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Cootamundra-Gundagai Regional Council

Asset Management Plan - Transport

May 2025

COOTAMUNDRA-GUNDAGAI REGIONAL COUNCIL

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Cootamundra-Gundagai Regional Council

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Version Control Protocol:

1. Primary number changes to Versions (e.g. V1.00 to V2.00) apply when the document undergoes its regular review and/or when significant changes are made.
2. Secondary number changes to Versions (e.g. V1.00 to V1.01) apply to minor amendments that do not materially impact the documents and are intended only to clarify or update issues.

Abbreviations

ABS	Australian Bureau of Statistics
AMP	Asset Management Plan
AMS	Asset Management System
AO	Audit Office of New South Wales
CAPEX	Capital Investment Expenditure
CRC	Current replacement cost
DA	Depreciable amount
EP	Equivalent Persons
FWP	Forward Works Plan
CGRC	Cootamundra – Gundagai Regional Council
GIS	Geographic Information System
IRI	International Roughness Index
IRMP	Infrastructure risk management plan
KIM	Knowledge Information Mapping
KPI	Key Performance Indicator
LCE	Life Cycle Expenditure
LCC	Life Cycle Cost
LGIP	Local Government Infrastructure Plan
LoF	Likelihood of failure
LOS	Levels of Service
MMS	Maintenance management system
TCorp	New South Wales Treasury Corporation
RACAS	Road Asset Condition Assessment System
RUL	Remaining Useful Life
RV	Residual value
SL	Service Level

Executive Summary

1.1 The Purpose of the Plan

This Transport Asset Management Plan (AMP) details information about infrastructure assets with actions required to provide an agreed level of service in the most cost-effective manner while outlining associated risks.

The plan defines the services to be provided, how the services are provided and what funds are required to provide over the 10 year planning period. The AM Plan will link to a Long-Term Financial Plan which typically considers a 10 year planning period.

1.2 Asset Description

This plan covers the infrastructure assets that included within Councils transport infrastructure network, including:

Transport Assets				
Bridges	Kerb & Channel	Pathways	Formed Road	Unformed Road
Gravel Road	Sealed Road	Road associated stormwater drainage	Carparks & Hardstands	Causeways

1.3 Levels of Service

The allocation in the planned budget is sufficient to continue providing existing services at current levels for the planning period.

The above infrastructure assets have replacement value estimated at $593,126,000, as at the last comprehensive valuation dated 30 June 2024.

1.4 Future Demand

The factors influencing future demand and the impacts they have on service delivery are created by:

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

1.5 Lifecycle Management Plan

1.5.1 What does it Cost?

The forecast lifecycle costs necessary to provide the services covered by this AM Plan includes operation, maintenance, renewal, acquisition, and disposal of assets. Although the AM Plan may be prepared for a range of time periods, it typically informs a Long-Term Financial Planning period of 10 years.

Therefore, a summary output from the AM Plan is the forecast of 10 year total outlays, which for the Transport Asset class is estimated as $6,389,000 on average per year.

1.6 Financial Summary

1.6.1 What we will do

Estimated available funding for the 10 year period is $28,000,000 or $2,800,000 on average per year as per the Long-Term Financial plan or Planned Budget.

The infrastructure reality is that only what is funded in the long-term financial plan can be provided. The Informed decision making depends on the AM Plan emphasising the consequences of Planned Budgets on the service levels provided and risks.

The anticipated Planned Budget for Transport leaves a shortfall of $1.1M on average per year of the forecast lifecycle costs required to provide services in the AM Plan compared with the Planned Budget currently included in the Long-Term Financial Plan. This is shown in the figure below.

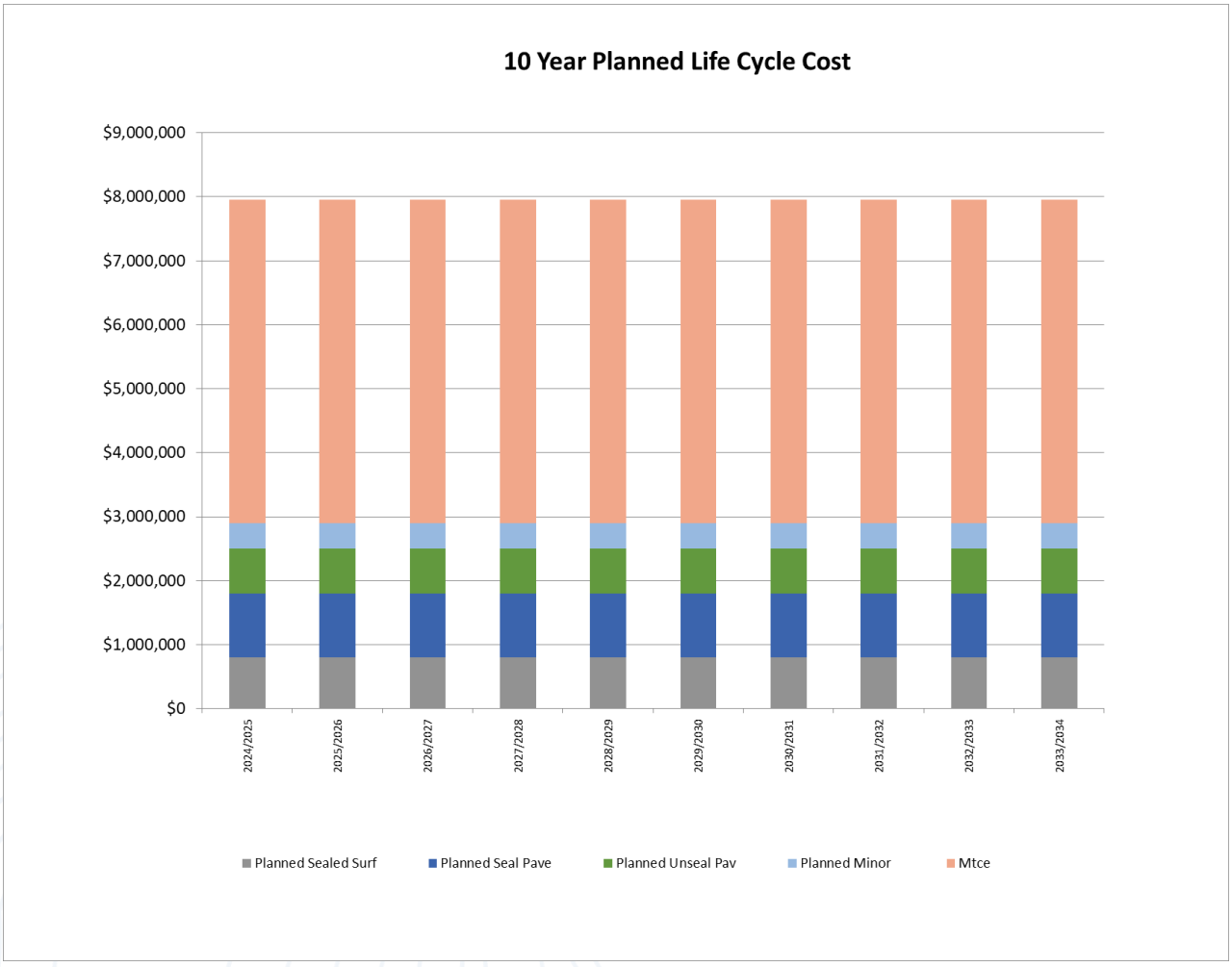


Figure 1 -Forecast Lifecycle Costs and Planned Budgets

1.7 Asset Management Planning Practices

Key assumptions made in this AM Plan are:

- Current historic expenditure will cover the technical levels of service
- Remaining useful life in the financial exports depicts the forecast renewals

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.

The remaining useful life was used to forecast the renewal lifecycle costs for this AM Plan.

1.8 Monitoring and Improvement Program

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

Table 1 – Improvement Program

Task	Task	Responsibility	Resources Required	Timeline
1	Organisational decision and communication of 'one place of truth' for asset data storage and management.	Deputy General Manager - Operations	All Council staff	1/10/2025
2	Works program development (including maintenance) and associated budget allocation, aligned with each yearly Council budget development.	Deputy General Manager - Operations	Both Team Leads - Engineering Cootamundra and Engineering Gundagai	March each year (aligned with budget development)
3	Continue to support the development of a comprehensive GIS system (and associated business management processes) of transport assets, across both operational bases of the Council (Cootamundra and Gundagai). Checks on data accuracy to be undertaken in parallel. This is to include asset attributes, such as location, asset attributes	Deputy General Manager - Operations	Both Team Leads - Engineering Cootamundra and Engineering Gundagai	1/7/2026

Task	Task	Responsibility	Resources Required	Timeline
	and condition score. This data is to be collated through - Undertaking inspections of each transport asset catgeory, including roads, culverts and road delineation/signage. - Complete analysis of map data and audit asset date. - Ensure all infrastructure is captured and added into the GIS, when new assets are found or added into the Transport asset class. Note: *Each asset is to be aligned to an operational base within the GIS asset attributes, to allow GIS data to be easily split, and broken into separate GIS data sets, should 'deamalgation' processes be activated.*			
4	Documented system to manage and collate new asset, such as completed works ('As Cons').	Deputy General Manager - Operations	Both Team Leads - Engineering Cootamundra and Engineering Gundagai	1/9/2025
5	Allocation of funding allocation to continue to undertake regular (3-year maximum interval) road condition assessments.	Deputy General Manager - Operations	Both Team Leads - Engineering Cootamundra and Engineering Gundagai	1/3/2025 (Budget development)
6	Measure performance against assigned service levels, through collation of customer surveys and/or analysis of customer feedback/complaints received from the community or stakeholders.	Deputy General Manager - Operations	Both Team Leads - Engineering Cootamundra and Engineering Gundagai	Annually

Task	Task	Responsibility	Resources Required	Timeline
7	Undertake review of road network and apply standardized Road Hierarchy. Identify the gaps in the network and costs for the future. NOTE: *If 'de-amalgation' process does not occur, streamline the classification of roads in the road hierarchy. Currently roads are classified based upon their Cootamundra or Gundagai classification. All roads should be classified in a uniform hierarchy consistent with the IPWEA Functional Road Classifications.*	Deputy General Manager - Operations	Both Team Leads - Engineering Cootamundra and Engineering Gundagai	
8	Complete planned inspections of Transport asset classes, in particular major culverts / bridges, and the development of a 5-year works program (based on condition assessments completed). Load limits to be placed onto bridges/major culverts, if condition assessments highlight structural capacity concerns.	Deputy General Manager - Operations	External Contractors	June 2027
9	Annual review to identify opportunities for available grant funding for road projects to narrow the funding gaps.	Deputy General Manager - Operations	Both Team Leads - Engineering Cootamundra and Engineering Gundagai	Ongoing annually
10	Comprehensive asset revaluation and review of depreciation and useful lives of sub assets: kerbs, pathways, culverts etc.	Deputy General Manager - Operations	External Contractors	Every 4 years
11	Review/consideration of work backlog based on current intervention levels, where funding available does not align (where grants or other funding streams are not successful).	Deputy General Manager - Operations	Both Team Leads - Engineering Cootamundra and Engineering Gundagai	March each year (aligned with budget development

BACKGROUND

2.1 Purpose of the Plan

The purpose of this AMP is to assist Council in two principal ways. The first purpose is to document asset management information in regards to Councils' Transport assets. The second purpose, which is unique to Cootamundra Gundagai Regional Council, is that this AMP will be ustilised to support Council navigation through any potential 'de-malgamation' process, should it be approved.

The documentation of asset management planning information for Transport Assets for the council is undertaken through:

- Documenting its current management approach of Transport assets;
- Demonstrating responsible management;
- Understanding and managing significant risks;
- Identifying opportunities to improve the management of Transport assets; and
- Identifying opportunities to support the separation of transport assets in the event of initiation of potential de-amalgamation activities.

This AMP documents asset management planning information for the Transport assets for the Council. This includes a review of strategic trends facing the Council and potential impacts on the asset stock, asset condition and performance against key indicators, long term financial forecasts, risk register and an improvement plan for managing the asset included within the Transport classification. Financial implications for providing the required levels of service into the future are also provided, based on the associated separate spreadsheet model for the AMP.

The potential benefits are:

- Enables Council to satisfy more community needs at less cost allowing the resources saved to be deployed to provide more services;
- Enables Council to know where to spend funds to get the most bang for their buck;
- Protects Council against potential litigation;
- Documentation of asset management processes make it easier for existing and new staff;
- Enables Council to avoid waste and the associated unfavorable publicity; and
- Financial Sustainability.

The second component of supporting Council through any future potential 'de-amalgation' process (if approved, through taking this into account in detailing how asset management of Transport assets is undertaken within Council.

2.2 Council's Vision, Aims, Outcomes and Strategies

The CGRC Community Strategic Plan (2022-32) includes a number of strategic objectives, which

link to Councils AMP documents. These include are:

Integrated and Accessible Region

Known for our good road network

- Revising the asset management plan
- Prioritising access road maintenance and future development to provide safe and efficient road and pathway network
- Considering alternate/additional road maintenance partners

Easily accessible from major cities and other regional towns

- Improve road conditions across the region, and advocate to improve access to regional cities and connection out of the region
- Establish linked network of pedestrian footpaths and cycle paths through continued extension and upgrade of pedestrian and cycle paths

A safe, sustainable and efficient road and pathway network

- Community satisfaction with the safety of the road network in their town or village and across the region
- Community satisfaction with the condition of the road network in their town or village and across the region

The key vision for Council to work towards meeting these strategies are:

- Providing a defined level of service and monitoring performance (as amended from time to time),
- Linking to a Long-Term Financial Plan (including renewal, maintenance and operational funding) which identifies required, affordable forecast costs and how it will be allocated.
- Taking a life cycle approach;
- Developing cost-effective management strategies for the long term;
- Identifying, assessing and appropriately controlling risks,
- Review our services to ensure they meet our customer needs within the financial constraints of Council;
- Sustainable use of physical resources; and
- Continuous improvement in asset management practices.

Key elements of the planning framework are

- Levels of service – specifies the services and levels of service to be provided,
- Lifecycle management – how to manage its existing and future assets to provide defined levels of service,
- Financial summary – what funds are required to provide the defined services,
- Monitoring – how the plan will be monitored to ensure objectives are met,

- Risk Management – how to manage these risks, and
- Asset management improvement plan – how we increase asset management maturity across the organisation.

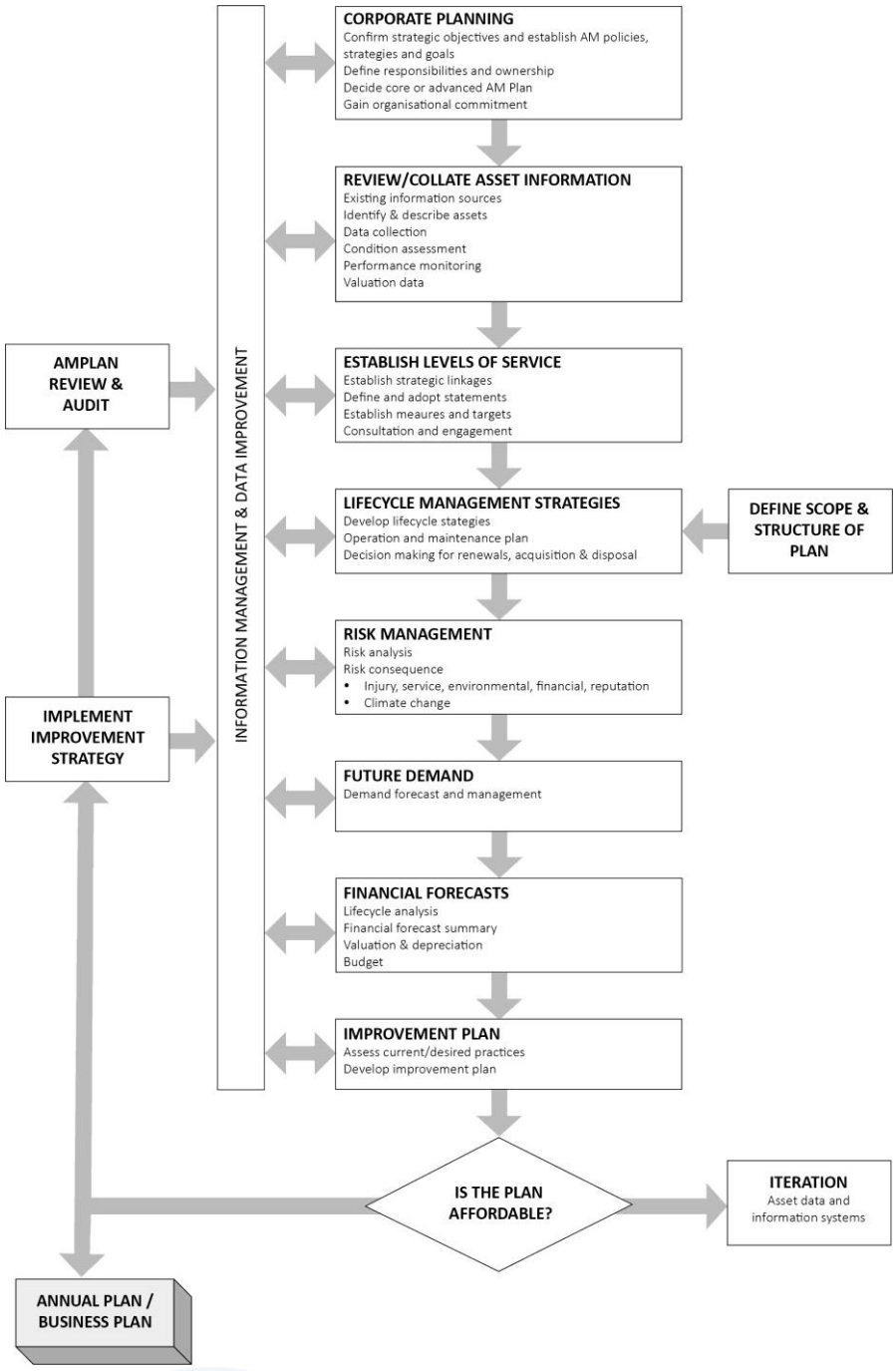


Figure 2 -Road Map for preparing an Asset Management Plan *(IPWEA, 2006)*

2.3 Key Stakeholders

Good asset management requires the alignment of resources with all people understanding the objectives and then playing their respective roles in the management of assets and the delivery of services to the community. Table 1.c outlines the roles and responsibilities for asset management within CGSC.

Table 2 - Key Stakeholders and Roles

Role	Who	Responsibilities
Strategic Direction	Councillors	Represent needs of community and service level expectations; Endorsement of the asset management policy; Ensure Council is financially sustainable; and Approval of allocation of resources.
Operational Decision Making	Executive Management Team	Overall responsibility for developing an asset management policy, plans and procedures and reporting on the status and effectiveness of asset management within Council; Allocate resources to meet the organisation's objectives in providing services while managing risks; Ensuring Council is financially sustainable. Provision of sound organisation structure Lead the organisations culture Managing risks in accordance with adopted appetite Manage Statutory Requirements Develop and Administer Policies Provide Service Strategy Asset management objectives
Strategic Alignment/ Organisational Alignment	Asset Management Working Group	Custodian of the corporate asset register and ensuring the asset valuations are accurate; Preparation of asset sustainability and financial reports incorporating asset depreciation in compliance with current Australian accounting standards; Asset Management System development and administration; Develop 10-Year Capital Works Plans and budgeting; Ensure funds are invested appropriately to ensure best value for money is delivered to the community;

Role	Who	Responsibilities
		and Develop the maintenance standards deployed and Council's ability to meet technical and community levels of service. Championing promotion of adequate resourcing for asset management Whole of Council asset performance monitoring Demonstrate whole of organisation support for sustainable asset management Wider accountability for achieving and reviewing sustainable asset management practices Encourage buy-in and responsibility; Coordinate strategic planning, information technology and asset management activities Promote uniform and fit for purpose asset management practices across the organisation Information sharing across IT hardware and software Pooling of corporate expertise Championing of asset management improvement initiatives
Tactical / Operational	Asset Custodians Maintenance Managers Service Managers	Service delivery Asset data capture Operational risk management Alignment of service levels to budgets Asset Management Plan Development Development of renewal and upgrade plans Asset specific condition monitoring Asset and resource optimisation Asset Maintenance and Operations Identification of asset disposal opportunities Identification of service efficiency opportunities
Tactical / Operational	Staff	Verify the size, location, and condition of assets; Provide local knowledge detail on all infrastructure assets; Capital Works, Operation and Maintenance

Role	Who	Responsibilities
		management to meet agreed levels of service; and Liaison internally with the Senior Management Team regarding asset prioritisation and planning.
	Community (residents, businesses,property owners)	End users of services provided by assets; Aware of service levels and costs; Participate in consultation processes; and Provide feedback on services.
	Consultants	Engineering expertise input.
	Utility Service Providers	Interaction in service delivery.
	State and Federal Government	Provision of various grants and subsidies; Provide Leadership in promoting Best Practice Asset Management; Facilitate Training and Education; Recognising the importance of LG Assets to community and provide funding; and Other assistance to sustain.

2.4 Legislative Requirements

The management of assets is often driven by complex legislative arrangements. Table 1.d provides a list of Legislation that is relevant to the Transport asset class.

Table 3 - Legislation and Requirements

Legislation	Requirement
Local Government Act	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, , the acquisition and disposal of assets and requirements for corporate and operational plans. The Local Government (Finance, Plans and Reporting) Regulation is subordinate legislation.
Roads Act 1997	To provide public access to Roads, to classify Roads, to act as the local road authority, to carry out certain functions e.g. road works and to regulate activities on public Roads.

Work Health and Safety Act & Regulation 2011	This Act is directed at eliminating the human cost to individuals, families and the community of death, injury and damage/ destruction of property that can be caused by electricity. It sets out roles and responsibilities to secure the health, safety, and welfare of persons at work.
The Australian Accounting Standards	The Australian Accounting Standards consisting of AASB13, AASB 16, AASB116 define the financial accounting requirements related to assets. The Australian Accounting Standards Section 27 (AAS27) requires that assets be valued, and reported in the annual accounts, which also includes depreciation value (i.e. how fast are these assets wearing out).
AS 1742 (Traffic)	To ensure compliance and uniformity with traffic control devices.
Environmental Planning and Assessment Act 1979	Sets out guidelines for land use planning and promotes sharing of responsibilities between various levels of government in the state.
Environmental Planning and Assessment Amendment Act 2008	Sets out guidelines for land use planning and promotes sharing of responsibilities between various levels of government in the state.
Protection of the Environment Operations Act 1997	Sets out Council responsibility and powers of local area environment and its planning functions.
Civil Liability Act 2002	To manage negligence, elements of a claim, duty of care, standard of care and causation and to address the requirements of sections 42 and 45.

2.5 Organisational Structure

Council's current organisational structure at present is shown below:-

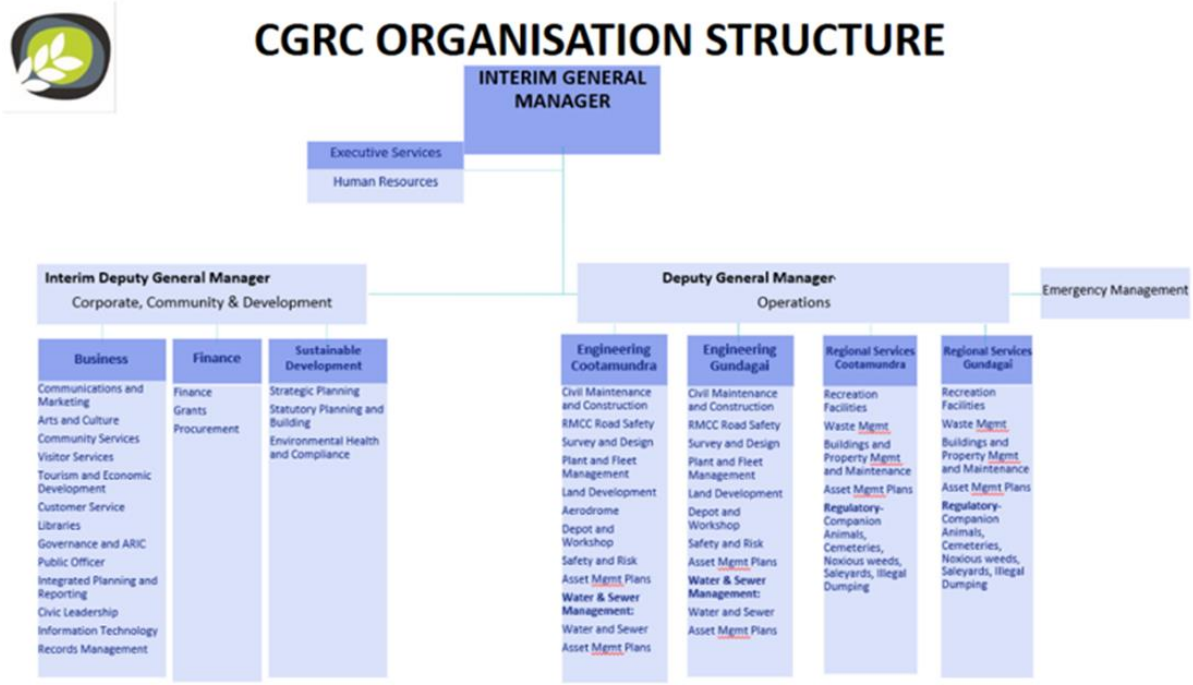


Figure 3 - Councils Organisational Structure

The council itself is currently involved within a review of its overarching body. The outcome of this review may see the council remain as a combined (amalgamated) organisation, or it may see the council be de-amalgamated into its separate components. At the time of production of this AMP document, the outcome of this review is not known. Therefore, this document has been written with both options in mind. Therefore in certain parts of this document, additional NOTE: comments have been made, which need to be considered for each eventual outcome.

From an asset management perspective, the importance of data management and clear delineation of asset ownership is underlined. In the event, de-amalgation occurs, it is imperative that the necessary slip of asset ownership is undertaken cleanly. This could be supported prior to the review being completed, through ensuring asset data systems have a link to asset ownership during the collection/management phase.

ASSET DESCRIPTION

The Council owns and maintains the local and regional road network within the Cootamundra – Gundagai Regional Council area. This AMP is for the Council owned Transport assets, which also includes stormwater drainage assets associated with the transport network assets.

The infrastructure assets covered by this AM Plan include:

Table 4 – Asset Class

Transport Assets				
Bridges	Kerb & Channel	Pathways	Formed Road	Unformed Road
Gravel Road	Sealed Road	Road associated stormwater drainage	Carparks & Hardstands	Causeways

2.6 Physical Parameters

The assets included in this Asset Management Plan are shown in Table 4, based on data from Council's website and GIS data, are based on the following hierarchy:

1. **Arterial Roads** – Connect to State Roads.

- Mainly Regional Roads but other important roads can be Arterial Roads.
- Carry traffic to, from and across council areas.
- Provide for traffic movements between regions. Carry the highest volumes of traffic, light and heavy.
- Extend to the perimeter of the Shire boundary.
- Acknowledged as an important road by Council, other road authorities and road users.
- Are subject to various avenues of funding (State, Local and development contributions).

2. **Primary Collector Roads** (Class A) – Includes High Traffic Urban.

- Roads which receive relatively high traffic volumes but are not Arterial Roads.
- Provide linkages between Arterial Roads.
- Mainly used by local traffic, both light and heavy vehicles.
- Does not include "dead ends" or "No Through Roads"

3. **Local Collector Roads** (Class B)-Includes Medium Traffic Urban.

- Local roads that carry traffic and allow access to residential and rural property.
- Provide linkages from Primary Collector Roads to the local access roads.
- Referred to as a "minor" road.
- Receives less traffic than a Primary Collector Road.
- Can be a through or non-through road (dead end) but does provide access to lower order local access roads.
- There may be an industrial presence on the road.

4. **Local Access Roads** (Class C) – Includes Low Traffic Urban.

- Road is maintained by Council.
- Class includes rear lanes in urban areas.
- Provides access to individual properties or a small number of properties.
- Branches out from another category of road.
- Local town streets in an urban setting.
- Generally, "no through roads" or dead ends but classification includes rear lanes which may be through roads.

5. **Unformed Local Access Roads** –

- Roads not maintained by Council.
- Includes unformed service tracks.
- Road has no constructed road formation.
- Provide access to a very small number of properties only.
- Branches out from another category of road.
- Mainly rural. Not urban.
- Generally, "no through roads" or dead ends.

6. **Bridges and Major Culverts** –

- Includes concrete, steel, corrugated and timber structures

2.7 Asset Valuations

Asset valuations for the Transport class were completed in 2024 with data loaded into Council Authority financial System. Table below details the value of assets in the Transport class based on the asset revaluation for all assets other than bridges.

Table 5 - Asset Valuations by Asset Type

Asset Type	Replacement Cost	Written Down Value
Sealed Roads Surface	$ 40,001,280	$ 18,362,042
Sealed Roads Pavement	$ 116,009,906	$ 63,795,908
Sealed Roads Subbase	$ 101,006,237	$ 55,500,725
Sealed Roads Formation	$ 149,800,747	$ 0
Sealed Roads Kerb	$ 28,311,990	$ 14,822,588
Unsealed Roads Pavement	$ 10,980,005	$ 9,520,332
Unsealed Roads Formation	$ 56,048,863	$ 55,966,397
Pathways Pedestrian	$ 9,872,621	$ 5,908,810
Bridges and Major Structures Bridges	$ 81,094,888	$ 42,130,169
Grand Total	**$ 593,126,536**	**$ 266,006,971**

2.8 Asset Registers

Council's asset register is maintained in 'Authority' which is Council's primary ERP (Enterprise Resource Planning) system. This system offers advanced capabilities when it is well configured and data is regularly maintained. There are considerable benefits when data in 'Authority' and Council's GIS (geographic information system) are linked, and the linkages are well maintained. In addition, having a single point of truth and linking operational information from field teams to assets also offers benefits if the data is maintained.

Improving organisational understanding of data management, maintenance and reporting principles will help progressively improve the data quality in the asset register. Improving other operational registers in a way that aligns with the GIS and 'Authority' would also assist in improved reporting capabilities and management of assets.

2.9 Asset Useful Life & Condition

Council's 2024 asset revaluation had useful life ranges from 10 to 110 years. Use of the Useful Life, Remaining Useful Life and Expiry Date fields within Authority requires review to improve consistency and reporting. A single point of truth needs to be adopted and all other data that could be misinterpreted should be archived and removed from the GIS and Authority. Table 6 provides details of useful lives from the 2024 asset revaluation.

Table 6 - Asset Useful Life

Component	Class	Intervention Level	Useful Life (years)
Road Seals (Flush Seal)	All Roads	7	15
Road Seals (AC)	All Roads	7	25
Sealed Road Pavements	Collector and above	7	80 to 110
Sealed Road Pavements	Local Access Roads	7	80 to 110
Gravel Pavements	Local Access Roads	7	15-30
Kerb & Gutter	All Roads	7	50
Footpaths (Concrete)	All Roads	7	50
Footpaths (AC & Pavers)	All Roads	7	25-50

2.10 Condition Profile

Condition data for transport assets are shown in figure 2.a where condition:

1 = Brand New,

2 = Excellent Good,

3 =Very Good,

4= Good Overall,

5 = Fair Overall,

6 = Fair to poor,

7 = Poor Overall,

8 = Very Poor Overall,

9 = Extremely poor condition,

10 = Failed Assets.

Data comes from Council's 2024 asset revaluation. Assets that shown as NA are assets which do not deteriorate, primarily formation assets. Assets that are shown as TBD are mostly stormwater assets that have no record of previous condition assessment.

LEVELS OF SERVICE

3.1 Background

One of the basic tenets of good asset management practice is to provide the level of service the current and future community want and are prepared to pay for, in the most cost effective way (NZ NAMS 2007).

3.2 Customer/Community Levels of Service (LOS)

Customer/Community LOS relate to how the customer/community receives the service in terms of safety, quality, quantity, reliability responsiveness, cost efficiency and legislative compliance; Community levels of service measures, commonly used within asset management planning are:

Quality	How good is the service for the user?
Function	Does it meet the users' expected needs?
Safety	Is the service safe for the user?

Table 7 - Community Level of Service

Type of Measure	Level of Service	Performance Measure	Current Performance	Expected Trend Based on Planned Budget
Condition	Provide smooth all weather access	Customer service requests relating to roughness	Satisfactory	85% maintenance request
Function	Access is available all time	Customer service requests relating to usage and availability	Satisfactory	Medium to High
Capacity	Road assets are safe	Reported accidents	Not currently reviewed	Medium

3.3 Technical Levels of Service (LOS)

Technical LOS are the operational or technical measures of performance, developed to ensure the minimum community levels of service are met. They are related to the allocation of resources and personnel to undertake these activities and are linked to Councils available budgets.

- **Operations** – the regular activities to provide services,
- **Maintenance** – the activities necessary to retain an assets as near as practicable to its original condition;
- **Renewal** – the activities that return the service capability of an asset up to that which it had originally;
- **Upgrade** – the activities to provide a higher level of service (e.g. sealing and unsealed

road or widening a sealed road) or a new service that did not exist previously (e.g. adding a road onto Council's maintained road network);

Councils currently adopted LOS (as detailed with the previous Transport AMP document, are contained in the below:

Table 8 - Technical Level of Service

Category	Technical LOS	Performance Measure Process
Sealed Roads	Provide an all weather smooth ride at the designated speed limit.	Sealed roads will be resealed or rehabilitated when roughness exceeds IRI 6
Unsealed roads	All weather access provided to everyone	All roads classed as local and higher will be maintained at condition 7 or higher
Kerb and Gutter	Roads are safe and maintained in condition appropriate for use.	Water doesn't pond in driveways for more than 2 days after a storm K&G rehabilitated or renewed at or prior to condition 7
Footpaths	Sound, non slippery pathways provided to enable safe travel throughout the City	Trip hazards managed in accordance with the Council Policy
Bridges	Bridges are accessible during periods of moderate rainfall.	Hydraulic capacity caters for at least a 1 in 10 year storm. (Exception is the Mundarlow Bridge, which is constrained by environmental flows in the Murrumbidgee River.)
Culverts	Roads can be safety used during periods of moderate rainfall.	Hydraulic capacity of road drainage systems caters for at least a 1 in 10 year storm
Causeways	Causeways to reopen within 24 hours after a storm event. Alternative routes (detours) available for all causeways.	Planned replacement of priority causeways with more reliable structures in the long term in order to improve continuity of service.

The current LOS appear to be difficult to measure by those within Council, and thus should be further developed along with the initiation of the performance target details in following table:

Key Performance Measure	Level of Service	Performance Measure Process	Performance Target
Quality	Provide an all-weather smooth ride at the designated speed limit.	Customer service requests relating to rideability.	< 5 per annum
Function	Purpose - Meets user requirements for - Road width, turning circles and parking. Accessibility - Adequate traffic control devices.	Customer service requests.	< 5 per annum
Quality	Provide an all-weather smooth ride at the designated speed limit.	Customer service requests relating to rideability.	< 5 per annum
	Accessibility - Road network is well connected and accessible to users allowing for efficient traffic movement.	Customer service requests relating to connectivity and access.	< 5 per annum
Operations	Roads are safe and maintained in condition appropriate for use.	Regular condition & defect inspections.	Network condition survey every 3 years (Strategic Planning and Assets) Planned defects inspections by maintenance staff on an agreed schedule/ timeframe.
	Roads are clean and free of debris.	Roads routinely inspected, and debris removed as per target requirements.	As per required.
	Road verges are maintained to a well presented standard.	Roads routinely inspected, and vegetation maintained removed as per target requirements	As per required.

Key Performance Measure	Level of Service	Performance Measure Process	Performance Target
Maintenance	Roads are safe and maintained in condition appropriate for use.	Reactive maintenance requests completed within agreed timeframes.	90% compliance rate for safety hazards.
		Planned maintenance activities completed to a documented schedule.	90% of planned maintenance completed as per Council's adopted service standard.
Renewal	Roads are safe and maintained in condition appropriate for use.	3% of network in condition 8 to 10.	3 year condition survey.
		Average age of seals.	< 8 years
		% of network resealed each year for long term asset sustainability.	7% of length resealed per annum.
		Reviews are undertaken where high maintenance costs are identified.	
Upgrade/New	Road network is well connected and accessible to users allowing for efficient traffic movement.	As council's road network is established, upgrades and new assets are assessed on individual merits.	Process undertaken annually.
		Council appropriately assigns grant funding to appropriate projects.	Process undertaken annually.

3.4 Sustainable Asset Base

Based on the financial position of Council ensuring that Transport services are priorities and provided adequate funding is essential to ensure the ongoing safety of road users and access to support the industries of the region.

Council's transport network has grown and evolved over time. However over this time, Council has expanded its services, lost knowledge about its transport network through natural attrition of it workforce, and now many of Council's transport assets are aged requiring capital expenditure to be spent on upgrades and/or renewals. This is an increasing challenge for the Council as time progresses.
Options to generate savings in the transport class include:

- Continue to review road network in line with good Asset Management processes and procedures. Additionally through reducing the length of the maintained road network or maintaining roads at a certain category, can reduce service levels (and their associated maintenance costs). If savings are required, it is recommended that the sections of the road network with lowest traffic volumes be targeted.
- In locations where alternative routes are available and Council can accept the service level impacts some bridges or major culverts may be able to be replaced with lower level floodways.
- Reducing gravel coverage on lower order unsealed road.
- Reducing levels of service for roadside vegetation management.
- Reducing services levels on lower order roads.
- Not replacing lower order footpaths.

FUTURE DEMANDS

The Cootamunda-Gundagai Regional Council population was 11,403 in the later ABS Census Data from 2021. The current growth rate is flat (0.75%) and predicted to continue as such or decline further in future years.

It is not expected that future demand (growth) will influence this class of assets over the next 20 years. Any planned upgrades or improvements in the Transport class will be focused on improving network efficiency and resilience, and will generally be funded through external grants obtained by Council.

4.1 Demand Drivers

Drivers affecting demand include things such as population change, regulations, changes in demographics, seasonal factors, vehicle ownership rates, consumer preferences and expectations, technological changes, economic factors, agricultural practices, environmental awareness, etc.

There are no known or planned large demographical changes across the Council area that would impact on changing traffic patterns or numbers across Councils transport network. Some projects are planned (including alternative energy construction and links) but it is expected there to have minimum impacts across the transport network.

4.2 Technological Changes

Technology changes are forecast to affect the delivery of services covered by this plan, as outlined in table 9. Historically changes in technology have the effect of reducing whole-of-life costs. Changes in technology will be embraced where possible to reduce future whole of life costs.

Table 9 – Demand Drivers

Technology Change	Implication	Effect on Service Delivery
Increased use of recycled material in pavement and seal construction and maintenance.	• Greater use of in-situ recycling of pavement materials. • Greater use of recycled materials and composites. • Introduction of synthetic binders for road surfacing treatments. • Greater use of new high strength pavement technology e.g. EME2 Asphalt.	• Reduced total cost of ownership. • Improved environmental sustainability. • Reduced maintenance costs • Longer useful lives. • Better use of existing resources such as quarry materials.
Driverless vehicles/ operator assisted vehicles.	• Road design and construction standards will need to be higher.	• Potential increased road design and construction costs.

	• Increase in line marking and traffic control devices.	• Requirement to retrofit old roads to suit driverless vehicles.
Increase in capacity and volume of heavy vehicles.	• Road design and construction standards will require current design standards to be adhered to for new infrastructure	• Potential increased road design and construction costs. • Higher demand on road pavements leading to shorter expected asset lives.

4.3 Demand Impact 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.

Demand for new services will be managed through a combination of managing existing transport assets, upgrading of existing assets and providing new assets to meet demand and demand management. Demand management practices can include non-asset solutions, insuring against risks and managing failures.

Opportunities identified to date for demand management are shown in Table 10

Table 10 -Demand Impact

Demand Driver	Current Position	Impact on Services	Demand Management Plan
Population Change	11,403 in 2021	A number of subdivisions are in the planning phase of development, to support workers at nearby new abattoir, which may increase operations and maintenance budgets for these specific links within the network. A low overall population growth rate will have minimal impact on demand for new and upgraded assets.	Continue to manage assets inline with this plan. Continue to apply for available grant funding to support rehabilitation projects across the network (both road and bridge funding).
Customer Values	Residents and network users are expecting a greater demonstration of value from the network.	Increasing capital budget demand, to support upgrades to existing roads and new assets such as pathways	Continue to apply for available grant funding to support rehabilitation projects across the network (both road and

Demand Driver	Current Position	Impact on Services	Demand Management Plan
		and kerbing. If Council provides these upgrades and new assets this leads to increased whole of life costs.	bridge funding). A prioritisation system to be used to develop Councils works program. This prioritisation system is to be underpinned through current asset condition data and age data and planned allocated funding available for future years
Transport Industry Trends	An increase in oversize vehicles and changes to vehicle configurations being used by the transport industry.	An increase of oversized vehicles will require Council to increase the heavy vehicle network, this may trigger. Intersection, bridge and road upgrades. Heavy vehicle traffic also impacts on the longevity of the asset life, resulting in an accelerated deterioration of the asset and subsequent increased maintenance costs.	A prioritisation system to be used to develop Councils priority links for HV movements across the council road network, with corresponding priority given to these works within Councils future works program. Alternatives to be consider may include speed reductions around intersections sidetracking of structures with inadequate structural integrity for large loads (for example), should upgrade project funding (grants) not be available to support these works.
More Active and Social Society	Residents are using the pathway network more regularly for fitness and social purposes.	Community expectations regarding footpath maintenance may increase as the community utilises the network more.	A prioritisation system to be used to develop Councils works program for pathway works. This prioritisation system is to be underpinned through current asset condition data and age data, with works included with the

Demand Driver	Current Position	Impact on Services	Demand Management Plan
			planned allocated funding available for future years.

5.1 Cootamundra Gundagai Regional Council

5.1.1 Operations and Maintenance Expenditure (Opex)

Historical

Three years of historical maintenance and operations expenditure figures have been taken from Council's financial system and averaged for the purposes of financial modeling. Based on available data which has been reviewed by Councill staff the figures in Table 11.a represent the best available data for historical maintenance costs.

Table 11 - Historical Operations and Maintenance Costs (2022-2024)

Expenditure Type	$
Operations	$4.041M
Maintenance	$4.038M
Total OPEX (O & M)	**$8.079M**

Future

For the purposing of this asset management plan the historical average has been used with a 3% annual increase being applied as well as the inclusion of additional operations and maintenance costs associated with new or upgraded assets.

5.1.2 Capital Expenditure (Capex)

Historical

Grant funding has historically funded the renewal and repair of transport assets. This funding is always welcome as it allow Council to restore damaged assets to required standards. This funding has been financially significant and has substantially helped to maintain the condition of the transport network across Councils network.

Forward Works Program

Council's current budget process has a 10 year forward works program which has commenced with works in the 2024/25 year, at the time of producing this AMP.

This forward works plan has been developed based on the asset data, input from staff and applying industry benchmarks that have been reviewed by staff to suit local conditions. In addition the forward works program also considers:

- Renewals will be prioritised to preserve road pavements and ensure structures (including culverts remain serviceable)
- Upgrades will be limited and will utilise external funding. Council should ensure that the economic and social benefits of upgrades justify the increased costs and/or identify locations on the transport network where service levels can be reduced.
- Increased focus on the renewal of bridge and drainage assets to ensure road network

remains accessible (without culverts access is significantly compromised or stopped).

- Kerb and Channel will be renewed when its performance as a drainage device is significantly compromised. Replacement of Kerb and Channel based on aesthetic appearance is beyond Council's ability to fund.
- Footpaths will be renewed when there are significant safety concerns that cannot be addresses through maintenance.

5.1.2.1 Future Capital Funding

Planned renewals total $ 28 M for the 10 year period based on the forward works program shown in Table 12. Projected renewals total $29M for the next 10-years to 2033 derived from valuations data for remaining useful lives. Thus, the average amount projected for renewals from valuations is approximately $2.9 M per year (in current dollars).

Figure 4 shows projected and planned renewals alongside depreciation.

As outlined earlier Council needs to focus future revaluations on improving data for assets (including structures and bridges) nearing end of life which will improve data in the asset register and make for more accurate renewal forecasting.

Table 12 - Planned 10 years Renewals (Cootamundra-Gundagai Regional Council)

Program/Project	24/25	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	10 Year Total
Resealing Program	$800,000	$800,000	$800,000	$800,000	$800,000	$800,000	$800,000	$800,000	$800,000	$800,000	**$8,000,000**
Pavement Reconstruction	$1,000,000	$1,000,000	$1,000,000	$1,000,000	$1,000,000	$1,000,000	$1,000,000	$1,000,000	$1,000,000	$1,000,000	**$10,000,000**
Gravel Resheeting	$700,000	$700,000	$700,000	$700,000	$700,000	$700,000	$700,000	$700,000	$700,000	$700,000	**$7,000,000**
Footpath	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	**$1,000,000**
Kerb	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	**$1,000,000**
Bridge and Other Structures	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	$100,000	**$1,000,000**

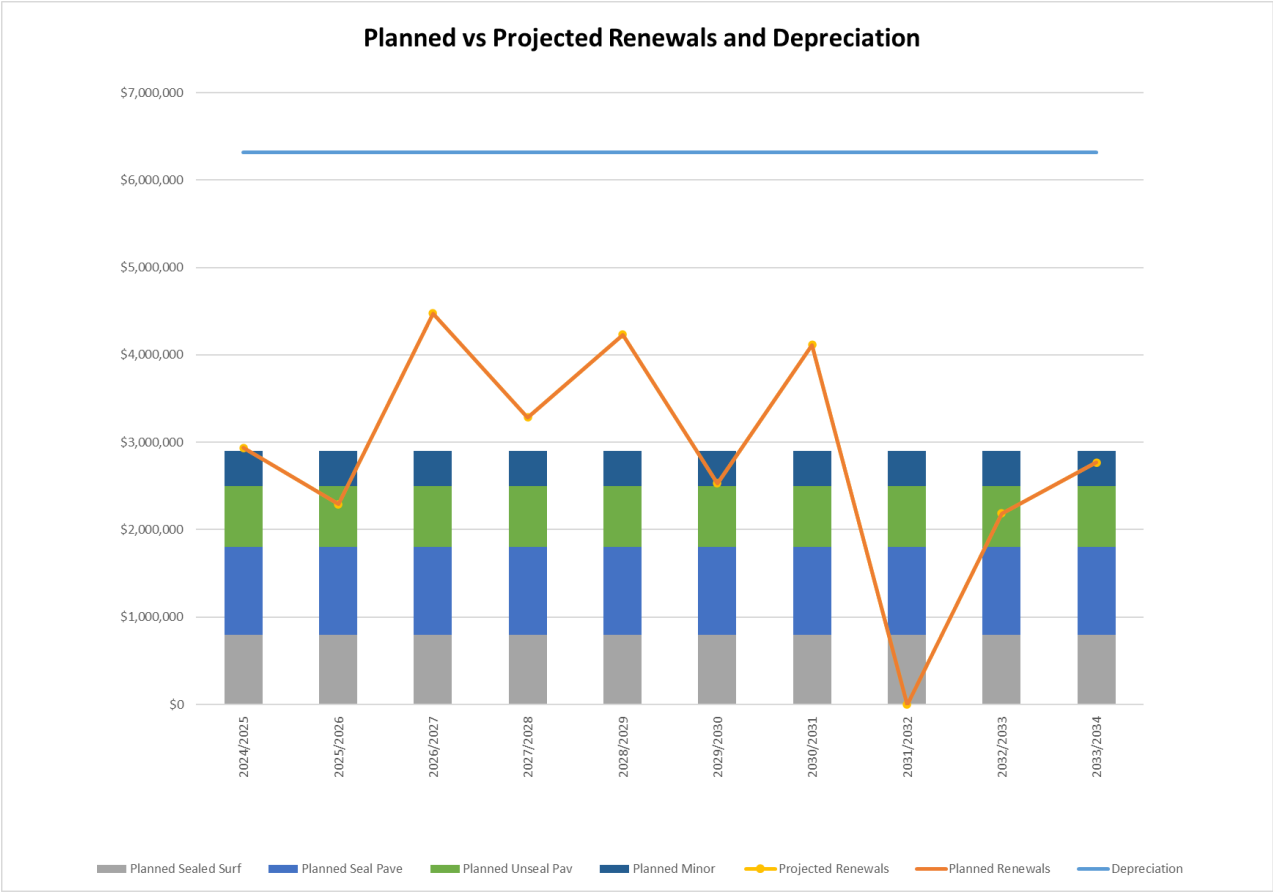


Figure 4 -Planned and Projected Renewals and Depreciation

5.2 Asset Sustainability Ratio

A financial measure of satisfactory levels of expenditure on asset replacements is the Asset Sustainability Ratio - the net capital expenditure on replacements as a percentage of the depreciation. It indicates whether the amount of replacement exceeds or is less than the amount of depreciation, that is, whether assets are being replaced at the rate they are wearing out. Although not a true reflection of the required long-term funding, depreciation does indicate the rate of consumption of assets. The Audit Office sets a target for renewals that is equal to or greater than 90% of depreciation.

The current total annual depreciation is $6.3 M per annum. A 90% target equates to $ 5.7 M per annum. Projected renewals over the next 10 years average $2.9 per year (45 %) which indicates a significant shortfall. Planned renewals average $ 2.8M per year (45 %) which also indicates a significant shortfall. While on face value this ratio is below the target Council should consider the following:

Review the useful lives of transport assets to ensure alignment with local factors.

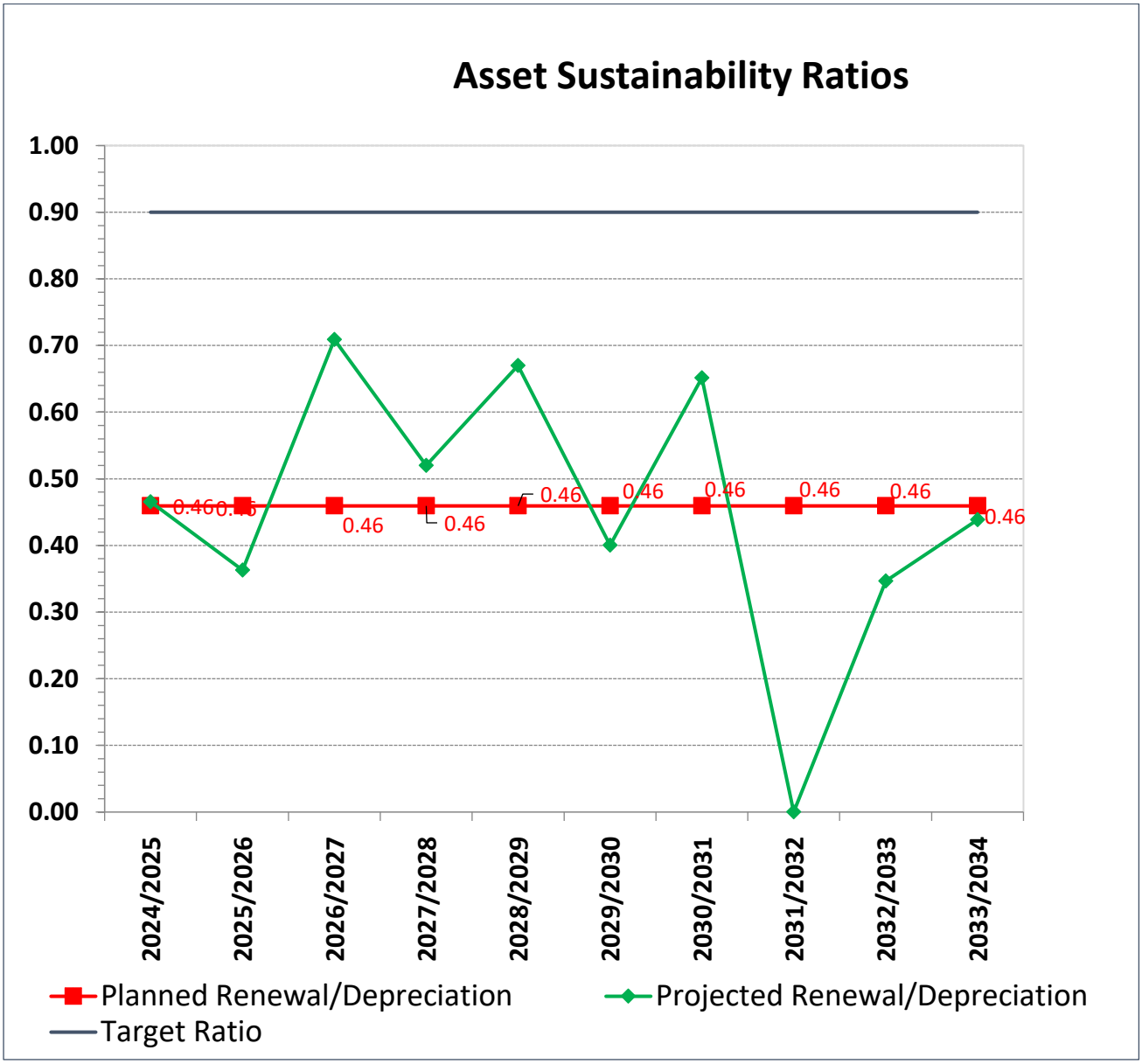


Figure 5 - Asset Sustainability Ratios

5.3 Cootamundra Component

5.3.1 Operations and Maintenance Expenditure (Opex)

5.3.1.1 Historical

Three years of historical maintenance and operations expenditure figures have been taken from Council's financial system and averaged for the purposes of financial modeling. Based on available data which has been reviewed by Councill staff the figures in Table 13 represent the best available data for historical maintenance costs.

Table 13 - Historical Operations and Maintenance Costs (2022-2024)

Expenditure Type	$
Operations	$3.024M
Maintenance	$2.216M
Total OPEX (O & M)	**$5.24M**

5.3.1.2 Future

For the purposing of this asset management plan the historical average has been used with no annual increase being applied as well as the inclusion of additional operations and maintenance costs associated with new or upgraded assets.

5.3.2 Capital Expenditure (Capex)

5.3.2.1 Forward Works and Future Capital Program

Planned renewals total $ 13M for the 10 year period based on the forward works program shown in Table 14. Projected renewals total $ 15.6M for the next 10-years to 2033 derived from valuations data for remaining useful lives. Thus, the average amount projected for renewals from valuations is approximately $1.56 M per year (in current dollars).

Table 14 -Planned 10 years Renewals (Cootamundra)

Program/Project	24/25	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	10 Year Total
Resealing Program	$400,000	$400,000	$400,000	$400,000	$400,000	$400,000	$400,000	$400,000	$400,000	$400,000	**$4,000,000**
Pavement Reconstruction	$500,000	$500,000	$500,000	$500,000	$500,000	$500,000	$500,000	$500,000	$500,000	$500,000	**$5,000,000**
Gravel Resheeting	$250,000	$250,000	$250,000	$250,000	$250,000	$250,000	$250,000	$250,000	$250,000	$250,000	**$2,500,000**
Footpath	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	**$500,000**
Kerb	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	**$500,000**
Bridge and Other Structures	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	**$500,000**

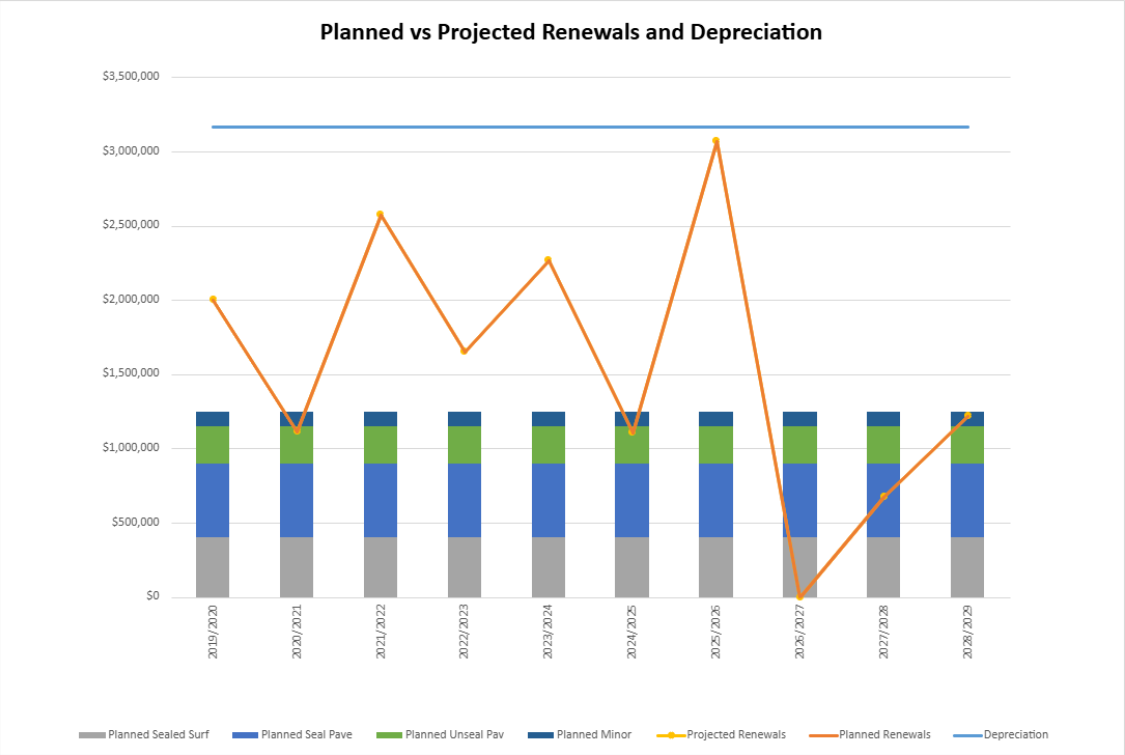


Figure 6 - Planned and Projected Renewals and Depreciation

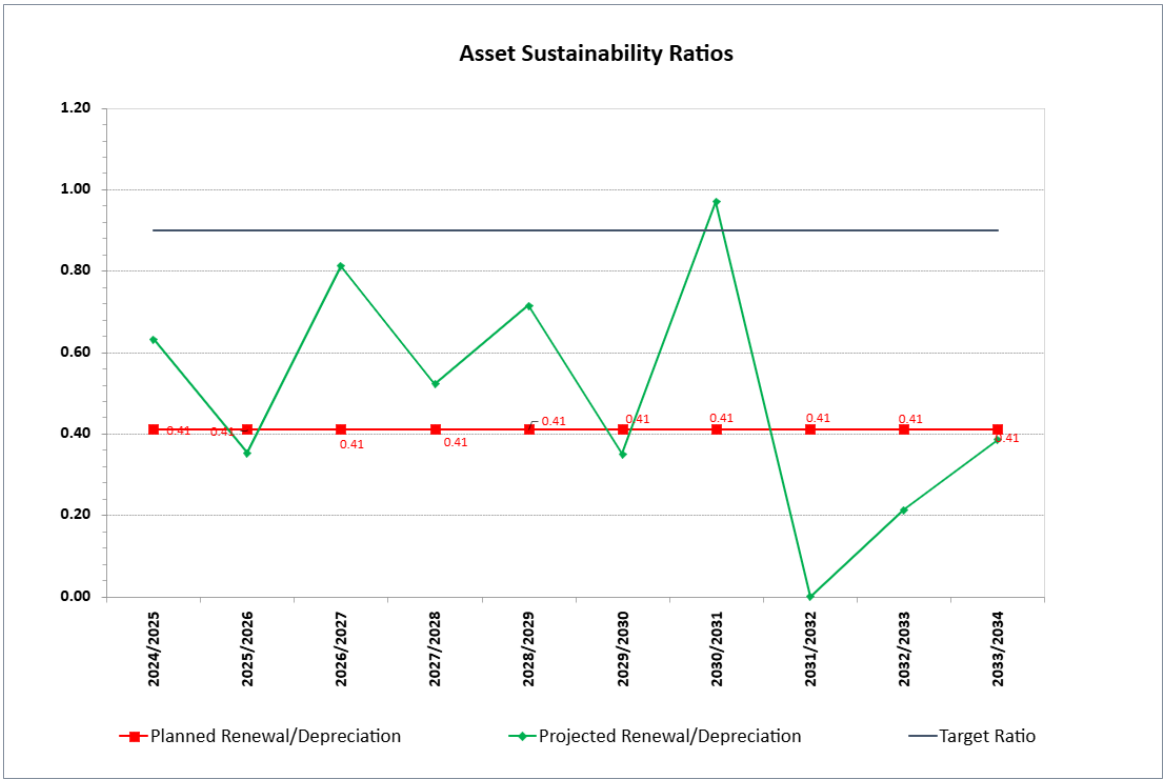


Figure 7 -Asset Sustainability Ratios

5.4 Gundagai Component

5.4.1 Operations and Maintenance Expenditure (Opex)

5.4.2 Historical

Three years of historical maintenance and operations expenditure figures have been taken from Council's financial system and averaged for the purposes of financial modeling. Based on available data which has been reviewed by Councill staff the figures in Table 15 represent the best available data for historical maintenance costs.

Table 15 - Historical Operations and Maintenance Costs (2022-2024)

Expenditure Type	$
Operations	$1.016M
Maintenance	$1.821M
Total OPEX (O & M)	**$2.837M**

5.4.3 Future

For the purposing of this asset management plan the historical average has been used with no annual increase being applied as well as the inclusion of additional operations and maintenance costs associated with new or upgraded assets.

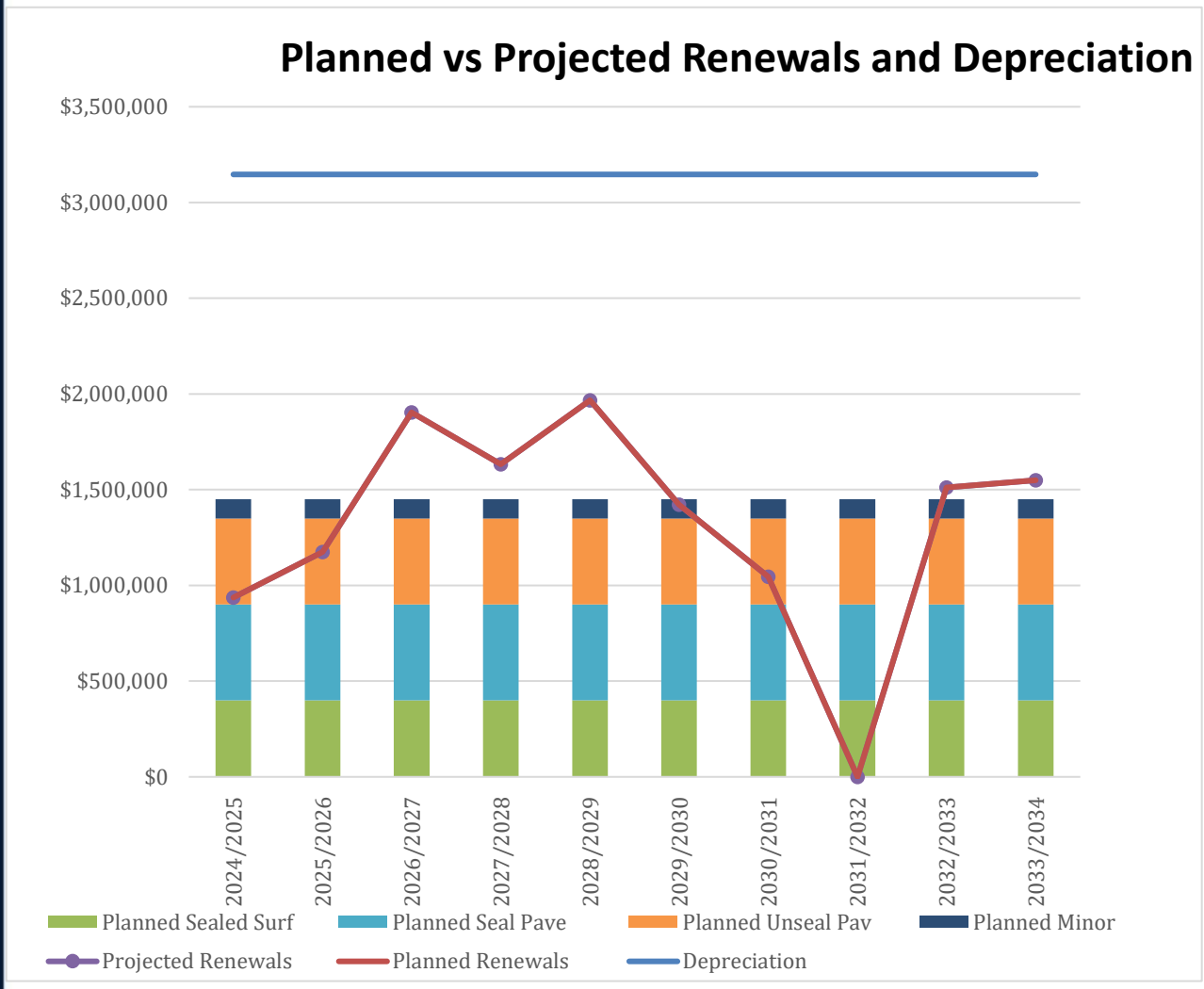
5.5 Capital Expenditure (Capex)

5.5.1 Forward Works and Future Capital Program

Planned renewals total $ 15M for the 10 year period based on the forward works program shown in Table 16. Projected renewals total $ 13M for the next 10-years to 2033 derived from valuations data for remaining useful lives. Thus, the average amount projected for renewals from valuations is approximately $1.3M per year (in current dollars).

Table 16 - Planned 10 years Renewals (Gundagai)

Program/Project	24/25	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	10 Year Total
Resealing Program	$400,000	$400,000	$400,000	$400,000	$400,000	$400,000	$400,000	$400,000	$400,000	$400,000	**$4,000,000**
Pavement Reconstruction	$500,000	$500,000	$500,000	$500,000	$500,000	$500,000	$500,000	$500,000	$500,000	$500,000	**$5,000,000**
Gravel Resheeting	$450,000	$450,000	$450,000	$450,000	$450,000	$450,000	$450,000	$450,000	$450,000	$450,000	**$4,500,000**
Footpath	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	**$500,000**
Kerb	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	**$500,000**
Bridge and Other Structures	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	**$500,000**



17 - Planned and Projected Renewals and Depreciation

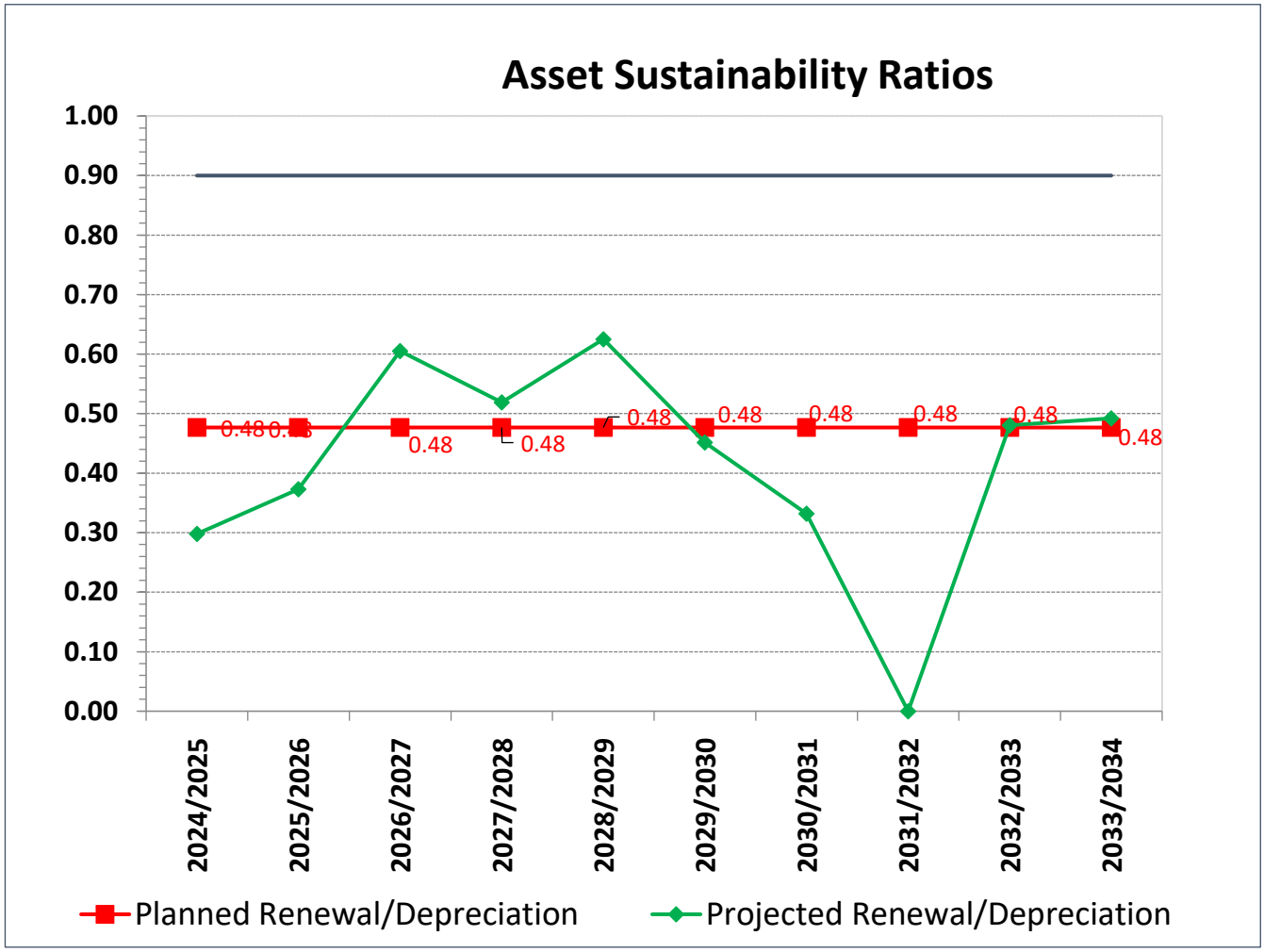


Figure 8 - Asset Sustainability Ratios

FINANCIAL SUMMARY

5.6 Summary Financial Projections

The Life Cycle Cost (LCC) shown in Figure 10 is the average projected cost to provide the service over the longest asset life cycle. It comprises required annual maintenance based on benchmarks and asset consumption expense, represented by depreciation expense. The average LCC over the forward 10 years to provide the transport network is estimated at approximately $6.4M per annum.

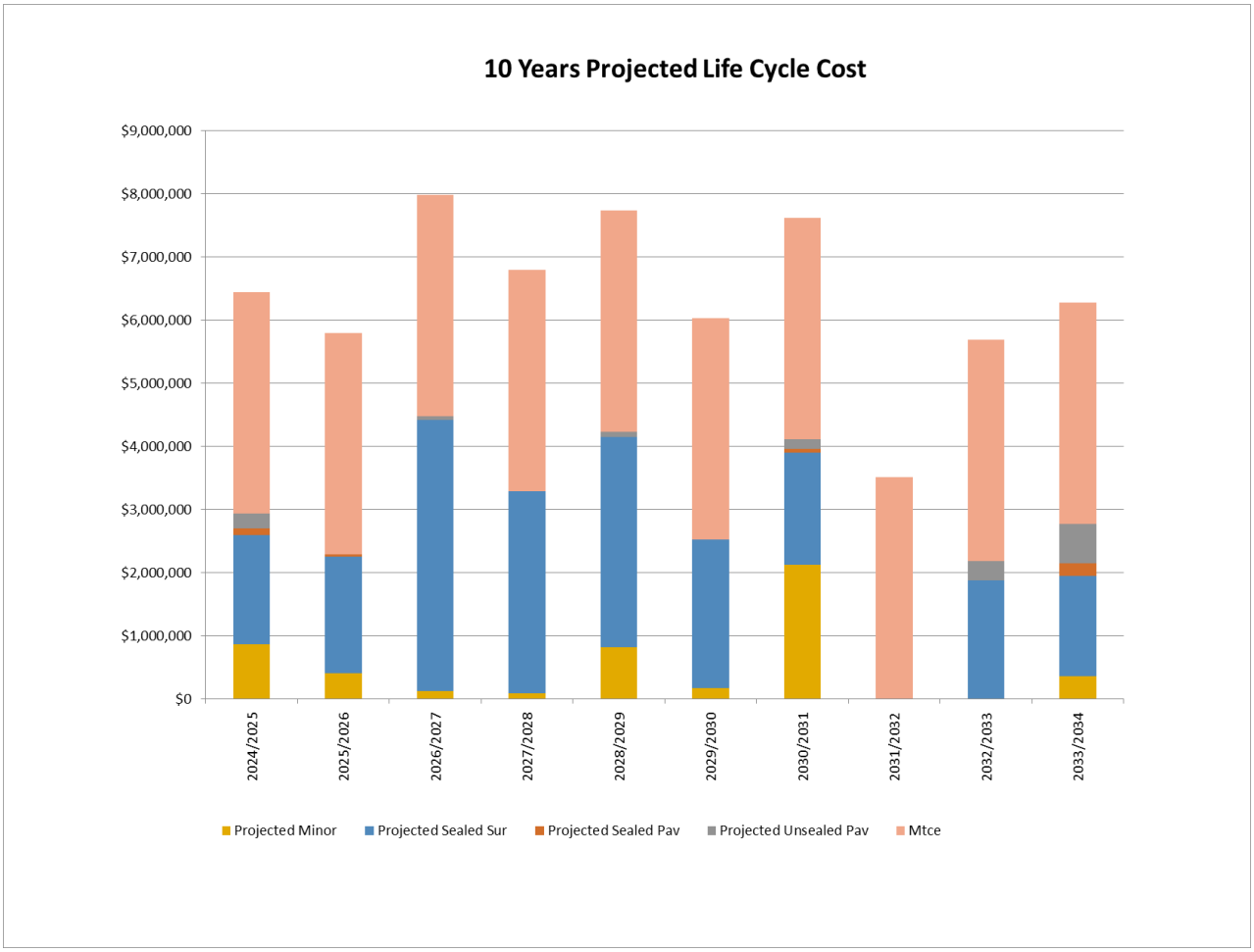


Figure 9 - Life Cycle Cost

5.7 Future Valuations

Over the next 10-years escalation in the cost of materials, labour and services will increase the value of Council's asset based and annual depreciation. Current escalation rates in the Transport class are relatively high as the class has assets that relate to both civil and building indices. Figure 6.c shows projected asset valuations for the Transport class, to present a balanced forecast annual indexation of 3% has been adopted.

Due to the size of Council's transport network the costs associated with the asset class are significant. As can be seen in Figure 6.c indexation will significantly increase the value of the asset class in future years which will increase the challenge to the fund depreciation expense associated with the class in the long term. This demonstrates the importance of ensuring upgrades to the transport network will create significant benefit as the community will struggle to fund the transport class in the long term.

5.8 Key Assumptions made in Financial Forecasts

This section details the key assumptions made in presenting the information contained in this asset management plan and in preparing forecasts of required operating and capital expenditure and asset values, depreciation expense and carrying amount estimates. It is presented to enable readers to gain an understanding of the levels of confidence in the data behind the financial forecasts.

Key assumptions made in this asset management plan are:

- Natural disasters (such as flood), vandalism and other unplanned events are not considered in the asset lifecycles;
- Information within the Transport register and values are based on current knowledge only;
- Maintenance and operations allocations are largely based on maintaining current budget levels; and
- Depreciation has been calculated on a straight-line basis.

Other assumptions as detailed in section 5.2.2

Accuracy of future financial forecasts may be improved in future revisions of this asset management plan by the following actions:

- Provision of a detailed 1-3 year forward work plan (Council should then consider extending the plan to 5-10 years however shifting from year to year budgeting to 1-3 year budgeting will take significant focus but is achievable);
- Ensure asset data and condition assessment data, gathered during inspections is progressively update within the GIS/ asset management system;
- Improved asset revaluation processes that incorporate operational information, increased focus on assets nearing end of life and industry benchmarks to better inform 10 year renewal plans;
- Full Implementation of a single Asset Register that is linked to the GIS (should deamalgation processes not be commenced); and
- Maintaining the Asset Register and GIS integrity (in the event deamalgation processes not be commenced).

Risk Management

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'.

An assessment of risks associated with service delivery will identify risks that will result in loss or reduction in service, personal injury, environmental impacts, a 'financial shock', reputational impacts, or other consequences. 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.

5.9 Critical Assets

Critical assets are defined as those which have a high consequence of failure causing significant loss or reduction of service. Critical assets have been identified and along with their typical failure mode, and the impact on service delivery, are summarised in Table 18.

Failure modes may include physical failure, collapse or essential service interruption.

Table 18 - Critical Assets

Critical Asset(s)	Failure Mode	Impact
Sealed Roads	Natural disaster or weather event.	Loss of service due inclement weather.
Bridges	Overloading of vehicles, lack of preventative maintenance, storm damage, ageing timber, fire, termites.	Bridge closed or load limited.
Gravel Roads	Less suitable or poorer quality material used in road construction, variable material.	Reduced gravel pavement life.
Pathway	Pathway failure - movement of slabs, cracking, overhanging limbs, kerb ramps not to standard, inadequate width.	Injury to customers.

Critical Asset(s)	Failure Mode	Impact
Transport	Skilled and experienced staff leaving organisation to seek other opportunities, staff leaving organisation due to retirement, difficult to fill vacancies due to regional location.	Unskilled and inexperienced work force.

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

5.10 Risk Assessment

The risk management process used is shown in Figure 11 below.

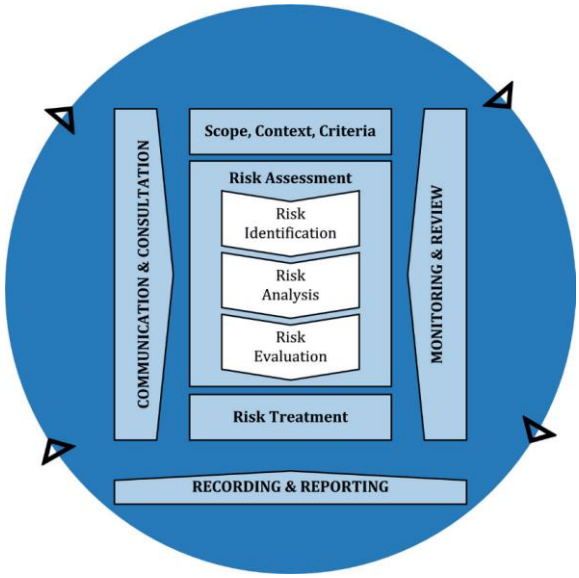


Figure 10 - Risk Management Process (ISO 31000:2018)

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 process is based on the fundamentals of International Standard ISO 31000:2018.

The risk assessment process identifies credible risks, the likelihood of the risk event occurring, the consequences should the event occur, development of a risk rating, evaluation of the risk and development of a risk treatment plan for non-acceptable risks.

An assessment of risks1 associated with service delivery will identify risks that will result in loss or reduction in service, personal injury, environmental impacts, a 'financial shock', reputational impacts, or other consequences.

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 is shown in Table 6.2. It is essential that these critical risks and costs are reported to management and the Cootamundra Gundagai Regional Council.

5.11 Risk Register

Table 19 - Risk Management

What Can Happen	Asset Providing the Service	When Can it Occur	Possible Cause	Existing Controls
Inaccurate cost estimations leading to budget blow-out	Transport Assets	Anytime	Poor project budgeting processes	Ensure that the contingency allowance in the project estimate, is commensurate with the level of project uncertainty/ risk
Growing backlog of road assets that have reached intervention level, that have not been renewed. Works program for renewal funded from reserves is limited and financially unsustainable.	Transport Assets	Anytime	Inadequate funding available within budgets for transport assets	Council to pursue a Special Rate Variation to obtain more funding for road assets. Council to continue applying for available grant packages from State and Federal government for Transport Asset Classes (in particular road and bridge rehabilitation).

What Can Happen	Asset Providing the Service	When Can it Occur	Possible Cause	Existing Controls
Unskilled and inexperienced work force.	Transport Assets	Anytime	Skilled and experienced staff leaving the organization, to seek other job opportunities or enter retirement, difficult to fill vacancies due to regional location.	Internal succession planning (cadets, apprentices and trainees, mentoring). Utilisation of short term contract roles to fill gaps or to deliver standalone projects for Council
Damage to vehicles or accidents.	Sealed Roads	Anytime	Insufficient renewals, insufficient maintenance, critical defects.	Completion of regular condition assessments of assets, reconstruction and reseal program, TAMMP - inspection and defect maintenance.
Accidents/Fatalities.	Sealed Roads	Anytime	Non standard asset.	Safety design principles, signage, Traffic Accident Committee involvement, review serious incidents, renewal program.
Loss of service due inclement weather.	Sealed Roads	Anytime	Natural disaster or weather event.	Design controls, oncall regional staff to restore critical service, QRA emergent works, vegetation clearing, existing control embedment.
Asset deterioration to point of failure.	Transport Assets	Anytime	Insufficient renewals, insufficient maintenance, deterioration due to use and age, increase usage.	Condition assessments, reconstruction and reseal program, TAMMP - inspection and defect maintenance, road permits.
Bridge closed or load restricted.	Bridges	Within 5 years	Overloaded vehicles, lack of preventative maintenance, storm damage, ageing timber,	Routine inspection program, preventative maintenance, heavy vehicle routes / permits, renewal program, load limits/sidetracks

What Can Happen	Asset Providing the Service	When Can it Occur	Possible Cause	Existing Controls
			fire, termites.	implemented when deemed necessary.
Cannot undertake gravel resheet and maintenance program due to lack of suitable gravel and water.	Gravel Roads	Within 2-3 years	Drought, environmental conditions, lack of natural resources available in close proximity.	Large network of registered pits, commercial quarries, local water source networks, ongoing relationships with water Owners
Restricted access due to community events.	Roads	Within 1 year	Planned community events	Planned detours and traffic control. Plan works outside of community events timeframes.
Reduced gravel pavement life.	Gravel Roads	Within 5 years	Less suitable or poorer quality material used in road construction, variable material.	Know material history, pit register, material testing, designated gravel production team.
Early loss of service level due to excessive roughness, potholes, etc	Roads	Anytime	Insufficient renewals, insufficient maintenance, deterioration due to use and age, increase usage.	Roads designed and constructed to Council's AUSPEC standards. Network is proactively inspected via planned inspections or reactively through customer service requests and is maintained according to Council's policies and procedures.
Inaccessible after rain, increase in traffic accidents	Roads	After high rainfall events		Acknowledge some roads are dry weather roads only. Network is proactively inspected via planned inspections or reactively through customer service requests, and is maintained according to Council's policies and procedures. Unformed local access roads not maintained by Council.

What Can Happen	Asset Providing the Service	When Can it Occur	Possible Cause	Existing Controls
Loss of wet weather skid resistance due to bleeding of surface of sprayed bitumen seal or asphalt surfaces.	Roads	Anytime	Insufficient renewals, insufficient maintenance, deterioration due to use and age, increase usage.	Monitor surface condition ahead of normal intervention
High accident rates		Anytime	Insufficient renewals, insufficient maintenance, deterioration due to use and age, increase usage, insufficient road delineation, signage or sight distances	Network is proactively inspected via planned inspections or reactively through customer service requests and is maintained according to Council's policies and procedures. Road safety audits as required.
Damage to road pavements.	Culverts	Within 5 years	Culvert separate and culvert blockage.	Culvert inspections / maintenance, improved culvert construction.
Injury to customers.	Pathways	Anytime in the future	Pathway failure - movement of slabs, cracking, overhanging limbs, kerb ramps not to standard, inadequate width.	Inspections, proactive maintenance, renewal program, upgrade program. (Footpath Inspection Policy 9/9/2022 due for updating later this year - 2/11/2025)

What Can Happen	Asset Providing the Service	When Can it Occur	Possible Cause	Existing Controls
Early loss of service level due to excessive cracking, stepping deformation, etc	Pathways	Anytime	Pathway failure - movement of slabs, cracking, overhanging limbs, kerb ramps not to standard, inadequate width.	Network is proactively inspected via planned inspections or reactively through customer service requests, and is maintained according to Council's policies and procedures
Residents and transport users expect more 'bang for their buck'.	Formed Roads	Anytime	Customer expectations.	Decisions made are consistent with Councils upgrade and extension policy.
Damage to road pavements.	Kerbs	Anytime	Kerb out of shape, kerb restrictions.	Kerb inspections / maintenance, improved kerb construction.
Non standard asset.	Transport Assets	Anytime	Change in design standards, industry & legislation updates.	Asset renewals to current standards, RPEQ certified designs, CRM management, inspections.
Data ownership to be split across previous Council boundaries	All Assets	Within 12 months	De-amalgamation is approved.	Data held within asset system is to have identifier to allow data to be allocated across to the corresponding councils ownership.
Organisational moral	All assets	Within 12 months	De-amalgamation is not approved.	Management, coordination and funding allocations of transport asset data to be shared across the entire Council

Strategic level risks for Council to consider in the Transport asset class include:

- Natural Disasters. While disaster relief funding is currently available Council needs to ensure its investing in the maintenance of its assets to ensure this funding continues to be available. Investment also needs to be made into assets that aren't frequently

impacted by disasters, while DRFA funding can appear to be taking the place of asset renewals this funding is limited to restoring assets damaged by the disaster meaning a significant number of assets have not seen renewal funding for many years.

- Decreased funding of road reseals significantly reduces the life of Council's sealed pavements. Sealed pavements represent the highest value assets owned by Council. Reseals are essential to limit saturation of pavements which contributes to pavement failure.
- Recognition of the importance of structures (culverts and bridges) to the transport network. These assets are not as visible as the road surfacing and pavements however failure of these assets can significantly compromise or even prevent access. Council needs to ensure adequate inspections are undertaken and renewals funded on a priority basis of these critical assets.
- Footpaths represent the highest portion of public liability claims for local governments. Council's Pathway Inspection Policy sets clear guidelines for inspections and maintenance. If Council's future resourcing and funding does not allow it to meet its policy targets both the policy and scale of the pathway network should be reviewed to reduce risk exposure.

IMPROVEMENT PROGRAM AND MONITORING

5.12 Improvement Program

An Asset Improvement Plan is intended to provide improvements in the knowledge of our assets and their management. This plan will ensure that acceptable progress is made on improving asset management processes and procedures and that progress can be verified and quantified. This improvement plan should ensure asset management progresses at an acceptable pace and moves in the "right" direction - that is "improvement" is embedded in the process.

Focus areas for Transport assets are related to better understanding the condition of assets so that renewals can be effectively planned into the future.

Table 20 provides a list of improvements that Council should pursue in the Transport asset class.

Table 20 - Improvement Program

Task	Task	Responsibility	Resources Required	Timeline
1	Organisational decision and communication of 'one place of truth' for asset data storage and management.	Deputy General Manager - Operations	All Council staff	1/10/2025
1	Works program development (including maintenance) and associated budget allocation, aligned with each yearly Council budget development.	Deputy General Manager - Operations	Both Team Leads - Engineering Cootamundra and Engineering Gundagai	March each year (aligned with budget development)
2	Continue to support the development of a comprehensive GIS system (and associated business management processes) of transport assets, across both operational bases of the Council (Cootamundra and Gundagai). Checks on data accuracy to be undertaken in parallel. This is to include asset attributes,	Deputy General Manager - Operations	Both Team Leads - Engineering Cootamundra and Engineering Gundagai	1/7/2026

	such as location, asset attributes and condition score. This data is to be collated through - Undertaking inspections of each transport asset catgeory, including roads, culverts and road delineation/signage. - Complete analysis of map data and audit asset date. - Ensure all infrastructure is captured and added into the GIS, when new assets are found or added into the Transport asset class. Note: Each asset is to be aligned to an operational base within the GIS asset attributes, to allow GIS data to be easily split, and broken into separate GIS data sets, should 'deamalgation' processes be activated.			
	Documented system to manage and collate new asset, such as completed works ('As Cons').	Deputy General Manager - Operations	Both Team Leads - Engineering Cootamundra and Engineering Gundagai	1/9/2025
4	Allocation of funding allocation to continue to undertake regular (3-year maximum interval) road condition assessments.	Deputy General Manager - Operations	Both Team Leads - Engineering Cootamundra and Engineering Gundagai	1/3/2025 (Budget development)
5	Measure performance against assigned service levels, through	Deputy General	Both Team Leads -	Annually

	collation of customer surveys and/or analysis of customer feedback/complaints received from the community or stakeholders.	Manager - Operations	Engineering Cootamundra and Engineering Gundagai	
7	Undertake review of road network and apply standardized Road Hierarchy. Identify the gaps in the network and costs for the future. NOTE: If 'de-amalgation' process does not occur, streamline the classification of roads in the road hierarchy. Currently roads are classified based upon their Cootamundra or Gundagai classification. All roads should be classified in a uniform hierarchy consistent with the IPWEA Functional Road Classifications.	Deputy General Manager - Operations	Both Team Leads - Engineering Cootamundra and Engineering Gundagai	
8	Complete planned inspections of Transport asset classes, in particular major culverts / bridges, and the development of a 5-year works program (based on condition assessments completed). Load limits to be placed onto bridges/major culverts, if condition assessments highlight structural capacity concerns.	Deputy General Manager - Operations	External Contractors	June 2027
9	Annual review to identify opportunities for available grant funding for road projects to narrow the funding gaps.	Deputy General Manager - Operations	Both Team Leads - Engineering Cootamundra and Engineering Gundagai	Ongoing annually

10	Comprehensive asset revaluation and review of depreciation and useful lives of sub assets: kerbs, pathways, culverts etc.	Deputy General Manager - Operations	External Contractors	Every 4 years
11	Review/consideration of work backlog based on current intervention levels, where funding available does not align (where grants or other funding streams are not successful).	Deputy General Manager - Operations	Both Team Leads - Engineering Cootamundra and Engineering Gundagai	March each year (aligned with budget development

5.13 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.

The AM Plan will be reviewed and updated annually to ensure it represents the current service level, asset values, forecast operations, maintenance, renewals, acquisition and asset disposal costs and planned budgets. These forecast costs and proposed budget are incorporated into the Long-Term Financial Plan or will be incorporated into the Long-Term Financial Plan once completed.

The AM Plan has a maximum life of 4 years and is due for complete revision and updating in line with comprehensive revaluation cycles.

5.14 Performance Measures

No data on asset management performance measures was available at the time of preparation of this Asset Management Plan. Council should develop performance measures.

REFERENCES

IPWEA, 2009, 'Australian Infrastructure Financial Management Guidelines', Institute of Public Works Engineering Australasia, Sydney, www.ipwea.org/AIFMG.

IPWEA, 2011, 'International Infrastructure Management Manual', Institute of Public Works Engineering Australasia, Sydney, www.ipwea.org/IIMM.

IPWEA Aotearoa/NZ, NAMS 2007, 'What is Asset Management'.

ISO 31000 Risk Management Standards, International Standards Organisation

ISO 55000 Asset Management Standards, International Standards Organisation

Accounting Standards, Australian Accounting Standards Board

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APPENDICES

APPENDIX A

Definitions

Appendix A: Definitions

Asset Condition Assessment	The process of continuous or periodic inspection, assessment, measurement and interpretation of the resultant data to indicate the condition of a specific asset so as to determine the need for some preventative or remedial action.
Asset Management	The combination of management, financial, economic, engineering and other practices applied to physical assets with the objective of providing the required level of service in the most cost effective manner.
Asset Management Plan	A plan developed for the management of one or more infrastructure assets that combines multi-disciplinary management techniques (including technical and financial) over the lifecycle of the asset in the most cost effective manner to provide specified level of service. A significant component of the plan is a long term cash flow projection for the activities.
Asset Renewal	Replacement or rehabilitation to original size and capacity of a road or drainage asset or the component of the asset. Renewals are "capitalised", so that the cost can be depreciated over the future life of the asset.
Core Asset Management	Asset management which relies primarily on the use of an asset register, maintenance management systems, job/resource management, condition assessment and defined levels of service, in order to establish alternate treatment options and long term cash flow predictions. Priorities are usually established on the basis of financial return gained by carrying out the work (rather than risk analysis and optimised renewal decision making).
Infrastructure Assets	Physical assets of the entity or of another entity that contribute to meeting the public's need for access to major economic and social facilities and services, e.g. roads, drainage, footpaths and cycle ways. These are typically large, interconnected networks or portfolios of composite assets. The components of these assets may be separately maintained, renewed or replaced individually so that the required level and standard of service from the network of assets is continuously sustained. Generally, the components and hence the assets have long lives. They are fixed in place and are often have no market value.
Level of Service	The defined service quality for a particular service against which service performance may be measured. Service levels usually relate to quality, quantity, reliability, responsiveness, environmental, acceptability and cost).
Life Cycle Cost	The life cycle cost (LCC) is average cost to provide the service over the longest asset life cycle. It comprises annual maintenance and

	asset consumption expense, represented by depreciation expense. The Life Cycle Cost does not indicate the funds required to provide the service in a particular year.
Life Cycle Expenditure	The Life Cycle Expenditure (LCE) is the actual or planned annual maintenance and capital renewal expenditure incurred in providing the service in a particular year. Life Cycle Expenditure may be compared to Life Cycle Cost to give an initial indicator of life cycle sustainability.
Maintenance and Renewal Sustainability Index	Ratio of estimated budget to projected expenditure for maintenance and renewal of assets over a defined time (e.g. 5, 10 and 15-years).
Performance Measure	A qualitative or quantitative measure of a service or activity used to compare actual performance against a standard or other target. Performance indicators commonly relate to statutory limits, safety, responsiveness, cost, comfort, asset performance, reliability, efficiency, environmental protection and customer satisfaction.
Reactive Maintenance	Unplanned repair work carried out in response to service requests and management/supervisory directions.
Scheduled Maintenance	Maintenance carried out in accordance with a routine maintenance schedule e.g. scheduled maintenance grading.
Planned Maintenance	Repair work that is identified and managed through the customer requests system (Dataworks). These activities include inspections, assessing the condition against failure/breakdown experience, prioritising, scheduling, actioning the work and reporting what was done to develop a maintenance history and improve maintenance and service delivery performance.
Rate of Annual Asset Renewal	A measure of the rate at which assets are being renewed per annum expressed as a percentage of depreciable amount (capital renewal expenditure/ depreciable amount).
Reactive Maintenance	Unplanned repair work carried out in response to service requests & management / supervisory directions.
Recurrent Expenditure	Relatively small (immaterial) expenditure or that which has benefits expected to last less than 12 months. Recurrent expenditure includes operating and maintenance expenditure.
Remaining Life	The time remaining until an asset ceases to provide the required service level or economic usefulness. Age plus remaining life is economic life (also useful life).
Renewal Expenditure	Major works which do not increase the asset's design capacity but restores, rehabilitates, replaces or renews an existing asset to its original service potential.

Upgrade/Expansion Expenditure	Work over and above restoring an asset to original service potential.
Useful Life (also economic life)	Either:(a) the period over which an asset is expected to be available for use by an entity, or (b) the number of production or similar units expected to be obtained from the asset by the entity. It is estimated or expected time between placing the asset into service and removing it from service, or the estimated period of time over which the future economic benefits embodied in a depreciable asset, are expected to be consumed by the Council.
New Assets	Activities that create a road or drainage asset that did not exist previously or extend an asset beyond its original size or capacity. New assets are also "capitalised", but they increase the asset base rather than restore its capacity to perform.

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