordability; these levels of service are performance tested at a local level using community satisfaction measurements.

IPWEA splits levels of service into three categories:

No	Service level category
1.	Customer values
2.	Customer levels of service.
3.	Technical levels of service.

Customer values

Customer values are the relative priority that the community gives to a particular asset type or characteristic over another.

The Shire's most recent community engagement for the Strategic Community Plan 2023-2033: *'Plan for the Future'* indicated the following order of community value priorities relating to infrastructure assets:

| Priority	Community Value Priority descriptor:
1.	Parks, gardens, walking tracks and stairs.
2.	Improve facilities (public toilets and coastal in particular).
3.	Footpaths and cycleways.

Note. The questioning was not asset management specific and other, non-infrastructure asset, priorities were identified that are not included as they are unrelated to asset management.

Customer Levels of Service

Customer levels of service relate to how the community receives a service; at a high level these are measured through community satisfaction scores relating to specific assets classes.

ASSET CLASS	CUSTOMER LEVEL OF SERVICE MEASURE	CURRENT PERFORMANCE
Bridges	Maintain at least 70% community satisfaction	unsurveyed
Buildings	Maintain at least 70% community satisfaction	unsurveyed
Drainage	Not specifically collected	unsurveyed
Land	Not specifically collected	unsurveyed
Parks & Reserves	Maintain at least 70% community satisfaction	unsurveyed
Pathways	Maintain at least 65% community satisfaction	unsurveyed
Roads	Maintain at least 70% community satisfaction	unsurveyed
Structures	Maintain at least 70% community satisfaction	unsurveyed

Customer Levels of Service are monitored on an annual basis through an asset management specific community survey, this will commence in 2025.
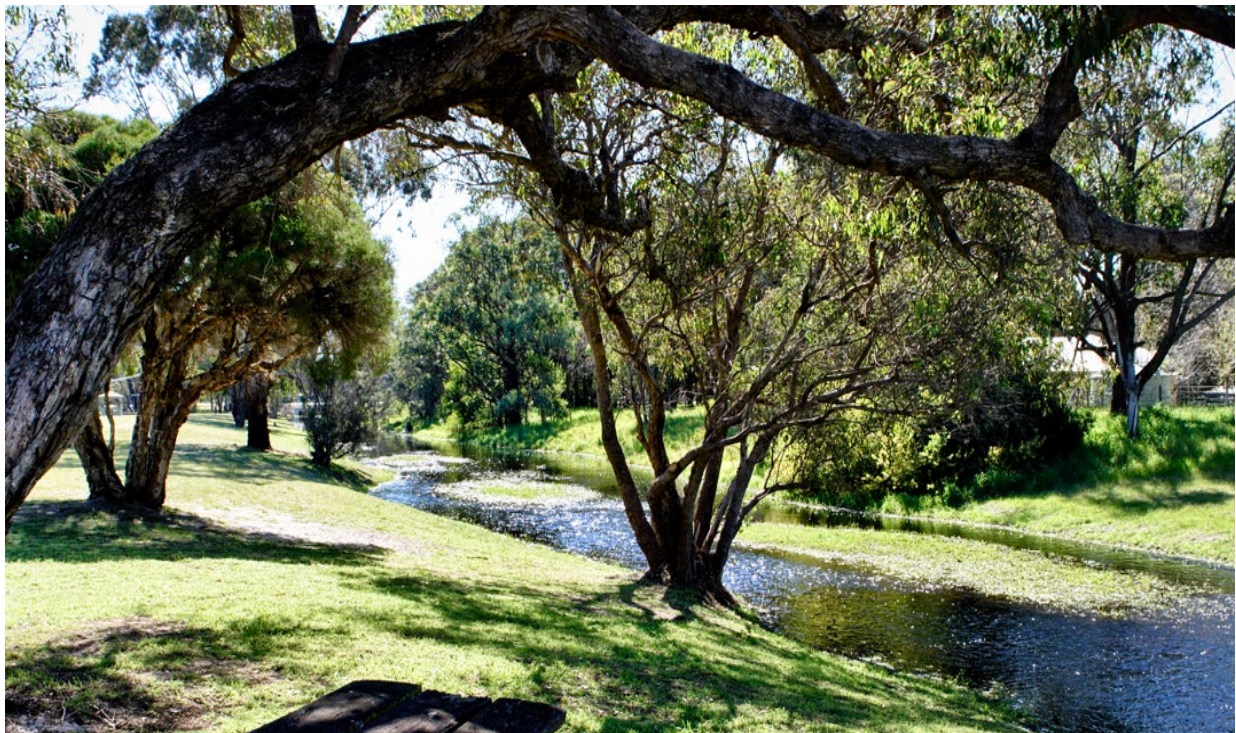
Sheoak Park, Gelorup

Technical Levels of Service

Technical levels of service support customer levels of service through the establishment of technical or operational standards (levels of service); these relate to:

- Asset condition.
- Compliance with Access and Inclusion standards.
- Areas of parks per resident.
- Distance from dwelling to nearest playground.
- Accident data.

Each asset management plan will define technical levels of service that are specific to each asset class.

Performance Assessment

Performance Assessment relates to how does the Shire's management of assets compares to best practice and Integrated Planning and Reporting Framework requirements. It further considers what may prevent the Shire from meeting its asset management objectives.

State of the Assets - Asset Management Financial Ratios

DLGSC's Integrated Planning and Reporting framework established 3 key performance indicators that, until June 2022, local governments reported against on an annual basis, these are provided below. As part of the *Local Government Act, 1995* reforms, DLGSC has indicated that new financial ratios will not be finalised until 2025 at which time the Shire will incorporate them into the updated reporting requirements.

Reform is also seeking to simplify the requirements for the development of asset management plans; these changes will also be incorporated into the Shire's asset management framework when released. The current performance ratios are detailed below:

ASSET CLASS	CONSUMPTION RATIO	SUSTAINABILITY RATIO	RENEWAL FUNDING RATIO
Description	How much of the Shire's assets have been used?	How well is the Shire replacing its assets as they wear out?	Is the Shire setting aside sufficient funding for future asset renewal?
Calculation	Depreciated replacement cost / current replacement cost	Capital renewal (1 year) / annual depreciation (1 year)	Planned capital renewal (10 years) / required capital renewal (10 years)
Targets	50-75%: Standard is met. 60-75%: Standard is improving	90-110%: Standard is improving. 90%: Standard is met.	75-95%: Standard is met. 95-105%: Standard is improving, and the sustainability ratio is between 90-110%, and consumption ratio is between 50-75%.

What does this mean?	Less than standard means assets are deteriorating, levels of service will decline over time.	Less than standard means that the Shire is not investing sufficient funds in asset renewal resulting in declining levels of service.	Less than standard means that the Shire is not allocating sufficient funds to long term asset renewal. Levels of service will decline over time.
	Higher than ideal means assets are being replaced too soon resulting in reduced value for money for the community	Higher than standard means the Shire is investing more than is required in asset renewal resulting in reduced value for money for the community.	Higher than standard means the Shire is over allocating funds to renewing assets. As a result assets may be replaced before they need to be resulting in reduced value for money for the community.

Financial Requirements

Council's asset data is currently stored in Asset Valuer Pro (the Shire's infrastructure asset management system) and Synergy Soft which holds asset related financial data. Rationalising the Shire's asset register and associated financial data will be achieved through the Enterprise Resource Planning project. Once complete Shire assets will be held in a single *'source of truth'* register and integrate into the Shire's financial and GIS mapping systems. This process will facilitate improved asset specific financial data to support informed and accurate decisions in relation to asset maintenance, operation, renewal, upgrade and disposal.

Dalyellup Youth Precinct – Skate Park

Asset Management Planning Improvement

Improvements in the areas identified in the table below will be included in the review of the Asset Management Strategy as indicators of organisational progress in asset management.

ISSUE	ACTION	TIMEFRAME
Data confidence	Improve data confidence across all asset classes through asset identification and condition assessment, lifecycle cost analysis, data integrity improvements.	Short / medium term
Asset Management Plans	Develop updated Asset Management Plans for all asset classes in line with reform that inform service level and future lifecycle cost funding requirements. Develop an ongoing schedule of review.	Short / medium term
Levels of Service	Improve definitions of technical and community levels of service and use to monitor performance.	Medium term
Asset software	Ensure replacement ERP system aligns to Shire AM software to ensure integration with financial reporting, asset data management and mobile application.	Medium term
Integrated asset software to support operations	Develop and implement a system to integrate asset data with GIS mapping, task allocation and lifecyle cost monitoring that includes mobile technology. This will support improved data integrity, improved operating efficiencies and financial and level of service reporting.	Long term

Asset Management Performance

Effective asset management ensures government assets deliver optimal service levels, meet community expectations and remain financially sustainable. The performance of asset management processes should be systematically measured to provide insight into the organisation's ability to manage its assets efficiently, while aligning with the overall objectives of service delivery, financial sustainability, and customer satisfaction.

Changes to improved financial planning, reporting and performance measurement ratios as part of the reform of the *Local Government Act, 1995* are ongoing and may change the financial sustainability performance measures below.

Dalyellup Youth Precinct.

Key Performance Indicators (KPIs)

The performance of asset management can be measured across the key aspects of operational efficiency, customer service, and financial deliverability. To ensure that asset management aligns with strategic objectives, local governments should implement the following KPIs to measure and monitor performance:

- **Asset Condition and Performance**

    o   Percentage of assets meeting or exceeding their expected service life.

    o   Frequency and severity of asset failures or breakdowns.

    o   Compliance with regulatory and safety standards.

- **Maintenance Efficiency**

    o   Proportion of preventive versus reactive maintenance activities.

    o   Downtime due to unplanned maintenance and repairs.

    o   Cost-effectiveness of maintenance interventions.

- **Asset Utilisation**

    o   Capacity versus utilisation of key infrastructure assets.

- o Ratio of under-utilised or surplus assets.
- o Performance of assets in meeting community needs and demands.

Dalyellup Beach Boardwalk at sunset

Customer Service and Satisfaction

Prudent asset management planning aims to ensure that service levels meet community expectations. Customer-centric KPIs enable local governments to assess how well assets are serving the public:

- **Service Delivery**
  - o Compliance with agreed service levels for key public assets (e.g., parks, roads and facilities).
  - o Response times for asset-related inquiries, repairs, or complaints.
  - o Number of service disruptions or downtimes affecting the community.

- **Customer Feedback and Satisfaction**
  - o Regular surveys measuring customer satisfaction with public assets.
  - o Number of complaints or compliments received related to asset quality.
  - o Engagement and responsiveness to community input regarding asset planning and development.

Financial Sustainability

Financial performance is a critical measure of an asset management strategy's success. It ensures that the assets are maintained and upgraded in a way that aligns with long-term financial sustainability:

- **Capital Expenditure vs. Operating Expenditure**
  - Ratio of Capital Expenditure to Operating Expenditure, ensuring a balanced approach to long-term investment and immediate needs.
  - Monitoring actual expenditure against budgeted forecasts.

- **Life-Cycle Costing**
  - Total cost of ownership of assets over their lifetime, including acquisition, maintenance, operating and disposal costs.
  - Efficiency of resource allocation across asset types.

- **Asset Renewal and Replacement**
  - Percentage of asset base renewed or replaced annually versus asset depreciation.
  - Funding gap analysis to identify shortfalls in asset renewal funding.

- **Risk and Financial Sustainability**
  - Assessment of asset-related financial risks (e.g., cost overruns, aging infrastructure).
  - Long-term financial forecasting to ensure asset renewal plans align with available funding and long-term planning objectives.

Continuous Improvement

A robust asset management strategy includes mechanisms for reviewing and improving asset management practices. This ensures that performance, customer service and financial sustainability metrics remain relevant and are aligned with evolving community expectations and fiscal realities.

- **Data-Driven Decision Making**
  - Regular audits of asset data and performance metrics to refine strategies.
  - Adoption of advanced asset management technologies (e.g., predictive analytics, GIS tools).

- **Benchmarking and Best Practices**
  - Benchmark performance against similar local governments and best practice standards.
  - Continuous professional development and training in asset management processes.

The Shire's Strategic Community Plan 2023-2033: *'Plan for the Future'* identifies performance outcomes that the Shire measures on a regular basis.

Many of these outcomes relate to asset specific customer level of service which can be used to measure how well the Shire is performing.

These following performance metrics within the Shire's *'Plan for the Future'* support the measurement and monitoring of customer satisfaction:

MEASURE	TARGET	SCP OBJECTIVE
1.3 An inclusive community	Increasing percentage of all groups of community members access spaces, facilities and places.	Ensure access and inclusion to spaces and places throughout the Shire.
1.5 A healthy and active community	Kilometres of walking and cycling paths and trails and delivery of other infrastructure promoting a healthy and active community.	Encourage informal recreation through well planned and developed public open spaces, cycle and walk paths, trails and traversable streetscapes
2.5 Improved connection and access to natural assets	Increasing levels of infrastructure providing environmentally safe access.	Improved infrastructure (eg boardwalks, paths & trails) that enable access to natural areas without negative impacts
5.1 Appropriate community facilities that meet the communities' needs	Developed and implemented levels of service for Shire facilities and public open spaces	Provide buildings and facilities that are well used and meet community needs. Provide improved amenities within open spaces
5.3 Better and safer roads	Reduced accident statistics	Review Shire roads and accident data to inform future improvements to the network
5.4 Improved beach infrastructure to support a healthy beach lifestyle	Reduced levels of environmental impacts. Increasing positive response in community surveys and engagement.	Develop better paths to provide beach access without impacting environment. Provide additional amenities near car parks and high use areas.

Conclusion - Strategy Implementation

Well defined, accurate asset data is essential for good asset governance and financial decision making. As a continuous improvement process asset data confidence and maturity improve over time as asset data is reviewed and improved.

Asset management plans provide Council with current information relating to condition, renewal forecasting, renewal cost, levels of service, risk and priority to inform the Shire's Program of Works and Long-Term Financial Planning processes.

The Asset Management Framework consisting of the Asset Management Policy, Strategy and individual asset management plans for each asset class provides the guidance and principles through which the Shire manages its infrastructure assets. Key actions to deliver the strategy are:

**Asset Management Improvements**

The Asset Management Planning Improvements identified within the strategy will be implemented over the life of the strategy with progress updates provided as indicated below:

- Data confidence: Within each asset management plan when reported to Council.

- Asset Management Plans: On completion and provided to Council for adoption.

- Levels of Service: On completion of definition and ongoing performance monitoring.

- Asset software: As part of the Enterprise Resource Planning (ERP) project program.

- Integrated asset software: Linked to ERP as a later stage outcome.

Key Performance Indicators

The identified Key Performance Indicators (KPI's) covering the key aspects of operational efficiency, customer service, and financial deliverability will be developed and implemented as a key action to support the Strategy.

As each KPI process is developed it will be incorporated into the relevant reporting schedule to Council through the Corporate Business Plan and asset class specific Asset Management Plans.
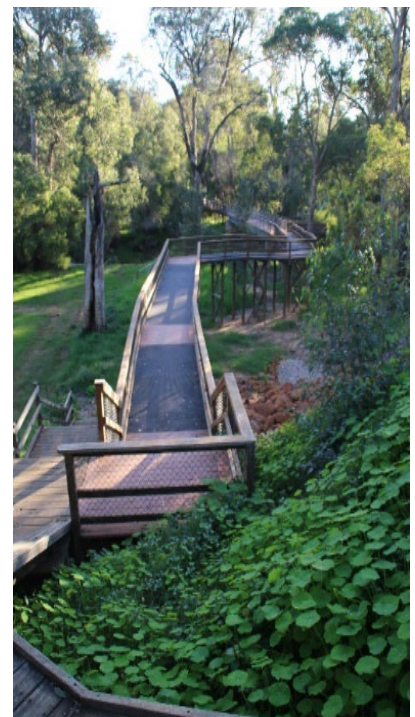
Terms and definitions

For the purposes of this document and related discussions, the following terms and definitions apply.

3.1 General terms

3.1.1 audit
systematic, independent and documented *process* (3.1.19) for obtaining audit evidence and evaluating it objectively to determine the extent to which the audit criteria are fulfilled
Note 1 to entry: An audit can be an internal audit (first party) or an external audit (second party or third party), and it can be a combined or integrated audit (combining two or more disciplines).
Note 2 to entry: "Audit evidence" and "audit criteria" are defined in ISO 19011.

3.1.2 capability
<asset management> measure of capacity and the ability of an entity (system, person or *organisation* (3.1.13)) to achieve its *objectives* (3.1.12)
Note 1 to entry: *Asset management* (3.3.1) capabilities include *processes* (3.1.19), resources, *competences* (3.1.3) and technologies to enable the effective and efficient development and delivery of *asset management plans* (3.3.2) and *asset life* (3.2.2) activities, and their *continual improvement* (3.1.5).

3.1.3 competence
ability to apply knowledge and skills to achieve intended results

3.1.4 conformity
fulfilment of a *requirement* (3.1.20)

3.1.5 continual improvement
recurring activity to enhance *performance* (3.1.17)

3.1.6 documented information
information required to be controlled and maintained by an *organisation* (3.1.13) and the medium on which it is contained
Note 1 to entry: Documented information can be in any format and media and from any source.
Note 2 to entry: Documented information can refer to:

- the *management system* (3.4.2), including related *processes* (3.1.19);
- information created in order for the organisation to operate (documentation);
- evidence of results achieved (e.g. records, key performance indicators).

3.1.7 effectiveness
extent to which planned activities are realized and planned results achieved

3.1.8 incident
unplanned event or occurrence resulting in damage or other loss

3.1.9 monitoring
determining the status of a system, a *process* (3.1.19) or an activity
Note 1 to entry: To determine the status, there may be a need to check, supervise or critically observe.
Note 2 to entry: For the purposes of asset management, monitoring may also refer to determining the status of an asset. This is typically referred to as "condition monitoring" or "performance monitoring".

3.1.10 measurement
process (3.1.19) to determine a value

3.1.11 nonconformity

non-fulfilment of a _requirement_ (3.1.20)

Note 1 to entry: Nonconformity can be any deviation from asset _management system_ (3.4.2) requirements, or from relevant work standards, practices, procedures, legal requirements, etc.

3.1.12 objective
result to be achieved

Note 1 to entry: An objective can be strategic, tactical or operational.

Note 2 to entry: Objectives can relate to different disciplines (such as financial, health and safety, and environmental goals) and can apply at different levels (such as strategic, organisation-wide, project, product and _process_ (3.1.19)).

Note 3 to entry: An objective can be expressed in other ways, e.g. as an intended outcome, a purpose, an operational criterion, an _asset management_ (3.3.1) objective or by the use of other words with similar meaning (e.g. aim, goal, or target).

Note 4 to entry: In the context of _asset management systems_ (3.4.3), asset management objectives are set by the _organisation_ (3.1.13), consistent with the _organisational objectives_ (3.1.14) and asset management _policy_ (3.1.18), to achieve specific measurable results.

3.1.13 organisation
person or group of people that has its own functions with responsibilities, authorities and relationships to achieve its _objectives_ (3.1.12)

Note 1 to entry: The concept of organisation includes, but is not limited to, sole-trader, company, corporation, firm, enterprise, authority, partnership, charity or institution, or part or combination thereof, whether incorporated or not, public or private.

3.1.14 organisational objective
overarching _objective_ (3.1.12) that sets the context and direction for
an _organisation's_ (3.1.13) activities

Note 1 to entry: Organisational objectives are established through the strategic level planning activities of the organisation.

3.1.15 organisational plan
documented information (3.1.6) that specifies the programmes to achieve the _organisational objectives_ (3.1.14)

3.1.16 outsource (verb)
make an arrangement where an external _organisation_ (3.1.13) performs part of an organisation's function or _process_ (3.1.19)

Note 1 to entry: An external organisation is outside the scope of the _management system_ (3.4.2), although the outsourced function or process is within the scope if its activities influence the effectiveness of the _asset management system_ (3.4.3).

3.1.17 performance
measureable result

Note 1 to entry: Performance can relate either to quantitative or qualitative findings.

Note 2 to entry: Performance can relate to the management of activities, _processes_ (3.1.19), products (including services), systems or _organisations_ (3.1.13).

Note 3 to entry: For the purposes of _asset management_ (3.3.1), performance can relate to _assets_ (3.2.1) in their ability to fulfil _requirements_ (3.1.20) or _objectives_ (3.1.12).

3.1.18 policy
intentions and direction of an _organisation_ (3.1.13) as formally expressed by its _top management_ (3.1.23)

3.1.19 process
set of interrelated or interacting activities which transforms inputs into outputs

3.1.20 requirement

need or expectation that is stated, generally implied or obligatory

Note 1 to entry: "Generally implied" means that it is custom or common practice for the _organisation_ (3.1.13) and _stakeholders_ (3.1.22) that the need or expectation under consideration is implied.

Note 2 to entry: A specified requirement is one that is stated, for example in _documented information_ (3.1.6).

3.1.21 risk

effect of uncertainty on _objectives_ (3.1.12)

Note 1 to entry: An effect is a deviation from the expected — positive and/or negative.

Note 2 to entry: Objectives can relate to different disciplines (such as financial, health and safety, and environmental goals) and can apply at different levels (such as strategic, organisation-wide, project, product and _process_ (3.1.19)).

Note 3 to entry: Risk is often characterized by reference to potential "events" (as defined in ISO Guide 73:2009, 3.5.1.3) and "consequences" (as defined in ISO Guide 73:2009, 3.6.1.3), or a combination of these.

Note 4 to entry: Risk is often expressed in terms of a combination of the consequences of an event (including changes in circumstances) and the associated "likelihood" (ISO Guide 73:2009, 3.6.1.1) of occurrence.

Note 5 to entry: Uncertainty is the state, even partial, of deficiency of information related to, understanding or knowledge of, an event, its consequence, or likelihood.

[SOURCE:ISO Guide 73:2009, 1.1]

3.1.22 stakeholder

person or _organisation_ (3.1.13) that can affect, be affected by, or perceive themselves to be affected by a decision or activity

Note 1 to entry: A "stakeholder" can also be referred to as an "interested party".

3.2 Terms relating to assets

3.2.1 asset

item, thing or entity that has potential or actual value to an _organisation_ (3.1.13)

Note 1 to entry: Value can be tangible or intangible, financial or non-financial, and includes consideration of _risks_ (3.1.21) and liabilities. It can be positive or negative at different stages of the _asset life_ (3.2.2).

Note 2 to entry: Physical assets usually refer to equipment, inventory and properties owned by the organisation. Physical assets are the opposite of intangible assets, which are non-physical assets such as leases, brands, digital assets, use rights, licences, intellectual property rights, reputation or agreements.

Note 3 to entry: A grouping of assets referred to as an _asset system_ (3.2.5) could also be considered as an asset.

3.2.2 asset life

period from _asset_ (3.2.1) creation to asset end-of-life

3.2.3 life cycle

stages involved in the management of an _asset_ (3.2.1)

Note 1 to entry: The naming and number of the stages and the activities under each stage usually vary in different industry sectors and are determined by the _organisation_ (3.1.13).

3.2.4 asset portfolio

assets (3.2.1) that are within the scope of the _asset management system_ (3.4.3)

Note 1 to entry: A portfolio is typically established and assigned for managerial control purposes. Portfolios for physical hardware might be defined by category (e.g. plant, equipment, tools, land). Software portfolios might be defined by software publisher, or by platform (e.g. PC, server, mainframe).

Note 2 to entry: An asset management system can encompass multiple asset portfolios. Where multiple asset portfolios and asset management systems are employed, _asset management_ (3.3.1) activities should be coordinated between the portfolios and systems.

3.2.5 asset system

set of _assets_ (3.2.1) that interact or are interrelated

3.2.6 asset type

grouping of _assets_ (3.2.1) having common characteristics that distinguish those assets as a group or class

EXAMPLE:
Physical assets, information assets, intangible assets, _critical assets_ (3.2.7), enabling assets, linear assets, information and communications technology (ICT) assets, infrastructure assets, moveable assets.

3.2.7 critical asset
asset (3.2.1) having potential to significantly impact on the achievement of the _organisation's_ (3.1.13)_objectives_ (3.1.12)
Note 1 to entry: Assets can be safety-critical, environment-critical or _performance-critical_ (3.1.17) and can relate to legal, regulatory or statutory _requirements_ (3.1.20).
Note 2 to entry: Critical assets can refer to those assets necessary to provide services to critical customers.
Note 3 to entry: _Asset systems_ (3.2.5) can be distinguished as being critical in a similar manner to individual assets.

3.3   Terms relating to asset management

3.3.1 asset management
coordinated activity of an _organisation_ (3.1.13) to realise value from _assets_ (3.2.1)
Note 1 to entry: Realisation of value will normally involve a balancing of costs, _risks_ (3.1.21), opportunities and _performance_ (3.1.17) benefits.
Note 2 to entry: Activity can also refer to the application of the elements of the _asset management system_ (3.4.3).
Note 3 to entry: The term "activity" has a broad meaning and can include, for example, the approach, the planning, the plans and their implementation.

3.3.2 strategic asset management plan (SAMP)
documented information (3.1.6) that specifies how _organisational objectives_ (3.1.14) are to be converted into _asset management_ (3.3.1)_objectives_ (3.1.12), the approach for developing _asset management plans_ (3.3.3), and the role of the _asset management system_ (3.4.3) in supporting achievement of the asset management objectives
Note 1 to entry: A strategic asset management plan is derived from the _organisational plan_ (3.1.15).
Note 2 to entry: A strategic asset management plan may be contained in, or may be a subsidiary plan of, the organisational plan.

3.3.3 asset management plan
documented information (3.1.6) that specifies the activities, resources and timescales required for an individual _asset_ (3.2.1), or a grouping of assets, to achieve the _organisation's_ (3.1.13)_asset management_ (3.3.1)_objectives_ (3.1.12)
Note 1 to entry: The grouping of assets may be by _asset type_ (3.2.6), asset class, _asset system_ (3.2.5) or _asset portfolio_ (3.2.4).
Note 2 to entry: An asset management plan is derived from the _strategic asset management plan_ (3.3.2).
Note 3 to entry: An asset management plan may be contained in, or may be a subsidiary plan of, the strategic asset management plan.

3.3.4 preventive action
action to eliminate the cause of a potential _nonconformity_ (3.1.11) or other undesirable potential situation
Note 1 to entry: This definition is specific to _asset management_ (3.3.1) activities only.
Note 2 to entry: There can be more than one cause for a potential nonconformity.

For the purposes of this document, the following terms and definitions apply.

3.1   General terms

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3.1.3 competence
ability to apply knowledge and skills to achieve intended results

3.1.4 conformity
fulfilment of a *requirement* (3.1.20)

3.1.5 continual improvement
recurring activity to enhance *performance* (3.1.17)

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Note 1 to entry: Documented information can be in any format and media and from any source.
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- — information created in order for the organisation to operate (documentation);

- — evidence of results achieved (e.g. records, key performance indicators).

3.1.7 effectiveness
extent to which planned activities are realized and planned results achieved

3.1.8 incident
unplanned event or occurrence resulting in damage or other loss

3.1.9 monitoring
determining the status of a system, a *process* (3.1.19) or an activity
Note 1 to entry: To determine the status, there may be a need to check, supervise or critically observe.
Note 2 to entry: For the purposes of asset management, monitoring may also refer to determining the status of an asset. This is typically referred to as "condition monitoring" or "performance monitoring".

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process (3.1.19) to determine a value

3.1.11 nonconformity
non-fulfilment of a *requirement* (3.1.20)
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result to be achieved
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Note 4 to entry: In the context of *asset management systems* (3.4.3), asset management objectives are set by the *organisation* (3.1.13), consistent with the *organisational objectives* (3.1.14) and asset management *policy* (3.1.18), to achieve specific measurable results.

3.1.13 organisation
person or group of people that has its own functions with responsibilities, authorities and relationships to achieve its *objectives* (3.1.12)

Note 1 to entry: The concept of organisation includes, but is not limited to, sole-trader, company, corporation, firm, enterprise, authority, partnership, charity or institution, or part or combination thereof, whether incorporated or not, public or private.

3.1.14 organisational objective
overarching *objective* (3.1.12) that sets the context and direction for
an *organisation's* (3.1.13) activities
Note 1 to entry: Organisational objectives are established through the strategic level planning activities of the organisation.

3.1.15 organisational plan
documented information (3.1.6) that specifies the programmes to achieve the *organisational objectives* (3.1.14)

3.1.16 outsource (verb)
make an arrangement where an external *organisation* (3.1.13) performs part of an organisation's function or *process* (3.1.19)
Note 1 to entry: An external organisation is outside the scope of the *management system* (3.4.2), although the outsourced function or process is within the scope if its activities influence the effectiveness of the *asset management system* (3.4.3).

3.1.17 performance
measurable result
Note 1 to entry: Performance can relate either to quantitative or qualitative findings.
Note 2 to entry: Performance can relate to the management of activities, *processes* (3.1.19), products (including services), systems or *organisations* (3.1.13).
Note 3 to entry: For the purposes of *asset management* (3.3.1), performance can relate to *assets* (3.2.1) in their ability to fulfil *requirements* (3.1.20) or *objectives* (3.1.12).

3.1.18 policy
intentions and direction of an *organisation* (3.1.13) as formally expressed by its *top management* (3.1.23)

3.1.19 process
set of interrelated or interacting activities which transforms inputs into outputs

3.1.20 requirement
need or expectation that is stated, generally implied or obligatory
Note 1 to entry: "Generally implied" means that it is custom or common practice for
the *organisation* (3.1.13) and *stakeholders* (3.1.22) that the need or expectation under consideration is implied.
Note 2 to entry: A specified requirement is one that is stated, for example in *documented information* (3.1.6).

3.1.21 risk
effect of uncertainty on *objectives* (3.1.12)
Note 1 to entry: An effect is a deviation from the expected — positive and/or negative.
Note 2 to entry: Objectives can relate to different disciplines (such as financial, health and safety, and environmental goals) and can apply at different levels (such as strategic, organisation-wide, project, product and *process* (3.1.19)).
Note 3 to entry: Risk is often characterized by reference to potential "events" (as defined in ISO Guide 73:2009, 3.5.1.3) and "consequences" (as defined in ISO Guide 73:2009, 3.6.1.3), or a combination of these.
Note 4 to entry: Risk is often expressed in terms of a combination of the consequences of an event (including changes in circumstances) and the associated "likelihood" (ISO Guide 73:2009, 3.6.1.1) of occurrence.
Note 5 to entry: Uncertainty is the state, even partial, of deficiency of information related to, understanding or knowledge of, an event, its consequence, or likelihood.
[SOURCE:ISO Guide 73:2009, 1.1]

3.1.22 stakeholder
person or *organisation* (3.1.13) that can affect, be affected by, or perceive themselves to be affected by a decision or activity
Note 1 to entry: A "stakeholder" can also be referred to as an "interested party".

3.1.23 senior management
person or group of people who directs and controls an *organisation* (3.1.13) at the highest level
Note 1 to entry: Top management has the power to delegate authority and provide resources within the organisation.
Note 2 to entry: If the scope of the *management system* (3.4.2) covers only part of an organisation, then top management refers to those who direct and control that part of the organisation. If multiple *asset management systems* (3.4.3) are employed, the systems should be designed to coordinate efforts.

3.2 Terms relating to assets

3.2.1 asset
item, thing or entity that has potential or actual value to an _organisation_ (3.1.13)

Note 1 to entry: Value can be tangible or intangible, financial or non-financial, and includes consideration of _risks_ (3.1.21) and liabilities. It can be positive or negative at different stages of the _asset life_ (3.2.2).

Note 2 to entry: Physical assets usually refer to equipment, inventory and properties owned by the organisation. Physical assets are the opposite of intangible assets, which are non-physical assets such as leases, brands, digital assets, use rights, licences, intellectual property rights, reputation or agreements.

Note 3 to entry: A grouping of assets referred to as an _asset system_ (3.2.5) could also be considered as an asset.

3.2.2 asset life
period from _asset_ (3.2.1) creation to asset end-of-life

3.2.3 life cycle
stages involved in the management of an _asset_ (3.2.1)

Note 1 to entry: The naming and number of the stages and the activities under each stage usually vary in different industry sectors and are determined by the _organisation_ (3.1.13).

3.2.4 asset portfolio
assets (3.2.1) that are within the scope of the _asset management system_ (3.4.3)

Note 1 to entry: A portfolio is typically established and assigned for managerial control purposes. Portfolios for physical hardware might be defined by category (e.g. plant, equipment, tools, land). Software portfolios might be defined by software publisher, or by platform (e.g. PC, server, mainframe).

Note 2 to entry: An asset management system can encompass multiple asset portfolios. Where multiple asset portfolios and asset management systems are employed, _asset management_ (3.3.1) activities should be coordinated between the portfolios and systems.

3.2.5 asset system
set of _assets_ (3.2.1) that interact or are interrelated

3.2.6 asset type
grouping of _assets_ (3.2.1) having common characteristics that distinguish those assets as a group or class

EXAMPLE:
Physical assets, information assets, intangible assets, _critical assets_ (3.2.7), enabling assets, linear assets, information and communications technology (ICT) assets, infrastructure assets, moveable assets.

3.2.7 critical asset
asset (3.2.1) having potential to significantly impact on the achievement of the _organisation's_ (3.1.13)_objectives_ (3.1.12)

Note 1 to entry: Assets can be safety-critical, environment-critical or _performance-critical_ (3.1.17) and can relate to legal, regulatory or statutory _requirements_ (3.1.20).

Note 2 to entry: Critical assets can refer to those assets necessary to provide services to critical customers.

Note 3 to entry: _Asset systems_ (3.2.5) can be distinguished as being critical in a similar manner to individual assets.

3.3 Terms relating to asset management

3.3.1 asset management
coordinated activity of an _organisation_ (3.1.13) to realize value from _assets_ (3.2.1)

Note 1 to entry: Realization of value will normally involve a balancing of costs, _risks_ (3.1.21), opportunities and _performance_ (3.1.17) benefits.

Note 2 to entry: Activity can also refer to the application of the elements of the _asset management system_ (3.4.3).

Note 3 to entry: The term "activity" has a broad meaning and can include, for example, the approach, the planning, the plans and their implementation.

3.3.2 strategic asset management plan SAMP
documented information (3.1.6) that specifies how _organisational objectives_ (3.1.14) are to be converted into _asset management_ (3.3.1)_objectives_ (3.1.12), the approach for developing _asset management plans_ (3.3.3), and the role of the _asset management system_ (3.4.3) in supporting achievement of the asset management objectives

Note 1 to entry: A strategic asset management plan is derived from the _organisational plan_ (3.1.15).

Note 2 to entry: A strategic asset management plan may be contained in, or may be a subsidiary plan of, the organisational plan.

3.3.3 asset management plan
documented information (3.1.6) that specifies the activities, resources and timescales required for an individual *asset* (3.2.1), or a grouping of assets, to achieve the *organisation's* (3.1.13)*asset management* (3.3.1)*objectives* (3.1.12)
Note 1 to entry: The grouping of assets may be by *asset type* (3.2.6), asset class, *asset system* (3.2.5) or *asset portfolio* (3.2.4).
Note 2 to entry: An asset management plan is derived from the *strategic asset management plan* (3.3.2).
Note 3 to entry: An asset management plan may be contained in, or may be a subsidiary plan of, the strategic asset management plan.

3.3.4 preventive action
action to eliminate the cause of a potential *nonconformity* (3.1.11) or other undesirable potential situation
Note 1 to entry: This definition is specific to *asset management* (3.3.1) activities only.
Note 2 to entry: There can be more than one cause for a potential nonconformity.
Note 3 to entry: Preventive action is taken to prevent occurrence and to preserve an *asset's* (3.2.1) function, whereas *corrective action* (3.4.1) is taken to prevent recurrence.
Note 4 to entry: Preventive action is normally carried out while the asset is functionally available and operable or prior to the initiation of functional failure.
Note 5 to entry: Preventive action includes the replenishment of consumables where the consumption is a functional *requirement* (3.1.19).
[SOURCE:ISO 9000:2005, 3.6.4, modified – Note 3 to entry has been modified; Notes 1, 4 and 5 have been added]

3.3.5 predictive action
action to monitor the condition of an *asset* (3.2.1) and predict the need for *preventive action* (3.3.4) or *corrective action* (3.4.1)
Note 1 to entry: Predictive action is also commonly referred to as either "condition monitoring" or "performance monitoring".

3.3.6 level of service
parameters, or combination of parameters, which reflect social, political, environmental and economic outcomes that the *organisation* (3.1.13) delivers
Note 1 to entry: The parameters can include safety, customer satisfaction, quality, quantity, capacity, reliability, responsiveness, environmental acceptability, cost and availability.

3.4   Terms relating to asset management system

3.4.1 corrective action
action to eliminate the cause of a *nonconformity* (3.1.11) and to prevent recurrence
Note 1 to entry: In the case of other undesirable outcomes, action is necessary to minimize or eliminate the causes and to reduce the impact or prevent recurrence. Such actions fall outside the concept of corrective action, in the sense of this definition.

3.4.2 management system
set of interrelated or interacting elements of an *organisation* (3.1.13) to establish *policies* (3.1.18) and *objectives* (3.1.12) and *processes* (3.1.19) to achieve those objectives
Note 1 to entry: A management system can address a single discipline or several disciplines.
Note 2 to entry: The system elements include the organisation's structure, roles and responsibilities, planning, operation, etc.
Note 3 to entry: The scope of a management system may include the whole of the organisation, specific and identified functions of the organisation, specific and identified sections of the organisation, or one or more functions across a group of organisations.

3.4.3 asset management system
management system (3.4.2) for *asset management* (3.3.1) whose function is to establish the asset management *policy* (3.1.18) and asset management *objectives* (3.1.12)
Note 1 to entry: The asset management system is a subset of asset management