

Asset Management Policy

Department:	Assets
Document ID:	<CentralDocs ID>
Approved by:	...
Effective date:	November 2021
Next review:	November 2023

Purpose

This policy provides the framework for Central Otago District Council to establish, maintain and improve its *Asset Management System*. It sets out Council's commitment to managing its assets and asset-related services effectively and sustainably, to meet the needs of the community.

Definitions

Asset Management: The systematic and coordinated activities and practices of an organisation, to deliver on its objectives optimally and sustainably through the cost-effective lifecycle management of assets.

Asset Management System: the set of inter-acting elements and processes of an organisation to achieve its Asset Management objectives.

Objectives

1. Council's **Asset Management System** is improved to the target level of maturity, defined in Attachment A, by December 2023.
2. Council's agreed **Levels of Service** are determined with consideration of Council's strategic goals, customer (community) expectations and legislative and regulatory requirements.
3. Council's **Assets and Activities** are managed to achieve agreed levels of service, in the most cost-effective manner, for current and future customers.

Principles

1. Council's asset management system:
 - a. Complies with the requirements of the Local Government Act (2002) and other relevant legislation.
 - b. Follows the framework in the IPWEA International Infrastructure Management Manual
 - c. Is aligned to the international asset management standard, ISO 55001.
2. Council's assets are managed in a sustainable, safe, cost-effective manner; minimising lifecycle costs while delivering agreed and affordable levels of service and managing risk.
3. Council's asset management activities are funded and delivered in a transparent and equitable manner, fostering community and Council confidence.

4. Asset management decision making is transparent and supported by accessible, reliable, and current asset information where appropriate.
5. Investment decisions priorities are firstly to meet legislative requirements and renew existing assets, secondly to meeting growth requirements, and thirdly to address agreed level of service improvements.
6. Resource capacity is appropriate, capable, and available ahead of need.
7. There is strong collaboration between relevant staff, teams and service providers, effective working relationships and information-sharing.

Scope

Assets and Activities

This Policy applies to the following Council-owned assets and activities:

- Water Supply
- Wastewater
- Stormwater
- Transportation
- Parks and Aquatic Centres
- Property and Community Facilities
- Waste Management

Scope of the Asset Management System

Figure 1 shows the scope of the planning documents in the Asset Management System (shaded) and the Council planning context that informs, and is informed by, Asset Management planning.

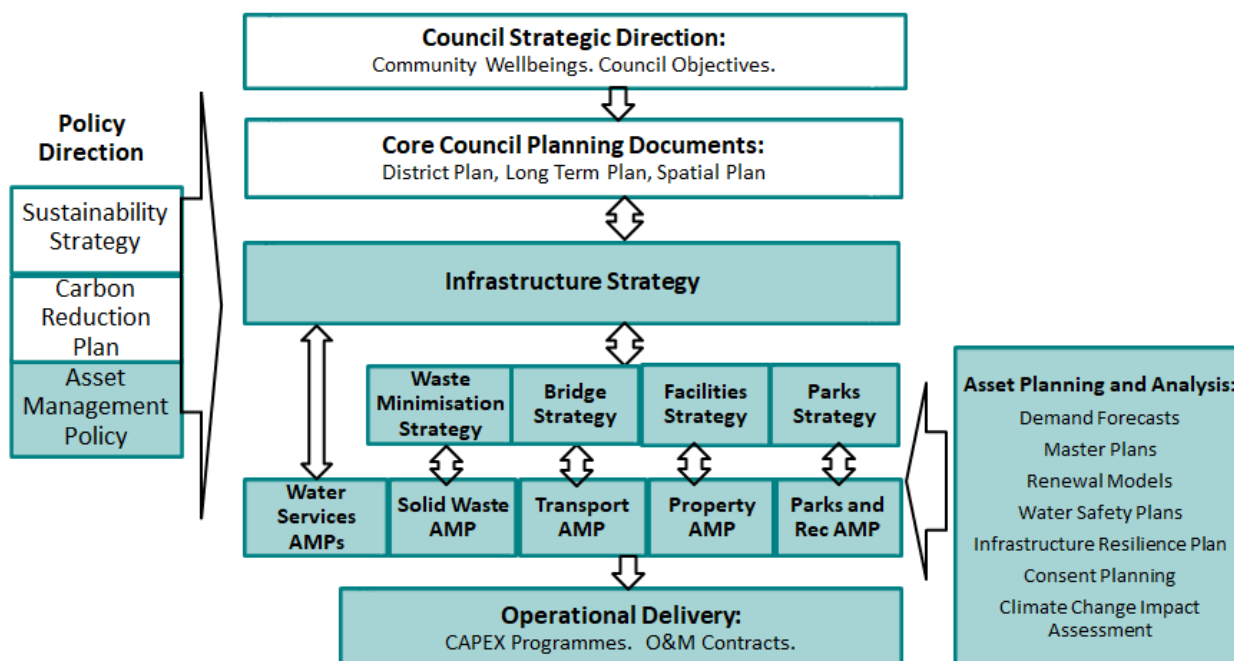


Figure 1: Scope of the Asset Management System (shaded)

Asset Management Requirements

To deliver Council's Asset Management objectives, Council will:

Function	Requirements
Activity (Asset) Management Plans (AMP)	<ul style="list-style-type: none"> Update AMPs in the year preceding the delivery of the council's Long-Term Plan, aligned with latest information in Council planning and strategy documents (Fig 1). Seek Council approval of the AMP to provides the basis for the draft activity inputs and budgets for the LTP. Update AMPs to align with LTP, when adopted, or add preface to AMP explaining changes.
Levels of Service and Performance Management	<ul style="list-style-type: none"> Maintain a performance management framework linking community outcomes, council objectives, levels of service and performance measures for all core activities. Annual reporting and analysis of performance results for all performance measures in the Long-Term Plan and AMP.
Demand Management	<ul style="list-style-type: none"> Review activity demand forecasts, demand management strategies and asset growth investment strategies at least 3 yearly and incorporate in the AMP with stated source information, assumptions and confidence levels.
Risk Management	<ul style="list-style-type: none"> Update the activity risk registers annually, using Council's risk management framework, and include a summary of extreme and high risks and proposed treatments in the AMPs. Document critical assets and management strategies (including spares management) in the AMP. Update the Infrastructure Resilience Plan and Emergency (Infrastructure Response Plan) three yearly.
Information Management	<ul style="list-style-type: none"> Maintain and improve asset registers with asset condition and performance information to the level of maturity defined in this Policy. Provide a fit-for-purpose Asset Management Information System to support the delivery of the requirements of this Policy.
Operations and Maintenance	<ul style="list-style-type: none"> Regularly develop, document and review 'optimised' O&M schedules, including condition and performance monitoring programmes, which prioritise high risk and criticality assets. Consider alternative service delivery options, risks and costs when major contracts are renewed.
Capital Investment	<ul style="list-style-type: none"> Develop risk, condition and performance-based renewal forecasts for major asset groups. Collate and prioritise investment projects from all planning sources (refer Fig 1), including renewals, and include forecasts in AMP with supporting assumptions and confidence levels.
Financial Management	<ul style="list-style-type: none"> Revalue assets in accordance with Accounting and Financial Reporting Standards. Prepare financial forecasts in the AMPs for a minimum of ten-year period and for the Infrastructure Strategy for a 30-year period; include detailed assumptions, source information and confidence levels.
Improvement Planning	<ul style="list-style-type: none"> Undertake tri-annual asset management maturity assessments using the IIMM Maturity Framework. Use the maturity assessment as the basis for development of updated Asset Management Improvement Plan which outlines tasks, deliverables, resources and timeframes. Annually report on the Improvement Plan to the Executive Team and Risk and Audit Committee.

Table 1: Asset Management Requirements

Roles and Responsibilities

Party	Responsibility
Council	<ul style="list-style-type: none"> • Stewardship of Council's assets, ensuring funds are resources are available to achieve the objectives in this Policy. • Governance of this Asset Management Policy, through the Audit and Risk Committee. • Provide strategic direction and priorities prior to the development of the infrastructure strategy and AMPs. • Approve AMPs as the basis for the draft Long-Term Plan, including the investment decision criteria, levels of service, performance targets and budget forecasts.
Chief Executive	<ul style="list-style-type: none"> • Establish an Asset Management Working Group with representatives from finance, information services and activity managers to oversee the implementation of this Policy and the Asset Management Improvement Programme. • Act as leader and advocate of Asset Management with staff, the council and the community. • Work with the Executive Team to foster a multi-discipline approach to Asset Management.
Infrastructure Executive Manager	<ul style="list-style-type: none"> • Initiate tri-annual reviews of the asset management maturity assessment and improvement programme. • Provide annual progress reports to the Audit and Risk Committee and Executive Team. • Lead the Asset Management Working Group.
Asset Management Working Group	<ul style="list-style-type: none"> • Lead, monitor and support the development and delivery of the Asset Management Improvement Programme and the tri-annual AMP updates. • Develop and adopt processes for reporting Asset Management Improvement Plan progress to the Executive Team. • Ensure that templates, tools, training and guidance are available to asset managers to enable them to enact their responsibilities in this Policy. • Foster a multi-disciplinary approach to Asset Management noting some projects are led by, or have significant input to, teams other than the Assets team. • Ensure that Asset Management Working Group members contribute the relevant inputs in time for Activity Management Plan development, including: <ul style="list-style-type: none"> ○ Population forecasts, growth forecasts and locations of new development. ○ Funding impacts of expenditure forecasts. ○ Leading community consultation around levels of service and costs.
Asset / Activity Managers	<ul style="list-style-type: none"> • Deliver the requirements of this Policy for their activity. • Provide appropriate representation and resourcing to the Asset Management Working Group and corporate asset management improvement projects. • Work collaboratively with other departments to promote a multi-disciplinary approach. • Support Asset Management activities across the council by making asset data and information accessible and reliable. • Provide asset and cost information to support strategic and level of service decision making by Council and the community. • Continually seek innovative ways to maintain asset information, manage assets and deliver services more effectively. • Build the asset management capability and capacity of staff to support achievement of asset management maturity targets.

Table 2: Asset Management Roles and Responsibilities

Improvement Roadmap

Key milestones in the Asset Management Improvement Plan include:

Timeframe	Key Project and Initiatives
Oct – Dec 2021	<ul style="list-style-type: none"> • Approval of this Asset Management Policy • Establish an Asset Management Working Group.
Jan - Feb 2022	<ul style="list-style-type: none"> • Develop a detailed AM improvement implementation plan. • Confirm asset management information system and implementation strategy. • Review / audit data capture processes by contractor and data quality / completeness.
Mar - Sep 2022	<ul style="list-style-type: none"> • Complete inspections and capture of asset information for above-ground 3-waters assets and development of renewal and upgrade programme. • Finalise and implement project management framework. • Develop / update Facilities and Parks strategies. • Three-Waters and Roding Valuations*
July – Dec 2022	<ul style="list-style-type: none"> • Implement the capital projects database for all Council activities. • Implement asset management information system (parks and property), including interface with contractor system. • Update, if required, key planning documents and processes that will inform AMP and LTP including: <ul style="list-style-type: none"> ▪ Renewal models (all major asset groups). ▪ Demand forecasts. ▪ Master Plans/growth plans. ▪ Resilience Plan. ▪ Risk registers.
Jan – June 2023	<ul style="list-style-type: none"> • Review strategic issues, priorities and options and levels of service with Council. • Develop draft Infrastructure Strategy and AMPs. • Property Revaluation*
June – Dec 2023	<ul style="list-style-type: none"> • External review AM Maturity Assessment. • Review contract performance measures (aligned to revised levels of service). • AMP / Infrastructure Strategy – Council consultation and revision for input to the 2024 Long Term Plan.

Table 3: Asset Management Roadmap

* Revaluation Frequency:

Three Waters and Roding: annually by 31 May 2022.

Property: three yearly by 31 May 2023 (desktop assessment annually), commercial investment property annually.

Parks and Pools: five yearly by 31 May 2025 (desktop assessment annually).

Attachment A: Asset Management Maturity Targets

The asset management maturity targets shown Table 4 are based on the scoring system in Table 5. Maturity targets are assessed as being appropriate to the important and risk of Council assets and activities.

Further details on how these targets were derived and current status of maturity is included in the report *Central Otago District Council Asset Management Maturity Assessment (Infrastructure Decisions, October 2018.)*

Activity	Transport	Three Waters	Property	Parks and Aquatics	Waste Management
Strategic Direction	Advanced (90)	Intermediate (80)	Core-Int (70)	Core (60)	Core (60)
Levels of Service	Advanced	Intermediate	Core-Int	Core	Core
Demand Management	Intermediate	Intermediate	Core-Int	Core	Core
Asset Register Data	Advanced	Intermediate	Core-Int	Core	Core
Performance and Condition	Intermediate	Intermediate	Core-Int	Core	Core
Decision-Making	Advanced	Intermediate	Core-Int	Core	Core
Risk Management	Intermediate	Intermediate	Core-Int	Core	Core
Operational Planning	Intermediate	Intermediate	Core-Int	Core	Core
Capital Planning	Intermediate	Intermediate	Core-Int	Core	Core
Financial Planning	Intermediate	Intermediate	Core-Int	Core	Core
Leadership and Teams	Intermediate	Intermediate	Core-Int	Core	Core
Activity Management Plans	Intermediate	Intermediate	Core-Int	Core	Core
Quality Management	Intermediate	Intermediate	Core-Int	Core	Core
Information Systems	Intermediate	Intermediate	Core-Int	Core	Core
Service Delivery Models	Advanced	Intermediate	Core-Int	Core	Core
Improvement Planning	Intermediate	Intermediate	Core-Int	Core	Core

Table 4: Target Levels of Asset Management Maturity

Section	Aware	Basic	Core	Intermediate	Advanced
2.1 AM Policy Development	Corporate awareness of the benefits of AM.	Corporate expectation expressed in relation to development of AM Plans and AM objectives.	AM Policy and AM Objectives developed, aligned to corporate goals and strategic context. Strategic context described in SAMP or AMP.	AM System scope is defined and documented. Strategic context (internal, external, customer environment) analysed and implications for the AM System documented in the SAMP or AMP.	AM Policy and SAMP fully integrated into the organisation's business processes and subject to defined audit, review and updating procedures.
2.2 Levels of Service and Performance Management	The organisation recognises the benefits of defining levels of service, but they are not yet documented or quantified.	Basic levels of service have been defined and agreed and some basic performance measures being reported. Customer Groups have been defined and requirements are understood.	Levels of service and performance measures in place covering a range of service attributes. Annual reporting against performance targets. Customer Group needs analysed and documented.	Level of service and cost relationship understood and considered in determining performance targets. Customers are consulted on significant service levels and options.	Customer communications plan in place. Levels of service are integral to decision making and business planning.
2.3 Demand Forecasting	Future demand requirements generally understood but not documented or quantified.	Demand forecasts based on experienced staff predictions, with consideration of known past demand trends and likely future growth patterns.	Demand Forecasts based on projection of a primary demand factor (eg: population) and extrapolation of historic trends. Risk associated with demand changes understood and documented. Demand management strategies considered.	A range of demand scenarios is developed (eg: high/medium/low) Planning scenario selected considering factors such as risk, lead time. Demand management is considered in all strategy and project decisions.	Demand forecasts based on mathematical analysis of past trends and primary demand factors. A range of demand scenarios is developed. Demand management is considered in all strategy and project decisions.
2.4 Asset Register Data	Asset information in combination of sources and formats. Awareness of need for centralised asset register.	Basic physical information recorded in a spreadsheet or similar (e.g. location, size, type), but may be based on broad assumptions or not complete.	Enough information to complete asset valuation (basis attributes, replacement cost and asset age/ life) and support prioritisation of programmes (criticality). Asset hierarchy, identification and attribute systems documented. Metadata held as appropriate.	A reliable register of physical, financial and risk attributes recorded in an information system with data analysis and reporting functionality. Systematic and documented data management process in place.	Systematic and fully optimised data collection programme with supporting metadata. Timely data updating processes are in place and regularly audited.
2.5 Asset Condition and Performance	Condition and performance understood but not quantified or documented.	Adequate data and information to confirm current performance against AM objectives.	Condition and performance information is suitable to be used to plan maintenance and renewals to meet over the short term. May be a mix of asset level and network level information.	Future condition and performance information is modelled considering level of service and demand requirements.	Information on work history, cost, condition and performance, recorded at component level ('maintenance management') level. The data collection programme is adapted to reflect the assets' lifecycle stage and risk.
3.1 Decision Making	AM decisions based largely on staff judgement.	Corporate priorities incorporated into decision making.	Formal decision frameworks (eg: multi criteria analysis, net present value analysis), are applied to major projects and programmes.	Options analysis and prioritisation techniques are applied to all operational and capital asset programmes.	Decision framework enables projects and programmes to be optimised across all activity areas

Section	Aware	Basic	Core	Intermediate	Advanced
			Decision criteria are based on the organisations' AM objectives / levels of service.	Critical assumptions and estimates are tested for sensitivity to results.	considering benefits and costs of options. Formal risk-based sensitivity analysis is carried out.
3.2 Risk Management	Risk management is identified as a future improvement.	Critical services and assets understood and considered by staff involved in maintenance / renewal decisions. Risk framework developed.	Critical assets and high risks identified. Risk register in place. Documented risk management strategies for critical assets and high risks. Risk management policy in place.	Systematic risk analysis to assist key decision-making. Risk register regularly monitored and reported. Risk managed and prioritised consistently across the organisation. Resilience level assessed and improvements identified.	Resilience strategy and programme in place including defined levels of service for resilience. Risks are quantified and risk mitigation options evaluated. Risk is integrated into all aspects of decision making.
3.3 Operational Planning	Operational processes based on historical practices.	Operating Procedures are available for critical processes. Operations structure in place and roles assigned.	Documented procedures are available for all operational processes. Operational support requirements are in place. Improvement processes are in development (eg: 'root cause analysis').	Operational objectives and intervention levels defined and implemented, aligned with organisational objectives. Evidence of optimisation of O&M programmes. O&M programmes monitored and audited.	O&M programmes optimised, monitored and regularly audited. Continual improvement can be demonstrated for all operational processes (audit recommendations are monitored through to completion).
3.4 Capital Works Planning	Capital investment projects are identified during annual budget process.	There is a schedule of proposed capital projects and associated costs for the next 3-5 years, based on staff judgement of future requirements.	Projects have been collated from a wide range of sources and collated into a project register. Capital projects for the next three years are fully scoped and estimated. A prioritisation framework is in place to rank the importance of capital projects.	Formal options analysis and business case development has been completed for major projects in the 3-5 year period. Major capital projects for the next 10-20 are conceptually identified and broad cost estimates are available.	Long-term capital investment programmes are developed using advanced decision techniques such as predictive renewal modelling.
3.5 Financial and Funding Strategies	Financial planning is largely an annual budget process, but there is intention to develop longer term forecasts. The organisational focus is on the operating statement rather than the balance sheet.	Assets are re-valued in accordance with financial reporting and accounting standards. Five to nine-year financial forecasts are based on extrapolation of past trends and broad assumptions about the future.	Asset revaluations based on reliable asset data. Ten-year financial forecasts based on current comprehensive AMPs with detailed supporting assumptions/reliability factors. Significant assumptions are specific and well-reasoned. Expenditure captured at a level useful for AM analysis.	Ten-year plus financial forecasts based on current comprehensive AMPs with detailed supporting assumptions/reliability factors and high confidence in accuracy. Funding sources are fully understood and matched with expenditure forecasts over the long term. Alternative funding sources have been fully explored. Asset expenditure information is linked with asset performance information.	The organisation publishes reliable ten-year plus financial forecasts based on comprehensive, advanced AMPs with detailed underlying assumptions and high confidence in accuracy. Advanced financial modelling provides sensitivity analysis, evidence-based whole of life costs and cost analysis for level of service options.
4.1 AM Teams	The organisation recognises the benefits of an asset management function	Asset Management functions are performed by a small groups and roles reflect requirements.	Position descriptions incorporate AM roles. AM co-ordination processes established. Ownership and support of AM by the	Organisational structure supports AM. Roles reflect AM resourcing requirements and reflected in position descriptions for key roles. Consistent	Formal documented assessment of AM capability and capacity requirements to achieve AM objectives. Demonstrable

Section	Aware	Basic	Core	Intermediate	Advanced
	within the organisation but has yet to implement a structure to support it.		leadership. Awareness of AM across most of the organisation.	approach to AM across the organisation. Internal communication plan established.	alignment between AM objectives, AM systems and individual responsibilities.
4.2 AMPs	Stated intention to develop AM Plans	AM Plans contains basic information on assets, service levels, planned works and financial forecasts (5-10 years) and future improvements.	AM objectives are defined with consideration of strategic context. Approach to risk and critical assets described, top-down condition and performance assessment, future demand forecasts, description of supporting AM processes, 10-year financial forecasts, 3-year AM improvement plan.	Analysis of asset condition and performance trends (past/future), customer engagement in setting levels of service, ODM/risk techniques applied to major programmes. Strategic context analysed with risks, issues and responses described.	Evidence of programmes driven by comprehensive decision-making techniques, risk management programmes and level of service/cost trade-off analysis. Improvement programmes largely complete with focus on ongoing maintenance of current practice.
4.3 Management Systems	Awareness of need to formalize systems and processes.	Simple process documentation in place for service-critical AM activities.	Basic Quality Management System in place that covers all organisational activities. Critical AM processes are documented, monitored and subject to review. AM System meets the requirements of ISO 55001.	Process documentation implemented in accordance with the AM System to appropriate level of detail. Internal management systems are aligned.	ISO certification to multiple standards for large asset intensive organisations, including ISO 55001. Strong integration of all management systems within the organisation.
4.4 Information Systems	Intention to develop an electronic asset register / AMIS.	Asset register can record core asset attributes – size, material, etc. Asset information reports can be manually generated for AM Plan input.	Asset register enables hierarchical reporting (at component to facility level). Customer request tracking and planned maintenance functionality enabled. System enables manual reports to be generated for valuation, renewal forecasting.	Spatial relationship capability. More automated analysis reporting on a wider range of information.	Financial, asset and customer service systems are integrated, and all advanced AM functions are enabled. Asset optimisation analysis can be completed
4.5 Service Delivery Mechanisms	Asset management roles (owner and service delivery) are generally understood.	Service delivery roles clearly allocated (internal and external), generally following historic approaches.	Core functions defined. Procurement strategy/policy in place. Internal service level agreements in place with the primary internal service providers and contract for the primary external service providers.	Risks, benefits and costs of various outsourcing options considered and determined. Competitive tendering practices applied with integrity and accountability.	All potential service delivery mechanisms reviewed, and formal analysis carried out to identify best delivery mechanism.
4.6 Improvement Planning	The organisation recognises the benefits of improving asset management processes and practices but has yet to develop an improvement plan.	Improvement actions identified and allocated to appropriate staff.	Current and future AM performance assessed, and gaps used to drive the improvement actions. Improvement plans identify objectives, timeframes, deliverables, resource requirements and responsibilities	Formal monitoring and reporting on the improvement programme to Executive Team. Project briefs developed for all key improvement actions.	Improvement plans specify key performance indicators (KPIs) for monitoring AM improvement and these are routinely reported.

Table 5: Asset Management Maturity Scoring System