

Appendix A – Transportation Asset Management Plan

This Asset management plan covers the portfolio of transport assets that facilitate the movement of people, vehicles and goods throughout Blayney Shire.

The plan covers councils' management of its Sealed roads, Unsealed roads, its Bridges and Culverts, Stormwater assets, Pathways as well as its ancillary transport assets.

As the owner and manager of transport assets, Council has a responsibility for a number of functions including:







- Operations and Maintenance
- Renewal and Refurbishment
- New Acquisitions and Upgrades
- As well as the Disposal of existing assets.

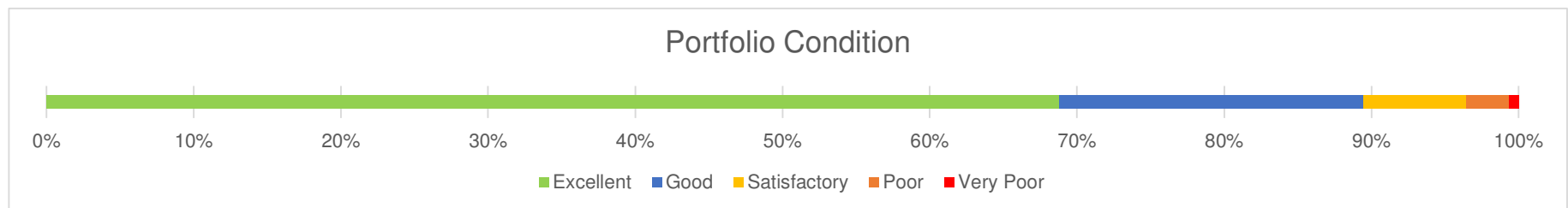
The planning of these functions is outlined in this asset management plan.



TRANSPORTATION INFRASTRUCTURE AT A GLANCE

The Transport Infrastructure asset portfolio comprises infrastructures relating to roading and pedestrian travel.

Value & Composition	Importance to the Community	Importance to the Community	Importance to the Community
Transport Infrastructure assets have a total value of: \$343.6m	Community Value of Sealed Roads 3.64	Community Value of Footpaths 3.37	Community Value of Unsealed Roads 2.22
			
			



Purpose of this Plan

The purpose of this asset management plan is to develop a strategic framework for the maintenance and renewal of transport assets and to provide an agreed level of service in the most effective manner.

This plan includes the following scope of management:

- asset inventory, values and condition
- asset-based levels of service
- demand and service management
- risk management
- development of the long-term financial plan (LTFP) for the maintenance and renewal of transport assets.

Figure 1: Relationship between Council's plans and resourcing strategies

Document	Purpose
Community Strategic Plan	Sets the community's vision for the next 10 years and strategies to achieve the vision
Community Engagement Strategy	Guides how Council engages with the community in all aspects of the IPR Framework and sets actions to be included in the Delivery Program
Delivery Program	Outlines the actions Council will undertake to meet the CSP goals over four years
Resourcing Strategy	Companion documents to the Delivery Program, outlines how Council will resource the actions (addressing Council's finances, assets and workforce)
Operational Plan and Budget	Maps what programs, projects and activities Council will undertake each financial year to fulfil the actions in the Delivery Program and to achieve the goals in the CSP
Strategic documents	Informs the actions in the Delivery Program and Operational Plan e.g. Economic Development Strategy
Quarterly reports, Annual Report and State of the Council Report	Reports Council's progress in achieving the community's vision
Blayney Shire Roads Strategy	The Blayney Shire Council Roads Strategy 2023 (Strategy) sets out a framework for assessing the priority for individual road rehabilitation and upgrade (or expansionary) works.
Road Hierarchy Renewal and Maintenance Policy	The Policy outlines Council's level of service for road renewal and maintenance activities and details procedures for the management of the road network, road related infrastructure and activities.
Pathway Hierarchy Renewal and Maintenance Policy	The Policy outlines Council's level of service for pathway maintenance activities and details procedures for the management of the pathway network and related infrastructure.

Levels of service

Community Consultation and Feedback

In 2021 Blayney Shire Council conducted a community survey to inform the Blayney Shire Community Strategic plan. The feedback for sealed and unsealed roads is summarised below.

Challenges with increased heavy vehicle traffic, particularly logging trucks on Hobbys Yards Road, highlight the strain on the road network. The Carcoar Street project faced mixed feedback, likely due to its two-stage delivery, emphasising the importance of continuous communication with residents about project status and timelines. Council's efforts during adverse weather are appreciated, but resource constraints affect pothole and patching works, potentially posing hazards, especially for motorcyclists.

While 45% of respondents express satisfaction with certain road safety aspects, concerns persist, such as inadequate line marking on sealed roads. Traffic conflicts arise at intersections where local roads intersect with state roads like the Mid-Western Highway and Orange Road. Community apprehension surrounds Council's roadside vegetation clearing projects.

Traffic safety concerns range from speeding on country roads to improper truck parking in residential areas, requiring the Road Safety Officer to convey safer driving messages. Residents have mixed responses to unsealed roads, particularly during wet weather, with dissatisfaction over issues like potholes, corrugations, and drainage problems.

For some people, including those bus operators, or residents whose primary access for work, education, transport of goods and primary production is an unsealed road and ongoing repair needed on these roads is not satisfactory.

The community consultation generated a number of recommendations relating to the management of transport assets:

- Ongoing collection and analysis of pothole patching data, coupled with prompt action on customer requests, are crucial. Sections requiring repeated patching should be considered for heavy patching or other necessary works.
- Council should explore innovative pothole patching methods to minimize loose stones and the need for repetitive repairs.
- Allocate a separate budget for repainting lines, installing guide posts, and employing road delineation methods to enhance safety outcomes.
- Continual reference to the Shire Roads Strategy is essential for prioritising reconstruction and new sealing projects.
- Maintain the annual re-sheeting and drainage works program to rehabilitate gravel roads and uphold road infrastructure.

Levels of Service

Outcome	Level of Service	How will we measure it?	What is our target?	How are we going?
Functionality - Reliability / Responsiveness	Be responsive to the needs of the road and transport asset users	Customer Service Requests	85% of requests are completed within Councils service charter	
Functionality - Reliability / Responsiveness	Planned works completed in accordance with schedules	Completion of scheduled work	90% completion within scheduled service standard	
Functionality - Sustainability	Provide well maintained infrastructure that is affordable to the community	Planned vs. Reactive Maintenance	Greater than 50% of maintenance expenditure is undertaken through planned maintenance schedules	
Functionality - Sustainability	Assets are being renewed in a sustainable manner	Infrastructure asset renewal ratio	OLG benchmark > 100%	

Outcome	Level of Service	How will we measure it?	What is our target?	How are we going?
Capacity - Affordability	The services are affordable and managed using the most cost-effective methods for the required level of service	Annual budget reporting	Maintenance / Operational Expenditure within 5% of Annual budget	
Capacity - Affordability	Council maintains its assets	Infrastructure Asset Maintenance Ratio	OLG benchmark of 100%	
Capacity - Health and Safety	Provide roadways free from hazards	Number of road accidents (annual RMS accident report)	Reduction in 3 year rolling average	
Capacity - Health and Safety	Provide pathways free from hazards	Number of insurance claims received	Reduction in 3 year rolling average	

Roles and Responsibility

Position	Role	Asset Class	Responsibilities	Functions
Director Infrastructure	Asset Owner	Roads Bridges & Culverts Footpaths Stormwater	This position takes ownership responsibility for the management of assets and is usually responsible for policy and over all asset strategy	<ul style="list-style-type: none"> Establish long term policy and strategy Establish existing demand for assets Establish future demand for assets (type and standard) Establish long term community expectation Implement policy and strategy for existing assets Establish community asset service level Ensure integration of asset management into Council's community, delivery and operational plans & resourcing Strategy Maintain and develop asset systems and reporting Ensure asset accounting is accurate and maintained, and asset valuation, Develop capital works prioritisation Develop capital works program Liaison with the organisation as a whole on asset matters
Manager Assets	Asset Custodian	Roads Bridges & Culverts Footpaths Stormwater	This position is the technical expert and has responsibility for collecting and maintaining asset data, determining works programs and maintenance strategies etc.	<ul style="list-style-type: none"> Develop and oversee capital works and maintenance program Handover and documentation Control budgets Develop asset plans Asset condition rating Risk management Data custodian – Hierarchy, level of detail Recommendation of asset disposal and renewal 4yr program
Manager Operations	Asset Delivery – CAPEX/OPEX Service Delivery – Operations	Roads Bridges & Culverts Footpaths Stormwater	Responsible for the day-to-day maintenance, operations and services delivered by assets as well as the delivery of capital works	<ul style="list-style-type: none"> Controls asset use, in line with policy Deliver programmed and reactive maintenance, internal/external Deliver and / or manage capital works Manage all operations and service delivery functions Manage service user expectations Deliver adopted levels of service

Future Demand

Drivers of Change

The future infrastructure demand for transport assets is driven by changes and trends in:

- population growth and changes in the demography of our community
- urban planning
- commercial/industrial demand particularly with respect to freight.
- technological changes which impact our assets and our ability to monitor our assets.
- the environment and changes in our climate



Demand Management Plan

Table with Impact of demand drivers and any high-level mitigating actions

Demand factor	Impact on services
Population	The population in the region is expected to continue to grow and supporting infrastructure will be required to accommodate this change. Local infrastructure, including roads, will be needed to support additional housing needs and the new industry and development.
Industry	Road and rail infrastructure will continue to improve within the region, including the establishment of the Parkes Intermodal Freight Terminal, this external expenditure requires a corresponding council program to allow growth within Blayney Shire.
Demographics	An increasing and older population will place an increased demand on some assets and increased accessibility requirements for footpaths, aged care facilities, community centres and recreation assets.
Increasing costs	Increases in demand and limited providers is likely to increase the costs of providing road infrastructure projects.
Environment and climate	Road and bridges may be affected by extreme weather and increased variability.
Technology	Increasing connectivity and a diverse economy will retain and establish new residents, businesses and industries in Blayney Shire over the next 20 years. These factors may contribute to more complicated assets with higher maintenance and renewal costs.

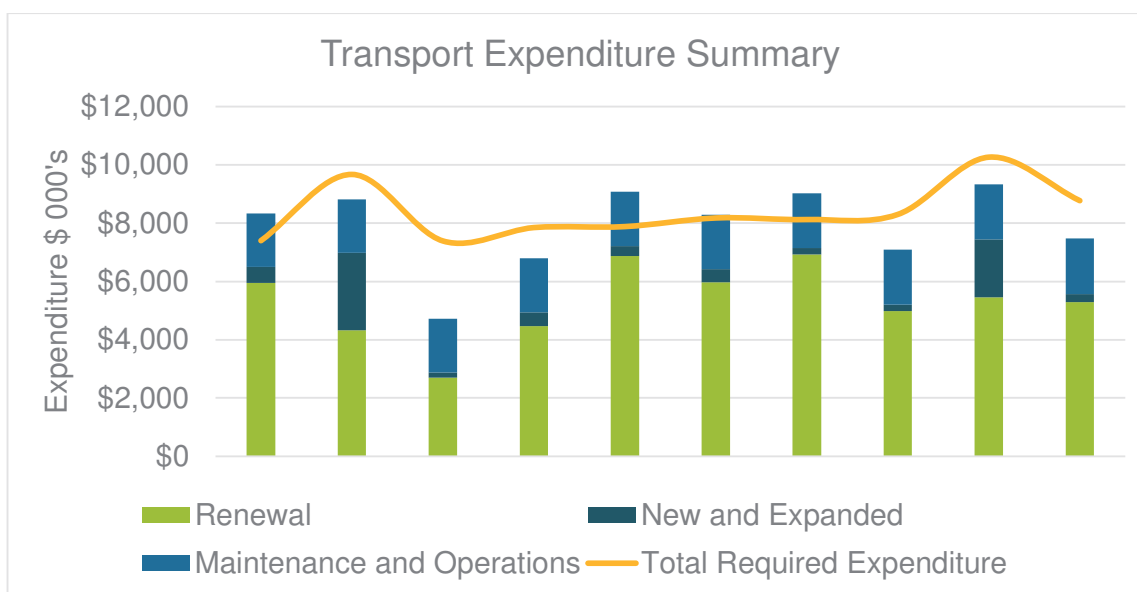
Lifecycle management

Assets

Asset class	Asset category	Unit	Quantity
Roads	Local sealed roads	Km	340
Roads	Regional sealed roads	Km	44
Roads	Local unsealed roads	Km	346
Bulk earthworks	Major Earthworks (cut/fill >2m)	No.	29
Roads	Crash Barriers (Guard Rail, Wire Rope)	Km	11
Bridges	Bridges – concrete/steel	No.	74
Bridges	Bridges – timber	No.	2
Roads	Culverts – major (450mm – 6m)	No.	429
Roads	Culverts – minor (<450mm)	No.	993
Roads	Urban Stormwater Pipes	Km	32
Roads	Kerb and Gutter	Km	73
Footpaths	Footpath/Shared	Km	39
Roads	Signs (all road signs)	No.	3,879
Roads	Guide posts	No.	12,399

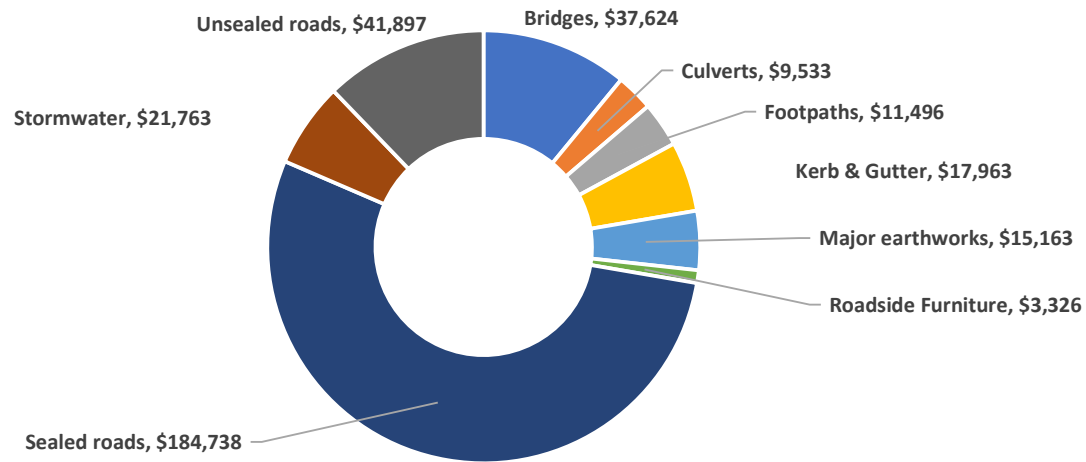
Infrastructure Ratios	Budget 2023/24	Estimated 2032/33	Funding Gap \$ 000's	
Infrastructure renewals ratio	139%	100%	Budget Year	\$1,689
Benchmark 100%			5-year average	\$375
			10-year average	\$528
Infrastructure Backlog Ratio ¹	4.1%	2.7%	Budget Year	-\$6,131
Benchmark 2%			5-year average	-\$5,706
			10-year average	-\$4,676
Infrastructure Maintenance Ratio	65.4%	55%	Budget Year	-\$986
Benchmark 100%			5-year average	-\$1,120
			10-year average	-\$1,282
Total Funding Gap			Budget Year	-\$5,428
			5-year average	-\$6,451
			10-year average	-\$5,430

¹ The Infrastructure Backlog Ratio Funding Gap is the amount required to reduce Councils 4.1% Backlog Ratio to the OLG benchmark of 2.0%.

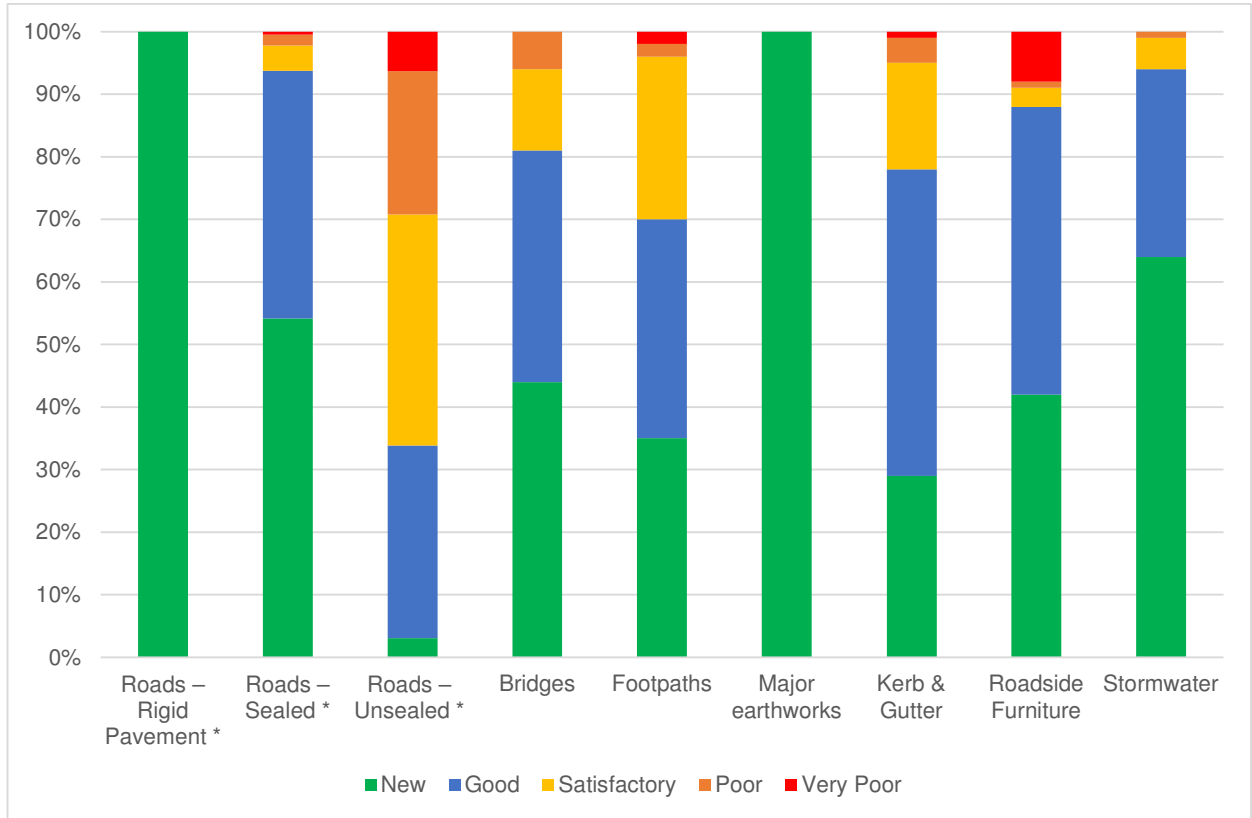


Asset Values

Asset Category	Gross Replacement Cost (\$ 000's)	Written Down Value (\$ 000's)	Annual Depreciation (\$ 000's)	New	Good	Satisfactory	Poor	Very Poor
Sealed roads	184,738	150,168	2,224	80%	17%	2%	1%	0%
Unsealed roads	41,897	34,057	946	54%	15%	17%	11%	3%
Bridges	37,624	26,915	354	50%	32%	12%	6%	0%
Footpaths	11,496	8,013	144	38%	29%	26%	7%	0%
Major earthworks	15,163	15,163	0	100%	0%	0%	0%	0%
Kerb & Gutter	17,963	14,602	183	30%	47%	18%	4%	1%
Roadside Furniture	3,326	2,704	92	45%	43%	3%	1%	9%
Culverts	9,533	7,749	86	71%	17%	7%	4%	1%
Stormwater	21,763	16,725	200	64%	39%	5%	1%	1%



Condition



Inspection Schedule

Asset Category	Inspection intervals
Local & Regional Sealed Roads	Formal Inspection every 5 years Ad-hoc & informal inspections in between
Local Unsealed Roads	3 to 12 monthly based on road hierarchy
Bridges – Concrete/Steel	Ad hoc / after major wet weather events
Bridges – Timber	Formal every 2 to 5 years based on known issues
Culverts – all	Ad hoc / after major wet weather events
Urban Stormwater – Pits & Pipes	Ad hoc / after major wet weather events Formal inspection undertaken as part of 2019/20 Transportation revaluation
Footpath / Shared	6 monthly (Blayney and Millthorpe CBD's) 12 monthly for rest of Blayney & Villages
Kerb and Gutter	12 monthly
Other (major earthworks, crash barriers, signs, etc)	Formal Inspection every 5 years Ad-hoc & informal inspections in between

The confidence in the asset data used as a basis for the financial forecasts has been assessed using the following grading system, as outlined in the following below.

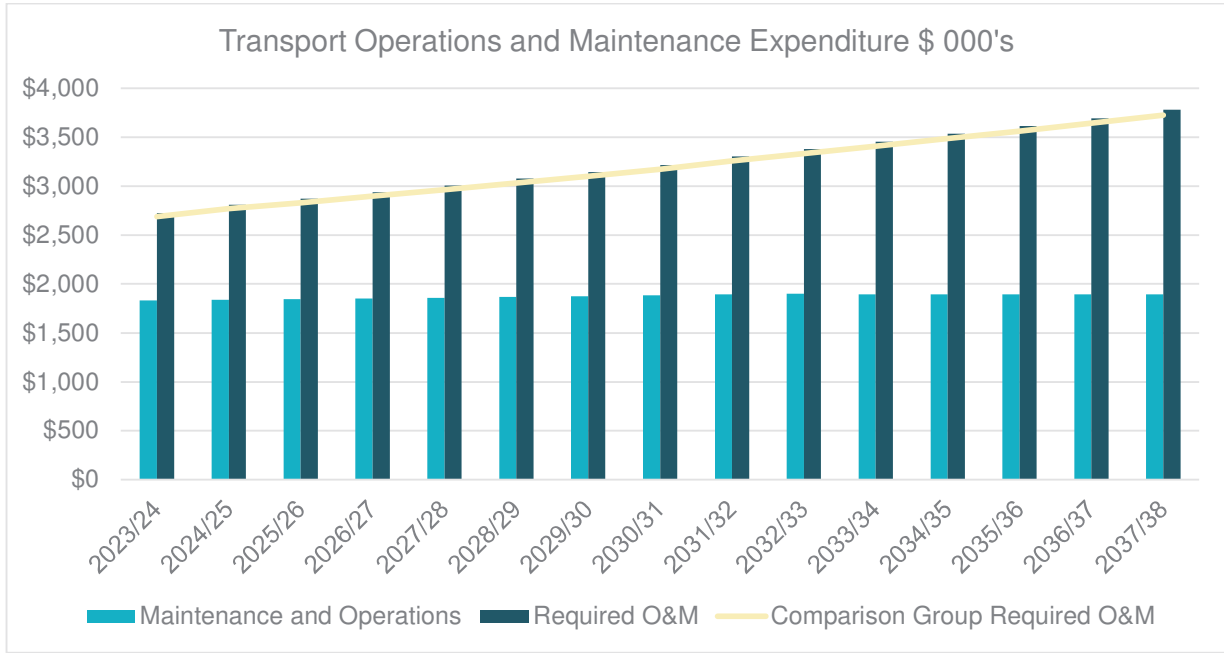
Confidence grade	General meaning
Highly reliable	Data based on sound records, procedure, investigations and analysis that is properly documented and recognised as the best method of assessment.
Reliable	Data based on sound records, procedures, investigations and analysis which is properly documented but has minor shortcomings; for example, the data is old, some documentation is missing, and reliance is placed on unconfirmed reports or some extrapolation.
Acceptable	Data based on sound records, procedures, investigations and analysis with some shortcomings and inconsistencies.
Uncertain	Data based on sound records, procedures, investigations and analysis which is incomplete or unsupported or extrapolation from a limited sample.
Very uncertain	Data based on unconfirmed verbal reports and/or cursory inspection and analysis.

Summary of confidence in asset data for all asset classes is detailed in the table below.

Asset class	Inventory	Condition	Age	Overall
Transport (Roads, Bridges, Footpaths, stormwater)	Reliable	Acceptable	Reliable	Reliable

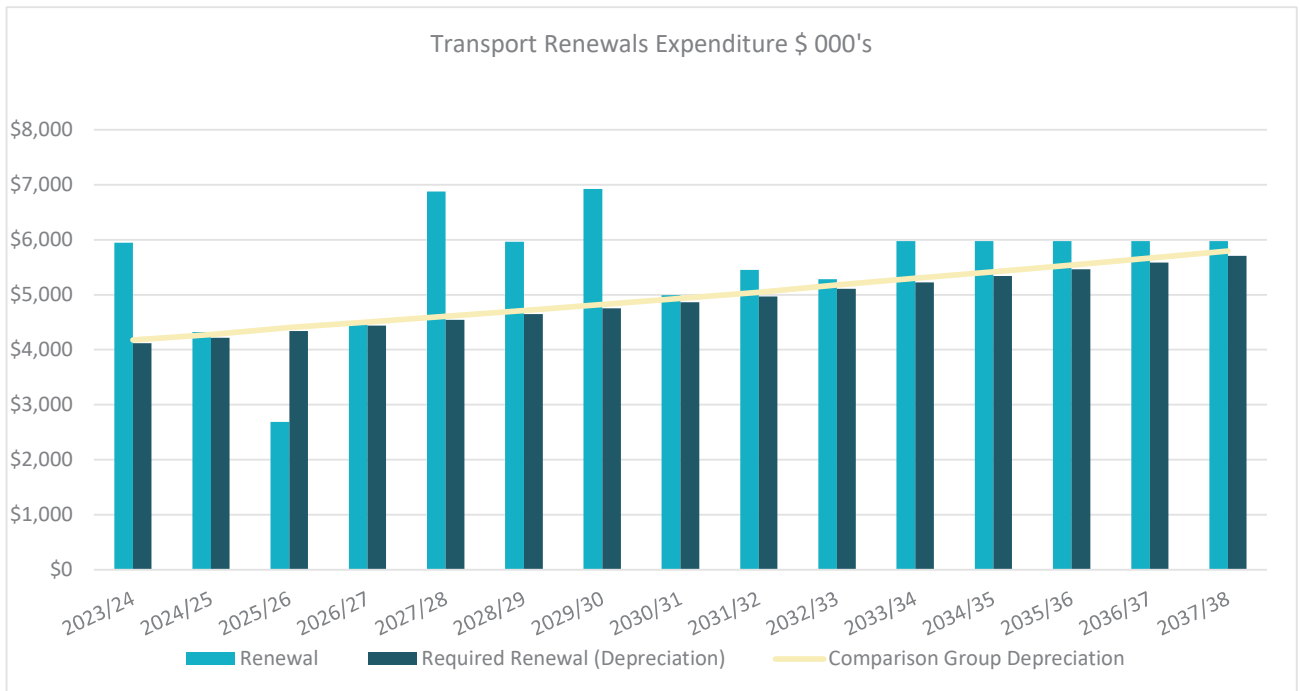
Operations and Maintenance Plan

Councils has detailed its transport maintenance strategy in its Road Hierarchy Renewal and Maintenance Policy as well as in the Pathway Hierarchy Renewal and Maintenance Policy.



1.1. Renewal Plan (Capital)

Councils has detailed its transport renewal and replacement strategy in its Road Hierarchy Renewal and Maintenance Policy as well as in the Pathway Hierarchy Renewal and Maintenance Policy.



Risk Management

Risk Assessment

Council utilises a corporate risk framework which aligns with ISO 31000:2018. The framework has been adopted for Council’s transport assets and highlights the strategic risks which impact Council’s asset portfolio.

Service or Asset at risk	What can happen	Risk rating (VH,H)	Risk treatment plan	Residual risk*	Treatment costs
Road pavement	Flooding/Inundation leading to pavement failure	H	Adequate drainage maintenance, initial pavement design considerations	M	\$250,000/km
Footpath	Concrete slab failure creating trip hazard	H	Regular inspections and funding renewal works	M	\$150/sq m
Bridge	Flooding/Inundation leading to structural damage	H	Inspections and specific inspections following large rain events.	M	Issue specific

* The residual risk is the risk remaining after the selected risk treatment plan is operational.



Critical Assets

Critical assets are defined as those which have a high consequence of failure causing significant loss or reduction of service. Similarly, critical failure modes are those which have the highest consequences. Critical assets have been identified and their typical failure mode and the impact on service delivery are as follows:

Critical Asset(s)	Failure mode	Impact
All Bridges on roads providing 'only' access	Structural failure / Flooding	Complete removal of access
Hobbys Yards Road	Flooding/Inundation	Complete removal of access
Belubula Way	Flooding/Inundation	Complete removal of access
Newbridge Road	Flooding/Inundation	Complete removal of access

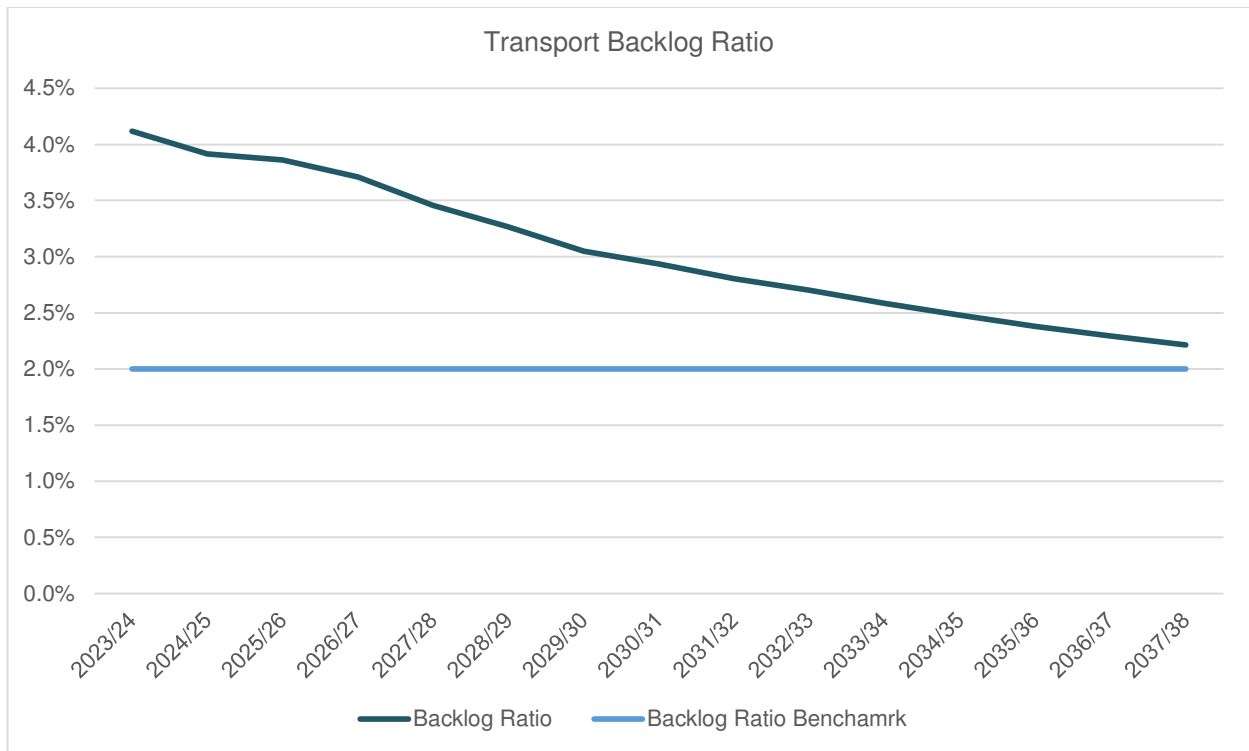
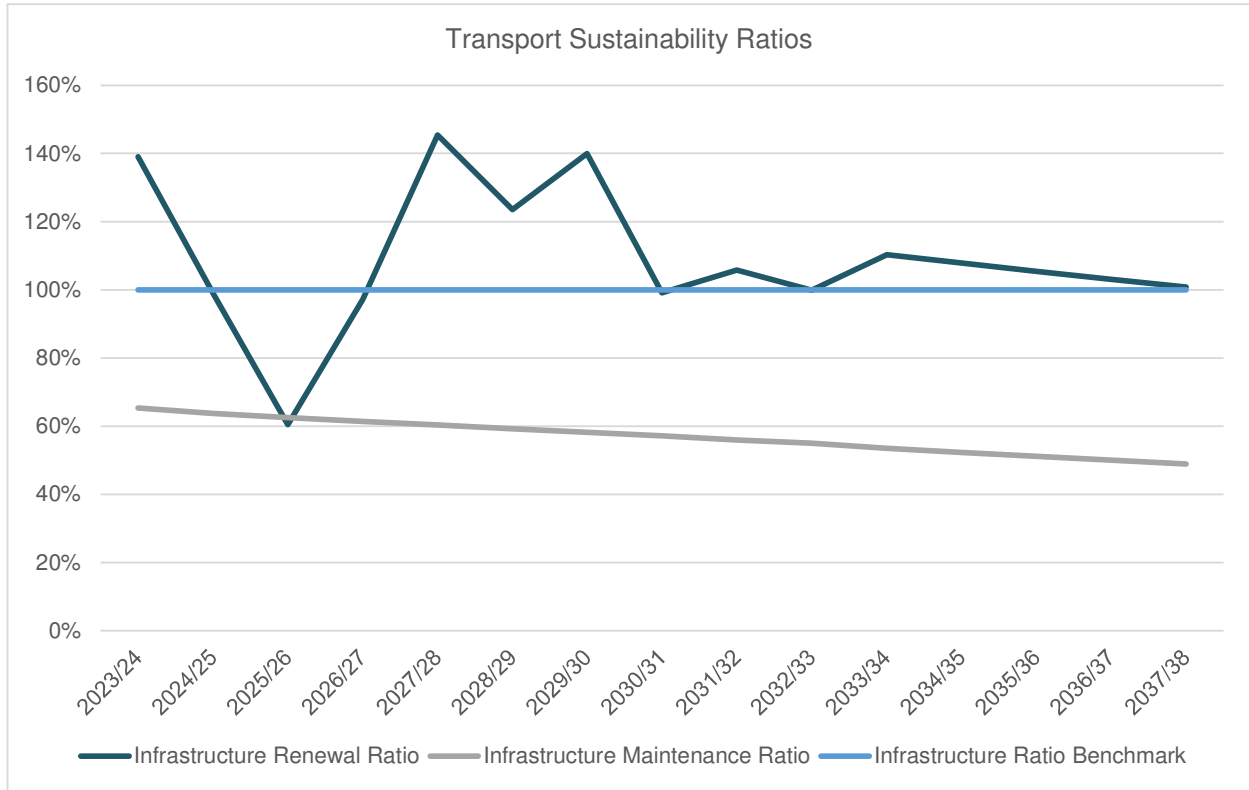
The following attributes are currently being considered as part of this analysis:

	High	Medium	Low
Road classification	Arterial	Primary Collector/Local Collector	Local Access
Emergency services	Police Ambulance	RFS, NSWFB, SES	Airfield, Council Depot
Schools	40km zones		
Accident history	Fatality	Accidents >5	
Isolated communities	Only one road providing access to or from a community		

Expenditure Forecast

	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34
Actual (Budgeted) Expenditure											
Renewal	\$6,011	\$4,394	\$2,763	\$4,540	\$6,952	\$6,042	\$7,001	\$5,071	\$5,533	\$5,365	\$6,056
New and expanded	\$1,666	\$2,810	\$177	\$471	\$334	\$455	\$223	\$217	\$1,988	\$289	\$289
Maintenance and Operations	\$1,861	\$1,868	\$1,876	\$1,884	\$1,893	\$1,902	\$1,910	\$1,919	\$1,929	\$1,938	\$1,929
Total Expenditure	\$9,538	\$9,072	\$4,816	\$6,895	\$9,179	\$8,399	\$9,134	\$7,207	\$9,450	\$7,592	\$8,274
Required Expenditure											
Required Renewal (Depreciation)	\$4,322	\$4,438	\$4,570	\$4,672	\$4,781	\$4,890	\$5,003	\$5,116	\$5,231	\$5,371	\$5,493
New and expanded	\$1,666	\$2,810	\$177	\$471	\$334	\$455	\$223	\$217	\$1,988	\$289	\$289
Required O&M	\$2,846	\$2,932	\$2,998	\$3,067	\$3,138	\$3,210	\$3,283	\$3,357	\$3,447	\$3,525	\$3,605
Total Required Expenditure	\$8,834	\$10,180	\$7,745	\$8,210	\$8,253	\$8,555	\$8,509	\$8,690	\$10,666	\$9,185	\$9,387
OPEX Balance (GAP)	-\$986	-\$1,063	-\$1,121	-\$1,183	-\$1,245	-\$1,309	-\$1,372	-\$1,437	-\$1,518	-\$1,586	-\$1,676
RENEWAL Balance (GAP)	\$1,689	-\$44	-\$1,806	-\$133	\$2,171	\$1,152	\$1,997	-\$45	\$301	-\$6	\$564
TOTAL Balance (GAP)	\$703	-\$1,107	-\$2,927	-\$1,316	\$926	-\$157	\$625	-\$1,482	-\$1,217	-\$1,592	-\$1,112

OLG Financial Ratios



2. Improvement and Monitoring

Improvement Plan

Improvement actions including who and by when.

Ref No.	Improvement Plan tasks	Priority	Suggested Timeframe
0	Existing Data Improvement Plan		
0.1	Calculation and disclosure of data input confidence levels for all asset classes (per AMPs).	Low	6/25
0.3	Assess and include Functionality and Capacity scores (1 to 5) for all relevant assets, as per asset class revaluations.	Low	6/25
0.4	Transportation asset class age data (sealed road surfaces, road pavements, bridges, (some) pathways, and urban stormwater).	High	6/25
0.5	Incorporate Geotechnical investigations from works program to improve confidence in road pavement depths	Medium	6/25
2.	Asset Data and Knowledge		
2.1	Separate non-depreciable components from reported condition profiles	High	2025
3.	Asset Knowledge Processes		
3.1	Undertake an annual desktop review of asset valuations ensuring that there is an annual review of useful life of assets.	High	Ongoing
3.2	Implementation of 1:1 relationship between financial and technical register.	Very High	Ongoing Quarterly
3.3	Develop maintenance and renewal policy for councils' bridges and stormwater assets	Very High	3/24
4.	Strategic Asset Planning Processes		
4.1	Undertake annual review of Asset Management Plan	Very High	Ongoing
5.	Operations and Maintenance Work Practices		
5.1	Identify critical assets and incorporate critical asset risk mitigation plans into Council's emergency response planning procedures.	High	2025
6.	Information Systems		
6.3	Ensure integration and access between spatial system and current technical asset register	High	Ongoing

Monitoring and Review Procedure

This AMP will be reviewed during annual budget planning processes and amended to show any material changes in service levels and/or resources available to provide those services as a result of budget decisions. The AMP will be updated annually to ensure it represents the current service level, asset values, projected operations, maintenance, capital renewal and replacement, capital upgrade/new and asset disposal expenditures and projected expenditure values incorporated into the long-term financial plan. The AMP has a life of 4



years and is due for complete revision and updating within 12 months of each Blayney Shire Council election.