Gunnedah Shire

Transport Asset Management Plan

November 2024

Document Control

Transport Asset Management Plan					
ECM Document ID : 1986793 (Template)					
Rev No	**Date**	**Revision Details**	**Author**	**Reviewer**	**Approver**
V0.1	19/11/2024	Draft for Gunnedah review	Brightly		

In presenting this document to the community, Gunnedah Shire Council acknowledges the Kamilaroi Nation as the traditional Custodians of the Land on which we live and work. In doing so, Council pays its respect to all Elders both past and present as well as to the young Indigenous leaders of tomorrow.

Contents

Background

Asset Management Plans are important documents which help us to plan and invest wisely to maintain our assets and infrastructure so we can continue to deliver valuable services for our community now and into the future.

Assets are the foundation stones of the Shire and include the streets we drive on, the parks and reserve our family play on, the stormwater network we rely on, and the community and sporting facilities we enjoy across our LGA.

Here we present the Transport Asset Management Plan, which covers the assets within the road reserve that facilitate movement around our municipality. These include:

- Roads
- Kerbs
- Pathways
- Car Parks
- Bridges
- Culverts
- Causeways
- Other Road Assets (Traffic Management Devices and Bus Shelters).

Asset Management Plans provide a snapshot of the current and future state of Council's infrastructure. The plans ensure we maintain and renew assets in a cost effective and sustainable manner that meets our community's expectations.

In the management of assets, we have to balance the service standard expectations of the community with the cost of delivering the service. While we would all like the highest standard of our assets this comes at a cost, the long-term impact of which needs to be carefully considered.

Behind the plans is a significant amount of investigation, planning and financial modelling to help council staff to maintain our assets cost effectively. The Asset Management Plans also highlight that when we build new assets or upgrade assets, we must plan for the ongoing maintenance and ultimate replacement of the assets at the end of their life.

We encourage you to have a look at the Asset Management Plans and review whether the service levels presented here are consistent with your vision for the future of Gunnedah Shire Council.

The following shows our AM documents in relation to other documents of Gunnedah Shire Council:

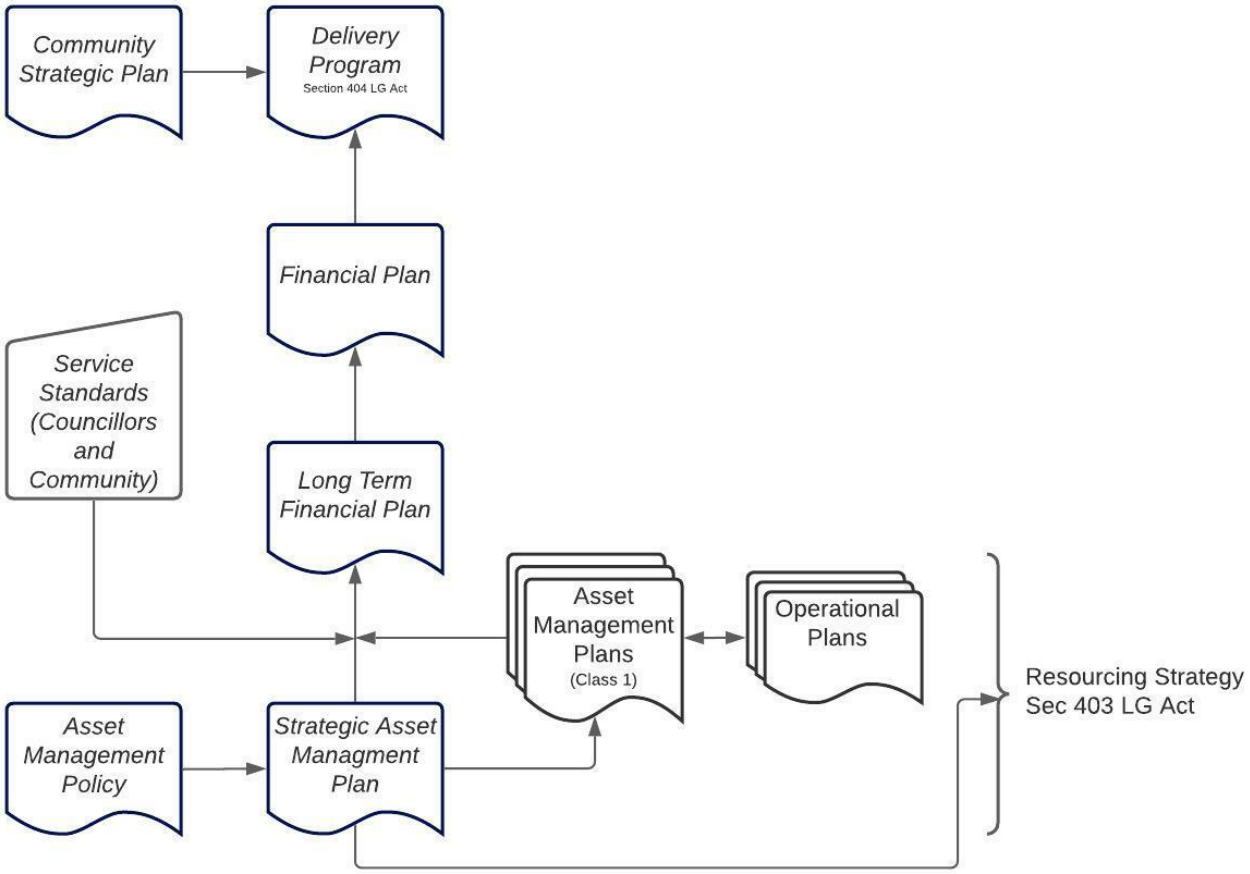


Figure 1: Strategic Asset Management Plan and the Asset Management Planning Process

Executive Summary

This document outlines in detail how Transport assets are obtained, maintained, retained, and disposed of to provide best value for Gunnedah Shire Council to meet its organisational objectives.

This Asset Management Plan (AMP) provides information about Transport assets with actions required to provide an agreed level of service in the most cost-effective manner while outlining associated risks. The plan outlines the services to be provided, how the services are provided and what funds are required to provide over the 10-year planning period. The AMP will link to a Long Term Financial Plan (LTFP) which typically considers a 10-year planning period.

Council currently has $35.3M for the renewal of this asset class over the planning period. There is a forecasted renewal funding requirement of $82.28M over the planning period to meet the desired level of service indicating a funding gap of $46.98M. The current backlog is assessed to be $7.91M. The overall portfolio condition is forecasted to degrade from an average condition of 1.67 to 2.33. The level of confidence is assessed as medium due to the currently available data and assumptions that were required during the lifecycle modelling, particularly around the unsealed road network.

Currently scheduled capital upgrade, expansion, or new works include:

- Causeway Upgrades, funded through Roads to Recovery. The upgrade project has a LTFP budget allocation of $2.94M and completion date of 2028/29.

The following table shows the net strategy costs of scenarios modelled over the planning period:

Table 1: Net Strategy Comparison

Scenario	Treatment Cost	Operational Costs	Initial Backlog*	Final Backlog	Total Change in Backlog	Net Strategy Costs	Final Ave. Cond
Current LTFP Funding	$35,256,879	$58,110,411	$4,026,908	$47,026,296	+$42,999,388	$136,366,678	2.33
Desired LoS Required Funding	$82,283,175	$56,300,992	$4,026,908	$-	-$4,026,908	$134,557,259	1.87

*The initial backlog does not include any required works on the unsealed road network.

As can be seen from the table above, there is a significant funding gap within the Transport portfolio. This is primarily in relation to the unsealed road network, however there are funding gaps across all the asset types.

The high funding gap creates significant risk for Council and the community it provides the assets for. The Community Satisfaction Survey highlights that the community perceives that

Unsealed Roads and Sealed Roads are areas of low satisfaction and need improvement, so Council is actively exploring opportunities to close this funding gap.

A breakdown of the associated costs and projected requirements are listed in the Financial Summary.

Introduction

In accordance with the *Local Government Act 1993* (the Act) and the Community Strategic Plan (2017-2027), Council provides a range of community services to the members of the local community and visitors. The services include transport services, waste management services, environmental services, social and recreational services, open space services and stormwater drainage services.

Under the Act, Council is required to develop and adopt an infrastructure and asset management plan covering a period of at least 10 years. In addition, Council is required to adopt a Long Term Financial Plan associated with such service plans also covering a period of at least 10 years. There is a direct link between the development and implementation of these two plans, with the LTFP updated to reflect forecast expenditure as detailed within these plans. Variations to the scheduled works within the AMP and the LTFP may be adjusted as the need arises. The primary intent of asset management is to meet a required level of service in the most cost-effective way, through the creation, acquisition, maintenance, operation, rehabilitation, and disposal of assets to provide for present and future community needs. The AMP will be a living document over the next 3 to 4 years complying to all legislative requirements, and to communicate funding required to provide the required levels of service over a 10-year planning period.

This plan also aims to align with ISO 55000 (international standard for asset management) but does not seek to become accredited as an ISO document or process. This document aims to align the delivery of asset management activities with the organisation's goals and objectives; this process is known as the "line of sight" with asset management. The ISO framework also aims to create transparency and accountability through all aspects of asset management; this process ensures that all stakeholders understand their roles and responsibilities of achieving the intentions of the plan.

The AMP works in conjunction with the following Council's plans and strategies:

Table 2: Plans, Strategies and Policies

Plans, Strategies and Policies	Description
Community Strategic Plan 2017 to 2027	Is a long-term plan that outlines the community's vision, values, key themes and action statements for the future. It involves extensive community engagement to ensure the plan reflects the aspirations and needs of the community. The plan guides decision-making and resource allocation, aiming to improve the quality of life, economic development, and sustainability within the community.

Plans, Strategies and Policies	Description
Delivery Program	Aligned to the strategic directions of the Community Strategic Plan, the Delivery Program describes what the elected council commits to deliver over their 4-year term.
Operational Plan	The Operational Plan identified the annual projects and activities to deliver against the Delivery Program outcomes, in alignment with the Community Strategic Plan.
Long Term Financial Plan	The Long Term Financial Plan (LTFP) is a 10-year rolling plan that informs decision-making and demonstrates how the objectives of the Community Strategic Plan and commitments of the Delivery Program and Operational Plan will be resourced and funded.
Asset Management Policy	Outlines the organisation's principles and guidelines on how AM will be done to achieve the organisation's objectives.
Strategic Asset Management Plan (SAMP)	High-level plan to implement the Asset Management Policy and outlines how assets will be managed – relies on lower-level plans for execution.
Risk Management Policy	Provides a framework and guidance for the management of risks associated with the delivery of the entirety of Council's functions and operations and to maximise opportunities and minimise adverse impacts.
Risk Management Framework	Documents a set of components that provide the foundations for risk management throughout Council including policies, procedures, business rules and risk management tools.

Table 3: Definitions

Abbreviation	Meaning
ABS	Australian Bureau of Statistics
AM	Asset Management
AMP	Asset Management Plan
FY	Financial Year
LGA	Local Government Area
LoS	Level of Service
LTFP	Long Term Financial Plan
Workbank Backlog	The value of engineering works that are requiring to be delivered to meet the desired level of service, but where capital renewal funding is not adequate.

Table 4: Legislation and Relevant Acts

Legislation	Requirements
Crown Land Management Act 2016	Provides for the administration and management of Crown land in the Eastern and Central Division of the State of NSW. Council has large holdings of Crown land under its care, control and management.
Disability Discrimination Act 1992	Provides protection for everyone in Australia against discrimination based on disability. It encourages everyone to be involved in implementing the Act and to share in the overall benefits to the community and the economy that flow from participation by the widest range of people.

Legislation	Requirements
Environmental Planning and Assessment Act 1979	Institutes a system of environmental planning and assessment for the State of New South Wales. Among other requirements the Act outlines the requirement for the preparation of Local Environmental Plans (LEP), Development Control Plans (DCP), Environmental Impact Assessments (EIA) and Environmental Impact Statements.
Heritage Act 1977	Provides for the protection and conservation of places and objects of cultural heritage significance and the registration of such places and objects.
Local Government Act 1993	Sets out the role, purpose, responsibilities and powers of local governments.
Roads Act 1993	Sets out procedures for opening and closing public roads, and establishes the authorities responsible for roads.
WHS Act 2000	Secures and promotes health and safety of employees at work.

Asset Information

This plan applies to Transport assets which provide services related to moving around our municipality. This includes active transport (walking, cycling), motorised transport (motorbikes, cars), public transport (buses), road freight (trucks) and the associated infrastructure.

The Transport network is outlined in the table below.

Table 5: Summary of Transport Network

Asset Type	Quantity	Replacement Value
Sealed Roads	598 kms	$220,782,996
Unsealed Roads	1,064 kms	$128,983,497
Kerbs	146.7 kms	$36,021,176
Car Parks	12 Units	$1,359,633
Pathways (including Shared Pathways)	35.7 kms	$13,528,628
Bridges	20 Units	$23,991,157
Culverts	719 Units	$26,776,546
Causeways	13 Units	$1,617,470
Other Road Assets	159 Units	$3,183,095
Total		**$456,244,198**

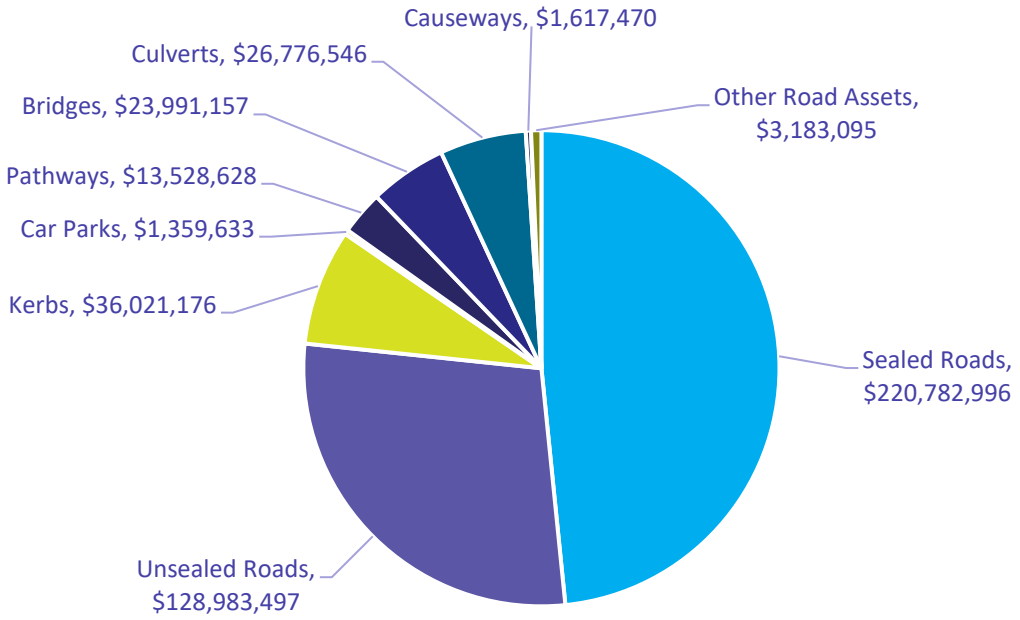


Figure 2: Replacement Value by Asset Type

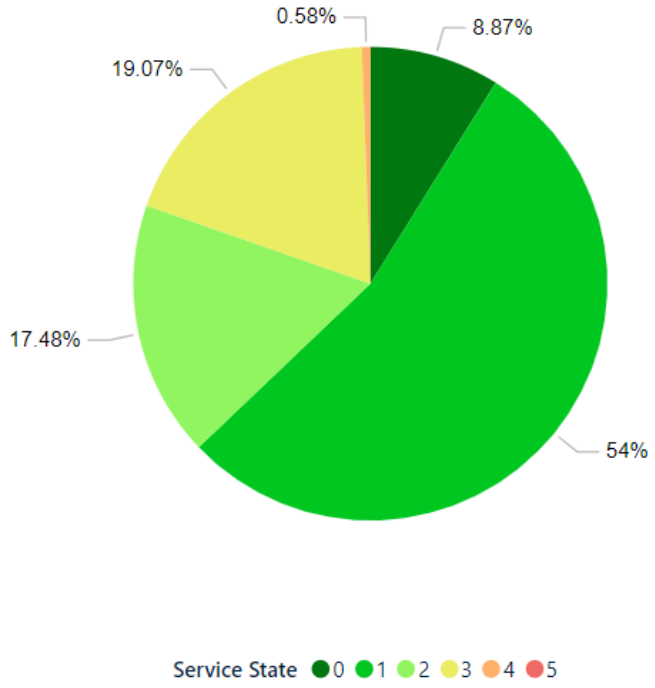


Figure 3: Current Overall Condition State of the Sealed Road Assets

Figure 3 above shows the current overall condition distribution of the road assets. Note that this is a weighted combination of the road surface and the road pavement so whilst there is a low portion in state 4 or 5 here, the road surface is currently showing 6.86% in state 4 and 0.58% in state 5.

Asset Hierarchy

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

Asset Expected Life

All assets are provided with a baseline straight line useful life value (blue line), used for the purposes of lifecycle cost planning and accounting for asset valuation and depreciation. This straight-line depreciation is used in Council's financial reporting. The service life of some assets, such as transport, differs from the standard design life and the useful life, as it also accounts for the ongoing maintenance and renewal of the asset to maintain a designated technical level of service (black line). The setting of service levels will be undertaken by council staff in consultation with the community and elected members, to optimise whole of life costs for the assets.

As upkeep of the asset is made through the capital renewal and maintenance budgets, the condition should be maintained at the desired level to ensure assets reach their potential service life (black line). If no regular maintenance occurs the potential asset life will not be reached (red line).

Figure 4 shows that the deterioration curves of red and black show a true reflection on an assets aging profile, as it typically deteriorates faster towards the end of its life.

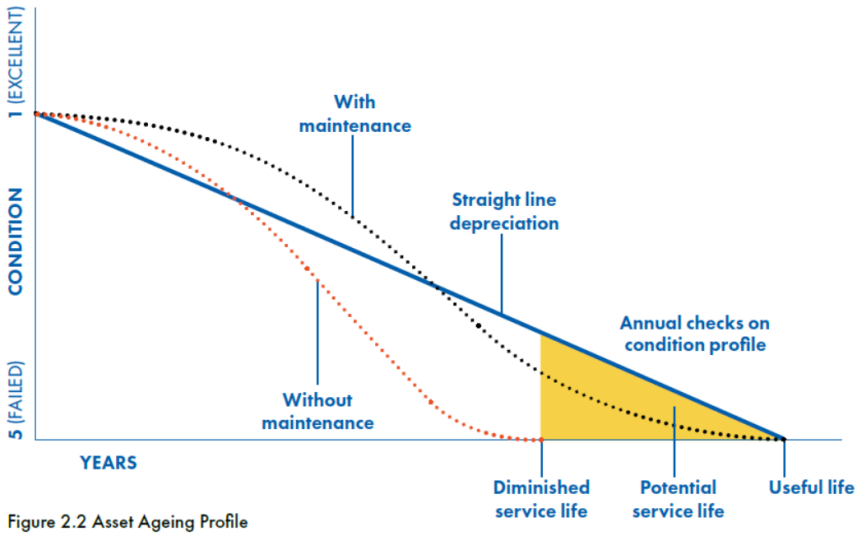


Figure 4: Asset Ageing Profile

See financial summary section for commentary on how the current budget allocation is performing.

Asset Quality, Condition and Distribution

The condition data that underpins this AMP and supporting lifecycle model is based upon valuation assessments completed by 30 June 2024. The condition framework used in the assessments was:

Table 6: Condition Assessment Framework

Condition Rating	Condition Description	Actions
0	As New	No action required
1	Excellent/Very Good	No action required
2	Good	Minor defects only
3	Fair	Maintenance required to return to accepted level of service
4	Poor	Consider renewal
5	Very Poor	Approaching unserviceable
6	End of Life	Unserviceable

Table 7: Average Condition Score by Asset Type

Asset Type	Average Score
Sealed Roads	1.74
Unsealed Roads	Not rated
Kerbs	2.53
Car Parks	1.84
Pathways	1.25
Bridges	1.6
Culverts	2.11
Causeways	1.03

Critical Assets

The majority of the Transport assets do not have a current criticality assessment that has been used in understanding the services delivered through the assets or their life cycle. The exception is bridges; given the relatively low number of bridges and the risk associated with their failure, an assessment was undertaken as part of the preparation of this AMP. For the other asset classes there is identifying data that helps guide the selection and prioritisation of any works that are undertaken on the Transport network. This includes:

Asset Location:

- Local
    - Urban
    - Rural
- Regional Road

Road Type:

- Sealed
- Unsealed

Council has an improvement item to review, assess, and update the criticality of the road assets. This can then be used to assess the other assets in the road corridor.

Stakeholders

Transport assets are managed through Gunnedah Shire Council's Infrastructure Directorate / Works with support services from the Engineering Services. The key stakeholders and their roles are defined in Table 8.

Table 8: Key Stakeholders

Key Stakeholders	Roles in Asset Management
Council Officers	Council officers play a role in managing Transport assets to ensure that they provide a level of service that meets the needs of both residents and visitors to the area.
Council Representatives	This stakeholder group includes Councillors and the Mayor for the Council. They are primarily responsible to ensure that their decisions represent and reflect the needs of the wider community.
Residents	Residents are the core users of Transport assets. Their needs, wants and expectations are conveyed to Council, which should be reflected in the desired levels of service.
Industry	The Transport network provides a critical connection for local industry such as mining or agriculture to provide their goods to the market, or have any plant or material delivered to their premises.
Visitors	Visitors are the second largest users of Transport assets, due to their frequency of use. Visitor's wants, needs and expectations drive the development in areas of the highest usage and commercial areas.
Insurers	Insurers have an interest to drive the implementation of systems, which would allow Council a better position in the knowledge of the condition of our assets. This should be reflected in by the number of claims made against this asset group.

Current and Desired Levels of Service

This AMP is prepared to facilitate consultation prior to adoption of levels of service by Gunnedah Shire Council.

Future revisions of the AMP will incorporate customer consultation on service levels and costs of providing the service. This will assist Council and stakeholders in matching the level of service required, service risks and consequences with the customer's ability and willingness to pay for the service.

The International Infrastructure Management Manual describes Levels of Service (LoS) as '*defined service quality for an activity or service area against which service performance may be measured*'.

Table 9: Customer (Community) Levels of Service

Strategic Goal	Criteria	Level of Service Objective	Performance Measure	KPI
2.2 Access to our goods, services, and markets	Function	Have sufficient car parks to meet commercial requirements.	Performance measures and KPIs have not yet been determined.	
1.5 Strategically Managed Infrastructure	Availability	Provide access between key or critical areas of our community.		
	Safety	Provide a safe road network		

Table 10: Technical Levels of Service

Strategic Goal	Criteria	Level of Service Objective	Performance Measure	KPI
1.5 Strategically Managed Infrastructure	Operations	Asset conditions are regularly monitored.	Defect inspections are undertaken in an ongoing fashion, as appropriate to asset type and risk.	90% inspections undertaken within operational plan timeframes.
			Condition assessments are undertaken every four years.	95% of assets condition audited.
		Assets are kept in a clean and serviceable state	Street sweeping and commercial area path cleaning is undertaken as per agreed standards.	90% of scheduled activities undertaken within desired frequency.

Strategic Goal	Criteria	Level of Service Objective	Performance Measure	KPI
	Maintenance	Asset defects are rectified in a timely manner.	In alignment with maintenance levels of services.	90% Compliance.
		Maintenance activities are primarily undertaken through proactive rather than reactive programs.	Maintenance expenditure is higher on proactive maintenance than reactive maintenance.	>1:1 ratio of expenditure of reactive to proactive maintenance.
	Renewal	Asset conditions meet community expectations.	Renewals completed to keep assets in the following conditions or better: Roads Surfaces and Pavements kept in condition 3 (average) or better (renewal at condition 4 (poor)). Kerbs kept in condition 4 (poor) or better (renewal at condition 5 (very poor)) Pathways kept in condition 4 (poor) or better (renewal at condition 5 (very poor)) Car park surface and pavement kept in condition 4 (poor) or better (renewal at condition 5 (very poor)) Bridges partially renewed at condition 4 (poor) where possible or full renewal at condition 5 (very poor). Culverts kept in condition 4 (poor) or better (renewal at condition 5 (very poor)) Causeways kept in condition 4 (poor) or better	90% Compliance.

Strategic Goal	Criteria	Level of Service Objective	Performance Measure	KPI
			(renewal at condition 5 (very poor)) Other Road Assets kept in condition 3 (average) or better (renewal at condition 4 (poor))	
	Upgrade / New	Assets comply with legislative requirements and regulatory standards. Assets are functional and meet the needs of the community.	Compliance Audits	100% Compliance with legislative requirements.

Future Demand

Over time, the community's demand for the services which Gunnedah Shire Council provides changes. The reason for change can be varied, but some of the common drivers are population, demographics, technology, environmental, economic and political. Naturally as service demand changes, Council's assets may also need to change.

Table 11: Demand Management

Current Position	Demand Forecast	Demand Impact	Demand Management Plan
Population - Gunnedah Shire Council's population as of the 2021 census was 12,691 people.	By 2036 the population is expected to increase by 589 people (4.6%) to 13,280.	Negligible or minor.	N/A
Community Expectations – According to the 2024 Community Research Survey, the community is not satisfied with the performance of the Council's unsealed, rural sealed, and urban sealed roads. All road survey responses were rated as needs improvement.	The Community Research Survey was based on current status, not forward focused. The condition projections included in the supporting lifecycle model are the only forward focused performance information. Under current funding, road condition is forecast to decrease which will lead to an increase in dissatisfaction amongst residents.	Decreasing community satisfaction.	Review funding allocation to Transport assets, determine community willingness to pay for transport related services, and secure additional renewal funding.
Demographic Changes – Age distribution analysis of the ABS census data shows a trend to an ageing population with residents generally staying in Gunnedah and 'ageing in place'.	See left.	Increase in vehicular movements and car parking requirements, specifically disabled parking. Increase in short active transport movements, decrease in longer active transport movements, increase sensitivity to trip hazards.	Monitor carparking utilisation and demand. Monitor active travel requirements and safety incidents related to the pathway network.

Current Position	Demand Forecast	Demand Impact	Demand Management Plan
Environmental Performance – As Australia moves towards achieving its's emission deduction and net zero targets, local government authorities will need to consider the carbon impact from construction activities and the availability and utilisation of recycled materials.	See left.	Expansion, New and Upgrade projects will need to comply with modern environmental standards and may incur higher costs than traditional projects.	All Expansion, New and Upgrade projects to comply with standards. Monitor Council's position and take opportunities to upgrade to better environmentally performing components where it is cost effective to do so.

Life Cycle Planning/Strategies

The lifecycle management plan details how Gunnedah Shire Council plans to manage and operate the assets at the agreed levels of service while managing life cycle. The assets covered by this Transport AMP are shown in the Asset Information section above.

This section presents an analysis of Council's Transport assets information and the lifecycle management plans covering the five key work activities to manage Transport assets.

Operations Plan

Operational activities are regular ongoing practices that keep the Transport assets functional and ready for use. Operational activities do not affect the condition of the asset and include activities such as defect inspections, debris removal, street sweeping, pathways sweeping, roadside mowing, and condition assessments.

Maintenance Plan

Maintenance is the regular ongoing work necessary to keep assets serviceable. Maintenance activities do not affect the condition of the asset, but rather are the required activities to ensure the asset meets its design life and includes reactive and proactive works.

Reactive maintenance is unplanned repair work carried out in response to service requests and supervisory directions, for example patching a pothole. Proactive (planned) maintenance is work that is planned and scheduled to either prevent defects from arising or to ensure the asset is kept in a serviceable condition, for example the grading of unsealed roads. This is often cyclical in nature.

The work and costs associated with maintenance activities is dependent on the condition state of the asset. As a general rule, the worse the condition state, the higher the reactive maintenance cost requirements.

Council currently spends an average of $4.95M on transport related maintenance per year.

Renewal Plan

Renewal is major capital work which does not significantly alter the original service provided by the asset, but restores, rehabilitates, replaces or renews an existing asset to its original service potential.

Work over and above restoring an asset to original service potential is considered to be an acquisition resulting in additional future operations and maintenance costs.

Assets requiring renewal are identified through asset lifecycle modelling using the Brightly Predictor modelling software. This uses asset specific condition assessments and degradation profiles to understand the current condition, forecast the expected year of renewal works, propose the type of renewal works required, and provide a strategic estimate for the renewal cost. It is noted that the software provides works candidates using technical criteria that are then reviewed and prioritised into a delivery program.

Given that Council does not currently have a criticality or hierarchy for Transport Assets, the renewal service levels (intervention levels) are recommended as follows:

- Sealed Roads Surfaces and Pavements kept in condition 3 (average) or better (renewal at condition 4 (poor)).
- Kerbs kept in condition 4 (poor) or better (renewal at condition 5 (very poor)).
- Pathways kept in condition 3 (average) or better (renewal at condition 4 (poor)).
- Car park surface and pavement kept in condition 4 (poor) or better (renewal at condition 5 (very poor)).
- Bridges partially renewed at condition 4 (poor) where possible or full renewal at condition 5 (very poor).
- Culverts kept in condition 4 (poor) or better (renewal at condition 5 (very poor)).
- Causeways kept in condition 4 (poor) or better (renewal at condition 5 (very poor)).
- Other Road Assets kept in condition 3 (average) or better (renewal at condition 4 (poor)).

Note that modelling has been completed for both renewal intervention at condition 4 (poor) or at condition 5 (very poor) for some asset classes, with the above recommendations considering risk, Council's strategic objectives, and cost.

Acquisition Plan

Acquisitions are new assets which did not previously exist or works which will upgrade or improve an existing asset beyond its existing capacity. They may result from growth, demand, social or environmental needs. Assets may also be donated to Council.

Proposed upgrade of existing assets, and new assets, are identified from various sources such as community requests, service manager studies and proposals identified by strategic plans. Potential upgrades and new works should be reviewed to verify that they are essential and non-asset solutions should always be considered.

Selection Criteria

When Council commits to new assets, they must be prepared to fund future operations, maintenance, and renewal costs. They must also account for future depreciation when reviewing long term sustainability. This is outlined in Council's Asset Management Policy.

The only Council approved forecast constructed acquisitions are listed below:

- Causeway Upgrades – scheduled from Road to Recovery funding from 2025/26 to 2028/29

Disposal Plan

Disposal includes any activity associated with the disposal of a decommissioned asset including sale, demolition or relocation. Council's Asset Disposal Policy outlines this process.

No asset disposals are currently planned in the 10-year planning horizon.

Financial Summary

This section contains the financial impacts and requirements from all the information provided in the previous sections.

Financial predictions can be improved when further information becomes available and documented in future AMPs, on desired levels of service and current and projected future asset performance.

Two funding scenarios have been developed, firstly a scenario that models the current LTFP funding allocation. The current renewal allocation for Transport assets is $4,061,132 per annum. Secondly a Desired LoS required funding scenario demonstrates the required expenditure to meet the desired levels of service by adopting an unconstrained budget in the supporting lifecycle model. Should an Asset Class have no capital renewal budget allocated in the LTFP, alternative renewal intervention level scenarios have been modelled. The summary of costs for each scenario is shown below.

Table 12: Summary of Cost Forecasts – Sealed Roads – Renewal at Condition 4 (Poor)

Year	Current LTFP Funding Scenario			Desired LoS Required Funding		
	O & M Costs	Renewal Costs	Workbank Backlog	O & M Costs	Renewal Costs	Workbank Backlog
1	$2,077,115	$3,786,557	$1,195,188	$2,031,977	$4,981,746	Nil
2	$2,147,437	$1,289,407	$-	$2,160,606	$94,218	Nil
3	$2,141,061	$3,086,617	$-	$2,142,217	$3,086,617	Nil
4	$2,225,325	$5,662,065	$1,900,248	$2,138,565	$7,562,313	Nil
5	$2,198,466	$3,512,707	$285,037	$2,219,790	$1,873,975	Nil
6	$2,239,707	$3,608,785	$1,617,699	$2,200,161	$4,964,967	Nil
7	$2,376,914	$1,735,839	$-	$2,403,091	$38,899	Nil
8	$2,298,127	$5,743,068	$2,373,565	$2,271,727	$6,979,260	Nil
9	$2,320,197	$3,880,342	$6,930,497	$1,975,597	$12,029,815	Nil
10	$2,381,060	$3,878,207	$7,492,186	$2,159,984	$2,939,704	Nil
Total	**$22,405,408**	**$36,183,593**	**$7,492,186**	**$21,703,714**	**$44,551,514**	**Nil**
Net Strategy Costs			**$65,981,524**	**Net Strategy Costs**		**$66,255,228**

Table 13: Summary of Cost Forecasts – Sealed Roads – Renewal at Condition 5 (Very Poor)

Year	Current LTFP Funding Scenario			Desired LoS Required Funding		
	O & M Costs	Renewal Costs	Workbank Backlog	O & M Costs	Renewal Costs	Workbank Backlog
1	$2,208,230	$1,082,339	Nil	$2,208,230	$1,082,339	Nil
2	$2,273,219	$201,550	Nil	$2,273,219	$201,550	Nil
3	$2,178,897	$3,697,856	Nil	$2,178,897	$3,697,856	Nil
4	$2,553,763	$-	Nil	$2,553,763	$-	Nil
5	$2,522,683	$2,874,041	Nil	$2,522,683	$2,874,041	Nil
6	$2,659,507	$-	Nil	$2,659,507	$-	Nil
7	$2,730,982	$105,224	Nil	$2,730,982	$105,224	Nil
8	$2,269,191	$13,791,058	Nil	$2,269,191	$13,791,058	Nil
9	$2,633,767	$-	Nil	$2,633,767	$-	Nil
10	$2,534,666	$6,431,642	Nil	$2,534,666	$6,431,642	Nil
Total	**$24,564,905**	**$28,183,710**	**Nil**	**$24,564,905**	**$28,183,710**	**Nil**
Net Strategy Costs			**$52,748,615**	**Net Strategy Costs**		**$52,748,615**

As no capital renewal budget is allocated for Kerbs, the below table shows the projected renewal requirements under the two modelled scenarios.

Table 14: Summary of Cost Forecasts – Kerbs – Renewal at Condition 4 (poor) and 5 (Very Poor)

Year	Renewal at Condition 4			Renewal at Condition 5		
	O & M Costs	Renewal Costs	Workbank Backlog	O & M Costs	Renewal Costs	Workbank Backlog
1	$31,570	$13,523,613	Nil	$52,800	$182,977	Nil
2	$49,374	$177,035	Nil	$51,281	$1,183,412	Nil
3	$49,788	$-	Nil	$52,979	$33,269	Nil
4	$48,328	$1,069,638	Nil	$53,160	$66,537	Nil
5	$44,628	$3,490,820	Nil	$52,868	$500,216	Nil
6	$48,149	$958,528	Nil	$50,174	$2,195,191	Nil
7	$50,026	$-	Nil	$46,855	$3,937,573	Nil
8	$50,184	$30,892	Nil	$48,362	$2,379,891	Nil
9	$49,774	$337,439	Nil	$51,014	$357,637	Nil
10	$50,123	$147,332	Nil	$51,100	$266,149	Nil
Total	**$471,945**	**$19,735,297**	**Nil**	**$510,594**	**$11,102,852**	**Nil**
Net Strategy Costs			**$20,207,242**	**Net Strategy Costs**		**$11,613,446**

As no capital renewal budget is allocated for Car Parks, the below table shows the projected renewal requirements under the recommended condition 5 intervention scenario and the required funding to ensure there is no workbank backlog.

Table 15: Summary of Cost Forecasts – Carparks – Renewal at Condition 5 (Very Poor)

Year	Renewal at Condition 5		
	O & M Costs	Renewal Costs	Workbank Backlog
1	$11,966	$86,721	Nil
2	$11,590	$304,655	Nil
3	$13,757	$24,196	Nil
4	$14,759	$-	Nil
5	$14,954	$-	Nil
6	$15,647	$-	Nil
7	$15,752	$-	Nil
8	$15,883	$-	Nil
9	$16,048	$-	Nil
10	$16,282	$-	Nil
Total	**$146,641**	**$415,678**	**Nil**
Net Strategy Costs			**$562,319**

Table 16: Summary of Cost Forecasts – Pathways – Renewal at Condition 4 (poor)

Year	Current LTFP			Desired LoS Required Funding		
	O & M Costs	Renewal Costs	Workbank Backlog	O & M Costs	Renewal Costs	Workbank Backlog
1	$79,237	$79,184	Nil	$79,237	$79,184	Nil
2	$80,683	$-	Nil	$80,683	$-	Nil
3	$80,441	$130,456	Nil	$80,441	$130,456	Nil
4	$80,588	$106,418	Nil	$80,588	$106,418	Nil
5	$81,313	$102,292	Nil	$81,313	$102,292	Nil
6	$82,004	$36,116	Nil	$82,004	$36,116	Nil
7	$81,721	$81,654	Nil	$81,721	$81,654	Nil
8	$82,301	$19,746	Nil	$82,301	$19,746	Nil
9	$80,616	$409,134	Nil	$80,616	$409,134	Nil
10	$79,398	$548,087	Nil	$79,398	$548,087	Nil
Total	**$808,302**	**$1,513,087**	**Nil**	**$808,302**	**$1,513,087**	**Nil**
Net Strategy Costs			**$2,312,388**	**Net Strategy Costs**		**$2,312,388**

Table 17: Summary of Cost Forecasts – Bridges

Year	Current LTFP Funding ($0 Renewal Budget)			Desired LoS		
	O & M Costs	Renewal Costs	Workbank Backlog	O & M Costs	Renewal Costs	Workbank Backlog
1	$1,037,000*	Nil	$291,622	$1,037,000*	$291,622	Nil
2	$-	Nil	$291,622	$-	$-	Nil
3	$403,500*	Nil	$291,622	$403,500*	$2,099	Nil
4	$-	Nil	$291,622	$-	$-	Nil
5	$-	Nil	$293,721	$-	$-	Nil
6	$-	Nil	$293,721	$-	$-	Nil
7	$-	Nil	$293,721	$-	$-	Nil
8	$-	Nil	$293,721	$-	$-	Nil
9	$-	Nil	$293,721	$-	$-	Nil
10	$-	Nil	$293,721	$-	$-	Nil
Total	**$1,440,500**	**Nil**	**$293,721 (Closing)**	**$1,440,500**	**$293,721**	**Nil**
Net Strategy Costs			**$1,734,221**	**Net Strategy Costs**		**$1,734,221**

*O & M works are those specified in Flood recovery program and L2 Bridge assessment specifications.

As no capital renewal budget is allocated for Culverts, the below table shows the projected renewal requirements under the recommended condition 5 intervention scenario and the required funding to ensure there is no workbank backlog. Note that whilst this summary shows no maintenance costs, maintenance is undertaken through other road maintenance programs.

Table 18: Summary of Cost Forecasts – Culverts – Renewal at Condition 5 (Very Poor)

Year	Renewal at Condition 5		
	O & M Costs	Renewal Costs	Workbank Backlog
1	Nil	$65,790	Nil
2	Nil	$112,662	Nil
3	Nil	$-	Nil
4	Nil	$-	Nil
5	Nil	$-	Nil
6	Nil	$-	Nil
7	Nil	$-	Nil
8	Nil	$-	Nil
9	Nil	$-	Nil
10	Nil	$140,015	Nil
Total	**Nil**	**$318,466**	**Nil**
Net Strategy Costs			**$318,466**

As no capital renewal budget is allocated for Causeways, the below table shows the projected renewal requirements under the recommended condition 5 intervention scenario and the required funding to ensure there is no workbank backlog. Note that whilst this summary shows no maintenance costs, maintenance is undertaken through other road maintenance programs.

Table 19: Summary of Cost Forecasts – Causeways – Renewal at Condition 5 (Very Poor)

Year	Renewal at Condition 5			
	O & M Costs	Renewal Costs	Acquisition Cost	Workbank Backlog
1	Nil	Nil	$588,019	Nil
2	Nil	Nil	$588,019	Nil
3	Nil	Nil	$588,019	Nil
4	Nil	Nil	$588,019	Nil
5	Nil	Nil	$-	Nil
6	Nil	Nil	$-	Nil
7	Nil	Nil	$-	Nil
8	Nil	Nil	$-	Nil
9	Nil	Nil	$-	Nil
10	Nil	Nil	$-	Nil
Total	**Nil**	**Nil**	**$2,352,074**	**Nil**
Net Strategy Costs				**$2,352,074**

As no capital renewal budget is allocated for Other Road Assets, the below table shows the projected renewal requirements under the recommended condition 4 intervention scenario and the required funding to ensure there is no workbank backlog.

Table 20: Summary of Cost Forecasts – Other Road Assets – Renewal at Condition 4 (Poor)

Year	Renewal at Condition 4		
	O & M Costs	Renewal Costs	Workbank Backlog
1	$15,051	$-	Nil
2	$15,213	$-	Nil
3	$15,283	$-	Nil
4	$15,306	$-	Nil
5	$16,016	$-	Nil
6	$16,153	$-	Nil
7	$15,984	$39,491	Nil
8	$16,373	$-	Nil
9	$16,428	$19,211	Nil
10	$16,317	$29,260	Nil
Total	**$158,125**	**$87,963**	**Nil**
Net Strategy Costs			**$246,087**

Unsealed Road Renewal Calculations

Unsealed road renewals are heavily dependent on the depth of gravel that is available on the road. As vehicles traffic the road or weather events occur, gravel is displaced and the overall thickness of the gravel pavement decreases. Surface defects can be addressed through maintenance, such as grading, where the road is returned to state that provides a smooth and easily trafficked user experience when the depth of gravel is available. This can, however, create difficulties in determining the overall condition of the unsealed road network. Recently graded road may appear to be in good condition, whereas a road in need of grading can appear in a poor condition; both situations do not provide insight into the current gravel depth.

Given the uncertainty of current gravel depth of the network, Council has adopted a principles-based renewal requirement for the unsealed road network, as follows:

- Determine the total unsealed road network length, currently assessed as 1,064kms.
- Determine the number of years between gravel resheets, averaged across the network, currently assessed as 20 years.
- Calculating that, on average, to resheet 1,064kms of gravel road over 20 years requires that 53kms of gravel road resheeting is undertaken per year, noting some high traffic roads will be more frequent and low-traffic roads will be less frequent.
- Determine the average rate of gravel resheeting per km, currently assessed as costing $45,000.

- Calculating that to resheet 53kms at $45,000 requires an annual gravel resheeting budget of $~2.4M.
- Currently, Council allocates $588,019 for unsealed road capital renewal (i.e. gravel resheeting), indicating a deficit of approximately $1.8M per year.
- It is noted that this calculation assumes that there has historically been an appropriate level of funding for gravel road resheeting. As renewal funding levels have been below this assessment, there is likely a backlog of works required that is not currently known.

It is noted that gravel road works are undertaken by Council crews, so increasing renewal and maintenance of the gravel road network is not as simple as partially increasing funding. The cost of labour, plant and equipment, and securing gravel sources will need to be considered alongside the funding deficit to provide an appropriate strategy for addressing this shortfall.

Asset Valuations

Council undertakes 'Revaluations' in line with the Asset Management Policy. Valuations are undertaken in alignment with Australian Accounting Standard 'AASB13 Fair Value'.

Valuations are required every three to five years and are independently audited. Valuations are undertaken to satisfy the financial reporting requirements and to understand the cost to replace assets.

Operations and Maintenance Trends and Forecasts

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

Furthermore, the work and costs associated with maintenance activities is dependent on the condition state of the asset. Therefore, if the asset portfolio experiences poorer condition states, increased maintenance costs will be anticipated.

Figure 5 shows the total operational funding requirements for the Transport asset network, based on the currently forecasted change in conditions and allocation of maintenance grading budgets. Asset specific operational expenses are outlined in the Financial Summary section above.

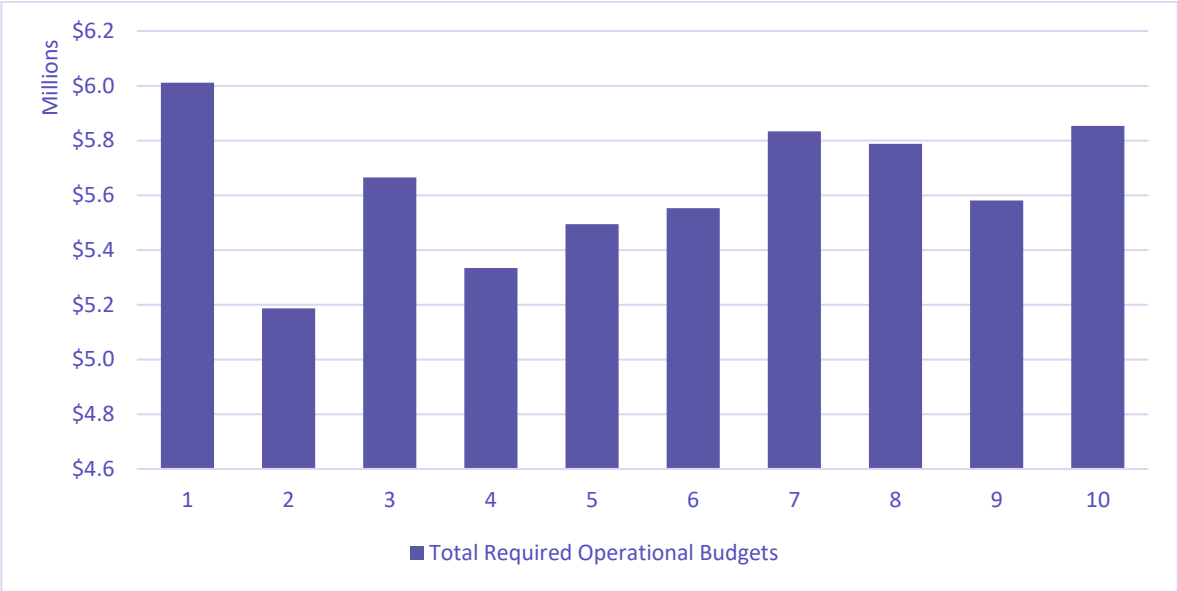


Figure 5: Forecasted Operational Funding Requirements

Future Renewal Forecast

Across the Transport Asset Portfolio, there are currently capital renewal budgets allocated for Sealed Roads, Unsealed Roads, and Kerb and Channel. The details of the allocated funding and the workbank backlog are available in the Financial Summary section above with the overall trend outlined below.

Over the 10-year planning period, there is $35.3M renewal funding allocated and a modelled requirement of $82.28M indicating a deficit of $46.98M. It is important to note that this funding projection is based on the condition of the assets and there may be other requirements due to risk or legislative requirements that are not included in this forecast.

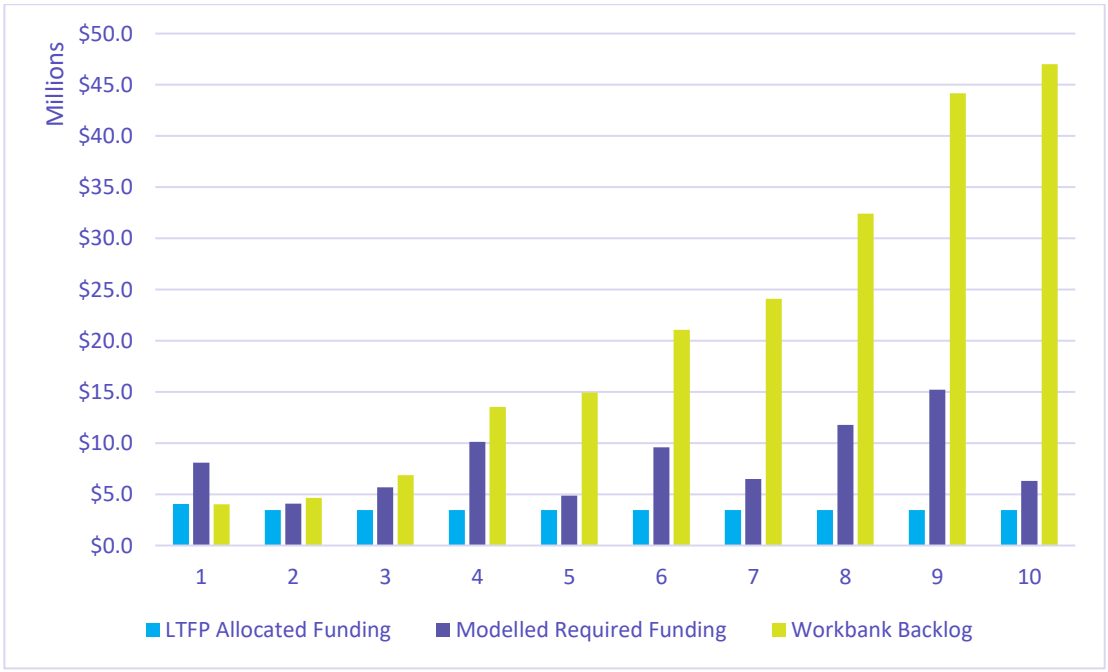
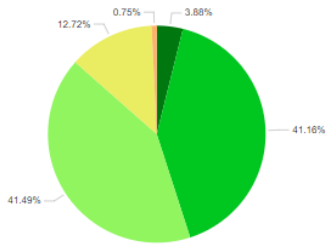
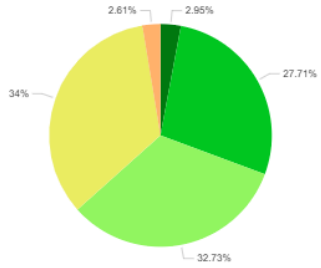
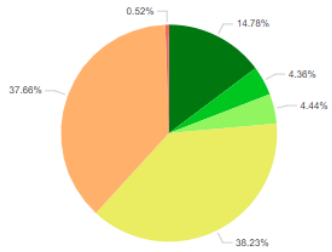
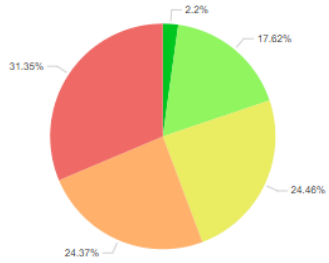
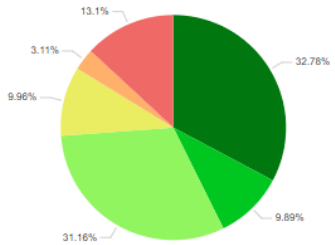
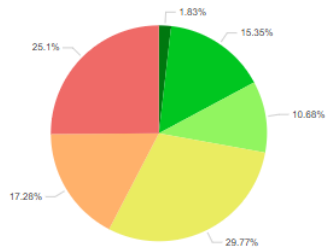
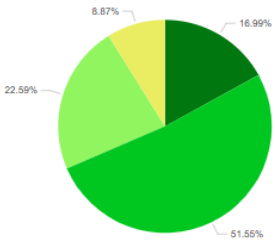
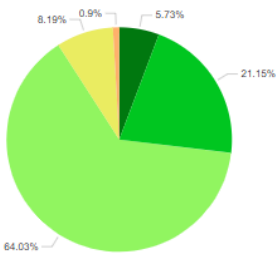
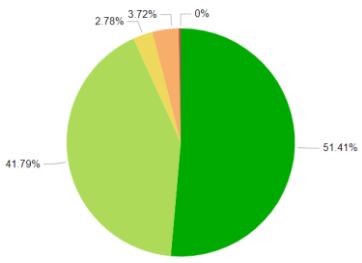
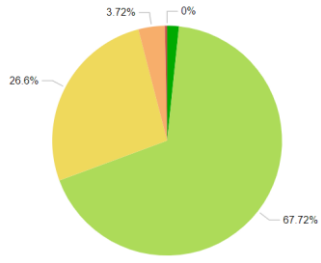
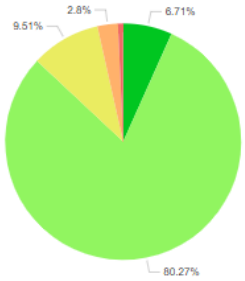
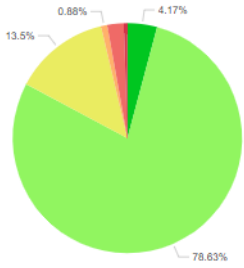
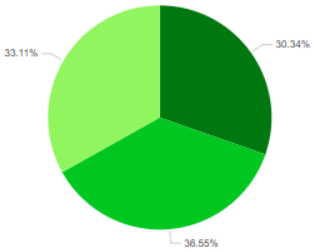
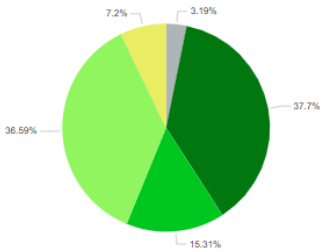
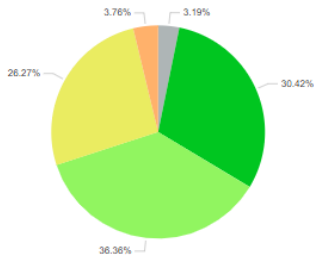


Figure 6: Forecasted Capital Funding Requirements and Backlog

The table below shows the forecasted condition at the start and the end of the planning period, by asset type. These graphs use the following colour legend:

Table 21: Current vs Forecasted Asset Condition – Current Funding

Asset Type	Year 1 Condition	Year 10 Condition
Sealed Roads		
Kerbs		
Car Parks		
Pathways		
Bridges		

Asset Type	Year 1 Condition	Year 10 Condition
Culverts		
Causeways		
Other Road Assets		

Future Acquisition Forecast

Currently the only acquisitions within the LTFP for the Transport network are the upgrade of Causeways from 2025/26 to 2028/29 with an annual funding allocation of $588,019, or total funding allocation of $2,352,074. Note that this does not include the works already completed in the 2024/25 FY.

Council's Section 94A contributions plan, recently updated to be Section 7.11 contributions within the Environment Planning Act, includes a total of $18,377,000 for projects related to traffic and transport. This document is dated 2013 so these figures will have significantly increased since then, and the projects within the contributions plan will need to be reviewed to ensure they meet the current community requirements and desired level of service.

Assumptions

In preparing this AMP and supporting lifecycle model the following assumptions were made:

Table 22: Key Assumptions

Assumptions	Details
Costs	All costs are shown in current 2024/2025 FY dollar values.

Assumptions	Details
Lives are appropriate for the associated assets.	The asset lives that have been used in modelling as assumed to be accurate for the modelling. For roads, both unsealed and sealed, the assumption is that the relatively increased renewal requirements for higher traffic roads and relatively decreased funding requirement for lower traffic roads can be managed with the average life that has been adopted for their respective components.
Conditions are accurately captured in financial reporting.	Modelling has been completed based on the condition index used for valuation reporting. This was informed by condition audits completed within the revaluation cycle and depreciated to the end of the 2023/24 financial year. It is assumed that this is a fair and accurate representation of current asset condition.
Maintenance Cost	The relative increase in maintenance costs were calculated using Brightly's standardised methodology, based on their experience with councils across Australia. This is deemed to be appropriate for Gunnedah.

Data Confidence

The expenditure and valuations projections in this AMP are based on best available corporate data. Currency and accuracy of data is critical to effective asset and financial management.

The confidence in the data for this AMP is Medium

Risk Management

An assessment of risks associated with service delivery from infrastructure assets has identified the most critical risks to Council. The risk assessment process identifies and assesses risks, develops a risk rating and develops a risk treatment plan for non-acceptable risks.

Table 23: Risk Management Plan

Risk	Risk Rating	Control Measure / Treatment Approach	Responsibility
Community or staff member injured because of using Council assets.	Moderate	Proactive maintenance, routine inspections, condition audits, capital works program, WHS management system, WHS inspections, training and education.	Engineering Services Works

Risk	Risk Rating	Control Measure / Treatment Approach	Responsibility
Assets do not meet user or community expectations.	Moderate	Asset management plan, customer satisfaction survey, service led AM planning, inspection and audit programs, capital works program.	Engineering Services Customer and Information Services Works
Significant breach of legislation, Council policies or frameworks.	Moderate	Training and education, legal and LGA updates, audit programs.	Governance and Legal Works
Climate change impact	High	Delivery of project-based initiatives in response to climate change impacts.	Works
Assets are not suitably maintained for community to access emergency services in natural disasters.	High	Identification of key access to manage during natural disasters, proactive maintenance, routine inspections, condition audits, capital works program, WHS management system, WHS inspections, training and education.	Engineering Services Works

Plan Improvement and Monitoring

This plan is to be reviewed and updated alongside any major changes to legislation or internal policies or strategies, or when required.

Monitoring and Reviewing

The Asset Management Plan is not a one-off document but part of the Council's business planning process. For this reason, it is necessary to review and update any key assumptions, strategic change or budget decision that may affect the planned service levels and future expenditure requirements.

To keep this AMP current, Council will schedule the plan review into its strategic and annual planning and budget processes. The AMP has a life of 4 years (or in line with the next revaluation of the asset group to assist with better data being available).

Improvement Plan

Table 24: Improvement Plan

Current Position	Improvement Item	Responsibility
The life cycle model supporting this Plan is based upon asset valuation data, which is drawn from condition audit data.	Utilisation of the detailed condition audit data as collected in the modelling will ensure that the model is as current as possible and includes any observations, assumptions, or asset anomalies that are identified in the field.	Engineering Services Works
Road assets are currently modelled using the same criticality, useful lives, and intervention points regardless of traffic volumes.	Develop a methodology for and undertake an assessment of road criticality, then determine the relative thresholds for operational, maintenance, and renewal activities throughout the asset lifecycle.	Engineering Services Works
Bridges are the only Transport asset with a criticality assessment.	Review the road criticality once completed and determine if it is suitable to adjacent road corridor assets (such as Kerbs, Culverts, Causeways, Other Road Assets) or where further development of criticality methodology and assessment is required (for e.g. Pathways, Carparks).	Engineering Services Works
The works program proposed by the modelling was developed from currently available condition data and capital work unit rates.	Monitor the works candidates from the modelling for accuracy of project selection and project costing. If required, identify any discrepancies, assess if there is a trend that needs to be captured in the asset register and included in future modelling, and update the models as appropriate.	Engineering Services Works
The life cycle model supporting this Plan is primarily based upon asset condition and renewal treatments.	Ensure any available information relating to accessibility, capacity, functionality, or legislative compliance is used in lifecycle model to inform asset planning.	Engineering Services Works
Levels of Service are not yet underpinned by service review data and other benchmarks	Levels of Service and associated Performance Measures and KPIs to be further developed once service reviews have been undertaken in all key areas relating to the AMP.	Engineering Services Works