

ASSET MANAGEMENT PLAN

Transport Assets 2024





Acknowledgement of Country

We acknowledge the traditional custodians of the land on which we work and live, the Gathang-speaking people and pay our respects to all Aboriginal and Torres Strait Islander people who now reside in the MidCoast Council area. We extend our respect to Elders past and present, and to all future cultural-knowledge holders.

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V3.0	June 2023	Amended to include: - other transport assets (footpaths, kerb and gutter, road furniture) - Re-issued Community Strategic Plan and Delivery Plan and Operational Plan - Adopted Pedestrian Access and Mobility Plan - Workshopped Risk Management Plan	MMcF	SN	
V4.0	March 2025	Amended to include: - Financial Statements November 2024 - ISO 550xx 2024 - MidCoast Council Asset Management Strategy - MidCoast Council Roads Strategy - Asset Conditions and Service Levels Review – 2025 - Revised NAMS+ template (V1.16)	MMcF	SN	
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Contents

1. Executive Summary	6
1.1 Purpose of the Plan	6
1.2 Asset Description	6
1.3 Levels of Service	6
1.4 Future Demand	7
1.5 Lifecycle Management Plan	7
1.6 Risk Management	8
1.7 Financial Summary	9
1.8 Monitoring and Improvement Program	9
2. Introduction	10
2.1 Background	10
2.2 Principles, Goals and Objectives of Asset Management	13
3. Levels of Service	15
3.1 Customer Research and Expectations	15
3.2 Corporate Goals and Strategic Links	15
3.3 Legislative Requirements	17
3.4 Customer Values	18
3.5 Customer Levels of Service	19
3.6 Technical Levels of Service	20
4. Future Demand	24
4.1 Demand Drivers	24
4.2 Demand Forecasts	24
4.3 Impacts and Demand Management Plan	24
4.4 Asset Programs to meet Demand	25
4.5 Climate Change Adaptation	25
5. Lifecycle Management Plan	27
5.1 Background Data	28
5.2 Operations and Maintenance Plan	32

5.3	Renewal Plan	34
5.4	Acquisition Plan	37
5.5	Disposal Plan	39
5.6	Summary of asset forecast costs	40
6.	Risk Management Planning	41
6.1	Critical Assets	41
6.2	Risk Assessment	41
6.3	Infrastructure Resilience Approach	46
6.4	Service and Risk Trade-Offs	46
7.	Financial Summary	47
7.1	Financial Sustainability and Projections	47
8.	Assumptions and Improvement Planning	49
8.1	Data and Information Sources	49
8.2	Key Assumptions	49
8.3	Forecast Reliability and Confidence	49
8.4	Improvement Plan	51
8.5	Monitoring and Review Procedures	51
8.6	Performance Measures	52
9.	References	53

1. Executive Summary

Our community relies on a diverse portfolio of transport infrastructure assets, including roads, bridges, roundabouts and islands causeways, signage and marking and carparks, valued at approximately \$1.27b.

This Asset Management Plan (AM Plan) and others, provide a strategic framework for managing our community's infrastructure assets, ensuring they remain safe, reliable, and capable of meeting current and future demands.

1.1 Purpose of the Plan

An AM Plan aims to:

- Provide a systematic approach to asset management
- Address critical risks associated with aging infrastructure and limited funding
- Ensure infrastructure supports the community's social, economic, and environmental goals

This AM Plan details information about MidCoast Council's (Council's) transport infrastructure assets with actions required to provide an agreed level of service in the most cost-effective manner while outlining associated risks. The AM Plan defines the services to be provided, how the services are provided and what funds are required over the 10-year planning period. The AM Plan links to a Long Term Financial Plan (LTFP) which considers a 10-year planning period.

1.2 Asset Description

This AM Plan covers the infrastructure assets that provide a safe and efficient network for travel within and through the local government area, by vehicle, bicycle or on foot. The Roads Network comprises:

- 3,119,988m² sealed Regional Roads
- 4,946,308m² sealed Urban Roads
- 6,349,530m² sealed Rural Roads
- 8,152,660m² unsealed Rural Roads
- 84,566m² unsealed Urban Roads
- Roundabouts & islands, causeways & floodways, kerb & gutter, signage & marking, and carparks
- Footpaths and cycleways

The above infrastructure assets have a replacement value estimated at \$1,271,911,000 as at 30 June 2024. Bulk earthwork values are excluded from this AM Plan due to them being non-depreciable.

1.3 Levels of Service

This AM Plan covers the infrastructure assets that provide a safe, reliable and well-maintained road and broader transport network for active and shared travel, the whole road structure and the footpaths and cycleways.

Recent consultation with the Community has prompted modification of 'Satisfactory Condition' from Condition 2 (Good) to Condition 3 (Fair).¹

The allocation in the Planned Budget is insufficient to continue providing existing services at current levels for the planning period.

The main service consequences of the Planned Budget are:

- Roads, and associated asset components, will deteriorate at a faster rate
- Deteriorated roads, kerb and gutter and paths will remain deteriorated
- Most sub-standard roads will never be upgraded to current standards

1.4 Future Demand

The factors influencing future demand and the impacts they have on service delivery are created by population growth, demographic and lifestyle changes and climate change.

These demands will be approached using a combination of managing existing assets, upgrading existing assets and providing new assets and different assets to meet demand. Demand management practices may also include a combination of non-asset solutions, insuring against risks and managing failures.

Strategies to manage these demands are discussed in Section 4.0.

1.5 Lifecycle Management Plan

How we plan to manage and operate the assets at the agreed levels of service throughout their lifecycle is contingent on the 10-year LTFP.

Furthermore, when Council commits to the upgrade of existing and acquisition of new assets, future operations, maintenance and renewal costs including depreciation will increase.

1.5.1 What does it Cost?

The lifecycle costs necessary to provide the services covered by this AM Plan include the costs of the operation, maintenance, renewal and upgrade of existing assets, and the acquisition of new assets to meet demand. Disposal of assets is also considered.

When lifecycle costs are prepared for a minimum 10-year planning period, they can be used to inform the 10-year LTFP. The first 10-year lifecycle forecast is estimated to cost \$701,308,032 or \$70,130,800 on average per year.

Depreciation is excluded from these cost estimates.

1.5.2 What we will do

The funding made available in the first 10 years of the LTFP is **\$575,848,000** or \$57,584,800 on average per year which is approximately 82.11% of the cost to undertake the lifecycle activities.

The reality is, only what is funded in the LTFP can be provided. Informed decision-making depends on the AM Plan emphasising the consequences of planned budgets on the service levels provided and communicating the residual risks. It is important to ensure Council is delivering the services in a financially sustainable manner.

¹ MidCoast Asset Condition Survey 2025, [Asset Conditions and service levels | Have Your Say](#)

The 10-year LTFP results in a shortfall of \$-12,546,000 on average per year of the forecast lifecycle costs required to provide services. This is shown in Figure 1.5.2 below.

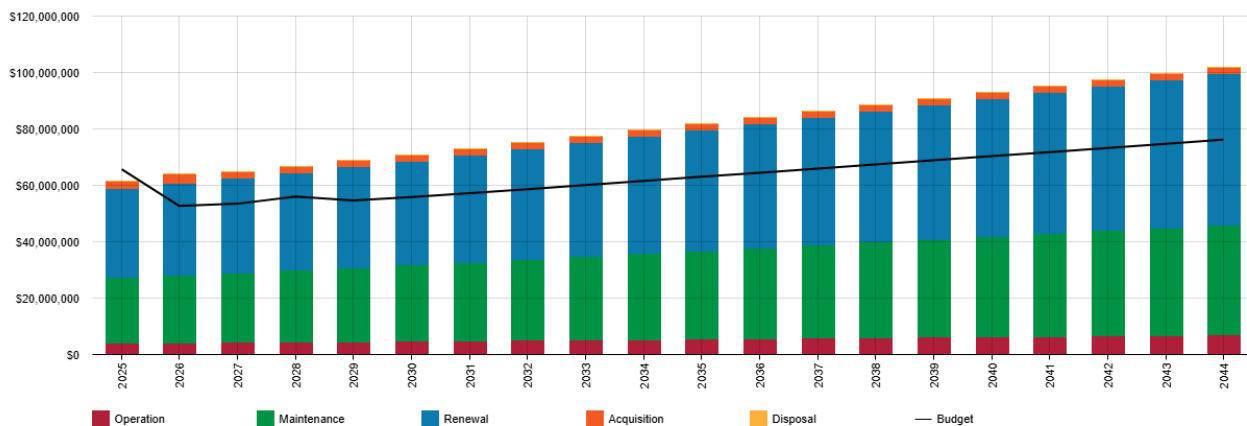


Figure 1.5.2 Forecast Lifecycle Costs and Planned Budgets

\$ values are shown in real values (i.e. current values, net of inflation).

We plan to provide Transport Assets services for the following:

- Operation, maintenance and renewal of Regional Roads, Rural Roads (sealed and unsealed), Urban Streets, Carparks, Bridges (the subject of another Asset Management Plan), Footpaths and Cycleways to meet service levels set by Council in annual budgets.
- Construction of new footpaths and cycleways and the initial seal of rural roads to meet acquisition plans determined by Council for the 10-year planning period.

1.5.3 What we cannot do

We currently do **not** allocate enough budget to sustain these services at the proposed standard or to provide all new services being sought. Works and services that cannot be provided under present funding levels are:

- Resealing roads at nominated end-of-life, to best protect the pavement beneath
- Renewing pavements when they need to be renewed to meet the expected service level
- Upgrading roads to meet current standards and expected level of service, even as part of renewal
- Maintaining the asset components to ensure the asset meets its intended life.

The current level of funding allocated to the road network is providing a lower level of service with works programs being restrained based on allocated budget. This will continue to lead to a higher proportion of defects and lower satisfaction over the term of the Asset Management Strategy.

1.6 Risk Management

Our present budget levels are insufficient to continue to manage risks in the medium term.

The main risk consequences are:

- Increased dissatisfaction by road users, loss of reputation and credibility

- Increased road user costs, vehicular damage and accidents
- Deterioration to beyond any practical means of recovery

We will endeavour to manage these risks within available funding by:

- Reviewing service levels for maintenance and design standards for construction and renewal
- Developing the most effective selection and prioritisation of reseals and renewal works
- Monitoring the road network condition to track and report trends.

1.7 Financial Summary

Providing financially sustainable and affordable services from infrastructure requires the careful management of service levels, costs and risks.

The 10-year LTFP is \$57,584,800 on average per year giving a 10-year funding shortfall of \$-12,546,000 per year. This indicates that 82.11% of the forecast costs needed to provide the services documented in this AM Plan are accommodated in the LTFP.

Asset values are forecast to increase as additional assets are added.

1.8 Monitoring and Improvement Program

Key assumptions made in this AM Plan are:

- Grant funding for asset renewals and new assets will continue, and will help close the gap, although the amounts and timing are unknown
- The service levels 'inherited' from the three amalgamated councils or else adopted internally are approximate to what the community expects, pending analysis of Levels of Service survey results
- Demand forecast factors are estimated, based on best available information.

The Alternate Method was used to forecast the renewal lifecycle costs for this AM Plan.

This AM Plan is based on information from a range of sources ranging from highly reliable to uncertain, resulting in a reasonable level of confidence. The quality of the information will be reviewed in subsequent revisions of this plan in order to achieve a highly reliable level of confidence.

The next steps resulting from this AM Plan to improve asset management practices are:

- Review asset data for currency and completeness, to achieve a high level of confidence and reliability
- Review procedures and methodologies that determine operation, maintenance, renewal and disposal practices to ensure effectiveness and efficiency of the asset holding
- Involve Council stakeholders (staff from Project Delivery, Design and Maintenance) in asset management by workshopping Risk Management, Process Reviews, Standards and Maintenance practices.

Some of these steps have already been initiated and others have been completed following the initial draft of this document as the Transport Asset Management Plan.

2. Introduction

2.1 Background

This AM Plan communicates the requirements for the sustainable delivery of services through management of assets, compliance with regulatory requirements, and required funding to provide the appropriate levels of service over the planning period.

The AM Plan is to be read in conjunction with Council planning documents. This includes the Asset Management Policy and Asset Management Strategy (see MidCoast Council's Asset Management Framework described in the Asset Management Strategy), along with other key planning documents:

- *MidCoast 2035 Community Strategic Plan (2025-2035)*
- MidCoast Council Delivery Program (2025-2029)
- MidCoast Council Operational Plans
- MidCoast Council Resourcing Strategy including the:
 - MidCoast Council Asset Management Strategy (2024-2034)
 - Workforce Management Strategy,
 - Long Term Financial Plan and
 - ICT Strategy
- Pedestrian and Access Mobility Plan
- MidCoast Climate Change Strategy
- MidCoast Council Road Strategy

As described in the Asset Management Strategy, Council's asset management journey as a unified organisation has commenced. At the time this Strategy was prepared, we had a single consolidated asset register within our corporate asset management system. The information in this register was migrated from the former Councils' asset registers and databases. Verifying the accuracy and completeness of the data has been identified as a key future focus area to ensure sound asset management decisions are made.

The adoption of the Asset Management Policy on 24 March 2021 was the first step in consolidating the practices and processes from the former councils. This Policy has since been reviewed, in 2025. Although this will take some time to implement across the whole of Council, the Asset Management Policy provides guiding principles for all asset management decisions.

The AM Policy is aligned to ISO 55000 Asset Management standards which provide common, authoritative and understandable terminology, concepts and principles for managing Council's infrastructure assets

Council also makes use of resources from the Institute of Public Works Engineers Australia (IPWEA) who provide manuals, training, templates and user forums. The IPWEA is the peak association for the professionals who deliver public works and engineering services to communities in Australia and New Zealand

As an organisation we have prioritised the need for asset management improvement and have begun our journey to asset management maturity. A May 2021 review of Council's asset management awareness identified a 'basic' level of asset management maturity. A subsequent review in August 2024 identified a 'core' level of asset management maturity had been achieved.

Council staff are preparing individual improvement programs for each asset class to reach beyond a 'core' level of asset management maturity, to intermediate or advanced in the coming years.

The infrastructure assets covered by this AM Plan include the transport assets owned and maintained by Council, including sealed, gravel and unpaved assets. For a detailed summary of the assets covered in this AM Plan refer to Table 5.1.1 in Section 5.

These assets are used to provide a safe and efficient network for travel within and through the local government area, by vehicle, bicycle or on foot.

The infrastructure assets included in this plan have a total replacement value of \$2,878,642,000.

Key stakeholders in the preparation and implementation of this AM Plan are shown in Table 2.1.

Table 2.1: Key Stakeholders in the AM Plan

Key Stakeholder	Role in Asset Management Plan
External Bodies	- Community - Participating in community surveys to determine required LOS - Providing feedback on asset condition and usage - State & Federal Government - Providing funding opportunities to assist with capital renewals and acquisitions - Providing resources for best practice in asset management - Providing guidance regarding transport planning
MidCoast Elected Council	- Representing the needs of community/shareholders - Allocating resources to meet planning objectives in providing services while managing risks - Providing leadership and governance - Adopting an asset management policy and strategy - Considering the impact of financial and service level decisions on Council's assets - Ensuring that organisational resources are allocated to safeguard sustainable service delivery
MidCoast Council Leadership Group	- Allocating resources to the implementation of the Asset Management Strategy and Plans - Ensuring that actions identified in the Asset Management Strategy and Improvement Plan are completed within timeframes - Ensuring the integration and compliance with the Asset Management Policy and Strategy with other policies and business processes of the organisation - Developing and implementing maintenance and capital works programs in accordance with the Integrated Planning and Reporting documents - Delivering Levels of Service to agreed risk and cost standards - Ensuring the community is involved and engaged on all key Council matters affecting service delivery - Managing infrastructure assets in consideration of long-term sustainability - Presenting information to Council on lifecycle risks and costs - Approving the Asset Management Plans
Asset Management Working Group	Providing strategic direction and governance for asset management by contributing to the development and implementation of Council's Asset

Key Stakeholder	Role in Asset Management Plan
	Management Policy, Asset Management Strategy and Asset Management Plans as required by the Office of Local Government's Integrated Planning & Reporting Framework • Collaborating across the organisation to consistently monitor, develop, implement and review all elements of the Asset Management Framework, associated policies and procedures • Monitoring and reporting on the implementation of Asset Management Improvement Plan(s) • Providing a forum for sharing of information and experience as well as providing professional advice and collaboration across the organisation in relation to asset management within the group's 'Terms of Reference'
Corporate Services	• Developing supporting financial processes such as capitalisation and depreciation • Preparing asset sustainability and financial reports incorporating asset depreciation in compliance with current accounting standards • Providing GIS support and administration
Manager, Strategic Asset Planning & Project Management	In consultation with Asset Owners: • Reviewing the Asset Management Policy and Asset Management Strategy and ensuring integration with the Long Term Financial Plan and other Integrated Planning & Reporting documents • Monitoring the development and implementation of the Asset Management Policy, Strategy and Plans • Developing and reviewing policies, processes and practices to ensure effective asset management across all asset classes • Implementing the Asset Management Improvement Plan in accordance with agreed timeframes • Collating and preparing the annual State of our Assets report Providing professional advice and collaborating with other departments of Council in relation to asset management
Team Leader Strategic Assets	• Managing and continually improving Council's asset management system for Transport assets • Developing, implementing and reviewing Council's Asset Management Plans, for Transport assets • Coordinating asset valuations in accordance with relevant accounting codes • Developing and managing processes to ensure the accurate collection and compilation of asset data from both internal and external sources.

Figure 2.1 is an extract from Council's organisational structure which identifies the departments responsible for assets included under this AM Plan.

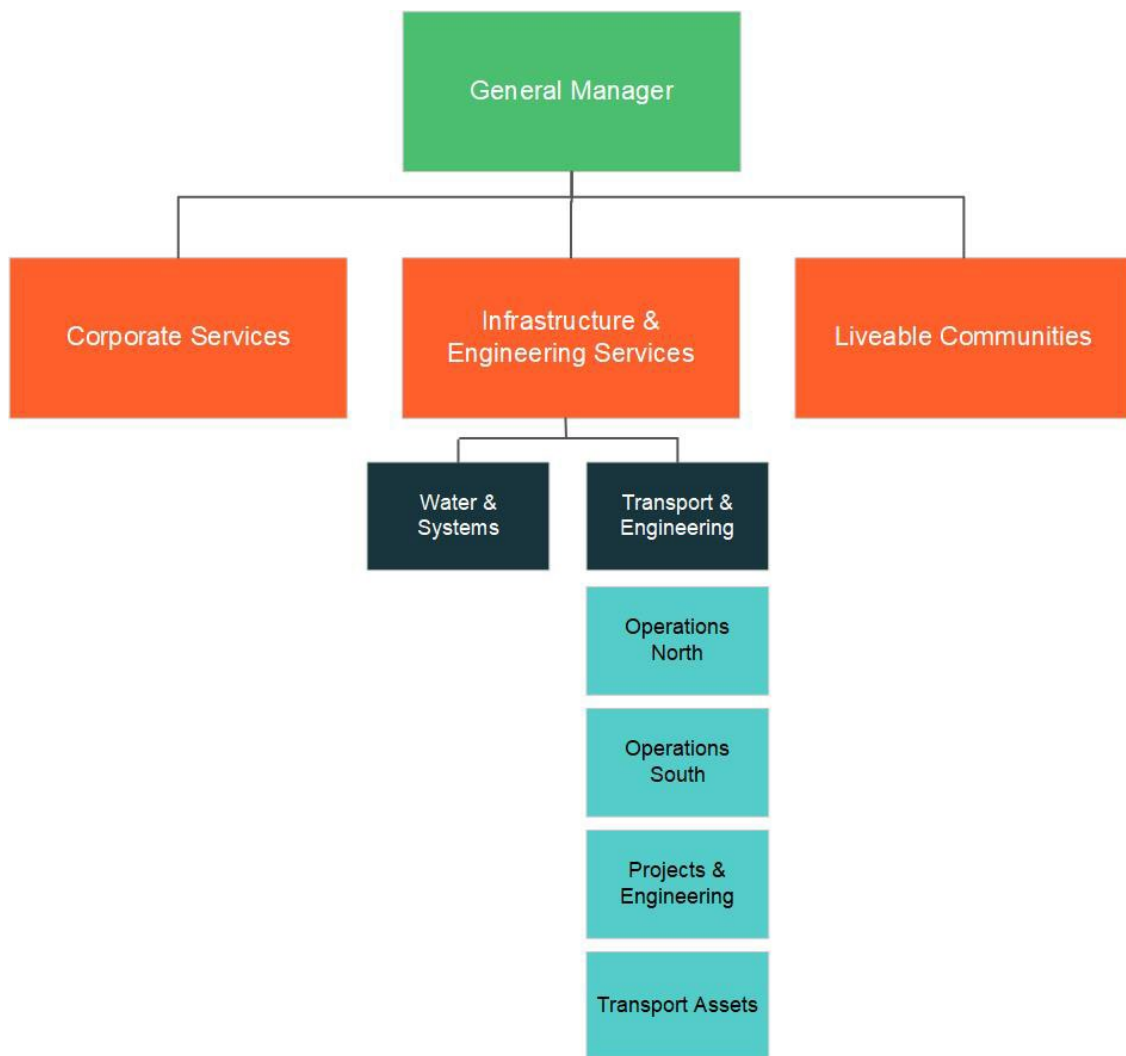


Figure 2.1: Organisational Responsibility for Transport Assets

2.2 Principles, Goals and Objectives of Asset Management

The principles of asset management as per the International Standards for asset management² are:

- **Value:** asset management focuses on the value assets provide to the organisation over time
- **Alignment:** asset management aligns financial, technical and operational decisions with the organisational objectives, promoting vertical and horizontal coordination
- **Leadership:** leadership and sustained commitment at all levels are crucial for successful asset management.

Our goal for managing infrastructure assets is to deliver the defined level of service (as amended from time to time) in the most cost-effective manner for present and future consumers.

The key objectives of infrastructure asset management as defined by the International Infrastructure Management Manual³ are:

- Defining levels of service and monitoring performance
- Managing the impact of growth through demand management and infrastructure investment
- Taking a lifecycle approach to developing cost-effective management strategies for the long-term that meet the defined level of service
- Identifying, assessing and appropriately controlling risks
- Linking to a Long Term Financial Plan which accommodates the required expenditure and how it will be funded.

² ISO 55000:2024 Asset Management – Vocabulary, overview, and principles

³ IPWEA International Infrastructure Management Manual (IIMM), Sec 1.2.1

3. Levels of Service

Levels of service define the standards and performance targets that infrastructure assets are expected to meet to ensure they provide reliable, safe, and efficient services to the community.

3.1 Customer Research and Expectations

A Community Engagement consultation exercise has recently been completed. Initial findings are limited to determining that Condition 3 is Satisfactory, in place of Condition 2 as mandated by the Office of Local Government (OLG). Pending the results of detailed analysis of the survey results, a summary of the results of a Community Satisfaction Survey conducted by Micromex Research in 2023 are shown below in Table 3.1

Table 3.1: Customer Satisfaction Survey Levels

	Community Satisfaction		Community Importance	
	MidCoast Council	Regional Benchmark ⁴	MidCoast Council	Regional Benchmark ⁴
Maintaining local roads	26%	58%	98%	93%
Maintaining footpaths	60%	68%	85%	81%
Provision of bike paths	54%	71%	64%	63%
Road safety	79%	84%	93%	91%
Availability of carparking all day or timed	70%	70%	85%	82%
Overall condition of the local sealed road network	37%	58%	95%	93%

While community satisfaction with road safety and the availability of carparking is relatively high, satisfaction with maintaining local roads and the overall condition of the local sealed road network is significantly lower.

3.2 Corporate Goals and Strategic Links

This AM Plan is prepared under the direction and support of Council's vision, mission, goals and objectives as well as the key directions and strategic objectives as outlined in Council's Community Strategic Plan.

Our vision is **“to be a high performing organisation where we are always striving to be better. One where we work collaboratively and are trusted. One where we are better every day.”**

Council's mission sets out how we are going to achieve our vision, and ensures we are all working towards the same outcomes. Our mission is to **“deliver benefits to the community in a way that adds value and builds trust.”**

Council's aim is to provide sustainable asset management and to ensure assets can deliver the community's desired service levels in priority areas in the most cost-efficient manner. This is

⁴ Micromex has developed Community Satisfaction Benchmarks using normative data from over 60 unique councils, more than 120 surveys and over 68,000 interviews since 2012

considered necessary if we are to achieve the Vision and desired Community Outcomes identified in the *MidCoast 2035* Community Strategic Plan.

The community's vision is:

“Together we can make the MidCoast even better”

The Community Outcomes support the vision. They describe the ‘big picture’ results we want to see for our community for each of five focus areas our *Wellbeing, Natural Environment, Places and Infrastructure, Economic Prosperity, and Leadership*.

The Strategies describe at a high level what the community will do to support the achievement of the Community Outcomes.

The Community Outcomes and Strategies most relevant to Transport Assets and how these are addressed in this AM Plan are summarised in Table 3.2.

Table 3.2: Community Outcomes and Strategies and how these are addressed in this AM Plan

Community Outcome	Strategy	How the Community Outcome and Strategy are addressed in the AM Plan
Our Places & Infrastructure		
... we can travel safely and easily around the MidCoast	PI-5 Provide a safe, reliable and well-maintained road and broader transport network with options for active and safe travel	This AM Plan identifies how the roads and transport assets can be maintained to meet performance, condition and safety requirements, while balancing costs and risk
		This AM Plan addresses the development of walking and cycling networks and infrastructure across the region, proposed in the Pedestrian Access and Mobility Plan
Our Leadership		
Decisions are evidence-based and informed by our input. Decisions also balance the interests of current and future generations	L-1 Inform, engage and involve the community in projects and decision-making	This AM Plan identifies community consultation as a necessary component in defining levels of service
		This AM Plan identifies the community (road users and other customers) as a valid source of information for the management of the local road and path networks
Together, all levels of government can deliver the facilities and services we need.	L-2 Build our ability to deliver community outcomes through capacity building, growing partnerships, and advocating for funding, services and enabling infrastructure	This AM Plan is a key document in the development of a regional transport network, in partnership with RMS

Our Council is financially sustainable	L-4 Deliver services to the community with a focus on customer service, efficiency, continuous improvement and long-term financial health	This AM Plan identifies the need for “developing and reviewing policies, processes and practices to ensure effective asset management across the organisation”
		This AM Plan identifies process review, project management and risk management as tool for effective and efficient delivery of services
		This AM Plan considers levels of service, demand management, efficiencies and their financial impacts
We have confidence and trust in our elected representatives and community leaders	L-3 Provide open and transparent leadership with a focus on clear decision-making processes and ongoing communication with the community	This AM Plan provides for documented, objective methodologies for prioritising maintenance, renewal and acquisition work, which can be demonstrated and explained to the community.

3.3 Legislative Requirements

There are many legislative requirements relating to the management of assets. Legislative requirements that impact the delivery of the roads service are outlined in Table 3.3.

Table 3.3: Legislative Requirements

Legislation	Requirement
Local Government Act 1993	Sets out role, purpose, responsibilities and powers of local governments including the preparation of a long-term financial plan supported by asset management plans for sustainable service delivery
Roads Act 1993	Sets out the rights for the use of public roads, confers certain road related functions on road authorities and regulates the carrying out of various activities
Environmental Planning and Assessment Act 1997	Encourages the proper management, development and conservation of natural and artificial resources, for the purpose of promoting the social and economic welfare of the community and a better environment
Protection of the Environment and Operations Act 1997 (POEO Act)	Enables the Government to set out explicit protection of the environment policies and adopt more innovative approaches to reducing pollution.
Occupational Health and Safety Act 2000	Aims to ensure the health, safety and welfare of people at work. It lays down general requirements which must be met at places of work in NSW.
Public Works and Procurement	An Act to consolidate the Acts relating to Public Works; and to make

Legislation	Requirement
Act 1912	provision in relation to the procurement of goods and services for New South Wales government agencies.
Road Improvement (Special Funding) Act 1989	An Act to make provision with respect to special funding for road improvement, road safety and road related public transport infrastructure; and for other purposes.
Workers Compensation Act 1987	An Act to provide for the compensation and rehabilitation of workers in respect of work-related injuries; to repeal the Workers' Compensation Act 1926 and certain other Acts; and for other purposes.
Civil Liability Act 2002	An Act to make provision in relation to the recovery of damages for death or personal injury caused by the fault of a person; to amend the Legal Profession Act 1987 in relation to costs in civil claims; and for other purposes.
Disability Inclusion Act 2014	An Act relating to the accessibility of mainstream services and facilities, the promotion of community inclusion and the provision of funding, support and services for people with disability; and for other purposes.
Native Vegetation Act 2003	An Act relating to the sustainable management and conservation of native vegetation; to repeal the Native Vegetation Conservation Act 1997; and for other purposes.

3.4 Customer Values

Service levels are defined in three ways: customer values, customer levels of service, and technical levels of service.

Customer Values indicate:

- what aspects of the service are important to the customer
- whether they see value in what is currently provided *and*
- the likely trend over time based on the current budget provision

Table 3.4: Customer Values

Service Objective:

Design, construct and maintain safe and efficient local transport and mobility networks

Customer Values	Customer Satisfaction Measure	Current Feedback	Expected Trend Based on Planned Budget
Comfortable driving surface	Measured roughness	Average roughness value = 109.	Deterioration may exceed the improvement from rehabilitation of worst roads
Minimal delays	Customer feedback	2 written complaints of excessive delays at intersections in past 6 months	Complaints may increase as population grows

All weather access	Customer feedback	Occasional complaints following wet weather	Complaints will increase as materials increase in price
Safety	Customer feedback	Occasional complaints as near misses occur	Complaints will increase as conflicts increase with rise in road user numbers

3.5 Customer Levels of Service

The Customer Levels of Service are considered in terms of:

Condition How good is the service ... what is the condition or quality of the service?

Function Is it suitable for its intended purpose Is it the right service?

Capacity/Use Is the service over or under used ... do we need more or less of these assets?

In Table 3.5 under each of the service measure types (Condition, Function, Capacity/Use) there is a summary of the performance measure being used, the current performance, and the expected performance based on the current budget allocation.

These are quantitative measures related to the service delivery outcome (e.g. number of occasions when service is not available or proportion of replacement value by condition %) to provide a balance in comparison to the customer perception that may be more subjective.

Table 3.5: Customer Level of Service Measures

Type of Measure	Level of Service	Performance Measure	Current Performance	Expected Trend Based on Planned Budget
Condition	Road service meets user expectations	Frequency of road-related customer service requests	1,895 pothole complaints in previous 6 months	Increased customer dissatisfaction is expected without an increase to reseals budget
	Acceptable rideability	Roughness count average	Average roughness value = 103.6	Deterioration as road age is expected to exceed the improvement from rehabilitation of worst roads
	Effective drainage	K&G discharges runoff as intended	Urban reseals identify kerb & gutter repair/replacement to be ~7.5% of length	Proportion of damaged kerb reduces as poorly constructed kerb and gutter is replaced
	Acceptable path surfaces	Extent of injury claims paid	2021/22 3 claims received 8 incidents reported 2022/23 3 claims received 21 incidents reported 2023/24 6 claims received 24 incidents reported	Without funding for inspection and repairs, injuries are likely to increase

Type of Measure	Level of Service	Performance Measure	Current Performance	Expected Trend Based on Planned Budget
	Confidence levels		High	Medium
Function	Road widths are appropriate to road speed and function	Number of segments not meeting standards	489 segments are less than standard width	489, reducing by year by year as road rehabilitation projects give opportunity for widening
	Intersection treatments given safe separation of traffic flows	Number of intersections requiring treatment	3	Unsatisfactory intersections will increase in number as population increases
	Path networks connect origins and destinations	Coverage of path networks	Satisfaction level of Provision of Cycle Paths was measured at 57%, in 2020	Call for more footpaths over time is likely to exceed current capacity to provide
	Confidence levels		High	Medium
Capacity	Intersection treatments are appropriate for volumes	Number of intersections requiring treatment	2	Unsatisfactory intersections will increase in number as population increases
	Rural road overtaking opportunities are sufficient	Number of locations identified through customer complaints	3	Requests for overtaking lanes are likely to increase in number as population and traffic increases
	Paths can accommodate users without conflict and congestion	Number of complaints reporting conflict or congestion on paths	Not currently measured	Population growth and change will likely result in conflict between cyclists, pedestrians and drivers
	Confidence levels		High	Low

3.6 Technical Levels of Service

Technical Levels of Service –To deliver on the customer values, and impact the Customer Levels of Service, are operational or technical measures of performance. These technical measures relate to the lifecycle activities (see Section 5) and allocation of resources to best achieve the desired customer outcomes and demonstrate effective performance.

Technical service measures are linked to the activities and annual budgets covering:

- **Acquisition** – the activities to provide a higher level of service (e.g. widening a road, sealing an unsealed road, replacing a pipeline with a larger size) or a new service that did not exist previously (e.g. a new footpath).
- **Operation** – the regular activities necessary to provide services (e.g. vegetation control, streetlighting, inspections, etc.)
- **Maintenance** – the activities necessary to retain an asset as near as practicable to an appropriate service condition. Maintenance activities enable an asset to provide the intended service for its planned life (e.g. road patching, unsealed road grading, footpath grinding and structure repairs)
- **Renewal** – the activities that return the service capability of an asset up to that which it had originally provided (e.g. road resurfacing and pavement reconstruction, pipeline replacement and building component replacement)

Service and asset managers plan, implement and control technical service levels to influence the service outcomes.⁵

Table 3.6 shows the lifecycle activities related to the current 10-year Planned Budget, and the forecast costs recommended in this AM Plan.

Table 3.6: Technical Levels of Service

Lifecycle Activity	Purpose of Activity	Activity Measure	Current Performance ⁶	Recommended Performance ⁷
Acquisition	Construct sealed road in place of gravel road	The portion of the candidate roads identified for initial seal completed each year	Funding allocated to initial seal construction each year is currently a nominal \$3m	Maintain funding but select candidates to reduce the maintenance burden
	Construct new footpath/cycleway in place of turf verge	The portion of the new paths proposed in Pedestrian Access and Mobility Plan	Funding allocated to new footpath/cycleway construction each year is \$400,000	Increase funding to achieve desired network in adopted timeframe
	Upgrade of sub-standard roads to meet current demands and standards	The portion of a program of identified projects completed annually	Upgrade work is currently deemed a part of renewal work – 'replace a road with a road'	Costs of upgrade work should be differentiated from that of renewal and funded and reported as such
	New kerb and gutter added to an existing urban street to address drainage issues	Nil	As complaints are received and funding is available	Identify and prioritise proposals for new kerb & gutter in urban streets and provide for program

⁵ IPWEA, 2015, IIMM, p 2|28.

⁶ Current activities related to planned budget

⁷ Expected performance related to forecast lifecycle costs

Lifecycle Activity	Purpose of Activity	Activity Measure	Current Performance ⁶	Recommended Performance ⁷
		Budget	\$2,264,800	\$2,264,800
Operations	Inspections – for planning of renewal projects	Frequency of LGA-wide condition assessment	Irregular, unscheduled	5-yearly routine
	Inspections – for planning repair and maintenance		Unplanned, reactive inspection by various staff	Scheduled inspection by specifically 'trained' staff
	Roadside vegetation control – to maintain a safe road environment	Complaints from road users	Roadside vegetation control is reactive, responding to road users' complaints.	A planned, seasonal approach can achieve greater coverage and pre-empt complaints
		Budget	\$2,810,775	\$4,699,560
Maintenance	Clearing and reshaping of rural road table drains to drain roadside	Zero cases of road pavement failure by saturation	No budget is provided for routine table drain maintenance	Annual program of table drain maintenance is planned, funded and implemented
	Reactive pothole patching	Percentage of reported potholes patched within time	Bitumen patching resources have open-ended funding	As per current management
	Periodic bitumen seal maintenance (hand lance, weed removal, etc)	All areas	No budget is provided for bitumen seal maintenance	Annual (seasonal) program of bitumen seal maintenance is planned funded and implemented
	Periodic repair (grinding, cold mix fill, etc) to maintain surface	Portion of path network covered annually	Largely reactive, complaint-driven	Proactive monitoring of path condition required to avoid trips and falls
		Budget	\$15,927,725	\$26,630,840
Renewal	Renew failing sealed road segments (Condition class 5)	Length of sealed road segments with a condition rating of 5	Current funding of local roads renewal projects is \$8.8m annually, achieving 46,000m2 of renewed pavement	Funding should be not less than sufficient to renew the segments expected to reach end of life over the next ten years; 61,000m2.
	Scheduled Reseals to maintain weatherproof surface	Area sealed annually should be 1/12th (8%) of the total area of sealed	Current funding (\$4m) is sufficient for 12% of the total seal area which	Funding should be not less than sufficient for 8% of the total seal area

Lifecycle Activity	Purpose of Activity	Activity Measure	Current Performance ⁶	Recommended Performance ⁷
		road (= 300,000m ²)	helps address backlog	(per a 13-year expected life)
	Replacement of failing panels	Program of inspection, risk assessment and repair work	Largely reactive, complaint-driven	Proactive monitoring of path condition required to avoid trips and falls
	Replacement of failing sections of kerb & gutter		Repair and replacement of kerb & gutter only occurs as part of urban resealing and rehabilitation works	Failing kerb & gutter should be identified for repair separate to resealing and rehabilitation works
		Budget	\$36,581,500	\$36,535,600

It is important to monitor the service levels regularly as circumstances can and do change. Current performance is based on existing resource provision and work efficiencies. It is acknowledged that circumstances such as technology and customer priorities will change over time.

4. Future Demand

Future demand refers to the anticipated need for infrastructure services driven by factors such as population movement, economic development, technological advancements, and changing environmental or community expectations.

4.1 Demand Drivers

A demand driver refers to the factors or trends that influence the need for infrastructure services and capacity. The factors influencing future demand are created by:

- Population growth
- Demographic and lifestyle changes
- Changes in transport modes and habits
- Emergency Management requirements

Demand drivers help predict future infrastructure needs and guide planning and investment decisions.

4.2 Demand Forecasts

The current position and projections for demand drivers that may impact future service delivery and use of assets have been identified and documented in Table 4.3.

4.3 Impacts and Demand Management Plan

The impact of demand drivers that may affect future service delivery and use of assets are shown in Table 4.3. The impact on service delivery will be managed through a combination of managing and upgrading existing assets and the provision of new assets to meet demand. Demand management practices can include non-asset solutions, insuring against risks and managing failures.

Opportunities identified to manage demand are shown in Table 4.3. Further opportunities will be developed in future revisions of this AM Plan.

Table 4.3: Demand Management Plan

Demand driver	Current position	Projection	Impact on services	Demand Management Plan
Population growth	101,600 as of 2025 (estimated)	116,700 by 2036 (estimated)	Impact will be first felt at intersections and parking	Commence design and funding of increased capacity intersections and additional CBD parking
Demographic and lifestyle changes	32,066 residents aged 65 years and over, as of 2021	38,013 residents aged 65 years and over, by 2036 (estimated)	Increased demand for non-car transport facilities.	Monitor national trends and review design standards.
Changes in transport modes and habits	Prevalent use of motor vehicles for short trips	Climate Change reduce use of private vehicles for short trips	Increased demand for public transport and walking/cycling options	Monitor national trends and review PAMP
	Rural areas are farms with occasional travel to town	Tree-changers cause increased use of villages as dormitory suburbs	More frequent use of rural roads by 'town cars and town drivers'	Review design standards and levels of service
Emergency management	Recent fire and flood events highlight difficulties accessing refuge	Emergency management planning identifies need for more access and egress routes	Some roads will need to be created, upgraded or extended	Ensure future developments provide for second road out. Develop non-asset options wherever appropriate

4.4 Asset Programs to meet Demand

The new assets required to meet demand may be acquired, donated or constructed. Additional assets are discussed in Section 5.4.

Acquiring new assets will commit MidCoast Council to ongoing operations, maintenance and renewal costs, and depreciation expenses for the period that the service provided from the assets is required.

4.5 Climate Change Adaptation

The impacts of climate change may have a significant impact on the assets we manage and the services they provide. In the context of the Asset Management Planning process, climate change can be considered as both a future demand and a risk that needs to be managed.

How climate change impacts on assets will vary depending on the location and the type of services provided, as will the way in which we respond and manage those impacts.⁸

As a minimum we consider how to manage our existing assets given potential climate change impacts for our region. MidCoast Council's Climate Change Strategy, published June 2021, has as one of its guiding principles:

“Council will reduce the emissions from its operations and ensure its assets and services are resilient to the impacts of climate change by adopting adaptation measures “

Risk and opportunities identified to date are shown in Table 4.5

Table 4.5: Managing the Impact of Climate Change on Assets and Services

Climate Change risk	Projection	Impact on services	Climate Change Management Plan
Increase in the number of extreme rainfall/storm events	Increased strain on Council's road maintenance resources	Roads will more frequently be untrafficable or in poor condition, for longer periods	Adopt more conservative criteria in drainage design. Adopt construction methods that reduce susceptibility of pavement to water/moisture Consider high-productivity repair plant and methods
Increase in drier and hotter weather	Shortened life of bituminous road surfaces	Resealing frequency will have to be increased – with a resultant cost increase	Research and trial crumbed rubber and other methods of UV protection.
Rising sea levels	Higher sea levels may inundate some road pavements, if not top those roads	Roads with inundated pavements will weaken Low-lying roads may be topped occasionally, periodically or permanently	Research (international) methods of construction Identify such vulnerable roads and develop options for walling, raising or closing

Additionally, the way in which we construct new, and upgrade existing assets should recognise that there are opportunities to build in resilience to climate change impacts. Building resilience can have the following benefits:

- Assets will withstand the impacts of climate change
- Services can be sustained *and*
- Assets that can endure may potentially lower the lifecycle cost and reduce their carbon footprint.

The impact of climate change on new and existing assets is evolving and new opportunities will be developed in future revisions of this AM Plan.

⁸ IPWEA Practice Note 12.1 Climate Change Impacts on the Useful Life of Infrastructure

5. Lifecycle Management Plan

This Lifecycle Management Plan details how Council plans to manage and operate the Transport assets at the agreed levels of service (Refer to Section 3) throughout their entire lifecycle, from acquisition or creation to disposal. The goal is to maximise the value of the assets while minimising costs and risks, ensuring they continue to meet performance requirements over time.

From a financial perspective, infrastructure activities tend to be classified as being either Operating or Capital. The lifecycle activities used in the asset management and financial planning and reporting process cover:

Capital

- **Acquisition** – the activities to provide a higher level of service (e.g., widening a road or sealing an unsealed road) or a new service that did not exist previously (e.g. a new footpath)
- **Renewal** – the activities that replace or restore assets to the standard it had originally provided (e.g. road resurfacing and pavement reconstruction)

Operating

- **Operations** - the routine activities that keep services accessible and effective, balancing efficiency with user expectations (e.g. vegetation management, line marking)
- **Maintenance** – the preventative and corrective actions to sustain asset functionality and minimise unexpected failures. Maintenance activities enable an asset to provide service for its planned life (e.g. road patching, unsealed road grading)
- **Disposal** – the decommissioning, removing, or repurposing of assets that are no longer cost-effective, safe, or necessary (e.g. dismantling old bridges)

A pictorial representation of the asset lifecycle activities is shown below in Figure 5.



Figure 5: Asset Lifecycle Activities

5.1 Background Data

5.1.1 Physical parameters

The assets covered by this AM Plan are shown in Table 5.1.1.

Council's transport asset class includes:

- Regional Roads, which allow travel from any town or region to another, within the LGA and beyond
- The Rural Roads, which provide access to and from our towns, villages and countryside
- The Urban Roads that provide access to our homes and in and around our urban centres
- Car parks that support our retail, commercial, recreational and tourist destinations
- Table drains and kerb and gutter that adjoin the above
- The constructed footpaths and cycleways that facilitate pedestrian use of the road network (excluding those in parks and properties, not on a public road)
- The bus shelters and other road-side structures.

Any road is typically comprised of:

- the road reserve – the land formally set aside (gazetted) for the purpose of movement of people and goods, with Council as the Road Authority
- the road carriageway – a formed pavement and often a wearing course (a seal)
- the bulk earthworks that allow roads to cut through the hills and valleys (non-depreciable) and value is excluded from this AM Plan
- the bridges that carry the roads across our waterways, gullies and railway lines*
- the footpaths and cycleways that facilitate active transport and recreation
- the shoulder and table drain or kerb and gutter that protects the road edge and carries stormwater away for safety and convenience and to protect the pavement
- road furniture, devices, signage and structures that improve the trip for drivers, riders, passengers and pedestrians.

* Note: Bridges are the subject of a separate Asset Management Plan

Table 5.1.1: Assets covered by this AM Plan

Asset Category	Dimension	Replacement Value (as at April 2025)
Sealed Regional Roads	3,119,988m ²	\$281,815,053
Sealed Urban Roads	5,369,462m ²	\$356,858,494
Sealed Rural Roads	6,349,530m ²	\$408,377,378
Unsealed Rural and Urban Roads	8,237,226m ²	\$44,323,719
Footpaths and cycleways	340,040m ²	\$39,605,548
Kerb and Gutter	940km	\$153,137,319
Total		\$1,257,940,982

The age profile of the assets included in this AM Plan are shown in Figure 5.1.1.

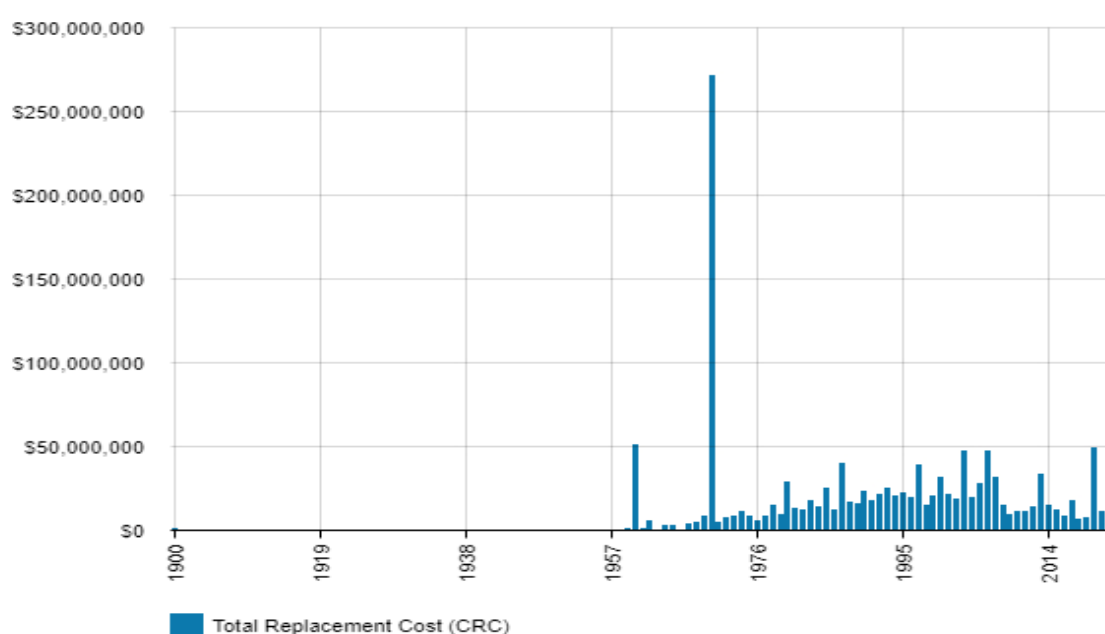


Figure 5.1.1: Asset Age Profile

All \$ values are shown in real values (i.e. current values, net of inflation)

The asset age profile shows an erratic range of ages, with significant aberrations:

- one outlier entry in 1900 distorts the spread of ages
- the very high value in 1960 is assumed to be all roads at the time being given a nominal acquisition date
- the extremely high value in 1970 is similarly assumed to be a nominal acquisition date for all roads first identified by the former Taree Municipal Council.

These aberrations will prompt analysis and correction of the data so that ages are reported more accurately. Nonetheless, the spread of ages of the road assets raises questions to be answered:

- are roads constructed to be fit-for-purpose still satisfactory?
- what roads have exceeded their expected useful lives?
- how can the renewal schedule from the peaks of investment be smoothed, to suit recurrent funding and work capacity?

5.1.2 Asset capacity and performance

Assets are generally provided to meet design standards where these are available. However, there are insufficient resources to address all known deficiencies. Locations where deficiencies in service performance are known are detailed in Table 5.1.2.

Table 5.1.2: Known Service Performance Deficiencies

Location	Service Deficiency
Rural sealed roads	Many roads are 5.5m to 6.0m seal width, with little or no shoulder, poor geometry and insufficient pavement
Rural unsealed roads	Road geometry is often substandard, from early road construction and maintenance practices since
Rural unsealed roads	Several roads should now be reconstructed as sealed roads, as per design standards
Footpaths	Footpath widths of 1.2m and below are insufficient for many parts of the footpath network
Kerb and Gutter	Many sections of kerb and gutter, built to earlier standards, have rolled or broken, allowing water to soak into the pavement
Rural sealed roads	Many roads are 5.5m to 6.0m seal width, with little or no shoulder, poor geometry and insufficient pavement

The above service deficiencies were identified from knowledge of the road network, held by key Council staff.

5.1.3 Asset condition

The condition of roads is currently monitored via inspection by Council's Transport Assets staff, for specific purposes. An LGA-wide condition assessment by a specialist contractor, not previously undertaken since amalgamation of the three former councils, was carried out in 2022. It is intended that this will be repeated on a five-yearly basis, so that the first five years of any long-term planning will be accurate and realistic.

Condition is measured using a 1 – 5 grading system as detailed in Table 5.1.3. It is important that a consistent approach is used in reporting asset performance enabling effective decision support. A finer grading system may be used at a more specific level, however, for reporting in the AM Plan, results are translated to a 1 – 5 grading scale for ease of communication.

Table 5.1.3: Condition Grading System

ASSET CONDITION			GENERAL ASSET INTERVENTION		
Rating	Grade	Asset Description	Planned Maintenance	Reactive Maintenance	Renewal/ Upgrade
1	Very Good	Defects free, only planned/routine maintenance required			
2	Good	Minor defects, minor planned maintenance required		Small amount	
3	Fair	Defects requiring regular and/or significant planned maintenance		Medium amount	Long-term
4	Poor	Significant defects, higher order cost intervention required		Large amount	Short/ Medium-term
5	Very Poor	Asset failed / beyond rehabilitation, urgent renewal /upgrading required			Immediate

The condition profile of our assets is shown in Figure 5.1.3.

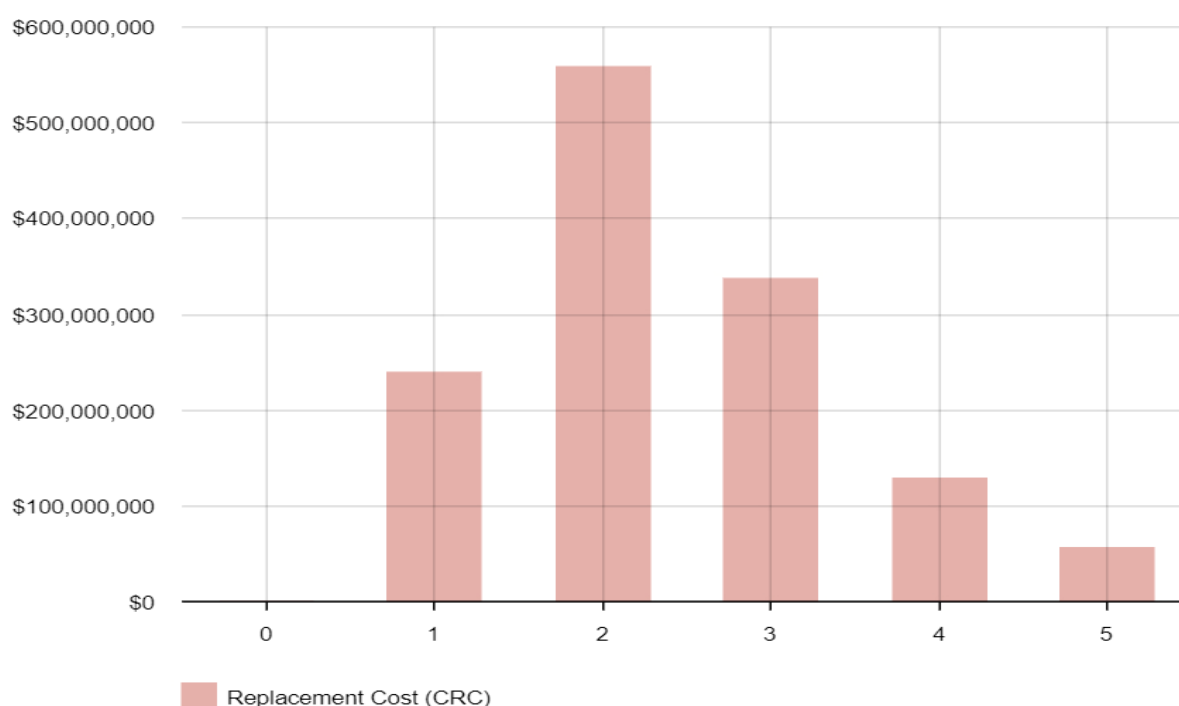


Figure 5.1.3: Asset Condition Profile

All \$ values are shown in current day dollars.

The roads asset condition is that which was uploaded from the three amalgamated authorities. While changes to the asset (by renewals and observation) had been reflected by changes to the data, the bulk of the data was rapidly becoming out of date. An LGA-wide condition assessment by a specialist contractor was carried out in 2022, which has restored confidence in the condition data. Additionally, the inventory data that was inherited from the three amalgamated authorities is being corrected and improved, in order to achieve a high level of confidence in the asset data.

In the meantime, the transport assets rated four and five are the focus of renewals planning; how to afford renewal of condition five assets and how to prevent condition four assets from becoming condition five assets.

5.2 Operations and Maintenance Plan

Operations includes regular activities to provide services. Examples of typical operational activities include line marking, street sweeping and asset inspections.

Maintenance includes all actions necessary for retaining an asset as near as practicable to an appropriate service condition including regular ongoing day-to-day work necessary to keep assets operating. Examples of typical maintenance activities include pipe repairs, asphalt patching, and equipment repairs.

The trend in roads maintenance budgets is shown in Table 5.2.1. There has been a very consistent, nominal value applied annually. Extra funding for unexpected events, including bushfire, flood and extended rain, has not been included as it is yet to be incorporated into the long-term planning that is evolving in response to climate change.

While the roads maintenance budget is increasing, it is approximately \$580,000 lower than the rate peg increase and \$1.2m less than the level of inflation over the same period. Whilst a commensurate reduction in service levels has not been defined, less maintenance work is being carried out now than six years previously, due to the disproportionate increase in costs.

Maintenance budgets for Footpaths and Cycleways, Kerb & Gutter and other structures are not shown, as lifecycle costs after construction are primarily operational or replacement. Maintenance trends will be analysed in subsequent revisions of this document

Table 5.2.1: Maintenance Budget Trends

Year	Maintenance Budget \$
2020/2021	\$15m
2021/2022	\$15m
2022/2023	\$15.2m
2023/2024	\$16.5m
2024/2025	\$17.2m
2025/2026	\$15.8m ⁹

Maintenance budget levels are considered to be inadequate to meet projected service levels, which may be less than or equal to current service levels. Where maintenance budget allocations are such that they will result in a lesser level of service, the service consequences and service risks have been identified and are highlighted in this AM Plan and service risks considered in the Infrastructure Risk Management Plan.

⁹ Heavy Patching re-allocated to Capital budget in 2025/2026

Asset hierarchy

An asset hierarchy provides a framework for structuring data in an information system to assist in the collection of data, reporting information and making decisions. The hierarchy includes the asset class and component used for asset planning and financial reporting, and service level hierarchy used for service planning and delivery.

The service hierarchy is shown in Table 5.2.2.

Table 5.2.2: Asset Service Hierarchy

Service Hierarchy	Service Level Objective
Arterial – Regional Road	As per Regional Road Black Grant Agreement
Primary Collector	Inspect and schedule low risk pothole – 10 days
Local Collector	Inspect and schedule all other potholes – 5 days Install new signage – 50 days from LTC approvals
Local Access	Replace existing regulatory signage – 15 days Replace existing specialist signage – 40 days Inspect and schedule works for vegetation control – 20 days Inspect and schedule works for drainage – 10 days
Unmaintained Lane	Inspect all reports, schedule any work on a Risk-Management basis

Summary of forecast operations and maintenance costs

Forecast operations and maintenance costs are expected to vary in relation to the total value of the asset stock. If additional assets are acquired, the future operations and maintenance costs are forecast to increase. If assets are disposed of, the forecast operation and maintenance costs are expected to decrease.

Figure 5.2 shows the forecast operations and maintenance costs relative to the proposed operations and maintenance Planned Budget.

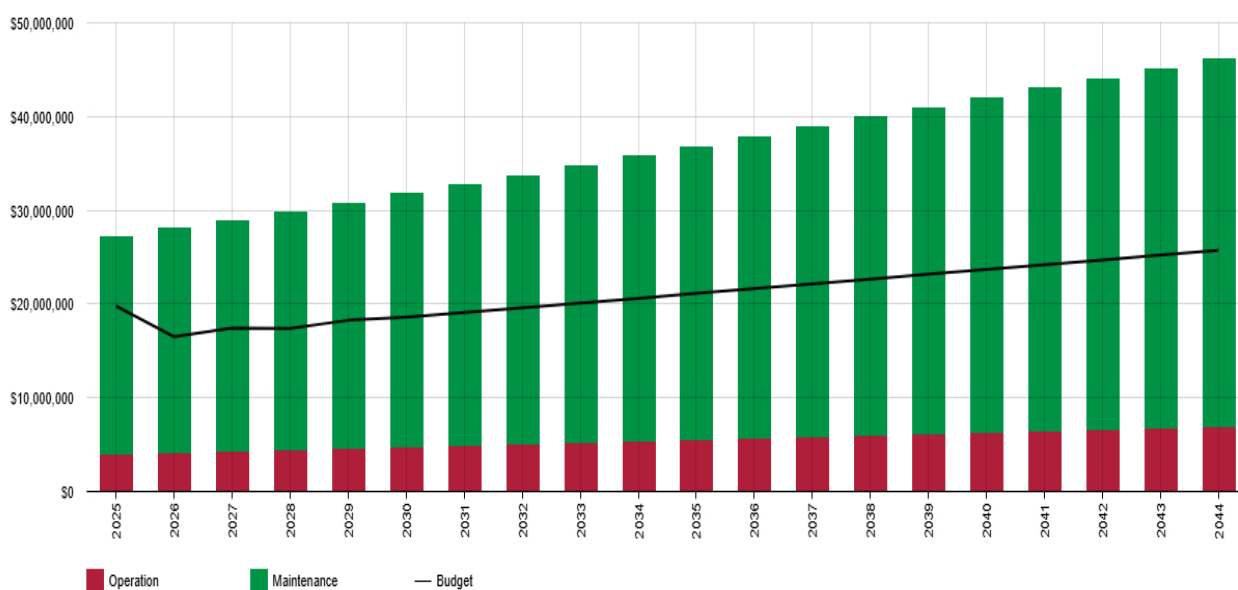


Figure 5.2: Operations and Maintenance Summary

All \$ values are shown in current day dollars (i.e. current values, net of inflation).

The Operations and Maintenance Summary graph shows little growth from current levels, which reflects the following key points of the lifecycle plan:

- Acquisition of assets that will increase operations and maintenance expenditure is limited to \$2,000,000 per annum and may even be reduced further as current external funding dries up
- The planned renewal of deteriorating road assets will reduce maintenance demands (such as pothole repair and heavy patching)

The graph also shows that the operations and maintenance budget is insufficient for current practices and does not allow for increases due to growth.

5.3 Renewal Plan

Renewal is major capital work which does not significantly alter the original service provided by the asset, but restores, rehabilitates, replaces or renews an existing asset to its original service potential. Work over and above restoring an asset to its original service potential is considered to be an acquisition resulting in additional future operations and maintenance costs.

Assets requiring renewal are identified from one of two approaches in the Lifecycle Model.

- The first method uses Asset Register data to project the renewal costs (replacement cost) and renewal timing (acquisition year plus updated useful life to determine the renewal year), or
- The second method uses an alternative approach to estimate the timing and cost of forecast renewal work (i.e. condition modelling system, staff judgement, average network renewals, or other).

The values in the Roads Infrastructure - Required Renewal (Depreciation) are reflective of what can be achieved within existing funding constraints. In particular, the life of the asset component being renewed exceeds the optimal intervention point. The depreciation-based assessment is centred around what can be afforded.

The Roads Infrastructure – Required Renewals (Road Strategy) is based on the principle of optimising the asset lifecycle. This scenario will minimise the rate of deterioration and reduce the maintenance effort required. The Road Strategy-based assessment is centred around what should be done.

The current state of the road network has, on average, deteriorated beyond the point where the lowest lifecycle costs can be achieved through optimum renewal and maintenance. There is now a greater need for renewal than the depreciation model provides.

The current level of funding allocated to the road network is providing a lower level of service with works programs being restrained based on allocated budgets. This will continue to lead to a higher proportion of defects and lower satisfaction over the term of the Asset Management Strategy.

The typical useful lives of assets used to develop projected asset renewal forecasts are shown in Table 5.3. Asset useful lives were last reviewed in June 2023.¹⁰

Table 5.3: Useful Lives of Assets

Asset (Sub) Category	Useful life
Roads – Bulk earthworks	Not depreciable
Roads – Sealed – Regional	60 years
Roads – Sealed – Urban	60 years
Roads – Sealed – Rural	60 years
Roads – Unsealed	15 years
Roads – Spray Seal – Regional	10 years
Roads – Spray Seal – Urban	10 years
Roads – Spray Seal – Rural	15 years
Roads – Asphalt	25 years
Roads – Kerb & Gutter	50 years

The estimates for renewals in this AM Plan were based on the Alternate Method.

5.3.1 Renewal ranking criteria

Asset renewal is typically undertaken to either:

- Ensure the reliability of the existing infrastructure to deliver the service it was constructed to facilitate (e.g. replacing a bridge that has a 5-tonne load limit), or

¹⁰ Transport Asset Revaluation Report June 2023

- Ensure the infrastructure is of sufficient quality to meet the service requirements (e.g. condition of the road pavement).¹¹

It is possible to prioritise renewals by identifying assets or asset groups that:

- Have a high consequence of failure
- Have high use and subsequent impact on users would be significant
- Have higher than expected operational or maintenance costs, and
- Have potential to reduce life cycle costs by replacement with a modern equivalent asset that would provide the equivalent service.¹²

The ranking criteria used to determine priority of identified renewal proposals is detailed in Table 5.3.1.

Table 5.3.1: Renewal Priority Ranking Criteria

Criteria	Weighting
Condition (condition rating and roughness measure)	30%
Usage (vpd, %commercial, bus route)	20%
Road class	20%
Proximity to schools and retail areas	10%
Maintenance costs	10%
Risk and safety to all road users	10%
Total	100%

These criteria and the methodology for their use, is documented in the Transport Assets procedure document; 'Transport – Capital Project Evaluation and Prioritisation', currently in draft form.

5.3.2 Summary of future renewal costs

Forecast renewal costs are projected to increase over time if the asset stock increases. The forecast costs associated with renewals are shown relative to the proposed renewal budget in Figure 5.3.2.

¹¹ IPWEA, 2015, IIMM, Sec 3.4.4, p 3|91.

¹² IPWEA, 2015, IIMM, Sec 3.4.4, p 3|91.

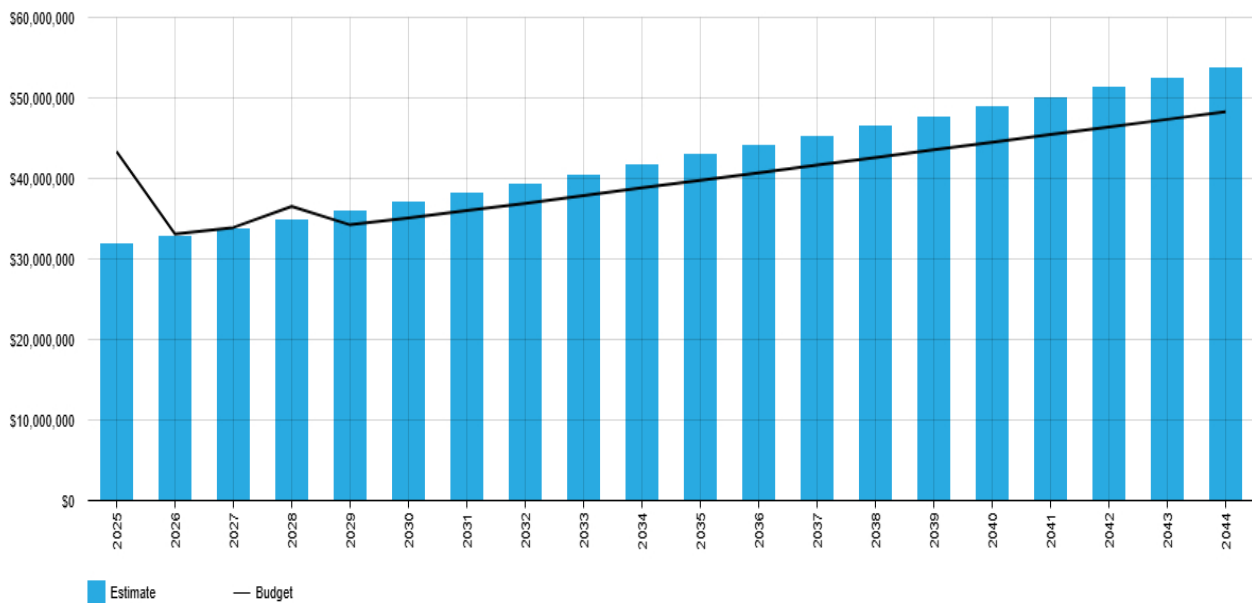


Figure 5.3.2: Forecast Renewal Costs

All \$ values are shown in current day dollars (i.e. current values, net of inflation).

The forecast renewal costs chart shows that the funds available to Council and being expended on asset renewal currently exceeds that which is required. However, the chart also shows that this situation will soon change dramatically. This will occur as the current flow of grant funding from the state government comes to an end. Further grant funding is likely, but the amount and timing are unknown, so cannot be included in this forecast planning. Meanwhile, as the infrastructure ages, the backlog increases so that the forecast renewal costs significantly exceed the proposed renewal budget.

The impacts of deferred renewal (assets identified for renewal and not scheduled in capital works programs) are described in the risk analysis process in the risk management plan.

5.4 Acquisition Plan

Acquisition refers to new assets that did not previously exist or works which will upgrade or improve an existing asset beyond its original service level. They may result from growth, demand, social or environmental needs. Assets may also be donated to Council.

5.4.1 Selection criteria

Proposed acquisition of new assets, and upgrade of existing assets, are identified from various sources such as community requests, proposals identified by strategic plans or partnerships with others. Potential upgrades and new works should be reviewed to verify that they are essential to the community's needs. Proposed upgrades and new work analysis should also include the development of a preliminary renewal estimate to ensure that the services are sustainable over the longer term. Verified proposals can then be ranked by priority and available funds and scheduled in future works programmes. The priority ranking criteria are detailed in Table 5.4.1.

Table 5.4.1: Acquired Assets Priority Ranking Criteria

Criteria	Weighting
Traffic volumes	15%
Heavy vehicles	15%
Dust receptors (residences, waterways)	15%
Road function within the network	15%
Maintenance Costs	15%
Risk and safety	15%
Condition (remaining useful life)	10%
Total	100%

5.4.2 Summary of future asset acquisition costs

Forecast acquisition asset costs are summarised in Figure 5.4.1 and shown relative to the proposed acquisition budget.

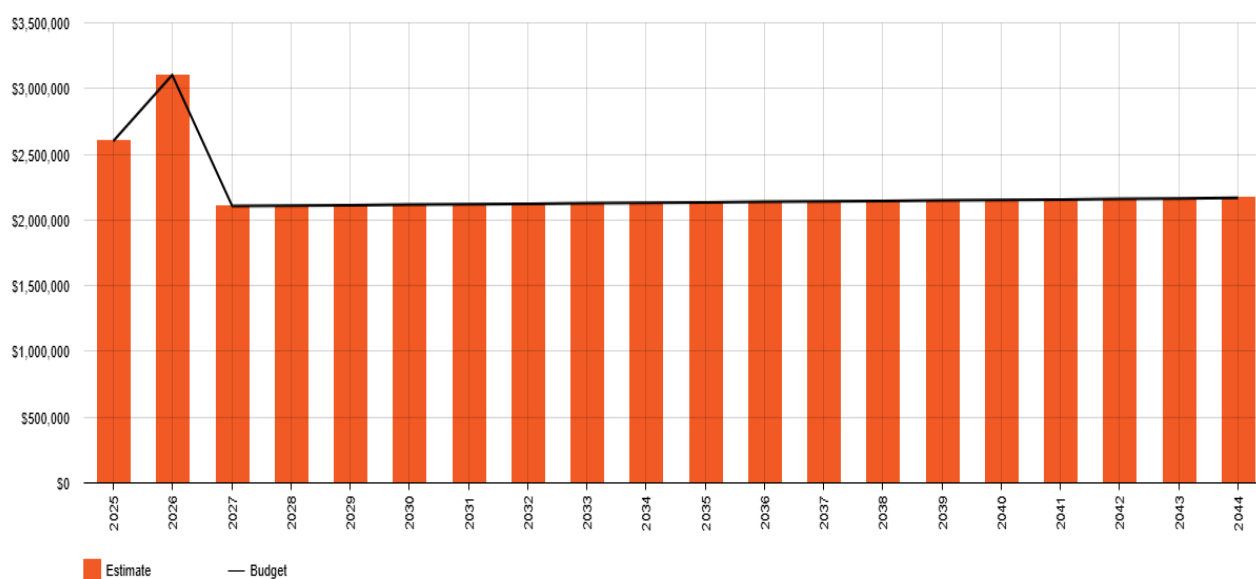


Figure 5.4.2: Acquisition (Constructed) Summary

All \$ values are shown in current day dollars (i.e. current values, net of inflation).

When Council commits to new assets, we must be prepared to fund future operations, maintenance and renewal costs. We must also account for future depreciation when reviewing long-term sustainability. When reviewing the long-term impacts of asset acquisition, it is useful to consider the cumulative value of the acquired assets being taken on by Council. The cumulative value of all acquisition work, including assets that are constructed and contributed is shown in Figure 5.4.2.

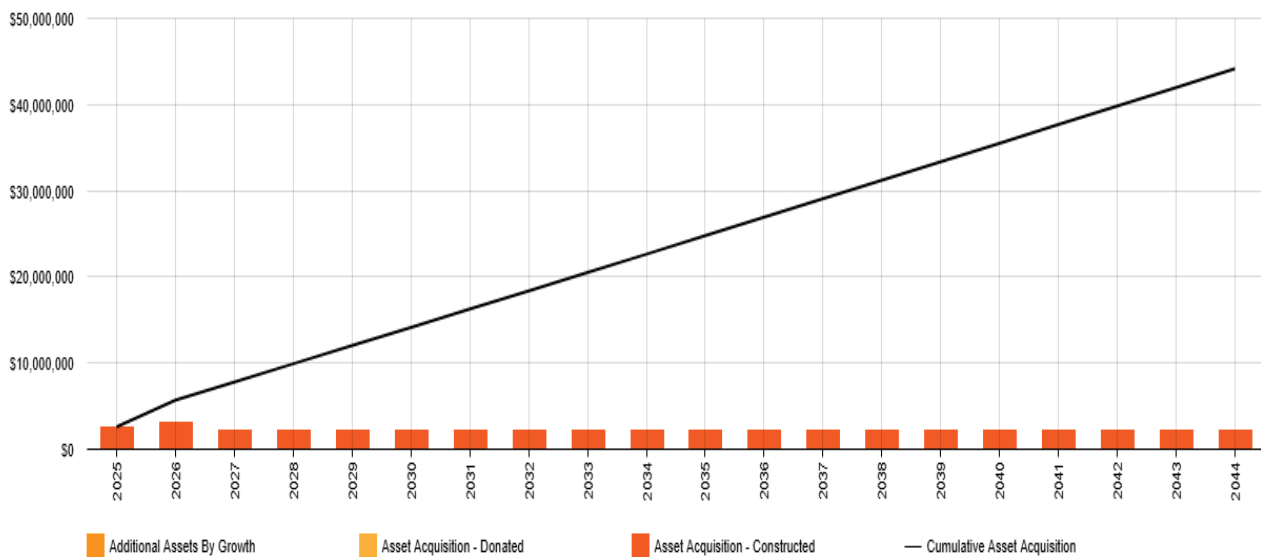


Figure 5.4.2a: Acquisition Summary

All \$ values are shown in current day dollars.

Expenditure on new assets and services in the capital works program will be accommodated in the LTFP, but only to the extent that there is available funding.

Council does not maintain a significant acquisitions program, limited to \$2,000,000 per annum for roads and \$400,000 for footpaths and cycleways, plus grant-funded works. The chart of the Acquisition Summary shows how that repeated (annual) acquisition of assets will accumulate to a massive asset holding. That extra asset holding will obligate Council to a similar (proportionate) increase in operations, maintenance and renewal costs as well as the funding of future depreciation.

5.5 Disposal Plan

Disposal includes any activity associated with the disposal of a decommissioned asset including sale, demolition or relocation. Assets identified for possible decommissioning and disposal are shown in Table 5.5. A summary of the disposal costs and estimated reductions in annual operations and maintenance of disposing of the assets are also outlined in Table 5.5. Any costs or revenue gained from asset disposals is included in the LTFP.

Table 5.5: Assets Identified for Disposal

Asset	Reason for Disposal	Timing	Disposal Costs	Operations & Maintenance Annual Savings
Nil				

5.6 Summary of asset forecast costs

The financial projections from this AM Plan are shown in Figure 5.6. These projections include forecast costs for acquisition, operation, maintenance, renewal, and disposal. These forecast costs are shown relative to the proposed budget.

The bars in the graphs represent the forecast costs needed to minimise the lifecycle costs associated with the service provision. The proposed budget line indicates the estimate of available funding. The gap between the forecast work and the proposed budget is the basis of the discussion on achieving balance between costs, levels of service and risk to achieve the best value outcome.

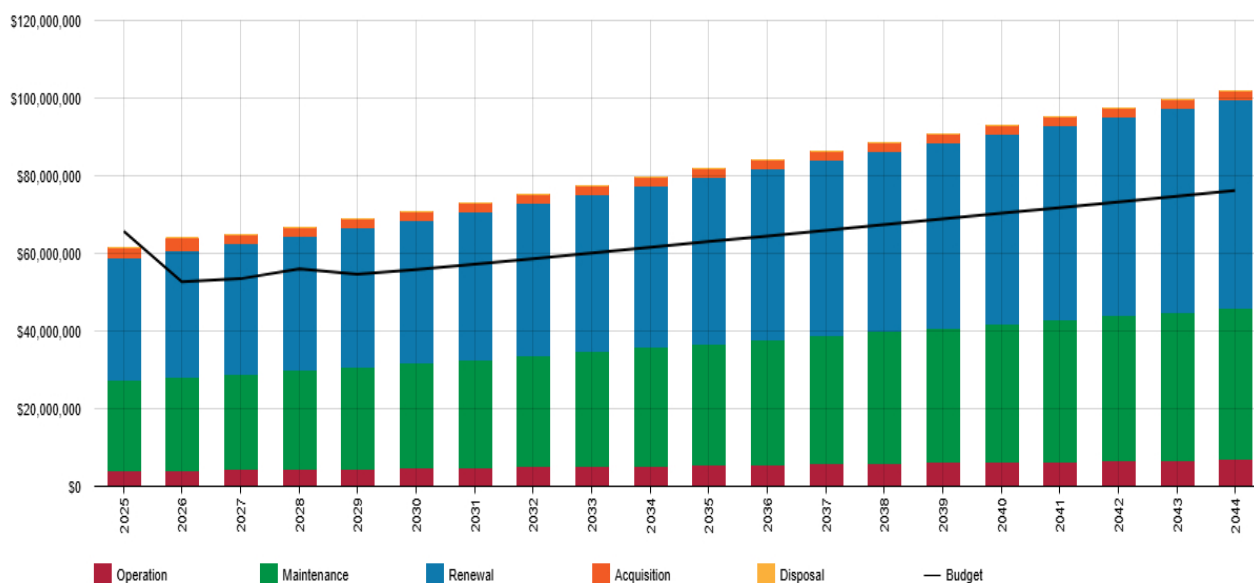


Figure 5.6: Lifecycle Summary

All \$ values are shown in current day dollars.

This has been explained in 5.4 Future Renewal Summary. The inclusion of costs of Operations, Maintenance, Acquisition and Disposal does not change the situation significantly, because these activities do not involve a shortfall between budget and forecast. While Council funds the practices required to effectively operate and maintain its roads, the funding required to renew the asset, primarily seals and pavements will continue to rise.

The impacts of deferred renewal (assets identified for renewal and not scheduled in capital works programs) are described in the risk analysis process in the risk management plan.

6. Risk Management Planning

The purpose of infrastructure risk management is to document the findings and recommendations resulting from the periodic identification, assessment and treatment of risks associated with providing services from infrastructure, using the fundamentals of International Standard ISO 31000:2018 Risk management – Principles and guidelines.

Risk Management is defined in ISO 31000:2018 as: ‘coordinated activities to direct and control with regard to risk’.¹³

6.1 Critical Assets

Critical assets are defined as those which have a high consequence of failure causing significant loss or reduction of service. MidCoast Council’s Asset Management Strategy and Business Continuity Plan identify assets that are essential for Council’s operations and outcomes. These include Council’s works depots located at Taree and Tuncurry and do not include any component of the road asset network. Critical roads assets will be identified in coming years, to be reported along with their typical failure mode, and the impact on service delivery. Failure modes may include physical failure, collapse or essential service interruption, such as occurred in recent landslips.

By identifying critical assets and failure modes Council can ensure that investigative activities, condition inspection programs, maintenance and capital expenditure plans are targeted at critical assets.

6.2 Risk Assessment

The risk management process used is shown in Figure 6.2 and is based on the fundamentals of International Standard ISO 31000:2018.

It is an analysis and problem-solving technique designed to provide a logical process for the selection of treatment plans and management actions to protect the community against unacceptable risks.

The risk assessment process identifies credible risks, the likelihood of the risk event occurring, and the consequences should the event occur. The risk assessment should also include the development of a risk rating, evaluation of the risks and development of a risk treatment plan for those risks that are deemed to be non-acceptable.

¹³ ISO 31000:2009, p 2

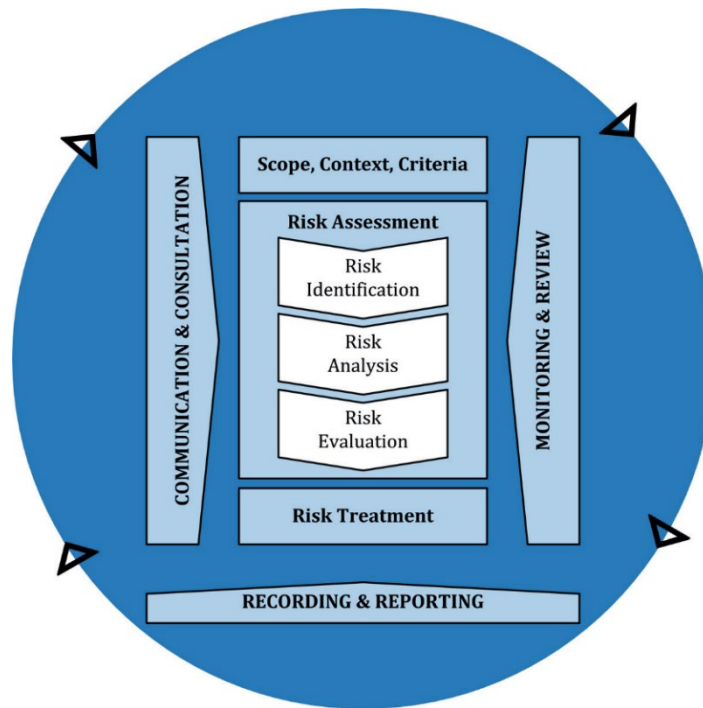


Fig 6.2 Risk Management Process – Abridged¹⁴

Critical risks are those assessed with ‘Very High’ (requiring immediate corrective action), and ‘High’ (requiring corrective action) risk ratings identified in the Infrastructure Risk Management Plan. The residual risk and treatment costs of implementing the selected treatment plan are shown in Table 6.2. It is essential that these critical risks and costs are reported to management and to the elected Council.

Table 6.2: Risks and Treatment Plans

Service or Asset at Risk	What Can Happen	Risk Rating (VH, H)	Risk Treatment Plan	Residual Risk (H, M, L) ¹⁵	Treatment Costs
Road Network planning Path Networks planning	Planned transport network infrastructure does not meet current and future community needs	H	Utilise improved methodology for asset condition assessment data for roads/drainage and implement ongoing procedure to ensure data remains accurate and current to inform future planning Regularly revise Asset Management Plans	M	Unquantified
Road Renewals Project Delivery	Agreed Capital Works Program not delivered in accordance with	H	Discuss with Manager Projects & Engineering an audit of the effectiveness of the Project Management	H	Unquantified

¹⁴ Source: ISO 31000:2018, Figure 1, p9

¹⁵ The residual risk is the risk remaining after the selected risk treatment plan is implemented

Service or Asset at Risk	What Can Happen	Risk Rating (VH, H)	Risk Treatment Plan	Residual Risk (H, M, L) ¹⁵	Treatment Costs
	allocated budget and timeframes		Framework and identify / implement improvements		
Road Renewals Project Delivery	Inability to deliver transport asset renewals in the medium to long term due to underfunding	VH	Determine actions in the adopted Road Strategy for implementation, in collaboration with Executive Manager Transport Assets	H	Unquantified
Asset Condition	Climate change adversely impacts asset condition and lifecycle	H	Regularly review planning documents Participate in regional and state climate change initiatives Access State and Federal Natural Disaster Funding	M	Unquantified
Project Delivery	Non-compliant or unsuitable transport infrastructure	H	Review handover process in Project Management Framework in liaison with Projects & Engineering Department and ensure compliance	M	Unquantified
Road Safety	Non-compliant or unsuitable traffic management arrangements	VH	Use suitable capable staff Use relevant, current standards and guides Refer to Local Traffic Committee and Council Refer DAs, Events, CRM requests to Traffic Engineer	M	Unquantified
Road Network planning Paths Networks planning	Failure to manage floodplain & coastal environmental hazards	H	Use suitable capable staff Use relevant, current standards and guides Refer to Floodplain Management Advisory Committee Refer DAs to CF&D team Access grants funding	L	Unquantified

Service or Asset at Risk	What Can Happen	Risk Rating (VH, H)	Risk Treatment Plan	Residual Risk (H, M, L) ¹⁵	Treatment Costs
Emergency Management	Lack of emergency management preparedness and implementation to support government agencies	H	Attend regular Emergency Management Meetings with all agencies Adopt MCC BCP / Infrastructure & Engineering Services Divisional Plan Regularly test Emergency Management Plan	M	Unquantified
Road Safety	Unauthorised or unsafe works and structures within the road reserve	H	Finalise Awnings Procedure and implement	M	Unquantified
Road Safety	Failure to effectively implement and manage road safety programs and initiatives	M	Use dedicated Road Safety Officer Work in collaboration with TfNSW and other groups Refer to Community Engagement strategies	L	Unquantified
Workplace Safety	Staff, contractor and volunteers incidents and injuries	H	Purchase and implement satellite phones and associated procedures Identify and implement improvements identified as part of the corporate WHS Risk Assessment (e.g. psychosocial hazards)	M	\$7,500 Unquantified
Human Resources	Failure to attract and retain qualified, skilled and motivated staff Poor staff culture and performance	H	Recruit in accordance with HR recruitment Processes Implement HR programs; EAP, FWAF, IWDP, staff culture-building Facilitate regular team meetings and staff check-ins Undertake staff and team development Redesign positions in the structure where appropriate and possible	H	Unquantified

Service or Asset at Risk	What Can Happen	Risk Rating (VH, H)	Risk Treatment Plan	Residual Risk (H, M, L) ¹⁵	Treatment Costs
Procurement	Poor procurement and management of contracts	H	QMS for procedures and compliance Review tender and contract documents Seek panel contract arrangements	L	Unquantified
Human Resources	Breach of internal Governance Framework (e.g. code of conduct, delegations, fraud control)	H	Ensure Governance Framework requirements are communicated in staff inductions, IWDPs, PDs and staff delegations and financial systems and procedures	L	Unquantified
Administration Information Technology	Loss of corporate records and information	H	Transport Assets Team to discuss information management needs and visibility requirements associated with moving records to the M drive and liaise with IT about solutions for issues raised	M	Unquantified
Road Condition and Safety	Heavy vehicles adversely impact transport network condition and safety	H	Weight of Loads Group for compliance and education NHVR Heavy route assessment and approval process Monitoring and implementation of route controls (e.g. load limits) Transport NSW mapping of approved routes Grant funding sourced and works delivered Route Strategies for targeted, staged betterment of freight routes	M	Unquantified

6.3 Infrastructure Resilience Approach

The resilience of our critical infrastructure is vital to the ongoing provision of services to customers. To adapt to changing conditions we need to understand our capacity to 'withstand a given level of stress or demand', and to respond to possible disruptions to ensure continuity of service.

This approach requires resilience recovery planning, financial capacity, climate change risk assessment and crisis leadership.

Council does not currently measure its resilience in service delivery. This will be included in future iterations of the AM Plan.

6.4 Service and Risk Trade-Offs

The decisions made in adopting this AM Plan are based on the objective to achieve the optimum benefits from the available resources.

6.4.1 What we cannot do

There are some operations and maintenance activities and capital projects that are unable to be undertaken within the next 10 years. These include:

- Resealing roads at nominated end-of-life, to best protect the pavement beneath
- Renewing pavements, kerb & gutter, footpaths and other structures when they need to be renewed to meet the expected service levels
- Upgrading roads to meet current standards and expected level of service, even as part of renewal
- Constructing an initial seal on a gravel road to improve and protect the road pavement
- Expanding the footpath and cycleway networks to meet the expected service level.

6.4.2 Service trade-off

If there is forecast work (operations, maintenance, renewal, acquisition or disposal) that cannot be undertaken due to available resources, then this will result in service consequences for users. These service consequences include:

- Roads and associated infrastructure will deteriorate at a faster rate
- Deteriorated roads and associated infrastructure will remain deteriorated
- Sub-standard roads and associated infrastructure will never be upgraded to current standards

6.4.3 Risk trade-off

The operations and maintenance activities and capital projects that cannot be undertaken may sustain or create risk consequences. These risk consequences include:

- Increased dissatisfaction by road users, loss of reputation and credibility
- Increased road user costs, vehicular damage and accidents
- Accelerated deterioration to beyond any practical means of recovery

These actions and expenditures are considered and included in the forecast costs, and the Risk Management Plan.

7. Financial Summary

This section contains the financial and valuation forecasts resulting from the information presented in previous sections of AM Plan. Forecasts will be improved as the discussion on sustainable levels of service, risk and cost matures in line with the financial strategy.

7.1 Financial Sustainability and Projections

7.1.1 Sustainability of service delivery

There are two key indicators of sustainable service delivery that are considered in this AM Plan. The two indicators are the:

- Asset Renewal Funding Ratio (planned renewal budget for the next 10 years / forecast renewal outlays for the next 10 years identified as warranted in the AM Plan), and
- Lifecycle Funding Ratio (planned lifecycle budget for the next 10 years / forecast lifecycle outlays for the next 10 years identified as warranted in the AM Plan).

Asset Renewal Funding Ratio

Asset Renewal Funding Ratio¹⁶ 100.13%

The Asset Renewal Funding Ratio illustrates that over the next 10 years we expect to have 100.13% of the funds required for the optimal renewal of assets.

Lifecycle Funding Ratio – 10-year financial planning period

This AM Plan identifies the forecast operations, maintenance and renewal costs required to provide the levels of service to the community over a 10-year period. This provides input into Council's 10-year LTFP which aims to provide the required services in a sustainable manner.

This forecast work can be compared to the planned budget over the first 10 years of the planning period to identify any funding shortfall.

The forecast operations, maintenance and renewal costs over the 10-year planning period are \$67,866,000 on average per year.

The proposed (budget) in the LTFP for operations, maintenance and renewal is \$55,320,000 on average per year giving a 10-year funding shortfall of \$-12,546,000 per year. This indicates that 81.51% of the forecast costs needed to provide the services documented in this AM Plan are accommodated in the proposed budget. Note, these calculations exclude depreciation and the acquisition of new and upgrade of existing assets.

Providing sustainable and affordable services from infrastructure requires the management of service levels, risks, forecast outlays and financing to achieve a financial indicator of approximately 1.0 for the first years of the AM Plan and ideally over the 10-year life of the LTFP.

7.1.2 Forecast Costs (outlays) for the Long Term Financial Plan

Table 7.1.2 shows the forecast costs (outlays) required for consideration in the 10-year LTFP.

¹⁶ AIFMM, 2015, Version 1.0, Financial Sustainability Indicator 3, Sec 2.6, p 9.

Providing services in a financially sustainable manner requires a balance between the forecast outlays required to deliver the agreed service levels with the planned budget allocations in the LTFP.

A gap between the forecast outlays and the amounts allocated in the financial plan indicates further work is required on reviewing service levels in the AM Plan and/or financial projections in the LTFP. We will manage any 'gap' by communicating the service performance, cost, and risk implications in consultation with the community and key stakeholders.

Forecast costs are shown in 2024/25-dollar values.

Table 7.1.2: Forecast Costs (Outlays) for the Long Term Financial Plan

Year	Acquisition	Operation	Maintenance	Renewal	Disposal
2025	2,600,000	4,085,850	23,153,150	31,761,000	0
2026	3,104,000	4,212,750	23,872,250	32,742,000	0
2027	2,107,000	4,341,900	24,604,100	33,757,000	0
2028	2,109,000	4,475,100	25,358,900	34,792,000	0
2029	2,113,000	4,612,350	26,136,650	35,859,000	0
2030	2,116,000	4,753,650	26,937,350	36,957,000	0
2031	2,119,000	4,899,150	27,761,850	38,089,000	0
2032	2,123,000	5,049,000	28,611,000	39,254,000	0
2033	2,127,000	5,203,350	29,485,650	40,454,000	0
2034	2,130,000	5,362,500	30,387,500	41,691,000	0
2035	2,134,000	5,514,600	31,249,400	42,873,500	0

7.2 Valuation Forecasts

The best available estimates of the value of assets included in this AM Plan are shown below. The assets are valued at fair value at cost to replace service capacity:

Replacement Cost (Gross)	\$ 2,878,642,532
Depreciable Amount	\$ 2,020,287,286
Current Replacement Cost ¹⁷	\$ 2,130,266,660
Depreciation	\$ 748,375,872

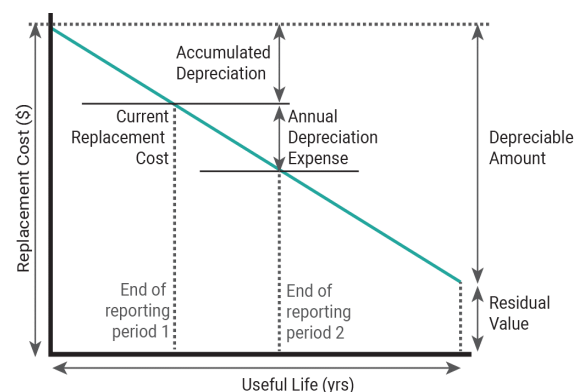


Figure 7.2: Valuation Terminology

¹⁷ Also reported as Written Down Value, Carrying or Net Book Value.

8. Assumptions and Improvement Planning

8.1 Data and Information Sources

8.1.1 Accounting and financial data sources

This AM Plan utilises accounting and financial data sourced from Council's Enterprise software as accessed by Council's Assets Accountant.

8.1.2 Asset management data sources

This AM Plan also utilises asset management data. The source of the data is Council's Enterprise software as accessed by the Team Leader, Strategic Assets and Manager, Transport Assets.

8.2 Key Assumptions

In compiling this AM Plan, it was necessary to make some assumptions. This section details the key assumptions made in the development of this AM plan and should provide readers with an understanding of the level of confidence in the data behind the financial forecasts.

Key assumptions made in this AM Plan are:

- Road Renewal works includes 20% upgrade works
- The Capital Works Program is based on the LTFP Business-As-Usual scenario

Assets requiring renewal are identified from either the asset register or an alternative method.

- The timing of capital renewals based on the asset register is applied by adding the useful life to the year of acquisition or year of last renewal
- Alternatively, an estimate of renewal lifecycle costs is projected from external condition modelling systems and may be supplemented with, or based on, expert knowledge. When doing so, the forecast remaining useful life in the asset register should be adjusted where necessary.

The Alternate Method was used to forecast the renewal lifecycle costs for this AM Plan.

8.3 Forecast Reliability and Confidence

The forecast demands, costs, planned budgets, and valuation projections in this AM Plan are based on the best available data. For effective asset management and financial planning and reporting, it is critical that the information is reliable and up to date. Data confidence is classified on an A to E level scale in accordance with the guidance provided in the International Infrastructure Management Manual.¹⁸

¹⁸ IPWEA, 2015, IIMM, Table 2.4.6, p 2|71.

Table 8.3.1: Data Confidence Grading System

Confidence Grade	Description
A. Very High	Data based on sound records, procedures, investigations and analysis, documented properly and agreed as the best method of assessment. Dataset is complete and estimated to be accurate $\pm 2\%$
B. High	Data based on sound records, procedures, investigations and analysis, documented properly but has minor shortcomings, for example some of the data is old, some documentation is missing and/or reliance is placed on unconfirmed reports or some extrapolation. Dataset is complete and estimated to be accurate $\pm 10\%$
C. Medium	Data based on sound records, procedures, investigations and analysis which is incomplete or unsupported, or extrapolated from a limited sample for which grade A or B data are available. Dataset is substantially complete but up to 50% is extrapolated data and accuracy estimated $\pm 25\%$
D. Low	Data is based on unconfirmed verbal reports and/or cursory inspections and analysis. Dataset may not be fully complete, and most data is estimated or extrapolated. Accuracy $\pm 40\%$
E. Very Low	None or very little data held

The estimated confidence level for and reliability of data used in this AM Plan is shown in Table 8.3.2.

Table 8.3.2: Data Confidence Assessment for Data used in AM Plan

Data	Confidence Assessment	Comment
Demand drivers	Medium	Sourced from Council's strategic documents with some extrapolation
Growth projections	High	Sourced from Council's strategic documents
Acquisition forecast	High	Sourced from Council's strategic documents
Operation forecast	Low	Sourced from Council's strategic documentation, with significant extrapolation
Maintenance forecast	Low	Sourced from Council's strategic documentation, with significant extrapolation
Renewal forecast - Asset values	High	Sourced from 2023 valuations
- Asset useful lives	Medium	Sourced from 2023 re-valuation
- Condition modelling	High	Condition data has recently been made complete and current
Disposal forecast	Very High	Sourced from Council's strategic documents

The overall estimated confidence level for and reliability of data used in this AM Plan is **Medium**.

8.4 Improvement Plan

It is important that we recognise gaps in the planning process that require improvement to ensure effective asset management and informed decision making. The improvement plan generated from this AM Plan is shown in Table 8.4.

Table 8.4: Improvement Plan

Task	Task	Responsibility	Resources Required	Timeline
1	Review road network for critical assets, such as bridges, landslip areas	Team Leader Strategic Assets	Current staff	12 months
2	Analyse trends in maintenance funding, practice and outcomes	Team Leader Strategic Assets	Current staff	12 months
3	Rationalise road holding – identify roads that could be abandoned, disposed or replaced with road with a lower lifecycle cost	Team Leader Strategic Assets	Current staff	24 months
4	Develop proposals for changes to Operation practices (to be developed by further workshopping and consultation, with research into technologies and industry experience)	Team Leader Strategic Assets	Current staff	24 months
5	Develop proposals for changes to Maintenance practices (to be developed by further workshopping and consultation, with research into technologies and industry experience)	Team Leader Strategic Assets	Current Staff	24 months
6	Further develop more comprehensive guidelines to ensure consistency in asset condition rating ¹⁹	Team Leader Strategic Assets	Current Staff	12 months
7	Undertake annual desktop review of asset values, in accordance with the accounting and valuation standards ¹⁵	Team Leader Strategic Assets	Current Staff	24 months

8.5 Monitoring and Review Procedures

This AM Plan will be reviewed during the annual budget planning process and revised to show any material changes in service levels, risks, forecast costs and proposed budgets as a result of budget decisions.

It will also be reviewed and updated annually to ensure it represents the current service levels, asset values, forecast operations, maintenance, renewals, acquisition and asset disposal costs and planned budgets. These forecast costs and proposed budget are incorporated into the LTFP or will be incorporated into the LTFP once completed.

¹⁹ Recommendation from Morrison Low Asset Management Maturity Assessment May 2021

The AM Plan has a maximum life of 4 years and is revised and updated within 6 months of each Council election and following any significant change to the Asset Management Policy and the Asset Management Strategy.

8.6 Performance Measures

The effectiveness of this AM Plan can be measured in the following ways:

- The degree to which the required forecast costs identified in this AM Plan are incorporated into the LTFP
- The degree to which the 1- to 5-year detailed works programs, budgets, business plans and corporate structures consider the 'global' works program trends provided by the AM Plan
- The degree to which the existing and projected service levels and service consequences, risks and residual risks are incorporated into Council's strategic planning documents and associated plans
- The Asset Renewal Funding Ratio achieving Council's target of 100%.

9. References

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- ISO, 2024, ISO 55000:2024 Asset Management – Vocabulary, overview, and principles
- ISO, 2018, ISO 31000:2018 Risk management – Guidelines
- *MidCoast 2035 Community Strategic Plan (2025-2035)*
- *MidCoast Council Delivery Program (2025-2029)*
- *MidCoast Council Operational Plans*
- *MidCoast Council Resourcing Strategy including the:*
 - *MidCoast Council Asset Management Strategy (2024-2034)*
 - *Workforce Management Strategy,*
 - *Long Term Financial Plan and*
 - *ICT Strategy*
- *Pedestrian and Access Mobility Plan*
- *MidCoast Climate Change Strategy*
- *MidCoast Council Road Strategy*

