Asset Management Strategy



2025-2036

Contents

1	Purpose and Scope	4
2.	Asset Portfolio Valuation and Condition	5
3	Asset Information Management Strategy	9
4	Asset Lifecycle Management	12
5.	Community Engagement and Service Levels	15
6.	Sustainable Asset Management Funding and 11 Year Plan	19
7.	Environmental Sustainability and Climate Change Scenario	24
8.	Asset Management Improvement	29
9.	Risk Management Approach	41
10.	Performance Measurement & Review	44



Waverley Council's Asset Management Strategy outlines the objectives, strategies and approaches that Council adopts to sustainably manage its asset portfolio. The strategy outlines the supply and demand requirements for Asset Management including the current state of assets, key services levels, strategic issues, and resourcing requirements.

The Asset Management Strategy provides an 11-year approach for Council to achieve its Asset Management Policy objectives, while providing the direction and support for Council to deliver its eight individual Asset Management Plans.



1. Purpose and Scope

Waverley Council owns and maintains a diverse \$1.44 billion asset portfolio across eight different asset classes. These assets are crucial to supporting transportation, safety, amenity, recreational and other services across the LGA. While the population is expected to grow at a modest 0.3%, lower than the 1.0% projected for similar metropolitan councils and NSW overall, demand for Council services and assets remains significant due to the area's popularity as a tourist destination, including the iconic Bondi Beach

The Asset Management Strategy forms a crucial part of Waverley Council's Strategic Asset Management Plan (SAMP). It defines the strategic approach to ensuring that Council is adequately resourced, structured, and planned to achieve the asset management objectives established in the Asset Management Policy.

While the Asset Management Strategy outlines the strategic approach to achieving the asset management objectives across Council's full asset portfolio, the eight individual asset management plans provide a detailed 11-year plan for each asset class. The Asset Management Strategy covers:



- Asset portfolio current valuation and condition levels for all eight asset classes considered within the SAMP.
- Asset Information Management Strategy and its importance to achieving Council's asset management objectives.
- Asset Lifecycle Management as a whole-oflife approach to planning, designing, acquiring, maintaining, and disposing assets.
- **Community Engagement** as Council's approach to provide a feedback loop to community members on how to prioritise asset management resourcing.
- Sustainable Asset Management funding and 11 Year Plan including the MoRUN approach to lifecycle costing.
- Environmental Sustainability and Climate Change Scenario and how it's impact to asset management decision-making.
- Asset Management Improvements identifying opportunities to continuously enhance maturity.
- **Risk Management Approach** outlining key considerations to mitigating risks to community and Council.

2. Asset Portfolio Valuation and Condition

As of the 30th of June 2024, Council's asset portfolio has a calculated replacement cost of over \$1.44 billion, and a depreciated value of \$943.6 million attributable to the wear and tear of the assets.



SAMP ASSET CLASS	CURRENT REPLACEMENT COST (CRC)	 REMAINING ASSET VALUE CONSUMED ASSET VALUE 	
Living Infrastructure	\$128,409,008	\$69,838,954	\$58,570,054
Open Space/Recreational Infrastructure	\$197,519,336	\$127,865,668	\$69,653,668
Public Domain Streetscapes	\$43,715,956	\$31,496,008	\$12,219,948
Roads	\$580,295,473	\$355,847,411	\$224,488,063
Stormwater Drainage	\$130,154,400	\$93,068,502	\$37,085,898
Buildings	\$335,464,341	\$252,382,615	\$83,081,725
Plant and Equipment	\$16,660,514	\$7,590,079	\$9,070,435
Information and Information Technology	\$10,450,215	\$5,548,050	\$4,902,165
Total Asset Portfolio	\$1,442,669,244	\$943,637,287	\$499,0331,957

The current replacement cost and depreciated value is measured for each of the 30,000+ individual assets within Council's asset register. The current replacement cost represents the full estimated expenditure that would be incurred by Council to replace the existing assets with new like-for-like assets. This is measured by a variety of evidence-based cost inputs detailed within Council's unit rate register.

The depreciated value represents the estimated remaining value of the assets that have deteriorated from the value of the assets since construction. It is a representation of the expected remaining useful life of the asset. Waverley Council schedules a comprehensive revaluation for all infrastructure asset classes at least once every four years in line with requirements from AASB 13, The NSW Office of Local Government, and NSW Treasury. The comprehensive revaluation constitutes a review of asset condition, useful life, and unit rates within each asset class. Interim revaluations take place annually between comprehensive revaluations and typically constitute a desktop review with the application of published indices onto unit rates.

Table AS2. Comprehensive Revaluation Schedule across Infrastructure Asset Classes

FINANCIAL YEAR BY ASSET CLASS	OTHER STRUCTURES	ROADS	STORMWATER DRAINAGE	OPEN SPACE / RECREATIONAL ASSETS
FY 2022-23	Comprehensive Revaluation	Comprehensive Revaluation	Comprehensive Revaluation	Comprehensive Revaluation
FY 2023-24	Interim Revaluation	Interim Revaluation	Interim Revaluation	Interim Revaluation
FY 2024-25	Interim Revaluation	Interim Revaluation	Comprehensive Revaluation	Interim Revaluation
FY 2025-26	Comprehensive Revaluation	Interim Revaluation	Interim Revaluation	Comprehensive Revaluation
FY 2026-27	Interim Revaluation	Comprehensive Revaluation	Interim Revaluation	Interim Revaluation
FY 2027-28	Interim Revaluation	Interim Revaluation	Interim Revaluation	Interim Revaluation
FY 2028-29	Interim Revaluation	Interim Revaluation	Comprehensive Revaluation	Interim Revaluation
FY 2029-30	Comprehensive Revaluation	Interim Revaluation	Interim Revaluation	Comprehensive Revaluation
FY 2030-31	Interim Revaluation	Comprehensive Revaluation	Interim Revaluation	Interim Revaluation
FY 2031-32	Interim Revaluation	Interim Revaluation	Interim Revaluation	Interim Revaluation

2.1. Asset Condition and Current State

Waverley Council adopts a 1 to 5 asset condition rating model/matrix to support its asset fair valuation, maintenance planning, and renewal planning.

Figure AS3. Asset Condition Depreciation Model

Note: Condition 0 and 6 are hypothetical only and are currently unused in asset information. Remaining Useful Life of 100% and 0% are represented as Condition 1 and 5 in asset registers, respectively and in line with the Office of Local Government's Code of Accounting Practice and Financial Reporting.



Across the eight asset classes, Waverley Council has maintained its \$1.44 billion portfolio to:

- 56% in 2 Good or better condition;
- 94% in 3 Fair or better condition; and
- 6% in 4 Poor or 5 Very Poor condition.

Waverley Council is maintaining the majority of its assets in line with service level targets. Council

is focused on renewing backlog assets that are in Condition 4 or 5, and planning for assets that are expected to deteriorate from Condition 3 to Condition 4.

The asset backlog is represented by a current replacement cost of \$43.1 million, which is the cost required to replace all Condition 4 and Condition 5 assets with new like-for-like assets.

Figure AS4. Condition by Asset Class as of 30th June 2024



When planning for assets, Council must also consider functionality (fitness for modern use and risk of obsolescence) and capacity (the ability to meet future demand and utilisation).

While asset condition reports currently indicate that most of Council's assets are in excellent or very good condition, this does not always reflect the true state or performance of assets on the ground. For instance, road pavements are rated as condition 3, signifying they are midway through their useful life, however, due to heavy traffic and frequent use, many roads require reconstruction despite this rating.

Waverley Council is committed to improving its practices by gathering more precise condition data and ensuring the asset register is comprehensive, up-todate, and supported by credible componentised asset information and attributes, so that the engineering condition information is aligned with the financial information.

3. Asset Information Management Strategy

Strategic and effective asset management is not possible without robust, reliable, and meaningful asset information management. With an extensive asset portfolio valued at over \$1.44 billion, spanning a 9.2km2 Local Government Area (LGA), it is crucial for Waverley Council to:

- Efficiently and accurately identify what types of assets are owned by Council.
- Understand where assets are located and how many exist.
- Define the extent of Council's responsibilities, particularly when assets interact with private property, third-party utilities, neighbouring Councils, or state-owned infrastructure.

A mature asset information strategy and reliable asset data that is supported by modern systems and the latest technology, ensures effective knowledge sharing, corporate knowledge retention, and organisational resilience, enabling data-driven decisions in all areas of operational and strategic asset management.

An integrated and reliable asset information process underpins Council's ability to meet its five asset management objectives.

ASSET MANAGEMENT OBJECTIVE	HOW ASSET INFORMATION ENABLES SUCCESS
Minimising risks to community and Council	Reliable data on asset locations, conditions, and other attributes enable Council to understand risks associated with assets, and to prioritise resources to minimising these risks.
Provision of Community-Centric Service Levels	Reliable asset data and systems enable Council to communicate the extent of assets to the community, and to calculate the resource demand required to maintain assets to provide these service levels.
Long Term Financial and Environmental Sustainability	Accurate asset data enables Council to assess environmental impacts across the LGA. It enables lifecycle costing to be calculated for the asset portfolio, ensuring that Council can financially support these assets at optimal intervention levels.
Attaining Legislative and Regulatory Compliance	Understanding the types, dimensions, and locations of assets enable Council to map asset types and locations to legal requirements and best practice standards.
Continuous Improvement and Operational Efficiency	Reliable asset data records enable performance reporting and powers a variety of analytics to optimise maintenance, operations, and renewal intervention levels. Accurate asset information and locations enable staff to efficiently respond to asset issues.

Waverley Council prioritises the continuous improvement and ongoing maintenance of its asset information systems, recognising that effective service delivery and long-term sustainability rely on data integrity and the ongoing upkeep of up-to-date asset information registers.

3.1. Asset Information Management Systems

Due to the geospatial nature of Council's infrastructure, Council currently manages asset information across two main platforms with aligned asset registers:

- TechnologyOne serves as the central financial asset register, and houses valuation, depreciation, and asset lifecycle data amongst other limited attributes.
- MapInfo Geographic Information System (GIS) captures and manages geospatial asset records, including asset locations, dimensions, and all associated attributes and attachments.

Council intends to enhance this environment through the future procurement and implementation of a Software as a Service (SaaS) integrated asset information and work management system. This will enable centralisation of these services, and modernise asset tracking, maintenance scheduling, and lifecycle decision making.

Many of Council's assets were established decades before the widespread use of digital systems and computers. In recent decades, Council has undertaken comprehensive data capture programs supported by mobile technology and digital mapping, to build an accurate asset register.

To maintain asset data accuracy moving forward, Council captures asset configuration changes through all lifecycle stages from asset planning, design, acquisition, construction, through to disposal. This ensures that asset registers are up to date to reliably inform lifecycle planning. The process of asset recognition and derecognition is governed by Waverley Council's Fair Valuation Methodology.



3.2. Asset Hierarchy

Waverley Council has developed a streamlined asset hierarchy that aligns financial reporting requirements with strategic asset management planning. Council's Fair Valuation Methodology defines how each asset is categorised under the Financial Asset Hierarchy, which is used for compliance with the Report of Infrastructure Assets. This hierarchy is mapped to a SAMP asset hierarchy that supports lifecycle planning, condition monitoring, and service level tracking.

Figure AS5. Financial Asset Hierarchy mapping with Strategic Asset Hierarchy

Financial Asset Hierarchy SAMP Asset Hierarchy LO: IPPE Aggregated Asset Class • This aggregates the SS7 Asset Classes per IPPE Report requirement. • A new "Other Infrastructure" Aggregated class is proposed to comply with OLG definitions for Sea Walls and Retaining Walls. • Level 0 in the IPPE report. Level 0 in the Report on Infrastructure Assets, but not reported in the Report on Infrastructure Assets. Not relevant to SAMP. L1: SS7 Asset Class L1: SAMP Asset Class This captures the SS7 Asset Class requirements for • Defined by each segregated Asset Management Plan compliant segregation into the Report on Infrastructure within the SAMP. Assets. • A new "Other Infrastructure Assets" Asset class is

- proposed to comply with OLG definitions for Sea Walls and Retaining Walls.
- Level 1 in the IPPE report.
- Level 1 in the Report on Infrastructure Assets.
- Not relevant to SAMP.

L2: SS7 Asset Category

- This captures the SS7 Asset Category requirements for compliant segregation into the Report on Infrastructure Assets.
- Level 2 in the IPPE report, but not reported in the IPPE report.
- Level 2 in the Report on Infrastructure Assets.
- Not relevant to SAMP.

L2: SAMP Asset Category

- Segregated Asset Categories depending on the functionality and service and SLAs that the Assets within the categories serve the community.
- Made to be meaningful to the community.

- L3: Asset Type
- This is the lowest level of Granularity (Lowest Common Denominator) and represents individual asset records. It is shared across both Financial and SAMP asset hierarchies to join both hierarchies.
- Level 3 in the IPPE report, but not reported in the IPPE report.
- Level 3 in the Report on Infrastructure Assets, but not reported in the Report on Infrastructure Assets.
- Level 3 in the SAMP.

4. Asset Lifecycle Management

Waverley Council manages its asset portfolio through a whole-of-life approach. The asset lifecycle management approach ensures that Waverley Council plans and delivers its assets and services to meet the asset management objectives. The four stages to asset lifecycle management are as follows.

Figure AS6: The Four Stages to Asset Lifecycle Management



4.1. Stage 1: Asset Design Planning

The Asset Design Planning stage is a crucial step that identifies the demand for an asset configuration change, and how Council plans to meet that demand. The Asset Design Planning stage ensures that Council:

- Identifies and captures what assets are intended to be acquired, constructed, renewed or disposed.
- Designs the asset configuration changes to meet the service or engineering demand.
- Identifies the impact to existing asset configurations.
- Calculates and plans lifecycle costing for the asset including:
 - » Capital expenditure (CAPEX) requirements for design, construction, and acquisition.
 - » Ongoing operational expenditure (OPEX) and resourcing required to maintain and operate the assets.

4.2. Stage 2: Asset Acquisition, Construction, Commissioning and Capitalisation

The Asset Acquisition, Construction, Commissioning and Capitalisation stage is crucial to ensuring that asset acquisition and construction is delivered to the design and scope. Asset commissioning ensures that assets are appropriately captured into the asset register for ongoing financial reporting and asset planning for maintenance, operations, and renewal.





The asset commissioning stage includes the handover from asset custodian to maintenance service delivery teams to ensure that ongoing maintenance and operations is adequately planned and resourced.



4.3. Stage 3: Asset Maintenance and Operations

The Asset Maintenance and Operations stage ensures that assets are planned and maintained to meet asset service levels. Ongoing maintenance and operations ensure that assets deliver services for the full extent of their planned and designed life.

A handover of maintenance requirements and specifications from the asset custodian to the service delivery teams ensures that the demand for operations and maintenance is agreed and adequately resourced. Council strives to implement a works management system so that routine and reactive work orders are scheduled to these assets, ensuring that maintenance frequencies and response times are reported against.

Routine asset inspections and condition assessments ensure that Council adequately plans and reports to deteriorating assets and service delivery.

4.4. Stage 4: Asset Disposal, Replacement, and Upgrades

As assets approach their full design lives and progress towards a poor condition, Council ensures that assets are adequately disposed, replaced, or upgraded. Disposal ensures that assets that are removed are decommissioned from asset registers and no longer considered for asset planning. Council's asset teams operate a capital works planning and prioritisation process to ensure that assets approaching poor condition and/or obsolescence progress into the Asset Design and Planning stage for capital works delivery.

5. Community Engagement and Service Levels

Waverley Council's Asset Management Strategy is underpinned by three themes within Council's Community Strategic Plan.

These themes form the foundation of our Asset Management vision and desired future state, keeping our community at the forefront of all we do.







A natural and built environment.

Waverley's assets will showcase community-driven, place-based planning to create functional, walkable streets and dynamic public spaces. Roads, footpaths, parks, and playgrounds will be modern, accessible, and climate-resilient, supporting sustainable transport options like walking, cycling, and public transit to reduce congestion and parking pressures. Recreational facilities and open spaces will prioritise a healthy, happy, and connected community.



A well governed, transparent and financially sustainable organisation.

Waverley's assets will be maintained well, with significant investment in buildings and infrastructure. Sustainability will be at the forefront, with a focus on conserving energy and water, reducing environmental impact, and enhancing natural assets such as coasts and bushland. By aligning with the latest in resilient design, Waverley's assets will deliver long-term value, meeting community expectations and adapting to future challenges.

5.1. Community Consultation

Historically, Waverley Council has conducted extensive consultations to assess community expectations on asset renewal and maintenance, including a 2012 consultation that established service levels for each asset class. Over the following years, additional funding helped reduce the asset backlog and improve asset conditions.

Between November 2024 and January 2025, Waverley Council conducted a series of community consultation activities to gather feedback on priorities and satisfaction levels regarding infrastructure assets.

SAMP Deliberative Panel Workshops (5th and 7th Nov 2024): Council representatives provided an overview of its infrastructure asset portfolio. The 26 randomly selected residents provided feedback to inform Council's asset management resourcing prioritisation and service levels.

Issues Workshop (13th Nov 2024):

Council representatives provided an overview of the challenges and issues that Waverley Council faces. The maintenance of public infrastructure and local centre upgrades was discussed with 49 community participants who provided their feedback, their high importance assets, and infrastructure, and street footpaths.

SAMP Online Budgeting Tool (12th Nov 2024 to 31st Jan 2025): An online budgeting tool was made available to the community via Council's Have Your Say website. A total of 18 people provided a submission where they ranked and prioritised a limited funding budget to Council's asset classes. The deliberative panel workshops yielded the below prioritisation rankings for maintenance and renewal resourcing across the six relevant asset classes. More detailed findings are reported in the individual asset management plans.

Figure AS7: Asset Class Prioritisation Ranked by Residents for Maintenance Resourcing



Figure AS8: Asset Class Prioritisation Ranked by Residents for Renewal Resourcing



5.2. Alignment of Services and Assets

Council manages infrastructure assets to deliver services that meet evolving community needs. The table below outlines the services provided and the assets that enable them.

SERVICES PROVIDED	ASSETS	ASSET CLASS
The transport network supports transportation (both vehicular and active) and economic activities of the region.	Roads, footpaths and cycleways, kerb & gutter, traffic facilities (islands & roundabouts), carparks, and signs.	Road infrastructure (including parking)
Collection of storm water and discharge into natural waterways and the sea.	Stormwater conduits, stormwater harvesting systems, stormwater pits.	Stormwater drainage
Provision of electrical infrastructure for community use.	Electric vehicle infrastructure and electrical switchboards	Public domain streetscapes
Public streetscapes that enhance community spaces and functionality.	Streetscape amenities, street lighting, furniture, and structures.	-
Housing provided to ensure affordable living options for the community.	Affordable housing	Buildings
Facilities to provide public amenities such as toilets, changing rooms, and shelters.	Amenities buildings	
Off-street parking buildings support various facilities and activities.	Carparks	-
Facilities for final resting places, including burial grounds, and cemetery structures.	Cemeteries	-
Properties leased for commercial activities generating revenue for council.	Commercial premises	-
Accommodation for community-based activities and Council service delivery.	Community centres and halls, community tenancies, Council administration offices, depots, and early education centres.	-
Residential properties leased by Council.	Residential lease properties for short- or long- term Council purposes.	
Facilities supporting lifesaving services, coastal activities, and community gatherings.	Surf club, lifesaving and ancillary coastal properties	-



SERVICES PROVIDED	ASSETS	ASSET CLASS
Green infrastructure to enhance urban amenities, environmental sustainability, and biodiversity.	Landscaping, native vegetation, urban forests, and tree canopies.	Living infrastructure
Art installations that enhance the public realm.	Public art such as sculptures, murals, and interactive installations.	
Parks, reserves, sporting facilities, and swimming pools provide active and passive recreation opportunities.	Park footpaths, park furniture (e.g., shelters, playgrounds), lighting, sports fields, swimming pools, and recreational beaches.	Open space & recreational infrastructure
Structures that protect coastal areas and support public access.	Sea walls, retaining walls, and erosion control infrastructure.	
Essential water services within public spaces, ensuring access to clean drinking water, maintaining green infrastructure, and promoting recreational and environmental sustainability.	Water equipment, including drinking fountains, irrigation, and irrigation accessories.	
Council-owned vehicles, plant, and equipment enabling operational delivery.	Fleet vehicles, machinery, maintenance tools, and equipment.	Fleet plant & equipmen
Technology infrastructure supporting Council operations and services.	Information technology systems, hardware, software, networks, and communication devices.	Information & information technology



6. Sustainable Asset Management Funding and 11 Year Plan

This strategy identifies the future funding and service delivery requirements in terms of:

- Current asset condition, function and performance
- Levels of Service, including asset intervention and/ or appropriate treatments
- Projected demand for infrastructure and services
- Critical assets and risks associated with their failure
- Funding constraints
- Consideration of the long-term health of Council's assets

Council's primary focus of this strategy is to maintain and renew existing assets to ensure that expected service levels are delivered efficiently and affordably for the community. The creation of new or upgraded assets presents challenges in funding the ongoing operating, maintenance, and replacement costs necessary to provide the required service over the assets' full lifecycle.

To develop the asset management strategy, Council has utilised Modelve's advanced scenario modelling to predict the long-term asset needs and performance, ensuring facilities and infrastructure remain fit for purpose. The process balances trade-offs between Maintenance and Operations, Renewal, Upgrade, and New (Mo-R-U-N), while simulating "what-if" scenarios based on asset criticality. Upgrades to assets (such as buildings and parks) have been prioritised where demand exists or where assets are no longer fit for purpose.

6.1. Scenario One – Current Funding Scenario

This scenario is based on current affordability, with a planned funding allocation of approximately \$30.8 million per year over a 10-year period. Under this approach, asset health is expected to decline below current levels.

It outlines a planned approach for maintaining service delivery and infrastructure provision, aligned with the existing revenue base and considered affordable within the current funding limits.

The capital works program, constrained by the cash generated from operations (including rates, grants, and user charges), is below what is considered to be necessary to maintain the current levels of service provided by the infrastructure. Assets such as certain buildings are not seen to be fit-forpurpose and are therefore unable to deliver on the level of service required to support residents and visitors. This approach is not considered to be a sustainable approach over the long term.



ASSET CLASS (SERVICE GROUP)	MAINTENANCE & OPERATIONS	RENEWAL	UPGRADE & NEW	TOTAL
Roads Infrastructure	\$6,521,271	\$9,110,520	\$3,522,775	\$19,154,566
Stormwater Drainage	\$1,082,882	\$1,301,648	\$0	\$2,384,530
Public Domain Infrastructure	\$2,850,997	\$1,889,501	\$1,086,725	\$5,827,223
Buildings	\$10,468,872	\$6,206,035	\$2,651,234	\$19,326,141
Living Infrastructure	\$1,671,507	\$1,153,186	\$0	\$2,824,693
Recreational & Open Space Infrastructure	\$7,630,355	\$5,819,066	\$2,687,174	\$16,136,595
Plant & Equipment	\$1,740,947	\$3,849,581	\$0	\$5,590,528
Information & Information Technology	\$690,830	\$1,527,563	\$0	\$2,218,393
Total Annual Costs	\$32,657,661	\$30,857,100	\$9,947,908	\$73,462,668

6.2. Scenario Two – Sustainable Funding Scenario

This Sustainable Funding Scenario is based on maintaining current technical levels of service, with a planned funding allocation of over \$33.5 million per year for the next 10 years. It outlines the necessary funding to manage and treat assets sustainably.

The Technical Levels of Service Model guides service delivery through the Mo-R-U-N framework: Maintenance and operations, Renewal, Upgrade, and New. It defines actions for each asset class to ensure effective management and maintenance, considering condition, age, reliability, and safety.

This scenario prioritises asset renewal and replacement to maintain service levels while providing additional funding for open spaces, recreational infrastructure, and buildings to ensure they remain fit for purpose. As Council enhances its Asset Management System, accurate O&M costs will be determined. In the meantime, a 1.8% reduction in O&M is assumed, matching the 1.8% GRC (Gross Replacement Cost) variance between scenarios.

Space Infrastructure Plant & Equipment \$1	10,280,432 § 1,709,610 §	\$6,275,221 \$3,849,581 \$1,527,563	\$2,687,174 \$0 \$0	\$19,242,827 \$5,559,191 \$2,205,958
Space Infrastructure	10,280,432			
•		\$6,275,221	\$2,687,174	\$19,242,827
Recreational & Open \$1				
Living Infrastructure \$7	7,493,009	\$1,204,020	\$0	\$8,697,029
Buildings \$1	1,641,420	\$7,839,083	\$2,651,234	\$12,131,737
Public Domain \$2 Infrastructure	2,799,679	\$2,128,858	\$1,086,725	\$6,015,262
Stormwater Drainage \$1	1,063,390	\$1,339,766	\$0	\$2,403,156
Roads Infrastructure \$6	6,403,888	\$9,304,425	\$3,522,775	\$19,231,088
	IAINTENANCE OPERATIONS I	RENEWAL	UPGRADE & NEW	TOTAL

The Sustainable Funding Scenario provides a more proactive and financially prudent pathway by investing in preventative maintenance and lifecycle management to improve long-term asset health.

By implementing this strategy and its associated improvement plan, Waverley Council anticipates the following outcomes:

- Improved asset health and financial sustainability, reducing the risk of future backlogs.
- Enhanced service reliability and community satisfaction.
- A proactive approach to managing climate resilience and sustainability challenges.
- Greater transparency, accountability, and performance tracking in asset management.

6.3. Scenario Lifecycle Costs Over 10 Years

The following tables present the estimated lifecycle costs under both scenarios over the next 10 years. The annual assumption of 2.5% inflation applied to all costs.

Scenario One – Current Funding Scenario, \$'00	cenario One – C	urrent F	Fundina	Scenario.	\$'000
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EXPENDITURE											
ТҮРЕ	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	TOTAL
0&M	\$32,658	\$33,782	\$34,780	\$35,800	\$36,894	\$38,018	\$39,180	\$40,362	\$41,506	\$42,663	\$375,643
Depreciation	\$20,778	\$21,605	\$22,299	\$23,007	\$23,781	\$24,577	\$25,403	\$26,241	\$27,032	\$27,827	\$242,550
Roads Infrastructure	\$9,348	\$7,949	\$8,901	\$9,707	\$10,441	\$11,272	\$11,725	\$11,032	\$10,940	\$10,893	\$102,210
Stormwater Infrastructure	\$1,336	\$1,136	\$1,272	\$1,387	\$1,492	\$1,611	\$1,675	\$1,576	\$1,563	\$1,556	\$14,603
Public Domain Infrastructure	\$1,939	\$1,649	\$1,846	\$2,013	\$2,165	\$2,338	\$2,432	\$2,288	\$2,269	\$2,259	\$21,198
Buildings	\$1,183	\$1,006	\$1,127	\$1,229	\$1,322	\$1,427	\$1,484	\$1,396	\$1,385	\$1,379	\$12,937
Living Infrastructure	\$5,971	\$5,077	\$5,685	\$6,200	\$6,669	\$7,200	\$7,489	\$7,046	\$6,987	\$6,957	\$65,283
Recreational & Open Space Infrastructure	\$6,368	\$5,415	\$6,064	\$6,612	\$7,112	\$7,679	\$7,987	\$7,515	\$7,452	\$7,420	\$69,625
Plant & Equipment	\$3,862	\$3,284	\$3,678	\$4,011	\$4,314	\$4,657	\$4,844	\$4,558	\$4,520	\$4,500	\$42,228
Information & Information Technology	\$1,655	\$1,408	\$1,576	\$1,719	\$1,849	\$1,996	\$2,076	\$1,953	\$1,937	\$1,929	\$18,098
Renewal	\$31,663	\$26,925	\$30,149	\$32,878	\$35,362	\$38,180	\$39,714	\$37,366	\$37,053	\$36,893	\$346,182
Roads Infrastructure	\$6,644	\$3,319	\$3,246	\$4,293	\$4,358	\$4,567	\$4,382	\$2,907	\$2,587	\$2,419	\$38,723
Stormwater Infrastructure	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$
Public Domain Infrastructure	\$2,050	\$1,024	\$1,001	\$1,324	\$1,344	\$1,409	\$1,352	\$897	\$798	\$746	\$11,945
Buildings	\$5,001	\$2,498	\$2,443	\$3,231	\$3,280	\$3,437	\$3,298	\$2,188	\$1,947	\$1,820	\$29,143
Living Infrastructure	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$
Recreational & Open Space Infrastructure	\$5,068	\$2,532	\$2,476	\$3,275	\$3,324	\$3,484	\$3,343	\$2,217	\$1,974	\$1,845	\$29,538
Plant & Equipment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$
Information & Information Technology	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$
Upgrade & New	\$18,763	\$9,372	\$9,167	\$12,123	\$12,306	\$12,897	\$12,375	\$8,208	\$7,307	\$6,831	\$109,348
Total	\$103,862	\$91,684	\$96,395	\$103,808	\$108,342	\$113,671	\$116,672	\$112,177	\$112,897	\$114,215	\$1,073,722

Scenario Two – Sustainable F	Funding Scenario, \$'000
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YPE	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	TOTAL
0&M	\$32,658	\$33,782	\$34,780	\$35,800	\$36,894	\$38,018	\$39,180	\$40,362	\$41,506	\$42,663	\$375,643
Depreciation	\$20,778	\$21,605	\$22,299	\$23,007	\$23,781	\$24,577	\$25,403	\$26,241	\$27,032	\$27,827	\$242,550
Roads Infrastructure	\$9,304	\$9,537	\$9,775	\$10,020	\$10,270	\$10,527	\$10,790	\$11,060	\$11,337	\$11,620	\$104,241
Stormwater Infrastructure	\$1,340	\$1,373	\$1,408	\$1,443	\$1,479	\$1,516	\$1,554	\$1,593	\$1,632	\$1,673	\$15,010
Public Domain Infrastructure	\$2,129	\$2,182	\$2,237	\$2,293	\$2,350	\$2,409	\$2,469	\$2,531	\$2,594	\$2,659	\$23,850
Buildings	\$7,839	\$8,035	\$8,236	\$8,442	\$8,653	\$8,869	\$9,091	\$9,318	\$9,551	\$9,790	\$87,824
Living Infrastructure	\$1,204	\$1,234	\$1,265	\$1,297	\$1,329	\$1,362	\$1,396	\$1,431	\$1,467	\$1,504	\$13,489
Recreational & Open Space Infrastructure	\$6,275	\$6,432	\$6,593	\$6,758	\$6,927	\$7,100	\$7,277	\$7,459	\$7,646	\$7,837	\$70,304
Plant & Equipment	\$3,764	\$3,858	\$3,955	\$4,053	\$4,155	\$4,259	\$4,365	\$4,474	\$4,586	\$4,701	\$42,170
Information & Information Technology	\$1,613	\$1,653	\$1,695	\$1,737	\$1,781	\$1,825	\$1,871	\$1,918	\$1,965	\$2,015	\$18,073
Renewal	\$33,469	\$34,305	\$35,163	\$36,042	\$36,943	\$37,867	\$38,813	\$39,784	\$40,778	\$41,798	\$374,961
Roads Infrastructure	\$6,644	\$3,319	\$3,246	\$4,293	\$4,358	\$4,567	\$4,382	\$2,907	\$2,587	\$2,419	\$38,723
Stormwater Infrastructure	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$
Public Domain Infrastructure	\$2,050	\$1,024	\$1,001	\$1,324	\$1,344	\$1,409	\$1,352	\$897	\$798	\$746	\$11,945
Buildings	\$5,001	\$2,498	\$2,443	\$3,231	\$3,280	\$3,437	\$3,298	\$2,188	\$1,947	\$1,820	\$29,143
Living Infrastructure	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$
Recreational & Open Space Infrastructure	\$5,068	\$2,532	\$2,476	\$3,275	\$3,324	\$3,484	\$3,343	\$2,217	\$1,974	\$1,845	\$29,538
Plant & Equipment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$
Information & Information Technology	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$
	440 700	\$9,372	\$9,167	\$12,123	\$12,306	\$12,897	\$12,375	\$8,208	\$7,307	\$6,831	\$109,348
Upgrade & New	\$18,763	<i>\$3,67</i>									

Notes: (1) The figures in the table include the inflation rate indicated. (2) O&M and depreciation include the assumption of 1.6% of upgrade and new assets constructed in the prior year.

6.4. Waverley Council's Adopted 11 Year Total Expenditure Plan

Waverley Council has adopted the below 11 Year Total Expenditure Plan to align current asset conditions and existing capital works commitments to with the Sustainable Funding Scenario. These are represented as indexed values using a projected inflation of 2.5% annually.





Between 2025 and 2036, Waverley Council's assets will experience a valuation and condition depreciation of \$186 million due to age and wear and tear. The planned CAPEX resourcing to renewals ensure that depreciating and high-risk assets are replenished as required over the 11-years while introducing CAPEX new and upgrade assets to meet increasing demands associated with asset service capacity, population, and technology.

Figure AS10: 11-Year Asset Valuation through Depreciation, Renewal, Upgrade, and New CAPEX.



Waverley Council's Asset Total Expenditure is between 2025 and 2036, is presented by existing commitments to Capital New and Upgrade projects, up to 2028/29 and a stable Capital Renewal expenditure annually. The Operational Expenditure is projected to increased annually in line with Capital New and Upgrade assets that are constructed/acquired, and thereby increasing Council's maintenance and operations responsibilities.

Figure AS11: Waverley Council's CAPEX and OPEX 11-Year profile for All Infrastructure Assets



7. Environmental Sustainability and Climate Change

Waverley Council not only strives to achieve longterm financial sustainability, but also environmental sustainability, which means considering and responding to projected, local impacts of climate change on our assets and operations. Human activities are causing atmospheric concentrations of heat-trapping greenhouse gases to rise higher and faster than ever before in recorded history. 2024 was the warmest year since modern record-keeping began, and the world's ten warmest years have all occurred in the last decade. This unprecedented rise in global temperature is causing extreme weather events such as heat waves, bushfires, droughts and floods to become more frequent and more intense and altering average temperatures and weather patterns around the world.

In Australia, our climate has warmed consistently since records began in 1910, and the 10 hottest years on record for Australia have all occurred since 2005. Extreme heat days are more common, overall cool season rainfall is declining in the southeast and bushfires are starting earlier and are more severe. Sea level rise and more frequent storm and extreme rain events are increasing the risk of inundation and damage to coastal infrastructure and communities. Oceans are acidifying, warming and expanding, which is negatively impacting coral reefs and other marine ecosystems.

Figure AS12: NSW historical and projected average temperature change. (NSW Department of Climate Change, Energy, the Environment and Water 2024)



Local shifts in seasonality and increased exposure to natural hazards presents risks to human health and wellbeing, ecosystems, infrastructure and services, and will require significant investment in adaptation, to avoid increasing damage and recovery costs.

7.1. Impact to Waverley Council

Historically, Waverley's climate is characterised by warm to hot summers and mild to cool winters. There is minimal seasonal variation due to our coastal location. Average annual rainfall is ~1200mm but with significant variability (809mm-2165mm over the last 50 years). Going forward summer is projected to be longer, hotter and drier, and a reduction in the duration of cooler months and winter rains has been projected



Waverley Council must prepare for and adapt to:



7.2. Waverley Council's Plan

It is important that Council assesses risks arising from expected climate changes so we can manage impacts to local residents, businesses and visitors and protect our public infrastructure and environmental assets.



Waverley's Resilience Framework

Council's Resilience Framework was adopted in 2022 and introduced as a key pillar of Waverley's Community Strategic Plan 2022-2032. To inform operations and budgeting, resilience was also reflected in SAMP 6 under objectives 2.3 Climate change and resilience - Prepare and adapt to the impacts of climate change and 2.3.1 Deliver the climate change adaptation and resilience framework.

A Climate Change Risk Assessment was undertaken between 2021 and 2023, using the NSW Government's Climate Risk Ready Risk Assessment Tool, which follows the Australian and New Zealand Standard AS/NZS 4360 Risk Management to determine and analyse climate change risks to our assets and operations by 2040. Of the 62 risks rating high or extreme, the vast majority impact Assets, Facilities, Open Space and Parks and Living Infrastructure and relate to damages or degradation related to expected climate impacts, including Increasing temperatures and heatwaves, extreme rainfall and flooding and coastal inundation.

Figure AS13: Climate Hazards Contributing to Assessed Council Risks

Heatwaves/extreme heat days





Figure AS14: Identified Climate Risk Ratings



Taking steps to reduce our exposure and vulnerability to climate change builds our capacity to respond and be resilient as the climate continues to warm. For example, Council's commitment to increase tree canopy and vegetation cover to 35% by 2032 will provide localised cooling and shading, minimise urban heat islands, improve air quality and decrease energy consumption, while protecting shelter and habitat for local biodiversity. Figure X: Maps of Waverley Council local government area showing Vegetation Coverage and Urban Heat Island effect, where colour represents the temperature of a surface on a hot day (Arbor Carbon, 2024).



Planning and responding to climate change involves adapting practices, policies, designs, and materials. There is no single solution, but by working together across community, business, and government we can increase our resilience to climate change impacts. Some ways Council is addressing climate risks include:

- Increasing and protecting urban vegetation and canopy trees to provide cooling, health, and wellbeing benefits
- Increase permeability in public spaces to retain water in the landscape and minimise localised flooding
- Encouraging climate-appropriate designs for new buildings to reduce energy and water use and account for warmer summers (e.g. shaded north and west-facing windows, insulation, effective ventilation and landscaping to mitigate urban heat).
- Reviewing asset management strategies to increase the resilience of essential services at risk from climate hazards (e.g. transport, telecommunications and water infrastructure).
- Incorporating sea level rise risk into coastal infrastructure design and management planning.

To ensure a safer future with less global warming and fewer extreme weather events, deep, rapid, and sustained reductions in greenhouse gas emissions to Net Zero is urgently required by all sectors of society.

Meanwhile it is prudent that Waverley Council adapt and responds to the current global emissions trajectory which is *RCP 8.5 or between **SSP2-4.5 to SSP3-7.0.

*Representative Concentration Pathways are trajectories that describe future greenhouse gas concentrations (not emissions) and were adopted by the Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report. RCP 8.5 denotes a future with little curbing of global emissions concentrations reaching 940parts per million by 2100. As current ppm is 428ppm, it is considered by many scientists as a Business-as-Usual scenario, as it is tracking within 1% of current actual emissions.

**Shared Socioeconomic Pathways (SSPs) are the most recent emissions scenarios adopted in the IPCC Sixth Assessment Report and describe how greenhouse gas emissions and socioeconomic factors – such as population, economic growth, education, urbanisation and land use – may change in the future.

- SSP2-4.5 describes reasonable (or median) level of success from climate change initiatives and programs
- SSP3-7.0 describes a high-emissions future of regional conflict and development where countries do not collaborate on tackling climate change and do not focus on sustainable and equitable development. Recommended for when applying to critical infrastructure.

8. Asset Management Improvement

Council's asset management maturity assessment has identified that it is currently operating at a Basic to Core maturity level. Council is committed to achieving a predominantly Intermediate maturity level, with a clear ambition to stretch towards Advanced maturity in key areas where it adds significant value.

To achieve this, Council will adopt enhanced asset management practices, including:



Service-Based Planning

Integrating social infrastructure planning with asset management planning to ensure service delivery aligns with community needs and priorities while incorporating risk and asset criticality to support informed decision-making.

Driving Continuous Improvement

Embracing better practices and continually improving Council's knowledge, systems, processes, and plans to support informed decisionmaking and deliver better outcomes for the community. Council's asset management objectives are to:

- Embed Asset Management (AM) Practices: Integrate asset management practices across the organisation, ensuring that all Council employees play an active role in the responsible management of Council's assets.
- Ensure Responsible Stewardship: Demonstrate sustainable and responsible stewardship of community assets to protect their value and functionality.
- Meet Service Level Expectations: Clearly define and manage Council's assets to achieve the agreed levels of service that align with community expectations.
- **Prioritise Resources Effectively:** Prioritise funding and resources across asset classes to safeguard assets for current and future generations.
- Manage Risks: Proactively monitor and mitigate environmental, financial, and public risks associated with Council's infrastructure assets.
- **Support Future Works Programs:** Provide a structured basis for planning and delivering future capital and maintenance programs.
- Drive Continuous Improvement: Implement a framework for continuous improvement in asset management systems, processes, and practices.
- Foster Transparency and Accountability: Promote transparent and responsible asset management practices that align with industry standards and best practices.
- **Optimise Whole-of-Life Costs:** Focus on strategies that minimise lifecycle costs while maximising asset performance and value.
- Support Long-Term Financial Sustainability: Enable long-term financial planning across all asset classes to ensure Council can sustainably manage its assets now and into the future.



Council aims to deliver a proactive and sustainable asset management approach that is aligned with the long-term needs of the community. This will enable Council to competently and responsibly manage its community assets, delivering the required levels of service now and into the future.

By striving for Intermediate and Advanced maturity, Council will:

- Provide a solid foundation for sustainable asset lifecycle management
- Enhance financial sustainability by improving forecasting, planning, and resource allocation
- Improve transparency and accountability in asset management decisions
- Deliver consistent, reliable, and efficient services that meet community expectations

This commitment to improving maturity levels will ensure that Council's asset management practices are robust in achieving better outcomes for the community.

8.1. Asset Management Maturity & IIMM Framework

Waverley Council conducted a self-assessment of its Asset Management maturity in June 2024, to understand our current performance and identify areas for improvement. The assessment was carried out using the International Infrastructure Management Manual (IIMM) model, as endorsed by the Council's Asset Management Steering Committee. This structured process evaluates capability against key benchmarks, with scoring based on documented evidence.

As part of our commitment to ongoing improvement, Council compares results to previous assessments to measure progress over time, compare performance to previous assessments, and track achievements toward improvement goals.

Regular asset management maturity assessments ensure Council continues to enhance its practices by identifying opportunities for enhancement, aligning activities with strategic goals, and optimising asset performance and value. By maintaining efficiency, compliance, and sustainability, Council can make informed decisions and deliver better outcomes for the community.

The IIMM framework includes several elements that assess the organisation's maturity in asset management practices. The following table and figure provide the target maturity and the result of the assessment across each category.

The following analysis identifies key gaps in asset management maturity, highlighting areas where resources, processes, and policies need improvement to align with strategic objectives, enhance capability, and support sustainable long-term asset management outcomes for the community. While substantial improvements between assessments are not yet evident, Council has made progress in asset hierarchies, data standardisation, and integration with the Long-Term Financial Plan and the Workforce Management Strategy – collectively providing the Resourcing Strategies to deliver the adopted Community



IIMM CATEGORY	CURRENT ASSESSMENT SCORE	TARGET MATURITY SCORE	CURRENT STATE
Understanding	Requirements		
2.1 Analysing the Strategic Direction	45 Core	85 Advanced	 Strategic organisational planning is in place but is not fully integrated with asset management, as other strategies and plans are not fully integrated (Enhanced LTFP). Monitoring and reporting on achievements against asset management objectives and the delivery of the asset management policy are not conducted regularly. Analysis of the strategic context (internal, external, and customer environment) is needed, along with an evaluation of the asset portfolio
2.2 Levels of Service Framework	40 Basic	85 Advanced	 to determine its fit-for-purpose status, both current and future. The organisation has defined customer groups and informally understands their requirements. While some key performance measures have been established for the activity, there is a lack of formal processes to clearly define and measure the desired service delivery. This gap suggests that, although there is awareness of what needs to be delivered, the absence of structured procedures and metrics makes it challenging to effectively monitor and ensure the fulfillment of these service expectations.
2.3 Demand Forecasting and Management	40 Basic	80 Intermediate	 The Waverley LGA boasts one of the highest residential population densities in Australia. According to New South Wales Department of Planning and Environment (2022), the historical population growth experienced in Waverley is anticipated to continue. Population is set to grow at an average annual growth of 0.3%, reaching 76,000 residents by 2041 (current population is approximately 71,400 residents), necessitating the requirement for demand forecasts.
2.4 Asset Condition and Performance	60 Core	80 Intermediate	 While condition data is being collected through emerging assessment programs, such as for the stormwater drainage asset class, further efforts are needed to extend these assessments to other assets that are not easily visually inspected, like road pavements. Processes for updating the financial asset register with this condition information must be improved to better support the planning and prioritisation of short-term maintenance and renewal activities and ensure asset valuation reflects the information provided in detailed condition assessments. To prevent excessive costs, assessments could focus on sampling critical assets within an asset class rather than evaluating the entire asset base. This targeted approach would free up resources to develop maintenance programs or advance other elements of asset management practices.
2.5 The Strategic Asset Management Plan	70 Intermediate	80 Intermediate	 The relationships and processes between the asset management system and other parts of the organisation could benefit from improvement and better documentation, consequently, the scoring does not reach the top of the intermediate range. Despite this, the SAMP is of good quality, with Council having received awards for its outstanding asset and financial management plans in the past.

IIMM CATEGORY	CURRENT ASSESSMENT SCORE	TARGET MATURITY SCORE	CURRENT STATE
Lifecycle Mana	gement		
3.2 Managing Risk and Resilience	40 Basic	80 Intermediate	 While critical assets are reported on in AMPs, this needs to be expanded, and a clear definition is required. Coastal assets, which were not previously identified as critical, have had to be closed off in certain areas. This has led to a loss of service and creates economic concerns, as the coast is the primary attraction for visitors. The management of critical assets is currently suboptimal, reactive in nature considering remediation options as opposed to preventative approaches. The loss of assets, where there is no option for replacement, results in a loss of service to the community and visitors.
3.3 Operational Planning	40 Basic	60 Core	 Comprehensive operating plans are not currently available for all operational areas, with the priority being placed on critical ones, as is the case with incident and emergency management plans as well. It is recommended that a thorough review of operational support requirements against industry best practices is completed. Trends are not currently analysed for planned and unplanned maintenance and renewal activities, required to inform decisions to optimise maintenance and renewal frequencies.
3.4 Capital Works Planning	60 Core	80 Intermediate	 Prioritisation process (scoring metrics) is established The prioritisation results are presented to the ELT and subsequently to the Council, with Council resolutions also incorporated. Prioritisation is applied to both the annual program and multi-year projects. Council has future plans to develop a four-year prioritisation process, which will provide a delivery program and enable strategic procurement.
3.5 Asset Financial Planning and Management	45 Core	85 Advanced	 The scoring for this element is at the bottom of the range for the core level of maturity. This is primarily due to the misalignment between the asset and corporate long-term financial planning processes, which is largely a result of changes and timing issues. Improvements have been made recently, ensuring that LTFP categories are aligned with revised SAMP asset categories, which is reflected in this strategy and the equivalent LTFP.
3.6 AM Plans	60 Core	80 Intermediate	 The risk component of the AMPs is at a very low maturity level and requires significant improvement. Risk ratings should be aligned with an enterprise risk management framework, and extreme risks should be reported to management with regular monitoring reports. Council's risk appetite should be clearly understood and documented. Additionally, AMPs need to be fully integrated with the corporate long-term financial planning process to ensure better alignment and

effectiveness.
IIMM CATEGORY	CURRENT ASSESSMENT SCORE	TARGET MATURITY SCORE	CURRENT STATE
Asset Managem	ent Enablers		
4.1 AM People and Leaders	50 85 Core Advanced		• While the current rating is core, the score remains in the middle of the range because asset management roles and responsibilities are only included in significant position descriptions, not across the board.
			 Additionally, a specific asset management training program has not been developed.
			 There is a need for mapping to define alignment between asset management objectives and team and individual responsibilities.
			 Council aims to plan for a formal, documented assessment of asset management capability and capacity requirements to achieve asset management objectives in the future.
4.3 Asset Management Information Systems	40 Basic	80 Intermediate	• Council currently tracks defects using a separate register that is not integrated with the Customer Request Management (CRM) system. As a result, customer requests do not generate work orders, and maintenance teams are using the CRM to track maintenance activities. This leads to recording information in the CRM that should remain internal and not be shared with customers.
			• Implementing an Asset Management Information System (AMIS) that allows live tracking of customer requests linked to maintenance tasks and provides basic reporting capabilities – such as condition and performance assessments, renewal forecasts, and valuations – would enhance Council's operational maturity to a core level.
4.4 AM Process Management	25 Basic	80 Intermediate	 Critical Asset Management processes must be identified, documented, monitored, and reviewed, with clear management of interfaces with other teams and organisations.
			• Council will also develop processes to enable them to provide evidence that these processes are followed.
			 Council is currently working on documenting the process for the fair valuation methodology.
4.5 Outsourcing and Procurement	40 Basic	60 Core	• Council has established a procurement strategy and policy, internal and external service level agreements (SLAs), and contracts, all aligned with service levels, along with regularly reviewed procurement and contract performance management processes.
			 To further enhance its maturity, Council would need to consider the risks, benefits and costs of various outsourcing and lease/buy options considered in determining the service delivery approach.
4.6 Continual Improvement	45 Core	85 Advanced	 Council is dedicated to developing asset management maturity and has a process in place for reviewing the progress made on initiatives identified in their improvement plans.
			 Reporting to ELT to provide progress updates at frequencies specified in the SAMP or AMP, linked to State of the Assets annual reporting to Council would be ideal.
			 Major improvement actions should be managed within the organisation's project management framework, with evidence of effective change management practices to support asset management improvement plan implementation.

To identify the desired maturity level for Council, risk management principles have been applied. It is recognised that not all assessed elements need to achieve the same level of maturity, and pursuing advanced maturity across all areas is not deemed the optimal solution for Waverley Council.



Council has achieved a Basic to Core maturity rating under the International Infrastructure Management Manual (IIMM) framework, focusing on establishing foundational practices, improving data quality, and defining its current maturity as:

Leadership & Governance:

- Established foundational leadership commitment to asset management
- Developed basic governance frameworks to meet regulatory requirements
- Aligns asset management activities with organisational objectives, with an emphasis on improvement over time.

Asset Management System:

- Implemented initial asset management systems and processes, focusing on data collection and standardisation.
- Established reactive maintenance processes to address immediate needs.
- Integrated financial forecasts for maintenance and renewals, though longterm planning remains limited.

Asset Portfolios:

- Maintains a basic understanding of asset inventory, including type, location. While condition is defined for some asset classes, such as buildings, this is not reflected in the financial asset register.
- Introduced lifecycle awareness, with early efforts toward planning for renewals and replacements.
- Defines initial service levels that balance community needs and available resources.

Council's largest asset spend is in renewals and upgrade works largely due to the high population density, with limited opportunity for greenfield development on undeveloped land. This often results in planning for more expensive upgrades, such as pedestrian overpasses to meet growing demand, in limited space, as part of the integrated transport planning, as opposed to just footpath expansion programs, or focusing on enabling public transport infrastructure to ease congestion, as a like for like replacement is not always feasible.

Mature asset management can produce significant efficiency savings. A strategic shift towards a proactive maintenance approach and enhanced programming of maintenance activities aims to reduce the prevalence of reactive maintenance practices. Insightful analysis has revealed that reactive maintenance can be between 3 to 3.6 times more expensive than proactive maintenance. Costs can escalate even further when assets experience a breakdown, resulting in expenses up to 6 times the baseline. Maturing Council's asset management practices can reduce these costs over the long term, however upfront investment may be required to enable this.



8.2. Key Challenges

Waverley Council continuously evaluates the evolving landscape of urban management to align strategies with emerging opportunities and challenges. With one of the highest population densities in Australia and a growing demographic shift toward children and seniors, planning for functional, adaptable, and sustainable infrastructure is critical to support both community wellbeing and economic resilience. Maintaining Waverley's reputation as a vibrant place to live, work, and visit requires forward-thinking asset management that responds to shifting demands while preserving environmental and cultural landmarks.

- **Population Growth and Demographic Shifts:** Although Waverley's population growth is slower than Greater Sydney, the projected addition of 5,000 residents by 2031 will place increased pressure on infrastructure. The growing proportions of children and seniors highlight the need for enhanced access to schools, healthcare, and services.
- Environmental and Climate Change Impacts: The coastal location exposes Waverley's assets to accelerated wear from rising sea levels, storm tides, and severe weather events.
- Technological Advancements and Smart Asset Management: Rapid technological change presents both challenges and opportunities for asset management, from smart infrastructure to data-driven decision-making.
- Expectations and Service Levels: High community and visitor expectations require assets that deliver reliable, efficient, and quality services.
- **Regulatory and Policy Reforms:** Compliance with evolving regulatory frameworks impacts the management of assets, particularly in areas like waste management and sustainability.

8.3. Key Opportunities

By addressing these strategic focus areas, Waverley Council can ensure robust, future-ready asset management practices that support a thriving, resilient, and sustainable community.

- Enhanced Use of Data and Technology: Implement advanced AMIS integrated with CRM to improve data management, predictive maintenance, and performance tracking.
- Lifecycle Cost and Criticality Assessments: Incorporate lifecycle cost evaluations into capital investment decisions. Broaden the definition of critical assets to prioritise investments that prevent service disruption.
- **Demand and Capacity Planning:** Use population density and tourism data to inform demand forecasts. Plan for infrastructure upgrades that enhance functionality and capacity.
- Climate-Responsive Infrastructure: Design assets with sustainability and climate adaptability in mind to increase resilience and reduce future costs.



8.4. Achieving Future State

To achieve our goal of delivering the 'best value' in asset management, Waverley Council is committed to a strategy of continuous improvement. This will involve ongoing development of the governance, knowledge, systems, processes, and plans necessary to manage our community assets competently, responsibly, and sustainably, both now and in the future.

Our approach will include the integration of exceptional competencies across all staff involved in asset management, facilitated through training, exposure to leading industry expertise, and the adoption of innovative technology. A key element of this strategy will be a review of asset data and processes, focusing on condition profiles, and ensuring that detailed condition and engineering information informs asset valuations and financial treatment of our assets, so this accurately reflects what is on the ground.

Moving forward, the strategy will evolve towards a more advanced level of asset management.

We will adopt a 'bottom-up' approach to gather detailed information on individual assets, enabling the optimisation of activities and programs to meet our Levels of Service. Future plans will focus on performance and risk optimisation, using predictive methods and advanced decision-making techniques to enhance our asset management practices. Ultimately, our goal is to be in a position where we can predict potential issues and address them proactively, ensuring cost-effective, long-term management of our community assets. The following strategies identify How we will do this.

A high-level action plan has been developed to guide Council in achieving Intermediate to Advanced asset management maturity. This plan, grounded in the analysis of current practices, aligns with strategies across Leadership and Governance, the Asset Management System, and Asset Portfolios to ensure sustainable long-term management and adequate provision of Council's infrastructure assets.

The Asset Management Steering Committee (AMSC) is the responsible body and will assign responsibilities as needed. While the Improvement Plan includes expected timeframes, updates may be required as initiative scopes are refined. Implementation timeframes and priorities are not specified in this strategy, as they depend on other Council initiatives and team capacity. The AMSC will oversee progress, ensuring alignment with objectives and adjustments as needed.

Waverley Council is committed to continuous improvement in asset management to deliver best value and ensure sustainable, responsible stewardship of community assets. The strategies outlined in this document, aim to strengthen leadership, governance, asset management systems, and asset portfolios to ensure long-term sustainability and optimal asset performance for Waverley Council, summarised in the following table.



STRATEGY COMPONENT	TASK	DESCRIPTION OF REQUIREMENTS	RESPONSIBLE ROLE	EXPECTED TIMEFRAME FOR IMPLE- MENTATION	WHEN THIS SHOULD OCCUR
Leadership and Governance	Align Strategic Planning	Ensure alignment of Council's Corporate Strategic Plan (CSP), Asset Management Strategy, Long-Term Financial Plan (LTFP), and Workforce Management Strategy for consistent strategic planning.	AMSC	6-12 months	Annually
	Review Unfunded Strategies	Assess endorsed strategies not fully costed to ensure affordability within funding constraints and integrate them with asset management processes, and Council's IP&R Framework documents	AMSC	6-12 months	Every 2 years
	Asset Management Leadership	Establish the AMSC as the lead for organisational asset management improvements, fostering lifecycle planning culture.	AMSC	6 months	Ongoing
	Bondi Beach Precinct	Define asset management requirements for Bondi Beach Precinct, focusing on funding needs and strategic advocacy.	AMSC	12-18 months	Once- off, with periodic reviews
	Asset Management Training	Define roles, create training programs, and align competencies across staff involved in asset management.	AMSC	6-12 months	Annually
	Progress Reporting	Develop a process for progress reporting on improvement initiatives, linked to "State of the Assets" annual reports, so that the successes achieved are celebrated.	AMSC	6 months	Annually
Asset Management System	Define Data Requirements	Define data requirements for informed decision making and maintain accuracy in the Asset Management System to support sustainable decisions.	AMSC	12 months	Quarterly
	Align Financial Accounting with Asset Management	Align depreciation methods with insights from AMPs and ensure ongoing collaboration between finance and asset management teams.	AMSC	6 months	Ongoing
	Improve Risk Management in AMPs	Align risk management with the enterprise framework and integrate it with the 10-year capital plan to ensure a comprehensive approach to asset planning. Incorporate the criticality matrix and community expectations into risk assessment, ensuring that investment decisions prioritise the most critical assets while addressing community needs and service expectations.	AMSC	6-12 months	Ongoing

STRATEGY COMPONENT	TASK	DESCRIPTION OF REQUIREMENTS	RESPONSIBLE ROLE	EXPECTED TIMEFRAME FOR IMPLE- MENTATION	WHEN THIS SHOULD OCCUR
Asset Management System	Develop Operating Plans	Create operating plans and analyse trends for maintenance and renewals to optimise schedules.	AMSC	12 months	Every 2 years
	Works Management System	Implement a Works Management System integrated with CRM and asset register to coordinate planned maintenance, with reporting alignment to individual assets.	AMSC	12-24 months	Ongoing
Asset Portfolios	Lifecycle Costing and Scenario Planning	Conduct lifecycle cost evaluations and scenario planning for capital investments. Produce simplified reports and introduce storytelling to inform stakeholders.	AMSC	12-24 months	Ongoing
	Enhance Asset Condition Assessments	Implement cycle-based condition assessment programs and in-depth assessments for critical assets to optimise funding allocation. Define the scope of data requirements to ensure the results effectively support informed asset decision-making.	AMSC	12 months	Annually
	Asset Componentisation	Complete componentisation for all asset classes, starting with buildings.	AMSC	12-24 months	Once-off, with updates
	Enhance Asset Resilience	Address geotechnical risks and design replacements for coastal assets to meet standards.	AMSC	18-24 months	Ongoing
	Criticality and Trade-offs	Broaden the definition of critical assets (incorporating key coastal assets and the Bondi Beach Precinct) and develop a framework for proactive risk management.	AMSC	12 months	Ongoing
	Outsourcing and Leasing Review	Assess outsourcing and lease/buy options to improve service delivery.	AMSC	6-12 months	Periodically
	Strategic Procurement	Explore and develop a four-year prioritisation process to support a delivery program, enabling strategic procurement through multi-year contracts.	AMSC	12 months	Ongoing
	Develop Demand Forecasts	Use demographic and utilisation data for adaptive asset planning.	AMSC	12 months	Every 2 years
	Climate Resilience Strategies	Incorporate resilience and sustainability into asset designs.	AMSC	18 months	Ongoing

9. Risk Management Approach

Having a clear process for identifying and managing risks is key to successful asset management. Every asset management decision, including selection of processes, needs to balance the competing factors of performance, cost and risk, and processes must exist to identify and quantify risks in order to include them in this trade off.

9.1. Strategic Risk Assessment

Council's risk appetite and identification, analysis and treatment tools should be consistent across the organisation and every decision it makes, including nonasset decisions. Council has identified the following strategic risks relating to Asset Management, considering reputation, compliance obligations, funding limitations, and climate impacts, along with high-level mitigation strategies.

RISK CATEGORY	IDENTIFIED RISK	HIGH-LEVEL MITIGATION STRATEGY		
Reputational Risks	Loss of coastal assets, leading to service loss and economic concerns due to the coastal area being a key visitor attraction.	Expand the definition of "critical assets" and implement preventative asset management strategies. Conduct regular condition assessments and communicate transparently with stakeholders to maintain public trust.		
	Loss of critical assets with no replacement options, resulting in service loss to the community and visitors.	Develop comprehensive asset replacement and renewal strategies. Establish contingency plans and emergency response protocols for unreplaceable critical assets.		
	No metrics to measure service delivery, limiting performance tracking.	Develop and implement key performance indicators (KPIs) linked to service levels. Monitor and report on performance regularly.		
Compliance Obligations	Low maturity of risk management within AMPs, with inadequate alignment to the enterprise risk management framework.	Integrate enterprise risk management principles into AMPs, enhance risk rating and escalation processes, and regularly monitor and report risks.		
	Non-compliance with regulatory or legal requirements due to weak risk management practices.	Regularly review and update AMPs to ensure compliance with evolving regulations. Align policies with compliance frameworks and audit schedules.		
	Non-aligned asset accounting practices, including depreciation methods being inconsistent with asset management plans.	Standardise accounting practices, align depreciation methods with insights from AMPs, and ensure ongoing collaboration between finance and asset management teams.		
Financial	Reactive asset management leads to higher remediation costs, as analysis shows it can be 3 to 3.6 times more expensive than proactive maintenance, with asset breakdown costs up to 6 times higher.	Shift from reactive to proactive maintenance. Develop and implement a Works Management System integrated with Council's CRM.		
	Insufficient funding for critical asset maintenance and replacement.	Prioritise critical assets in financial planning. Identify and secur- alternative funding sources, including government grants and partnerships.		
	Acquiring new capital assets without thorough lifecycle cost assessments increases long-term financial burden.	Mandate lifecycle cost analyses before acquiring new assets. Incorporate total cost of ownership into all investment decisions.		

RISK CATEGORY	IDENTIFIED RISK	HIGH-LEVEL MITIGATION STRATEGY		
Climate Impacts	Coastal asset deterioration from rising sea levels and extreme weather events.	Develop climate resilience strategies and incorporate climate risk assessments into AMPs. Design assets for durability in coastal environments.		
	Increased frequency of extreme weather events affecting asset integrity and service delivery.	Implement climate adaptation strategies, reinforce vulnerable infrastructure, and prioritise proactive interventions for high-risk areas.		
	High utilisation and exposure to environmental factors reduce asset lifespan and performance.	Adjust maintenance schedules to account for higher wear. Use durable materials and design improvements suitable for high-use and coastal conditions. Review the current asset lifes to ensure they are appropriate.		
Risk Management	Lack of clear understanding of Council's overall risk appetite for asset management.	Define and communicate Council's risk appetite, integrating it into asset management decisions and strategies. Conduct regular workshops to reinforce understanding.		
	Low maturity of risk management across AMPs and asset portfolios.	Integrate comprehensive, enterprise-wide risk management into AMPs. Conduct regular risk reviews incorporating the criticality matrix and community expectations into risk assessment and continuous improvement initiatives.		
	Undefined roles and responsibilities lead to unclear decision-making.	Define, document, and communicate clear roles and responsibilities for all stakeholders in asset management processes. Conduct regular role reviews and training.		
	Asset registers lacking componentisation across all asset classes, limits precision in planning, management of assets, and valuation.	Enhance the asset register with detailed componentisation. Use refined data for improved planning, valuations, and decision-making.		
	Lack of robust asset information in planning undermines data-driven strategies.	g Incorporate reliable asset data and condition information into planning tools. Use analytics to support forecasting and strategic decisions.		
Safety & Wellbeing	Poor asset conditions increase risks to public and staff safety.	Implement proactive maintenance, regular inspections, and hazard identification processes to mitigate safety ris		
	Inadequate lighting, accessibility, and security in public spaces compromise community safety.	Incorporate safety audits, improve lighting and accessibility, and enhance surveillance in high-risk areas.		
	Failure to address workplace health and safety risks in asset management processes.	Align asset management practices with WHS standards, provide staff training, and integrate risk controls into asset operations.		

9.2. Critical Assets

Critical assets are those assets that are likely to result in a more significant financial, environmental and social cost in terms of impact on organisational objectives. By identifying critical assets and critical failure modes, organisations can target and refine investigative activities, maintenance plans and capital expenditure plans for their critical areas.

ISO 55001 CI 6.2.1.2b requires organisations to "review the importance of assets related to their intended outcomes, objectives and product or service requirements." ISO 55002 CI 6.2.2.1 suggests that "a risk ranking process can determine which assets have a significant potential to impact on the achievement of AM objectives".

At Waverley Council, we are working towards an advanced approach in identifying critical assets for each major asset class. The approach is using the 'Critical Asset Risk Matrix' by Morrison Low Consultants on Council owned assets that rates each asset from high to low in importance, significance and consequences.

Having considered the critical risk matrices and based on the operational expertise and experience of Council's officers, the following assets are considered to be the most critical assets for the organisation as a whole, a review of this will be completed as part of the Improvement Plan.

Roads Infrastructure

- Grafton Street, between Grosvenor Street and Newland Street
- Grosvenor Street, between Oxford Street and Grafton Street
- Newland Street between Oxford Street and Grafton Street.

Buildings

- State Emergency Services Depot
- Alexandria Integrated Facility (Depot)
- Grafton Street Sub Depot
- Waverley Library (Evacuation Centre)
- Margaret Whitlam Recreation Centre (Evacuation Centre)

Plant and Equipment

- Waste and recycling collection fleet
- Public place cleansing fleet
- Asset maintenance fleet and equipment (trees, flood response, traffic response, etc.)



Information and IT

- Servers and Storage assets
- Network and Connectivity assets



10. Performance Measurement & Review

Through continuous monitoring and refinement, Waverley Council ensures the strategy remains responsive, data-driven, and focused on long-term sustainability and operational efficiency. Council strives to implement the following performance measure to guide the implementation of this strategy.

STRATEGY COMPONENT	PERFORMANCE MEASURE/ INDICATOR	DESCRIPTION	KPI MEASURE	FORMULA	TARGET	MONITORING FREQUENCY
Leadership and Governance	Progress on Unfunded Strategies	Track the affordability and integration of unfunded strategies into asset management processes.	Percentage of unfunded strategies integrated	(Number of strategies integrated / Total strategies) × 100	90%	Annually
	Asset Management Culture	Evaluate the promotion of a proactive asset management culture.	Employee satisfaction with asset management culture	(Number of positive responses / Total responses) × 100	85%	Biennial
	Staff Competency Development	Monitor training completion and competency in asset management across staff.	Percentage of staff trained			
		(Number of staff trained / Total staff) × 100	100%	Quarterly	90%	Ongoing
			Frequency of AMSC meetings	Count	Minimum 4 per year (quarterly)	Ongoing
Asset Management System	Data Accuracy and Fit for Purpose	Assess the accuracy, quality, and completeness of asset data in supporting decision-making.	Data accuracy rate	(Number of accurate data entries / Total data entries) × 100	98%	Quarterly
		Measure how relevant the data is to the specific decision-making process at hand.	Percentage of data points that are considered useful or pertinent to the decision-making process.	(Total number of data points / Number of relevant data points) ×100	90% or higher	Quarterly
		Measures the impact of missing data on decision- making processes.	Percentage of decisions or KPIs impacted by missing data.	(Total number of decisions made / Number of decisions affected by missing data) ×100	Less than 10%	Quarterly
	Risk Management Integration	Evaluate the alignment of risk management strategies with the enterprise risk management framework.	Risk alignment score	(Number of aligned risks / Total risks) × 100	95%	Ongoing

STRATEGY COMPONENT	PERFORMANCE MEASURE/ INDICATOR	DESCRIPTION	KPI MEASURE	FORMULA	TARGET	MONITORING FREQUENCY
Asset Management System	Works Management System Implementation	Track the implementation and integration of the Works Management System with asset registers and CRM.	Implementation progress	(Number of milestones achieved / Total milestones) × 100	100%	Ongoing
	Alignment of Asset Accounting (Depreciation) and AMPs	Define data attribute requirements for informed decision making and implement into the Asset Information Management System.	Alignment score	Number of Asset Classes aligned / Total Asset Classes) × 100	100%	Ongoing
Asset	Lifecycle Costing	Assess the use of lifecycle costing and scenario planning in capital investment decisions.	Effective use of lifecycle costing and scenario planning	Total Number of Capital	80%	Ongoing
Portfolios	and Scenario Planning			Investment Decisions Made/ Number of Capital Investments		
				Supported by Lifecycle Costing & Scenario Planning) ×100		
	Condition Assessments Coverage	Track the completion and quality of condition assessments.	Condition assessment completion rate	(Number of completed assessments / Total required assessments) × 100	100%	Annually
	Componentisation Progress	Monitor the completion of asset class componentisation.	Percentage of componentisation completed	(Number of componentised assets / Total assets) × 100	90%	Once-off, with updates
	Planned versus reactive Maintenance	Proportion of maintenance activities that are planned versus those that are reactive	Planned vs Reactive Maintenance Ratio	Hours or Costs Spent on Reactive Maintenance / Hours or Costs Spent on Planned Maintenance	80% Planned 20% Reactive	Monthly (Trend to be reported)
	Outsourcing and Leasing Decisions	Monitor assessments of outsourcing and lease/buy options for service delivery improvements.	Outsourcing and leasing decision rate	(Number of decisions made / Total number of areas considered) × 100	100%	Periodically
	Demand Forecast Accuracy	Measure the accuracy and effectiveness of demand forecasts based on demographic and utilisation data.	Demand forecast accuracy rate	(Forecasted demand – Actual demand) / Forecasted demand × 100	±5%	Annually
	Climate Resilience Integration	Assess the incorporation of climate resilience strategies into asset designs and management practices.	Resilience strategy integration rate	(Number of assets with resilience strategies / Total assets) × 100	100%	Ongoing



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