Asset Management Strategy

2022-2032

resourcing NEWCASTLE 2040

City of Newcastle

Welcome

Acknowledgement of Country

We all sit on Awabakal and Worimi land
'Niirun Yalawa Awabakal dha Worimi burrai'

City of Newcastle (CN) acknowledges its Local Government Area (LGA) sits within the Country of the Awabakal and Worimi peoples. We acknowledge that Country for Aboriginal peoples is an interconnected set of ancient relationships. We acknowledge the custodianship of the Awabakal and Worimi peoples and the care and stewardship they have performed in this place since time immemorial.

Always was, always will be Aboriginal land
'Wunyibu wunyibu warra wunyibu wunyibu gkuuba Aboriginal burrai'

Sustainable Development Goals

We are committed to contributing towards the achievement of the United Nations Sustainable Development Goals (SDGs). We have adopted the SDGs and New Urban Agenda as cornerstones for our planning.

In September 2015, Australia was one of 193 countries to commit to the SDGs. These goals provide a global roadmap for all countries to work towards a better world for current and future generations.

To ensure we continue to support our community's vision for a smart, liveable and sustainable global city, it is important that we apply this global framework.

These global goals are significant and will take time to achieve; however, it is important to recognise the steps we are taking to progress these goals. This is our second year reporting against the SDGs and it is our intention to continually improve our methods of reporting to help us achieve these global standards.

Contents

1 Executive Summary

Newcastle is Australia's seventh-largest city, with a resident population of 171,000 and a total land area of 187km^2 (Australian Bureau of Statistics 2020). The Newcastle Local Government Area (LGA) shares boundaries with Lake Macquarie Council to the south, Port Stephens Council to the north, and Maitland and Cessnock Councils to the west. The Traditional Custodians of the Newcastle area are the Worimi and Awabakal peoples.

City of Newcastle (CN) serves its community by providing a range of services to residents and visitors. Our services are supported by a variety of built and natural assets, information technology, fleet and plant. Each asset contributes to meeting community needs, from park benches to our large local road network. Community services rely on well-planned, well-built and well-maintained infrastructure. Our goal is to ensure sustainable community service expectations are met by providing a structured set of objectives, actions and processes aimed at improving asset management and integrated resourcing strategies.

Diagram 1: Asset Diversity

Our Asset Management Strategy (AMS) is developed in conjunction with *Newcastle 2040*. A core component of *Resourcing Newcastle 2040*, the AMS integrates with our Long-Term Financial Plan (LTFP) and Workforce Development Strategic Plan (WDSP) to sustainably deliver services to our community.

The AMS determines the nature and direction of CN's asset management, providing the link between our Asset Management Policy (AMP) and our Service Asset Management Plan (SAMP). The strategy determines how our asset portfolio will support the service delivery needs of our community, now and into the future.

Our AMS is based on service planning and best practice asset life cycle management principles. Service planning identifies the services desired by our community and explores options to deliver them in an equitable and sustainable manner. This approach ensures we understand the people, processes, resources and tools CN requires to maintain and enhance our services to the community through our substantial asset portfolio.

Our asset policy, strategy and plans are regularly updated to maintain data confidence and ensure ongoing alignment with strategic direction. Improvement plans are also included within the AMS and SAMP, detailing key actions required to ensure continuous improvement.

2 Integrated Planning and Reporting

Integrated Planning and Reporting (IP&R) legislation was introduced by the NSW State Government in 2013 and sets requirements for all councils to lead the development of long-term plans for their city, detailing community aspirations and strategic directions. The diagram below demonstrates how our AMP, AMS and SAMP fit within the IP&R framework.

Diagram 2: Asset Management Strategy context

Our AMS is developed in conjunction with *Newcastle 2040*, working to deliver its vision of Newcastle as a liveable, sustainable, inclusive global city. *Newcastle 2040* represents CN's highest level of strategic planning. All other plans developed by CN as part of the IP&R framework must reflect and support the implementation of our community strategic plan. A core component of *Resourcing Newcastle 2040*, the AMS integrates with our LTFP and WDSP to determine how our asset portfolio will support the service delivery needs of our community, now and into the future.

CN's asset planning framework comprises our AMP (see Appendix 1), AMS, SAMP and our individual operational Service Asset Plans (SAPs). The AMP defines the key principles that underpin asset management for CN. The AMS translates these principles into core objectives that guide the management of our asset portfolio to support service delivery for our community. Asset performance modelling and service alignment is detailed in our SAMP and SAPs. CN utilises SAPs to enable rational and coordinated decision-making about levels of service. Resourcing, funding and asset life cycle requirements are examined to inform our daily operations, annual budgets and long-term planning. The long-term projections within our SAPs drive and support the LTFP and WDSP.

3 Our Service Delivery

CN provides a range of services to its residents, businesses and visitors. The majority of these services depend on CN assets for delivery, including natural and built assets such as trees, roads, drains, bridges, footpaths, public buildings and recreational facilities. Effective management of these assets, including understanding levels of service, is essential to the delivery of *Newcastle 2040*'s objectives.

3.1 Community Research and Expectations

Community research and consultation contributes significantly to the development of CN's Asset Management Policy, Strategy and Plans. To determine current and desired service levels, community engagement and consultation is undertaken through:

- Community strategic planning engagement
- Service-based engagement and consultation
- Individual service-based customer experience
- Quarterly targeted surveys.

CN undertook extensive community consultation in 2021 and 2022 to develop *Newcastle 2040*. This produced four strategic themes that are used to guide our asset management and service delivery, as shown in the diagram below. Community aspirations and service needs are converted into customer and technical levels of service, which are used to measure performance.

Diagram 3: Newcastle 2040 themes

3.2 Determining Levels of Service

The AMS details how our asset portfolio supports the service delivery needs of our community. In an asset management context, level of service refers to a defined rating against which service performance can be measured. Levels of service generally relate to quality, quantity, functionality, capacity, utilisation, location, accessibility and environmental factors. They provide the link between higher-level corporate objectives, asset management objectives and more detailed technical and operational objectives.

Service levels articulate the link between providing the outcomes the community desires and the way in which CN provides the service. A higher level of service will likely cost more to deliver than a lower level of service.

CN's current average levels of service are represented using a general 1–5 star rating system, as shown in the table below. The star rating system provides a platform for comparing levels of service across different services.

Star Rating	General Standard of Key Service Attributes
★☆☆☆☆	Basic quality standard. Low community usage, limited functionality.
★★☆☆☆	Average quality standard and presentation. Moderate community usage and functionality.
★★★☆☆	Good quality standard and presentation. Medium–high community usage. Fit for purpose. Maintained and presented in good condition.
★★★★☆	Very good quality standard. High community usage, functionality and capacity. Maintained and presented in very good condition. Services LGA community and beyond.
★★★★★	Excellent quality standard. Very high community usage, functionality, and capacity. Maintained and presented in excellent condition. High profile; delivers important economic benefits and services beyond the LGA and regional community.

Table 1: Star rating system

Our levels of service are defined using customer and technical performance measures. Customer performance measures describe attributes of the service from a customer viewpoint: how the customer receives or experiences the service. Technical levels of service support customer measures and are used internally to measure the performance of the service. Individual SAPs detail assessments for each service output, which are collated to form a current average community level of service. A summary of our service star ratings can be found in our SAMP.

3.3 Demand

To ensure our asset management and service delivery is sustainable and meets the changing needs and aspirations of our community, the following demand drivers need to be considered:

- Population growth/decline
- Economic changes
- Customer expectations
- Technology and innovation initiatives

- Impact of climate change
- Drive for environmental sustainability
- Disability inclusion and access
- Changes to legislation and statutory requirements
- Urban development
- New assets from growth
- Financial sustainability.

Our SAMP aims to address these demands through a combination of managing, upgrading and disposing of existing assets; providing new assets; enhancing technology; and utilising alternative service delivery options.

4 Asset Management Planning

Asset management planning is a comprehensive process that ensures our assets are managed and maintained to deliver a sustainable service to the community. CN adopts cost-effective life cycle management with a service delivery focus. This ensures assets and their associated performance support *Newcastle 2040* objectives and meet community needs.

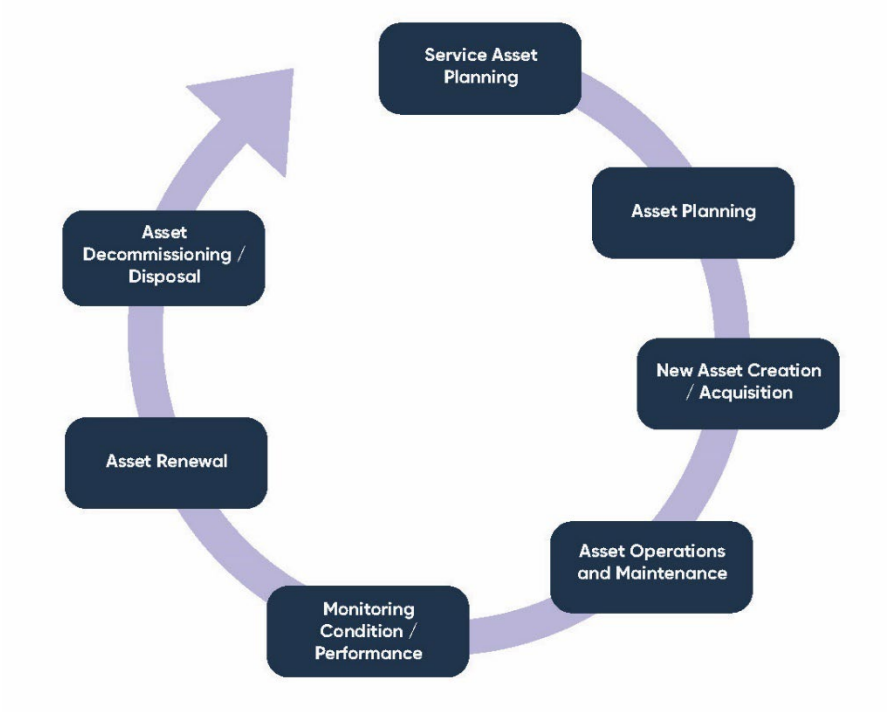

Diagram 4: Asset management planning cycle

Asset management planning seeks to manage services and assets efficiently and effectively through:

- Prioritised asset resourcing with a service delivery focus
- Adopting a whole-of-asset life cycle approach
- Data-driven and -informed decision-making
- Performance monitoring and reporting.

4.1 Asset Management Objectives

Asset management refers to the systematic, coordinated activities and practices an organisation undertakes to deliver its objectives optimally and sustainably through the cost-effective life cycle management of assets. CN's asset management goals are to proactively manage our assets from a lowest whole-of-life cost perspective in accordance with recognised industry practice while meeting agreed levels of service, and to continuously improve our asset management systems.

This strategy communicates how the principles of our AMP (see Appendix 1) will be achieved by defining key objectives for asset management across CN. These objectives are shown in the table below and are listed in the order that they appear, not by priority.

No.	Objective	How CN plans to achieve the objective	Asset Policy principles
1	Align service delivery expectations with available funding to achieve sustainable management of all required supporting assets	CN's SAPs are operational plans detailing service delivery expectations and required levels of funding to deliver the service. Our SAMP and SAPs will be reviewed periodically to reflect decisions resulting from the integrated planning process.	2
2	Identify levels of funding required to achieve a sustainable Capital Works Program and assess the implications of different funding levels on levels of service	To align sustainable service delivery expectations with available funding, CN will maintain and utilise a project management system for project proposal, prioritisation and approvals. CN will implement Strategic Asset Management software to model asset data, which will provide asset life cycle cost requirements to deliver desired service delivery expectations. CN will utilise Strategic Asset Management software to model funding versions and adjust service level expectations with available funding.	3, 4
3	Adjust resources and invest in building capacity to deliver works programs	Each SAP will continue to review the delivery of its associated works program and identify issues with resourcing delivery.	2
4	Ensure renewal and maintenance required to minimise life cycle costs and maintain agreed level of service is fully funded and reportable	Asset modelling will provide detailed data on optimised maintenance and renewal expenditure, which will inform the LTFP and allow funding to be planned. Levels of service, capital works forecasting and maintenance plans are defined within the SAMP. Capital works program priorities renewal. Maintenance is funded to meet service levels.	2, 4
5	Use SAPs to coordinate decision-making regarding levels of service and implement relevant strategies and plans	The SAMP will forecast demand and its effects on the service and correlating assets. Assets that are no longer required will be identified through detailed development of SAPs and will follow the asset review process to enable disposal. Each SAP incorporates a risk management plan integrated with current corporate software. Periodic review of SAMP and SAPs (i.e. maturity assessment) will be undertaken. SAPs identify legislative and statutory compliance and reporting requirements.	5, 6, 7
6	Only approve new services and/or assets where the full life cycle cost of doing so has been evaluated and appropriate supporting budget allocations made	As per IP&R requirements, strategies are required to be costed. Expenditure Review Committee reviews all strategies prior to approval. Development of business cases will engage staff in whole-of-life costing for assets before a project is prioritised.	1
7	Capture and improve asset data and service information	A continuous improvement approach is taken to advance asset management practice throughout the organisation and maintain a single source of truth for asset-related information.	3
8	Align asset management activities with *Newcastle 2040*	The SAMP supports service delivery and demonstrates integration with *Newcastle 2040*.	7
9	Ensure accountability, responsibility and reporting requirements	CN is committed to understanding the services valued by the community and to providing and	1, 6

No.	Objective	How CN plans to achieve the objective	Asset Policy principles
	for assets are established, relevant, clearly communicated and implemented	maintaining assets through informed decision-making. Responsibilities for custodianship and management of assets are identified and guide our asset management system. Reporting occurs through our Annual Report, Operational Plan, Delivery Program, capital works monthly reporting and annual financial statements.	
10	Delivery of services will incorporate environmental sustainability, considering: • Emission prevention and reduction • Climate resilience • Biodiversity and Water-Sensitive Urban Design, Urban Forest expansion • Circular economy, including resource efficiency and designing out waste • Whole-of-life asset management	CN will continue to invest in public natural asset management to ensure benefits accrue for current and future generations. Through our strategic frameworks, including our environment strategy, circular economy, climate action and adaptation plans, and coastal management programs, we will: • Measure environmental performance and impact • Identify priority assets • Improve environmental sustainability. CN will implement actions to improve the quality of corporate information systems underpinning natural asset management planning and decision-making. Each SAP will continue to detail sustainable environmental measures, including consideration of: • Climate mitigation and adaptation planning requirements • Environmental risks and opportunities • Biodiversity and Water Sensitive Urban Design.	2, 4, 6

Table 2: Key objectives and actions

4.2 Environmental Sustainability

Section 8 of the *Local Government Act 1993* requires CN to 'properly manage, develop, protect, restore, enhance and conserve the environment of the area for which it is responsible in a manner which is consistent with and promotes the principles of Ecologically Sustainable Development (ESD)' and 'have regard to the long-term and cumulative effect of its decisions'. The Act also requires councils to take the principles of ESD into account. As such, CN will continue to apply systems thinking and adaptive planning in the governance of asset management objectives for all our activities.

CN is the custodian of a diverse natural asset portfolio. There is a need to protect our city's waterways, biodiversity and local blue and green corridors. Through our environmental policies, strategies and plans, CN is committed to reducing pollution, emissions and waste, as well as water and materials consumption.

CN will invest in public natural asset management to ensure benefits accrue for current and future generations. This includes funding for renewal to address the impacts of infrastructure and urban development on our natural asset portfolio. This investment delivers on our ESD objectives and builds the resilience of our infrastructure.

To integrate environmental management best practice within our SAPs, environmental sustainability measures are incorporated into the star rating system for all CN's service outputs. The measures focus on the assessment of energy efficiency and emissions reduction; water conservation; protection of biodiversity, land and water quality; recycling of waste materials; promotion of sustainable transport; and use of sustainable building materials that are incorporated into the delivery of each service project across its whole life cycle.

5 Our Assets

CN is responsible for the management of assets valued at more than $2.5 billion. These assets play an integral part in delivering the services provided by CN to serve the City. The tables below provide a summary of the replacement values of CN's built and natural assets.

Asset Class	Description	Current Replacement Cost ($,000)
Buildings	Community building's including libraries and cultural facilities, investment properties	364,587
Fleet and Plant	Light vehicles, trucks, plant, trailers	39,412
Open Spaces	Playgrounds, structures, retaining walls, park furniture	253,175
Other Assets	Equipment, smart poles, flood warning system	134,206
Stormwater	Stormwater drainage including, pits and pipes, culverts headwalls, open channels, water quality devices	273,650
Transport	Roads, footpaths, cycleways, bridges, carparks, roadside furniture	950,362
Waste Management	Waste facilities	85,442
Total		**2,100,834**

Table 3: Built asset value

Asset Class	Description	Current Estimated Value ($,000)
Bushland	Bushland, habitat trees, tracks and trails, inland cliff lines	129,907
Public trees	Street and park trees	107,233
Watercourses	Natural and constructed watercourses including vegetation	67,592
Coast	Coastline including beaches, dunes, rock platforms, clifflines	56,213
Wetlands	Natural and constructed waterbodies including fringe vegetation	45,296
Sea/River Walls	Sea and river walls	73,509
Total		**479,750**

Table 4: Natural asset value

Our assets support a wide and diverse range of services, including, but not limited to:

- Administrative services
- Community, arts and cultural facilities and programs
- Customer service
- Environmental management
- Urban water cycle management (including flood mitigation and protection)
- Strategy and innovation
- Libraries and learning
- Parks and recreation (including sporting facilities, aquatic services and natural areas)
- Development and compliance
- Traffic and transport
- Tourism and economic development
- Waste services.

5.1 Critical Assets

Critical assets are defined as those that have a high consequence of failure. They are likely to result in more significant financial, environmental and social costs in terms of impact on organisation objectives. By identifying critical assets, we can reduce risk by continually improving investigative activities, maintenance and capital expenditure plans, and direct investment.

CN does not have any critical assets as we do not provide utility networks or sewer supply. CN has high-risk assets that have a high consequence of failure, such as the Works Depot and the road network. Individual operational SAPs identify assets deemed high risk and demonstrate the methodology used to minimise potential impact on the achievement of asset management objectives.

By identifying high-risk assets, CN can target and refine investigative activities, maintenance plans and capital expenditure plans for the key areas. This information is fed into asset modelling software to target investment on high-risk assets and reduce risk.

5.2 Asset Depreciation and Useful Life

Depreciation is a method of allocating the cost of an asset over its useful life to reflect the patterns of consumption of the asset. CN has adopted the straight-line method of depreciation to reflect patterns of consumption for all non-current assets other than bulk earthworks, parcels of land and heritage collections, which are not depreciated.

CN assesses the period over which an asset or asset component is expected to be available for use when determining its expected useful life. Useful life is assessed in the context of the asset's service to CN and not its physical life.

Asset useful lives and residual values are reviewed, and adjusted if appropriate, with sufficient regularity to ensure that the pattern of consumption is accurately reflected in annual financial statements. The estimated useful lives of CN assets as shown in General Purpose Financial Statements at 30 June 2021 are set out in Table 5 below.

Asset Classification	Useful Life in Years
Office equipment	3 to 5
Furniture and fittings	2 to 25
Plant and equipment	3 to 50
Library books	3 to 100
Depreciable land improvements	25 to 50
Buildings[1]	20 to 100
Other structures[2]	3 to 200
Swimming pools	50 to 100
Other open space/recreational assets	7 to 60
Stormwater drainage	18 to 94
Roadside furniture	20
Sealed roads: surface	17 to 74
Sealed roads: pavement	114 to 119
Sealed roads: kerb and gutter	79
Unsealed roads: surface	28
Bridge: substructure, superstructure	67 to 89
Bridge: handrail, guardrail	45 to 89
Footways	28 to 49
Other infrastructure	15 to 100

Table 5: Asset Useful Life

1 100-year life is only applicable to building shell on four culturally significant buildings

[2] 200-year life is only applicable to one leading light tower

5.3 Asset Condition

To monitor asset performance and ensure service delivery, we undertake regular condition assessments across our asset portfolio. The majority of these assessments are undertaken in line with asset revaluation timeframes, i.e. five-yearly. Regular condition assessments are scheduled for:

- Buildings
- Transport including roads, parking, footpaths, cycleways and public domain elements
- Stormwater including stormwater drainage network and flood planning assets

- Plant and equipment
- Open space assets such as parks, playgrounds and pools
- Natural assets including beaches, bushland, wetlands, street and habitat trees, waterways and cliff lines, and sea/river walls.

Data from condition assessments is used to reassess the remaining useful lives and depreciation rates of our assets and ensure that the annual depreciation expense is the best reflection of each asset's remaining service potential. Each asset revaluation aims to improve the accuracy of the asset's value by using the most recently available information on construction materials, methods and use.

5.3.1 Asset Condition Profile

To sustainably manage the infrastructure of our historic coastal city, condition and asset consumption modelling informs our asset planning, optimising maintenance and renewal expenditure. As our city's infrastructure ages, the overall consumption increases across our asset profile.

Asset condition (excluding fleet, plant and equipment) is measured against an Office of Local Government five-point scale (see Table 6 below), which rates infrastructure condition from excellent to very poor.

Infrastructure Asset Condition Assessment Key		
1	Excellent/Very good	No work required
2	Good	Only minor maintenance work required
3	Satisfactory	Maintenance work required
4	Poor	Renewal required
5	Very poor	Urgent renewal/upgrading required

Table 6: Condition scale

A snapshot of condition distribution for our major asset classes is provided below.

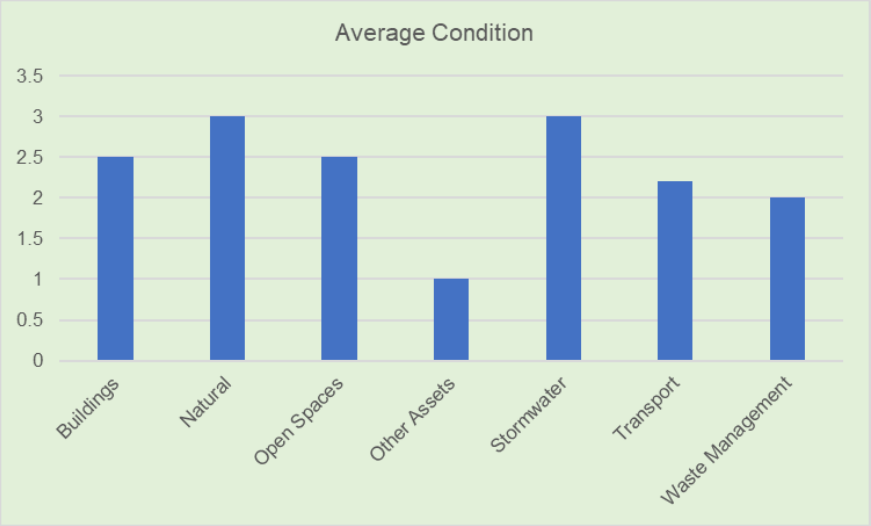

Diagram 5: Average condition profile

Detailed condition data is combined with our analysis of asset service attributes including functionality, quality, capacity and utilisation to inform our asset planning. This analysis enables CN to implement data driven asset life cycle management.

6 Asset Management System

It is important to understand how well our current asset management system supports service delivery for our community, and to identify opportunities for ongoing improvement. Our asset management system includes the IT systems used to manage assets as well as the people, processes and tools involved in service delivery. Key components include asset registers and management systems, asset condition assessments, strategic planning capabilities, predictive modelling, deterioration modelling, risk analysis and life cycle costing.

6.1 Asset Management System Confidence Rating

Confidence in CN's asset management system components has been assessed using the Confidence Rating System in Table 8. Confidence in both the financial and asset processes is assessed in each SAP. Low confidence in the asset system limits our ability to use the data for high-level business decisions and option analysis. The asset management system and SAPs provide the structure for asset performance monitoring, with each SAP outlining an action plan for improving the asset data.

Confidence Grade	Description
A	**Highly reliable** Data based on sound records, procedure, investigations and analysis, documented properly and recognised as the best method of assessment.
B	**Reliable** Data based on sound records, procedures, investigations and analysis, documented properly but has minor shortcomings, for example old data, some documentation is missing and/or reliance is placed on unconfirmed reports or some extrapolation.
C	**Uncertain** Data based on sound records, procedures, investigations and analysis which is incomplete or unsupported or extrapolated from a limited sample for which grade A or B data are available. Dataset is substantially complete but up to 50% is extrapolated data.
D	**Very uncertain** Data based on unconfirmed verbal reports and/or cursory inspection and analysis. Dataset may not be fully complete and most data is estimated or extrapolated.
E	**Unknown** None or very little data held.

Table 7: Confidence Rating System (Source: International Infrastructure Management Manual (2015) – IPWEA)

6.2 Asset Registers and Management Systems

CN has implemented an Enterprise Resource Planning (ERP) system and is currently undertaking an upgrade of the combined financial and operational asset register (Works and Assets). This register is also used to capture maintenance and capital costs against individual assets. Other operational costs are recorded in the ERP's financial module against cost centres.

CN recognises that we must continually invest in maintaining and improving asset data and knowledge to demonstrate good governance and make well-informed asset management decisions to sustainably meet community needs.

The Confidence Rating in the asset data informing the AMS and SAMP ranges between B (reliable) and C (uncertain), dependent on service. Many asset registers require improvement, including process establishment for future data capture, improved integration with the Geographical Information System (GIS), and further rollout of asset classes into Works and Assets.

Asset register and management system improvements are detailed in each individual SAP. Individual operational SAPs detail asset condition, inspection timetables and required maintenance and renewal plans. Where asset condition data is incomplete, overall condition of the asset class is extrapolated and data improvement plans are developed. Condition assessments for transport assets are undertaken more frequently in accordance with the City-Wide Maintenance Procedure.

6.3 Strategic Planning Capabilities

CN's ERP software includes a Strategic Asset Management module. This module enables us to model asset data to gain an optimised view of the life cycle costs of our assets, informing service levels, SAPs and the LTFP. The module will be implemented in alignment with ERP upgrades.

The AMS and SAMP will integrate with the LTFP to allow predictive modelling and deterioration modelling of assets. The forecast future life cycle costs demonstrated in this strategy are reflected in CN's long-term financial planning, allowing us to ascertain sustainable funding limits and make decisions on the future focus of our services.

6.4 Risk Management

CN integrates risk management into its organisation's core business planning and decision-making processes. CN's Enterprise Risk Management (ERM) Framework provides the foundation for responding to uncertainty through a structured and consistent approach.

The ERM Framework considers the internal and external context in which CN operates. A Governance and Risk (Executive) Committee provides oversight and guidance to the organisation whilst independent Audit and Risk Committee provides independent oversight.

CN's ERM Guideline incorporates the asset risk management approach outlined in standard ISO 55000:2014. This standard is the global standard for the effective management of assets. Key components of this approach include:

- Planning (concept and specification)
- Acquisition
- Operation and maintenance (operate, maintain, improve)
- Disposal.

Our risk assessment process identifies risk, the likelihood of the risk occurring, and the consequence should the risk eventuate. CN's assets are assessed during the asset management life cycle for:

- The selection of asset solutions that are not required and/or do not meet needs
- Poor specification of asset solutions
- Poor whole-of-life asset budgeting (resulting in 'financial shock')
- Poor asset life cycle management planning
- Assets not meeting prescribed specifications
- Difficulty or costliness of improving or managing the asset
- Assets incurring environmental risks.

Asset Custodians and Service Unit Managers are responsible for identifying significant risks to assets and the services they provide. The asset risk assessment includes identifying critical and high-risk assets and devising treatment to mitigate the risk. Removal of these practices may impact service delivery.

6.4.1 Resilience

The International Infrastructure Management Manual defines 'resilience' as being wider than natural disasters. It covers the capacity of public, private and civic sectors to withstand disruption, absorb disturbance, act effectively in a crisis, adapt to changing conditions (including climate change) and grow over time.

CN addresses resilience through a Business Continuity Management Framework (the Framework) and implementing measures that assist to:

- minimise the impact of incidents, disruption and emergencies
- safeguard CN's critical services and functions
- support the effective return to normal operations and enhance capability and organisational resilience.

The Framework enables CN to continue delivering critical business functions if an incident, disruption or emergency causes disruption that is beyond CN's business as usual capabilities if it is logistically feasible to do so. CN's Business Continuity Management Policy, Business Continuity Plans and Crisis and Emergency Management Plan constitute essential components of the Framework in the form of recovery from potential risk events that may significantly impact critical business activities, revenue, reputation and service delivery. The Framework was prepared in accordance with the principles outlined in AS ISO 22301:2019 *Societal security -Business continuity management systems – Requirements*.

7 Life Cycle Management

The AMP, AMS and SAMP provide a framework for a uniform approach to asset life cycle management. A unified, whole-of-organisation approach is critical to achieve best practice alignment and maximise the value of assets across their life cycle. The table below summarises key components of asset life cycle management.

Life Cycle Category	Description
Acquisition (new)	Expenditure that creates a new asset providing a service/output that did not exist before, including planning, design, construction and acquisition.
Operations	Recurrent expenditure, which is continuously required to provide a service, e.g. power, fuel, staff, plant equipment.
Maintenance	All actions necessary for retaining an asset as near as practical to an appropriate service condition, including regular ongoing day-to-day work necessary to keep assets operating.
Renewal	Expenditure on an existing asset or on replacing an existing asset, which returns the service capability of the asset up to that which it had originally.
Upgrade/New	Upgrade: Expenditure which enhances an existing asset to provide a higher level of service or expenditure that will increase the life of the asset beyond that which it had originally. New: Expenditure which creates a new asset providing a service/output that did not exist beforehand, including planning, design, construction and acquisition.
Disposal	Expenditure on activities necessary to dispose of decommissioned assets.

Table 8: Asset life cycle expenditure categories. Source: Australian Infrastructure Financial Management Manual 2015

7.1 Roles and Responsibilities

Responsibility for service output delivered by CN assets is spread across our service units. Table 10 demonstrates the service units responsible for managing the delivery of service outputs and developing SAPs. Due to the alignment of CN's organisational structure, there are many services where more than one unit contributes to the overall delivery of services.

CN has adopted an Asset Custodian/Asset Manager model for the delivery of services across the LGA. An Asset Custodian is the CN Service Unit Manager responsible for the stewardship of the asset and for defining the level of service required for the asset. An Asset Manager is the CN Service Unit Manager responsible for providing ongoing advice, maintenance, renewal and support services to facilitate the service provided by the Asset Custodian.

Asset Life Cycle Management Role	Description	Responsibility
Service Unit Management	• Coordination, resource allocation, SAP implementation, project submissions • Planning for future service required, including level of service • Providing information for establishing, monitoring and reviewing level of service to assist ongoing development of SAPs • Managing assets in accordance with legislative requirements and standards	Managers of responsible Service Unit as per organisation structure
Service Planning	• Development and implementation of SAPs	Manager of:

Asset Life Cycle Management Role	Description	Responsibility
	• Providing support and guidance to Service Units in preparing SAPs and strategies • Identifying asset requirements – New/Upgrade/Renewal/Maintenance	• Community, Strategy and Innovation • Responsible Service Unit delivering the CN service
Asset Design	• Designs and specifications; adherence to and application of relevant standards and legislative requirements	Manager of: • Assets and Projects • Parks and Recreation • Property and Facilities • Information Technology • Community, Strategy and Innovation
Asset Construction	• Delivery and project management of construction programs; adherence to and application of design and required specifications; budgeting and estimating	Manager of: • Assets and Projects • Civil Construction and Maintenance • Property and Facilities • Parks and Recreation • Information Technology • Community, Strategy and Innovation
Asset Renewal Scheduling	• Planning, scheduling and reporting on asset renewal activities	Manager of: • Assets and Projects • Parks and Recreation • Property and Facilities
Asset Condition Inspections	• Scheduling and delivery of asset condition inspections	Manager of • Assets and Projects • Property and Facilities • Parks and Recreation • Depot Operations • Waste Management
Asset Maintenance and Operations	• Planning, implementing and managing reactive and proactive maintenance and operational activities • Implementing cyclic/periodic/programmed maintenance and operational programs in consultation with Assets and Projects	Manager of: • Civil Construction and Maintenance • Property and Facilities • Parks and Recreation • Assets and Projects • Depot Operations

Asset Life Cycle Management Role	Description	Responsibility
	• Approved asset-related maintenance and operation work	• Information Technology • Waste Management
Asset Disposal	• Identifying service requirements and assets no longer fit for purpose • Repurposing assets	Managers of responsible Service Unit as per organisation structure Supported by Infrastructure and Property Directorate

Table 9: Roles and responsibilities

7.2 New and Upgrade Planning

New works involve the creation or acquisition of a new service or asset. Upgrade works involve the significant enhancement of an existing service or asset. To ensure CN is well positioned to deliver new and upgraded assets for the community, it is essential to understand our collective requirements across services. New and upgrade plans are developed in consultation with Asset Custodians and Managers.

CN strategies and plans are required to provide whole-of-life costings as part of internal review and endorsement through our Expenditure Review Committee. All new and upgrade projects require forecasting and prioritisation in our project management system. Each new/upgrade asset-related project will be reflected in the relevant SAP to drive future funding in the LTFP in all asset life cycle cost categories. Delivery of new and upgrade works for our built and natural assets is undertaken through portfolio and program management.

Projected new and upgrade capital works to meet community service expectations are placing an increasing demand on CN's limited resources. Further analysis of CN's project prioritisation methodology and associated life cycle costing is being undertaken to support the sustainable delivery of our future Capital Works Programs.

7.3 Renewal Planning

Renewal refers to the restoration, rehabilitation or replacement of an asset to its original or required service capacity. To maintain existing levels of service, asset renewal should take precedent over new and upgrade expenditure. Major renewal works are funded through the Capital Works Program and are identified in individual SAPs. Renewal plans are developed in consultation with Asset Custodians and Managers as well as key stakeholders.

When determining whether an asset needs renewing, consideration is given to the following criteria:

- Condition of existing asset: can the useful life be extended and renewal be delayed?
- Risk assessments
- Changes to service levels: does the existing asset meet or fail service level requirements?
- Fitness for purpose – capacity and functionality: does the asset meet the level of service required?
- Environmental ratings
- Current rates of utilisation.

Renewal intervention points may vary between asset classes and categories. Factors such as location and fitness for purpose may also influence intervention timing.

Condition inspections are programmed to inform the development of the renewal program. All proposed capital renewal works are recorded in our project management system. Project proposals include demonstrated strategic alignment, a detailed business case, indicative cost estimate, priority rating and timeframe for delivery. Proposed renewal works are subject to resource availability and changes to community priorities.

7.3.1 Renewal Demand

Renewal demand refers to assets that have met or exceeded their nominated intervention point and potentially no longer provide the intended level of service. Many factors influence the condition and deterioration of our assets, including utilisation rates, environmental conditions, age, design and location. To ensure community levels of service are met, investment in asset renewal is essential at the appropriate intervention point. When assets exceed their intervention point, there is an increase in our level of renewal demand and maintenance.

Renewal demand is calculated by estimating the cost to bring the asset to the agreed level of service. Due to budget constraints, including increasing demands for new and upgrade work, our renewal demand is currently not being met by our financial funding. Our renewal demand will continue to increase as the city expands, as we gain more assets, and as we continue to invest in new and upgraded assets for our community.

To meet growing renewal demand challenges, we are prioritising our works programs and improving our condition data capture and asset systems. Renewal demand for each asset class is identified in individual SAPs and included in our Capital Works Program. Each SAP reviews assets that are approaching or have reached intervention points and establishes whether the asset meets current service level requirements. Investment to return assets to an agreed level of service and to maintain the remaining asset condition profile is considered in the LTFP.

7.4 Maintenance Planning

Maintenance refers to the regular day-to-day work required to ensure an asset achieves its useful life. Increasing maintenance spend will often reduce the capital investment required over the life of the asset. Examples include road resurfacing and painting of building assets. Maintenance strategies to minimise life cycle costs are incorporated in individual operational SAPs.

To achieve the lowest whole-of-life cost for our assets, a proactive approach to maintenance scheduling is required. CN is progressively moving towards such an approach that implements service level agreements and associated prioritised maintenance schedules. We have developed our City-Wide Maintenance Procedure, Service Level Agreements and preventative maintenance schedules to monitor condition and undertake scheduled servicing. To determine optimal life cycle funding, CN plans to implement a Strategic Asset Management module to enable the modelling of maintenance and renewal scenarios. The optimised life cycle funding requirements will allow funding to be scheduled in the LTFP.

7.5 Operational Planning

Operations are the regular business activities required to provide a service to the community. In asset management terms, operations can be split into two major components: the cost associated with the delivery of the service, and the cost associated with the operations of the asset that supports the delivery of the service. Operational costs are captured in the annual adopted budget and are reviewed quarterly. Any adjustments are subject to Council approval. The annual budget cycle provides opportunity to review and adjust operational budgets for service provision. Additional adjustments can take place through quarterly review. Details of CN's adopted operational plan can be found in the document *Delivering Newcastle 2040*.

7.6 Asset Disposal

Disposal is the closing, decommissioning or sale of an asset or service. Asset disposal is to be considered in all individual SAPs. In proposing the disposal of an asset, SAPs will consider:

- Current CN policy and procedures for disposal of assets
- Assets that have reached end of useful life or are nearing intervention point
- Service and asset reviews that may identify assets that are no longer fit for purpose or are under/over-utilised through analysis of the current level of service provided
- Alternative methods of delivering current and desired levels of service
- Opportunities to repurpose the asset within CN services.

8 Financial Summary

To assess the estimated life cycle costs of managing assets, it is necessary to understand the plans and expenditure involved in maintaining those assets and the services they provide. When resourcing its assets, CN considers not only the annual operating costs for maintenance and operation, but also upfront capital costs associated with procuring new assets or renewing and upgrading existing assets.

8.1 Future Capital Works

This strategy provides estimates for capital expenditure to acquire, upgrade and renew assets for a 10-year period. A summary of our 10-year capital works program is provided in section 8.2. The forecast has been modelled on LTFP funding projections, assuming CN priorities may change in alignment with community expectations. The prioritisation of capital works may result in projects being completed beyond the current ten-year time frame.

The capital works program is modelled in LTFP scenarios to ascertain sustainability levels to facilitate decision-making. To meet the challenge of competing demands, our Asset Management Improvement Plan (see Section 9) includes a range of measures to enhance CN's investment prioritisation and resource allocation.

CN resources its capital works for infrastructure assets through various funding sources generated from operating activities such as rates, developer contributions, Special Rate Variations, grants and community contributions. Where appropriate, funding may be obtained via a loan. Funding constraints and limitations are determined from the LTFP, which is updated annually. In addition, funding constraints and limitations can be driven by changes in borrowing decisions and political commitments and to ensure financial sustainability.

8.2 Forecast Estimated Service Costs

To achieve the objectives of *Newcastle 2040*, it is important to identify life cycle costs associated with delivery of our services. Our life cycle costs estimate expenditure across all asset-based services to achieve the agreed level of service. This forecast is modelled in LTFP scenarios for financial sustainability. Estimated life cycle costs are shown in the table below.

Life Cycle Category	FY 23 ($,000's)	FY 24 ($,000's)	FY 25 ($,000's)	FY 26 ($,000's)	FY 27 ($,000's)	FY 28 ($,000's)	FY 29 ($,000's)	FY 30 ($,000's)	FY 31 ($,000's)	FY 32 ($,000's)
Operational	190,233	196,320	202,603	209,086	215,777	219,876	224,054	228,311	232,649	237,069
Maintenance	28,418	29,327	30,266	31,234	32,234	32,846	33,470	34,106	34,754	35,415
Renewal	40,700	36,485	37,325	38,183	39,061	39,960	40,879	41,819	42,781	43,765
Upgrade and New	91,905	65,715	67,226	68,772	70,354	71,972	73,627	75,321	77,053	78,825
Disposal – Proposed Asset Sale	-	-	-	-	-	-	-	-	-	-
Disposal – Other	-	-	-	-	-	-	-	-	-	-
Total	**351,256**	**327,847**	**337,420**	**347,275**	**357,426**	**364,654**	**372,030**	**379,557**	**387,237**	**395,074**

Table 10: Estimated life cycle costs

9 Asset Management Improvement Plan

CN's asset management goals are twofold: to proactively manage our assets from a lowest whole-of-life cost perspective in accordance with recognised industry practice while meeting agreed levels of service and to continuously improve our asset management systems. The table below identifies focus areas to further enhance our asset management planning and practice.

Ref	Objectives[1]	Action	Responsibility	Due Date
1	Align service delivery expectations with available funding to achieve sustainable management of all required supporting assets	1.1 SAPs summarise 10-year actions. Costings are aligned with renewal and capital budgets in the LTFP (link to funding) 1.2 Development of Project Management Policy and procedures 1.3 Project prioritisation: review of current methodology 1.4 Standard asset creation and handover processes	Asset Services Program and Project Services Service Unit Managers	23/24
2	Identify levels of funding required to achieve a sustainable Capital Works Program and assess the implications of different funding levels on levels of service	2.1 Asset management system is utilised to model funding versions, adjusting service level expectations with available funding and reviewing cost of service per SAP 2.2 Implementation of Strategic Asset Management software	Assets and Projects Information Technology Service Unit Managers	Ongoing 24/25
3	Adjust resources and invest in building capacity to deliver works programs	3.1 Project prioritisation policy and procedures implemented 3.2 Capital Works Program is planned and resourced as per prioritisation procedure	Asset Services Program and Project Services Service Unit Managers	23/24
4	Ensure renewal and maintenance required to minimise life cycle costs and maintain agreed level of service is fully funded and reportable by service	4.1 Gap analysis of existing data, detailed condition reporting, and development of maintenance and renewal plans is documented in individual SAPs 4.2 Continue to mature proactive maintenance for asset classes (SAPs align to scheduled servicing, preventative maintenance schedules etc.)	Asset Services Program and Project Services Property and Facilities Service Unit Managers	Ongoing
5	Use SAPs to coordinate decision-making regarding levels of service and implementing relevant CN strategies and plans	5.1 Periodic review and update of SAPs to ensure alignment with *Newcastle 2040* and related strategies and plans	Corporate Planning and Performance Service Unit Managers	Ongoing
6	Ensure new services and/or assets are only approved where the full life cycle cost of doing so has been evaluated and appropriate supporting budget allocations made	6.1 Implement a program of training for business case development 6.2 Review and update software user guides	Asset Services Program and Project Services	23/24
7	Capture and improve asset data and service information	7.1 Asset Register and Management Systems – process establishment for future data capture, improved integration with GIS and further	Asset Services Program and Project Services	Ongoing

Ref	Objectives[1]	Action	Responsibility	Due Date
		rollout of asset classes into Works and Assets 7.2 Update Works and Assets with assets not yet migrated to corporate asset register 7.3 Program and undertake scheduled inspections on all assets	Information Technology Property and Facilities	
8	Align asset management activities with *Newcastle 2040*	8.1 Regular review and update of operational SAPs to ensure alignment with *Newcastle 2040* objectives 8.2 Internal working groups across resource planning and strategy units	Corporate Planning and Performance Service Unit Managers	Ongoing
9	Ensure accountability, responsibility and reporting requirements for assets are established, relevant, clearly communicated and implemented	9.1 Update Asset Custodian and Manager roles and responsibilities in Asset Register 9.2 Asset-related activities current in both CAMMS Risk and CAMMs Strategy	Asset Services Audit and Risk Corporate Planning and Performance Manager, Assets and Projects Service Unit Managers	22/23 Ongoing
10	Delivery of services will incorporate environmental sustainability	10.1 Each SAP continues to detail sustainable environmental measures, including climate mitigation and adaptation requirements	Asset Services Program and Project Services Innovation and Futures Service Unit Managers	Ongoing

Table 11: Asset management improvement plan

[1] *Objectives are listed in the order that they appear, not by priority*

Note: Corporate Accounting and Corporate Planning and Performance teams will have an advisory role across numerous actions

10 Strategy Review Cycle

The AMS will be reviewed annually to ensure key drivers, key strategies and asset management direction accurately reflect the current climate. This will ensure ongoing integration with *Resourcing 2040* strategies and plans. In addition, a complete review will occur every four years to ensure strategic alignment with the updating of *Newcastle 2040*.

11 Appendix

11.1 Asset Management Policy

Asset Management Policy

June 2022

resourcing NEWCASTLE 2040

City of Newcastle

Table of Contents

Part A Preliminary

1 Purpose

1.1 The purpose of the Asset Management Policy (Policy) is to outline how City of Newcastle (CN) will manage its assets throughout the asset lifecycle.

1.2 CN's Asset Management Framework comprises the following documents:

1.2.1 Asset Management Strategy (AMS),

1.2.2 Asset Management Policy (AMP) (this document),

1.2.3 Service Asset Management Plan (SAMP), and

1.2.4 Service Asset Plans (SAPs).

2 Scope

2.1 The Policy applies to all capitalised assets and related land under the control and jurisdiction of CN.

3 Principles

3.1 CN commits to the following:

3.1.1 **Accountability and transparency** - A framework for transparency and a system of accountability in asset planning and enabling informed input from all stakeholders;

3.1.2 **Sustainability** - Sustainably meeting community needs and expectations for all assets and asset infrastructure services;

3.1.3 **Continuous Improvement** - Supporting the implementation of continuous improvement practices in asset management;

3.1.4 **Levels of Service** – Providing a selection of appropriate levels of service to meet community demand;

3.1.5 **Risk Management** - The appropriate management of risk to people, service and property;

3.1.6 **Legislative Compliance** - Compliance with state and federal legislation pertaining to asset management (including Integrated Planning and Reporting);

3.1.7 **Alignment with Council strategies** – The Policy aligns with Open and Collaborative Leadership priorities outlined in the *Newcastle 2040*.

Part B Roles and Responsibilities

4 Roles, responsibilities and resources

4.1 CN Service Unit Managers (SUMs) with asset management responsibility are responsible for implementing this Policy, as well as understanding and implementing the AMS and suite of SAPs.

4.2 CN Manager, Assets and Projects is responsible for developing and reviewing the AMS.

4.3 CN SUMs are responsible for implementing, reviewing and undertaking maturity assessments related directly to SAPs within their service unit.

4.4 This Policy is required to be reviewed in line with the review of the Operational Plan and every four years following an ordinary Council Election or following substantial legislative/organisational change.

5 Organisational Commitment

5.1 This Policy aligns with CN's Resourcing Strategy, which consists of:

5.1.1 Long Term Financial Plan - Delivering the community's expectations as outlined in Newcastle 2040 and Delivering Newcastle 2040, within the context of finite economic and financial resources;

5.1.2 Workforce Development Strategic Plan - Outlining strategies and initiatives to ensure CN has the people and skills needed to achieve Delivering Newcastle 2040; and

5.1.3 Asset Management Strategy - Outlining CN's high-level long-term approach to asset management, including action plans and objectives for managing assets.

5.2 The ownership, control, accountability and reporting requirements for assets are to be established, documented, clearly communicated and implemented through CN's AMS and SAPs.

5.3 CN will revise the AMS and SAPs as community needs, demographics, economic environment, resource availability, climate and technology change over time.

Part C – Operational

6 Levels of Service

6.1 Levels of service are measurable and capture what can sustainably be delivered by CN. Levels of service are incorporated into individual SAPs and require Executive Leadership Team approval.

7 Operations, Maintenance and Renewal

7.1 CN SUMs, in conjunction with Asset Custodians, are responsible for ensuring that:

7.1.1 A routine inspection program of assets under their control takes place;

7.1.2 All works and services are procured in accordance with CN's Procurement Policy; and

7.1.3 Lifecycle costs, maintenance and renewal plans are generated from available condition data, predictive modelling (as appropriate), usage rates, available funding and the needs of the community.

7.2 CN's Asset Managers are responsible for implementing the AMS and providing support to CN's Asset Custodians through:

7.2.1 Asset management advice, including condition reporting and data maintenance; and

7.2.2 Provision of maintenance to facilitate the service where appropriate.

8 Risk Assessment and Management

8.1 Risk is identified for assets and the services they provide within each SAP. Each SAP has a risk action plan.

9 Data Management

9.1 CN maintains a corporate asset management software system that is accessible to designated CN officers.

9.2 The updating and maintenance of all asset inventory and life cycle data within the corporate asset management system is undertaken in a timely manner.

10 Financial Authorisations

10.1 All CN SUMs are responsible for the monetary commitment that will result from the implementation of this Policy and for ensuring they align with CN's Register of Financial Authorisations.

Annexure A - Definitions

For the purposes of this Policy:

Asset means a physical component of a facility, which has value, enables services to be provided, has potential value to an organisation such as land, plant, machinery, buildings etc. and has an economic life of greater than 12 months.

Asset Custodian means the CN staff member with responsibility for the stewardship of the asset and is responsible for defining the level of service required for the asset.

Asset Infrastructure Services means any service provided in the identification, management and construction of CN assets.

Asset Lifecycle means the series of stages involved in the management of an asset. It starts with the planning stages when the need for an asset is identified and continues all the way through an asset's useful life and eventual disposal.

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

Asset Management Strategy (AMS) means the high-level long-term approach to asset management, including action plans and objectives for managing the assets.

Asset Manager means the CN staff member with responsibility for providing ongoing advice, maintenance, renewal and support services to facilitate the service provided by the Asset Custodian.

City of Newcastle (CN) means Newcastle City Council.

Level of Service means the outputs or objectives an organisation or activity intends to deliver to customers.

Lifecycle Cost means the total cost of an asset throughout its life, including planning, design, construction, acquisition, operation, maintenance, and rehabilitation and disposal costs.

Maturity Assessment means the process used to understand the effectiveness of an organisation's asset management system and levels of service, as well as help comply/align with standards and regulatory requirements.

Predictive Modelling means the method of projecting the costs associated with maintenance, renewal, acquisition and disposal of assets to achieve an acceptable condition, or service level. Predictive modelling can be used to predict a required budget, or to view the distribution of a specified budget.

Service Asset Management Plan (SAMP) CN's Asset Management Plan supporting the delivery of asset-based services. The SAMP and operational SAPs detail asset performance modelling, service alignment and financial forecasting.

Service Asset Plans (SAPs) detail the requirements necessary to effectively manage the assets which exist to support service delivery. SAP's establish a framework to ensure sustainable community service expectations are met. This involves achieving a balance between delivering services to meet community needs and our ability to manage and resource the asset portfolio accordingly. …

Useful Life means the period over which an asset is expected to be available for use by an entity (in the context of its service to the entity and not to the asset's actual physical life).

Annexure B - Policy Authorisations

Function	Position Number / Title
Nil	

Document Control

Policy title	Asset Management Policy
Policy owner	Director Infrastructure and Property
Policy expert/writer	Asset Services Manager
Associated Procedure Title (if applicable)	N/A
Procedure owner (if applicable)	Manager Assets and Projects
Prepared by	Asset Services
Approved by	Council
Date approved	28/06/2022
Policy approval form reference	ECM# 7362458
Commencement Date	28/06/2022
Next revision date (date policy will be revised)	26/04/2026
Termination date	26/04/2027
Version	6 (*Newcastle 2040 CSP Revision*)
Category	Council
Keywords	Asset, asset management, infrastructure services, asset lifecycle
Details of previous versions	Version 1 April 2010 (ECM Reference 2935100) Version 2 August 2012 (ECM Reference 3438058) Version 3 June 2016 (ECM Reference 4873789) Version 4 July 2020 (ECM Reference 6525846) Version 5 April 2022 (ECM Reference 7363544)
Legislative amendments	N/A
Relevant strategic direction	Open and Collaborative Leadership
Relevant strategy	Asset Management Strategy 2018 - 2027
Relevant legislation/codes (reference specific sections)	Local Government Act 1993 (8B) Local Government (General) Regulation 2005 Local Government Amendment (Planning and Reporting) Act 2009 Integrated Planning and Reporting Guidelines for Local Government in NSW (Division of Local Government)

	Integrated Planning and Reporting Manual for local government in NSW (Division of Local Government (s3.4) International Infrastructure Management Manual Edition 5 (2015) Australian Infrastructure Financial Management Guidelines Edition 2 2015 (ISO 55000).
Other related policies/ documents/ strategies	N/A
Related forms	N/A
Required on website	Yes
Authorisations	Functions authorised under this Policy at Annexure B

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