District Council of YANKALILLA

Transport

Asset Management Plan

August 2023

Document Control

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1.0	22/06/2022	90% Completion at Draft Form	SW	TY	
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4.0	3/08/2023	Final for Council Endorsement	PL		C23156

Contents

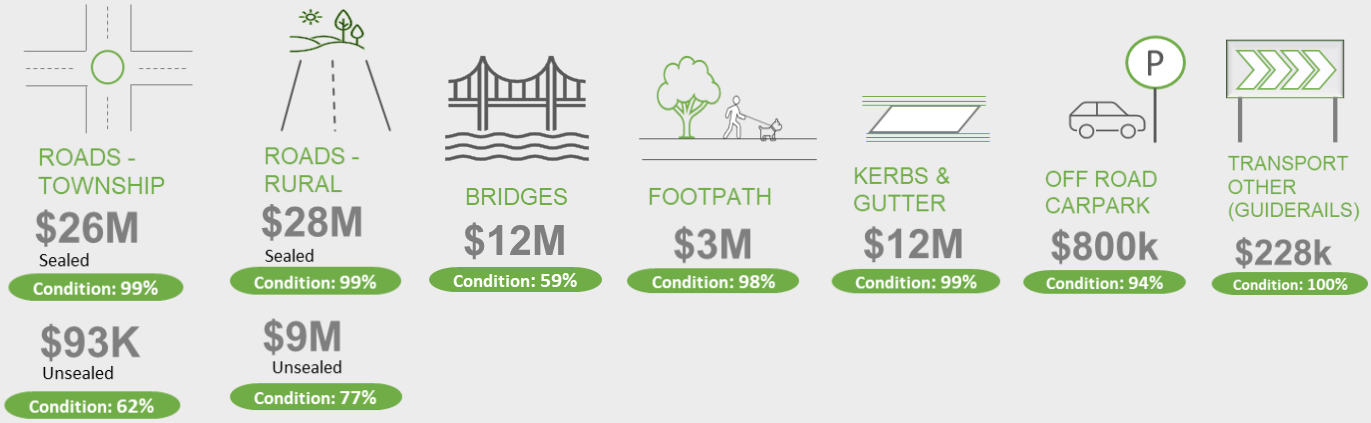
Abbreviations

Abbreviation	Term
AMP	Asset Management Plan
LTFP	Long Term Financial Plan
SMP	Strategic Management Plan
ESCOSA	Essential Service Commission of South Australia

Executive Summary

Total Replacement Cost: $65,502,577

Condition percentage are assets in fair to very good condition.



The purpose of our Transport Asset is to support the transportation need across the District of Yankalilla and to connect people to our rural and urban places in a safe and accessible way. This AMP focuses on the management of Council's transport assets, which include roads, bridges, kerbs and gutters, footpaths, off road carpark and transport (other).

Effective asset management of Council's transport assets will support Council in achieving the following strategic objectives:

- To achieve Council's vision: "Our community is a connected network of townships and rural settlements" and "Our Infrastructure is taking us places.
- Meet the required level of service in the most cost effective manner for present and future customers.
- Comply with regulatory requirements.
- Consult and communicate necessary funding requirements to provide the required levels of service over the next 10 years
- Create and maintain an effective transport network that supports safe and effective movements, 'taking us places'.

TRANSPORT LEVELS OF SERVICE

Quality
Roads, Bridges and Footpaths are well maintained

Function
Transport Assets are 'fit for purpose' and meet community needs.

Utilisation
Transport Assets have the capacity to meet community needs.

Condition
State of transports assets are in useable condition.

Renewal
Sustainably managing the renewal of assets.

Safety
Provide safe and suitable facilities free from hazards.

Accessibility
Streets and footpaths are accessible to all.

Executive Summary

TRANSPORT FUTURE DEMANDS

Population & Demographic
Population is predicted to be 6927 by 2030.

Seasonal Factors
Green Change - Increase number of people living in rural style allotment but not working the land.

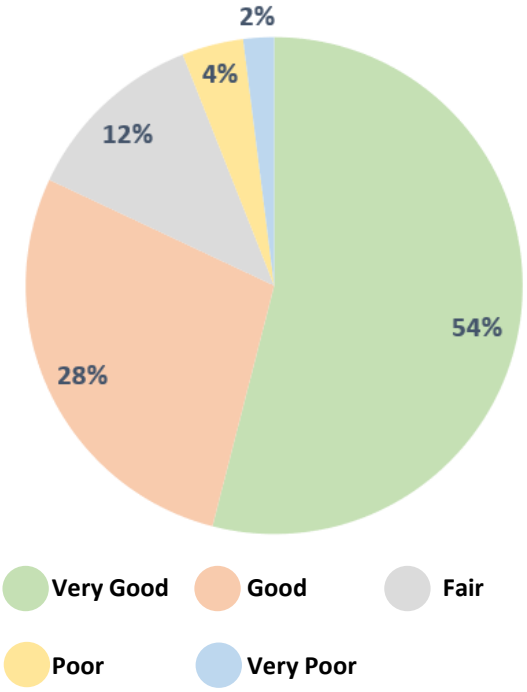
Sea Change - Increase population living in township areas.

Freight Movement
Request to be placed on Council to gazette local roads as B double freight commodity routes under State Government heavy vehicle access framework.

Forest Harvesting
Seasonal Demands for harvesting during wet seasons to avoid fire season.

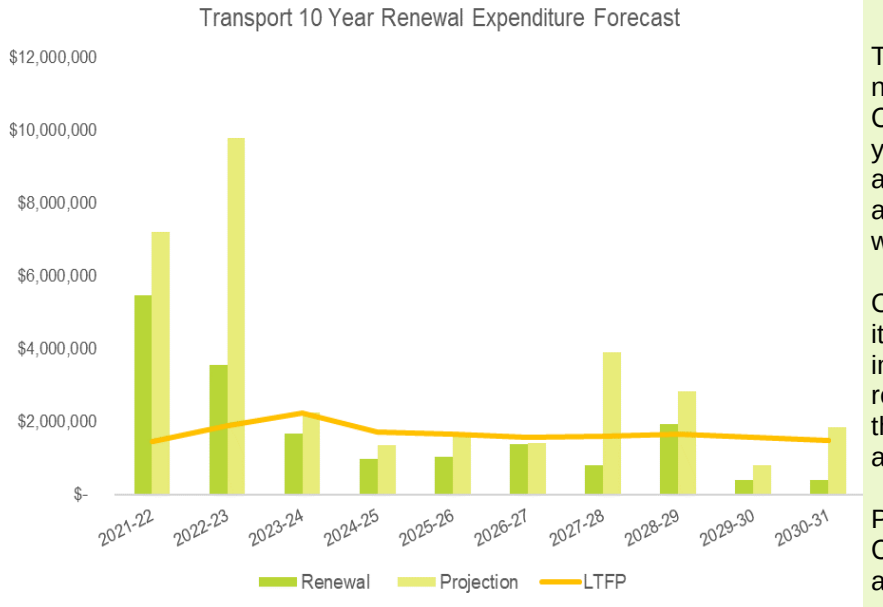
Climate Change
Increase frequency and intensity of weather events.

TRANSPORT ASSET CONDITION



54% of Council's transport assets are in very good condition. Council will need to pay closer attention to the 6% of transport assets (highlighted in yellow and blue) that requires immediate intervention to meet the level of service.

TRANSPORT FINANCIAL SUMMARY



The projected renewal expenditure necessary to meet the service standards for Council's transport assets is **$1.8m** per year over the next **10 years**. This is the average annual spend required to ensure all assets are maintained in accordance with service levels and current standards.

Council will strive to improve the quality of its asset management practices. Our improvement plan identifies our responsibility to increase data confidence through asset condition audits of transport assets.

Performance measures are in place to track Council's performance of its transport assets and asset management practices.

1 INTRODUCTION

1.1 Why does Council need an Asset Management Plan?

In accordance with the Local Government Act 1999 (the Act) and the Strategic Plan - 2030 Vision, 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, stormwater drainage services, and coastal and beach management 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 Transport Asset Management Plan will be a living document over the next 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) without seeking accreditation as an ISO document or process.
- 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.
- Create transparency and accountability through all aspects of asset management ensuring all stakeholders understand their roles and responsibilities for achieving the Plan's aims.

The recent review of the Local Government Act 1999, and the commencement of the Essential Service Commission of SA's (ESCOSA) Rate Oversight Scheme, will focus on the effectiveness and robustness of Council's strategic management planning processes and financial sustainability. With changes in section 122 (Strategic Management Plans) and section 123 (Annual Business Plan and Budget), it is important that there is a clear and transparent alignment between the Long Term Financial Plan (LTFP) and Assets Management Plans (AMPs) – both arising under council's Strategic Management Plans (SMP). These plans are critical documents as they plan out how Council intend to manage its financial position and performance over the longer term.

1.2 Background

The purpose of our transport asset is to support the transportation need across the District of Yankalilla and to connect people to our rural and urban places in a safe and accessible way.

This AMP replaces the last AMP (2016) and will assist with achieving our goals in managing Council's transport assets to:

- Meet the required level of service in the most cost-effective manner for present and future customers.
- Comply with regulatory requirements;
- Consult and communicate necessary funding requirements to provide the required levels of service over the next ten years.

In lay, the plan defines the services to be provided, how the services are provided, and what funds are required to provide the service.

Council's transport assets covered in this AMP include:

- Township Roads (Sealed and Unsealed)
- Rural Roads (Sealed and Unsealed)
- Bridges
- Footpaths
- Kerbs and Gutters
- Off Road Carparks
- Transport Other

Figure 1 illustrates the quantum of transport assets by asset category managed by Council.

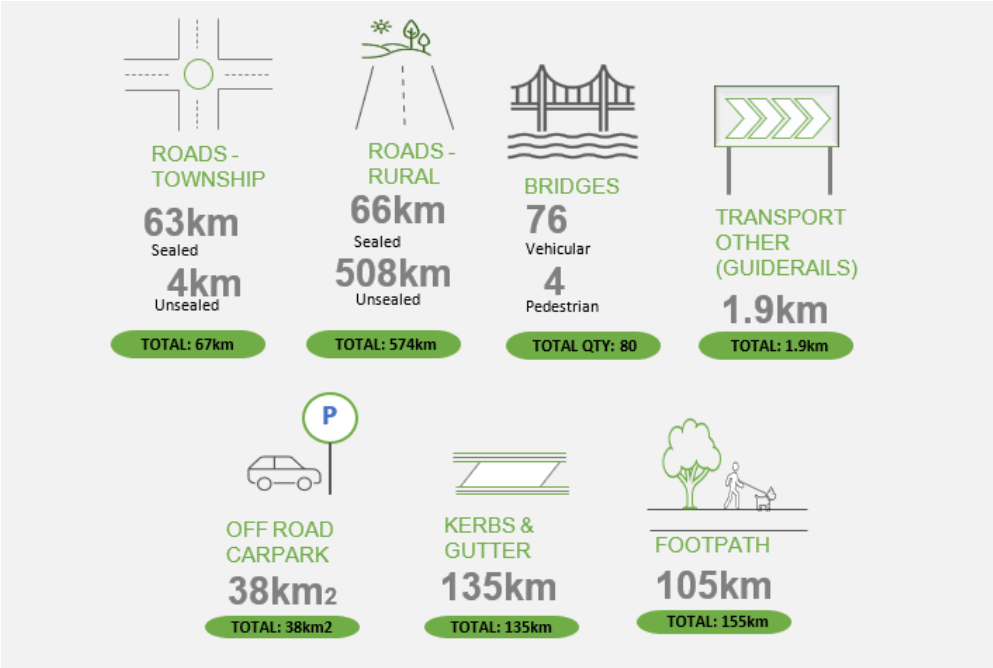


Figure 1 Transport Asset Category

The transport asset management plan works in conjunction with the following Council's plans, strategies and policies (Table 1):

Plans, Strategies and Policies
District of Yankalilla Strategic Plan (2030 Vision)
Long Term Financial Plan 2023-2033
Asset Management Policy
Asset Accounting Policy
Yankalilla Pedestrian and Cycling Network Plan

Table 1 - Plans, Strategies and Policies

Assets controlled by Council are used widely across a broad section of the community. It is important that assets are maintained and renewed based on functionality, need and fit of purpose. The best measure of an asset being fit for purpose is likely to be the user of the asset. Asset users are therefore key stakeholders of this Transport AMP. Table 2 displays the stakeholders where consultation is necessary when Council requires input in determining the levels of service and intervention levels of its transport assets.

Key Stakeholders	Roles in Asset Management Plan
Council	Endorsement of the asset management policy strategy and plans Allocate resources to meet Council objectives in providing services while managing risks
Audit & Risk Committee	Endorsement of the asset management policy strategy and plans
Executive Leadership Team	To provide leadership and strategic direction Review Asset Management Policy and Asset Management Strategies To ensure that community needs, and the outcomes of service reviews are incorporated into asset management planning and Long-Term Financial Plan To ensure that training of Councillors and staff in financial and asset management practices is provided Support for asset management driven budget and Long Term Financial Plans To ensure that accurate and reliable information is presented to Council To ensure appropriate delegations and approval processes are followed

Key Stakeholders	Roles in Asset Management Plan
Infrastructure Management	Facilitate development of Asset Management Plans To oversee the implementation of the Asset Management Policy and Asset Management Strategies To oversee the ongoing development and review of service plans and asset management plans To ensure that community needs, and the outcomes of service reviews are incorporated into asset management plans To promote and raise awareness of asset management within the organisation To ensure relevant health and wellbeing, human rights and equity principles and strategies are taken into consideration To develop and implement asset management improvement plan To provide and manage the asset management information system(s) Integrate asset management and financial plans and reporting To develop and implement maintenance, renewal, and capital works programs in accordance with the Asset Management Policy, Strategy, Plans, as well as budget allocations. Develop Specific Management Plans (upgrade, renewal, maintenance, operations, disposal) To deliver levels of service to agreed risk and cost standards and expectations To report asset related risk and damage To establish and monitor asset compliance and risk inspection regimes To manage asset condition assessments
Finance Department	To ensure that the asset valuations are accurate Develop supporting policies i.e. Asset Accounting Policy To prepare asset sustainability and financial reports incorporating asset depreciation in compliance with current Australian Accounting standards.
Operations and Maintenance Managers	Unit Managers are responsible for understanding expectations of levels of service through effective, ongoing engagement with the community (user of the service) Planning for changes to operations and maintenance as well as undertake minor renewal works

Table 2 - Key Stakeholders in Asset Management Plan

1.3 GOALS AND OBJECTIVES

The goal of asset management is to provide the desired level of service through the provision and management of physical assets in the most cost-effective manner, for present and future generations.

This Transport Asset Management demonstrates alignment with the following District of Yankalilla's Strategic Plan's 2030 vision, themes and priorities:

OUR COMMUNITY

VISION:

Our Community is a connected network of townships and rural settlements.

PRIORITIES:

- Providing for our children, young people, and families
- Accessing health, emergency, and community services
- Building community connections.

OUR INFRASTRUCTURE

VISION:

Our Infrastructure is taking us places:

PRIORITIES:

- Getting around
- Delivering township infrastructure

1.4 PLAN FRAMEWORK

The asset management framework includes the following key elements of this plan:

- Levels of service - Defines the level of service Council delivers to its customers and how they are measured.
- Future demand – The impact on future service delivery and how the demand will be met.
- Lifecycle management – What Council has planned to manage and operate the assets at the agreed levels of service while optimising lifecycle cost.
- Risk management – How Council manages its assets' risks.
- Financial summary – The funds needed to provide the agreed levels of service.
- Plan improvement and monitoring – how Council will improve with is asset management maturity and how the plan will be measured.

1.5 CORE AND ADVANCED ASSET MANAGEMENT

This asset management plan is prepared as a core AMP over a 10-year planning period in line with the IIMM. Core asset management is a 'top down' approach with analysis is applied at the 'system' or 'network' level. This plan is prepared to meet minimum legislative and organisational requirements for sustainable service deliver and long-term financial planning and reporting.

2 LEVELS OF SERVICE

2.1 CUSTOMER RESEARCH

Council is continually working to improve its understanding of the community perceptions of Council. To assist Council in planning for and ensuring it is meeting community needs, continuous research is sought to establish a deeper understanding and provide an evidence based quantitative measure of community perceptions towards the services provided by Council.

The most recent community benchmark survey, conducted in 2018, reported satisfaction levels on key transport service areas as illustrated in table 3.

	SATISFACTION LEVEL				
PERFORMANCE MEASURES	MEAN SCORE	VERY GOOD 8.0+	GOOD 7.0-7.9	MODERATE 6.0-6.9	INVESTIGATE <6
Overall rating of Council performance	5.9				●
Providing and maintaining footpaths and walking trails in the area	5.9				●
Maintaining roads within townships and rural areas	5.3				●

Table 3 - Satisfaction level on Council's performance

Results from the survey indicated that the community was not very satisfied with the overall maintenance of its footpaths and roads networks. Council will utilise this data to investigate how it can deliver its community levels of service when making decisions on its footpath and road network.

2.2 LEGISLATIVE REQUIREMENTS

There are many legislative requirements that Council must adhere to when it comes to maintaining its assets. Legislative requirements that impact the delivery of Council Transport services are listed in Table 4.

Legislation	Requirements
AS / NZS 1428.2 Pedestrian & Cycling Paths	Have consideration of, adhere to and fulfil the requirements of the Standards.
Australian Accounting Standards	Standards applied in preparing financial statements, relating to the valuation, revaluation, and depreciation of open space assets.
Development Act 1993	An Act to provide for planning and regulate development in the State; to regulate the use and management of land and buildings, and the design and construction of buildings; to make provision for the maintenance and conservation of land and buildings where appropriate; and for other purposes.
Planning, Development, and Infrastructure Act 2016	An Act to provide for matters that are relevant to the use, development and management of land and buildings, including by providing a planning system to regulate development within the State, rule with respect to the design, construction and use of buildings, and other initiatives to facilitate the development of infrastructure, facilities and environments that will benefit the community.
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.
Environmental Protection Act	An Act to provide the protection of the environment; to establish the Environment Protection Authority and define its functions and powers; and for other purposes. Consideration of this act should be undertaken for the provision, development or management of open space.
Highways Act 1926	An Act to provide for the appointment of a Commissioner of Highways, and to make further and better provision for the construction and maintenance of roads and works and for other purposes.
Local Government Act 1999.	Sets out role, purpose, responsibilities, and powers of local governments including the preparation of long-term financial plan supported by asset management plans for sustainable service delivery.
Work Health and Safety Act 2012	An Act to provide for the health, safety, and welfare of persons at work; and for other purposes.
Road Traffic Act 1961	An Act to consolidate and amend certain enactments relating to road traffic; and for other purposes.
Summary Offences Act 1953	This Act provides provisions for road closure to motor vehicles in accordance with section 59.

Table 4 - Legislative requirements

2.3 LEVEL OF SERVICE

The primary purpose of the transport network is to provide safe, accessible, and convenient access to our rural region and townships. Levels of service are a key business influencer and drives all asset management decisions. It describes:

- What Council intends to deliver to customers.
- The service quality, functionality and capacity.
- The performance measures.
- The service target.

The adopted levels of service for transport assets are based on legislative requirements, customer research and expectations, and Council's strategic goals. By using performance measures, Council can see how it is doing in terms of delivering levels of service.

Council has identified two levels of service:

- Community Levels of Service – the service outcomes that the community wants.
- Technical Levels of Service – measures the service that Council provides.

Key Performance Measure		Levels of Service	Performance Measure	Service Target
COMMUNITY LEVELS OF SERVICE				
	Quality	Sealed roads are smooth to drive on.	Customer service request	<30/year (sealed)
		Unsealed roads are smooth to drive on.	Customer service request	<200/year (unsealed)
		Roads are adequate with the amount of traffic	Customer service request	<3/year
		Sealed roads are safe and well maintained	Customer service request	<55/year (sealed)
		Unsealed roads are safe and well maintained	Customer service request	<70/year (unsealed)
		Provide even surface for pedestrians.	Customer service request	<14/year

Key Measure	Performance	Levels of Service	Performance Measure	Service Target
		Kerb and gutters free from ponding and displacement.	Customer service request	<4/year
		Bridges to provide a smooth ride	Customer service request	<4/year
		Bridges are free from hazards and are in a condition appropriate to use.	Customer service request	<2/year
		Bridges are structurally sound and load capacities meet current and future demands.	Customer service request	<2/year
	Function	Transport assets are well connected and accessible to users allowing for efficient traffic movements.	Customer service request	<12/year
		Transport assets are fit for purpose and meet community needs.	Customer service request	<130/year
		Footpath compliance with DDA	Customer service request	<12/year
	Utilisation	Road capacity is appropriate to service hierarchy	Customer service request	<3/year
		Footpaths are provided for pedestrian demand	Customer service request	<5/year
		Stormwater flow is contained within kerb and channel	Customer service request	<2/year
		Bridge width and weight capacity is suitable for road hierarchy	Customer service request	<2/year

Key Performance Measure		Levels of Service	Performance Measure	Service Target
TECHNICAL LEVELS OF SERVICE				
	Condition	Physical state of transport assets in a serviceable condition	Average Condition of transport assets	21-40 (Good)
			Average Condition of bridge assets	21-40 (Good)
			Average Condition of footpath assets	21-40 (Good)
			Average Condition of kerb and gutter assets	21-40 (Good)
			Average Condition of transport other assets	21-40 (Good)
	Renewal	Sustainably managing the renewal of assets	Asset Renewal Ratio	90-110%
	Safety	Footpaths are free from hazardous debris and trip hazards	Number of successful claims against Councils	0
		Provide safe and suitable facilities free from hazards	Average number of defects per assets	0
	Accessibility	Footpath compliant with DDA Streets are accessible to all	Compliance requirements	95% Compliant

3 FUTURE DEMANDS

3.1 DEMAND DRIVERS

Overtime, the community's demand for the services that the Council provides changes. The reason for change can be varied, but some of the demand drivers are population, demographics, seasonal factors, vehicle ownership, consumer preferences and expectations, agricultural practice, technology, and environmental factors. Naturally as service demand changes, Council's assets may also need to change.

3.2 DEMAND FORECASTS

The present position, future projection, demand factors and impacts on service delivery are summarised in Table 5.

CURRENT POSITION	DEMAND FORCAST	DEMAND IMPACT
 **POPULATION AND DEMOGRAPHIC**		
Population increase: ➢ Total estimated current population 5,520	Under Structural Plan, URS, 2015, planned to accommodate 6,927 in 2030	Increase demand and use of transport assets
Changing demographics: ➢ 25% of population aged over 65 years old	Growth in aging population	Increase demand for expanded network of higher quality footpaths and facilities suitable for small, wheeled mobility devices
 **SEASONAL FACTORS**		
"Green Change" Factors: ➢ The rural population live on and make a living from the farmland with vehicles suitable for variable unsealed road conditions.	Growth in number of people living in rural style allotments, but not working the land.	Increase use of unsealed roads; Increase level of service expectations for the unsealed road network; Demand to construct and maintain new sheeted roads to access new development in rural areas.

CURRENT POSITION	DEMAND FORCAST	DEMAND IMPACT
"Sea Change" Factors: ➢ Most existing dwellings in the seaside township are private holiday or rental holiday accommodation.	Increase number of dwelling and percentage of the population living presently in seaside township areas; In many instances, the increase in permanent population will not result in increase in rate base.	Increase demand for infrastructure improvements within township i.e Streetscape; Increase demand to provide pedestrian and cycling infrastructure.
	**FREIGHT MOVEMENTS**	
Gazetted B-Double and heavy mass freight routes restricted to State Government Controlled roads.	Requests will be placed on Council to gazette local roads as B double freight commodity routes under State government heavy vehicle access framework. To service dairy and forestry industries.	Improvements to existing road alignments required.
	**FOREST HARVESTING**	
Currently there is approx. 4,500ha of land parcels that are utilised for forest plantations.	Seasonal Demands for harvesting during wet seasons to avoid fire season.	The adverse impact on unsealed road of increased logging truck movements during wetter months.
	**CLIMATE CHANGE**	
Current climate conditions used as the basis for infrastructure design and use.	Increased extreme heat days (increased bushfire risk) Increased frequency and intensity of weather events. Serious rainfall deficiency and above average temperatures. Increased length and intensity of bushfire seasons	Intense heat will impact on spray sealed road performance. Bushfire can damage transport infrastructure.
Current Sea Level	Sea levels rise of 3cm a decade	Low level coastal infrastructure could be more regularly inundated and damaged.

Table 5 - Future Demands

3.3 DEMAND MANAGEMENT PLAN

The demand for District of Yankalilla will increase proportionally with the forecasted prediction listed in table 5.

Demand for new services will be managed through a combination of managing existing assets, upgrading existing assets, and providing new assets to meet demand and demand management. Council will determine the ability of the existing assets to manage increased usage for new and housing developments as well as demand for freight vehicular movements. Developers will be required to provide additional infrastructure for the existing network and upgrade where necessary to ensure adequate transportation. Opportunities identified to date for demand management are shown in Table 6. Further opportunities will be developed in future revisions of this AMP.

SERVICE ACTIVITY	DEMAND MANAGEMENT PLAN
Roads	Council to liaise with Forestry SA to determine road access movements and harvest timing
Roads	Councils to determine 'offsite' infrastructure requirements and development infrastructure agreements as part of future land zoning changes.
Roads	Continue unsealed township road construction and sealing program
Roads	Council to liaise with owners of property (both residential and farming) along minor access roads to determine the required routes to focus maintenance and renewal activities.
Footpath	Continue Township footpath network construction
Footpath	Footpath network plan to guide footpath programs

Table 6 - Demand Management Plan

4 LIFECYCLE MANAGEMENT

Life cycle management details how Council plans to manage and operate (from planning to disposing) its transport assets at the agreed level of service while optimising total cost of ownership at an appropriate level of risk.

This section outlines the transport asset data (condition, valuation, revaluation, useful life) and processes needed to effectively manage, renew and upgrade the infrastructure assets.

It is worth noting that while significant time is spent on the decision to create or acquire a new asset, historically local government has not adequately considered the financial costs of maintaining that asset from creation through to its disposal or replacement. New assets require initial expenditure; however new assets also require financial commitment for the assets lifecycle costs which can be up to five times the initial expenditure.

The cost of an asset lifecycle can be divided into four major stages:

- Creation / Acquisition;
- Routine Maintenance;
- Capital Renewal/Replacement; and
- Decommission.

These major stages are explained in this section of Life Cycle Management.

Variability of these stages also exists within different transport categories, as transport function may influence the renewal versus replacement strategies.

The major stages can be further divided into specific processes as listed in Figure 2. In each stage of the lifecycle, varying events will trigger the need to begin the next phase of the cycle. Further details on the processes of these lifecycle stages for transport assets is provided in the following sections.

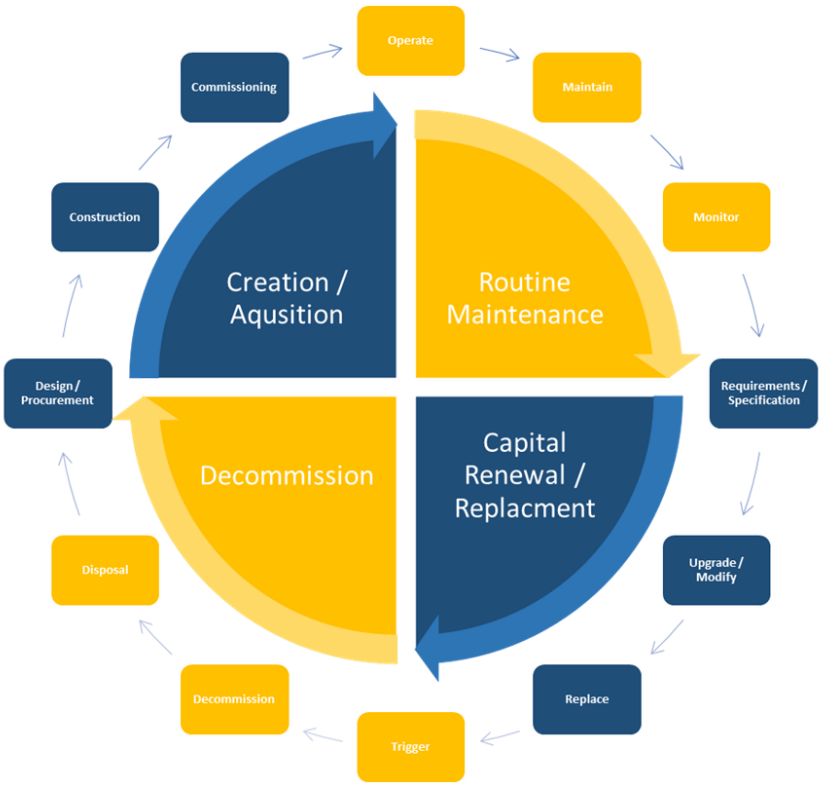


Figure 2 - Asset Lifecycle Flowchart

4.1 ROAD HIERACHY

To ensure that engineering standards, planning practices and appropriate management are applied to Council's road assets, a hierarchy system is applied. This enables a more efficient use of limited resources, by allocating increased funding to those assets that are in higher demand.

The District of Yankalilla has developed and documented a transport asset hierarchy that classifies the portfolio into different levels based on the anticipated traffic volumes generated by freight, tourism industries or social (resident access/school bus route) requirements. The hierarchy includes the Roads asset class and component used for asset planning and financial reporting and service level hierarchy used for service planning and delivery.

Road Hierarchy	Definition
DPTI	Road under care and control of Department for Planning Transport and Infrastructure.
Class A: Arterial / Distributer Road	Major sealed road forming access between major centres.
Class B: Collector Road	Sealed or sheeted road which links small township.
Class C: Local Road	Sealed (township) or sheeted road that provides access to properties.
Class D: Minor Access Road	Sheeted or unsheeted road that provides access to a minimal number of dwellings.

The existing road layout within the Yankalilla District resulted in many rural unsealed roads falling within the Class C, Local Roads classification, many of which vary from being a through road through to a dead end road along its length. To account for the likely change in sue along a road, the road hierarchy allocations are further classified to distinguish between differing uses along Roads, and are grouped as follows for the purposes of determining unit replacement rates and/or useful lives:

Road Hierarchy	Definition
High	Class A and High Use Class B1
Medium High	Medium Use Class B2 or High Use C1
Medium	Medium Use Class C2
Standard Low	Low Use Class C3
Low	Low Use Class D

Further information on Council's road hierarchy can be found in Council's Condition Assessment Manual.

4.2 ASSET CONDITION

The objective of a condition assessment is to provide sufficient information on asset condition to allow informed strategic asset planning and management decisions to be made. The condition rating is based on the collected various transport asset audit that have been inspected (visually/desktop) and assessed in the years displayed in table 7. Condition audits are undertaken every 5 years and with the exception for bridges, all other transport categories are now out of date. New condition audits for all transport categories (except bridges) are now due and scheduled for 2022/23. This is highlighted as an action in this AMP's improvement plan (section 7).

Asset Categories	Year of Condition Audit	Next Condition Audit
Roads	2016	2022/2023
Bridges	2020 (Desktop)	2023/2024
Footpaths	2016	2022/2023
Kerb and Gutter	2016	2022/2023
Off Road Carpark	2016	2022/2023
Transport (Other)	2016	2022/2023

Table 7- Condition Audit Schedule

Transport assets condition is measured using a 0-100 rating summarised in Table 8, where condition rating 0 is brand new and rating 100 is fully deteriorated.

Rating	Condition	Condition Description	Action
0-20	Very Good	A new or near new asset with no visible signs of deterioration.	No action required
21-40	Good	Early stages of minor deterioration causing no serviceability problems.	Minor defects only, no action required
41-60	Fair	Some obvious deterioration evident. Serviceability may be impaired slightly	Maintenance required to sustain the level of service
61-80	Poor	Severe deterioration evident, starting to limit the serviceability of the asset	Consider renewal
81-100	Very Poor	Serviceability problems needing immediate rehabilitation. Possible risk to remain in service.	Replace/dispose

Table 8 - Asset Condition Rating

The average condition rating of Council's transport assets by category is shown in Table 9. The average condition rating can be used as a benchmark for measuring Council's desired level of service. A more comprehensive breakdown of the transport asset condition percentage of each asset category is displayed in Table 10.

Asset Category	Length / Quantity	Average Condition (1-100)	Target
Township Roads (Sealed)	63km	Surface: 18 Pavement: 15 Base: 12 Sub-base: 20	20
Township Roads (Unsealed)	4km	48	30
Rural Roads (Sealed)	66km	Surface: 16 Base: 19 Sub-base: 17	20
Rural Roads (Unsealed)	508km	31	30
Bridges	80 Bridges	54	40
Footpaths	105 km	16	25
Kerb and Gutters	135km	29	25
Off Road Carparks	38km2	Surface: 25 Pavement: 22 Kerb: 25	25
Transport Other (Guardrails)	2km	0	25

Table 9 - Average Condition of Transport Assets

Asset Category	Very Good	Good	Fair	Poor	Very Poor
	1-20	21-40	41-60	61-80	81-100
Township Roads (Sealed)					
Surface	*60%*	*33%*	*5%*	*2%*	*0%*
Pavement	*79%*	*19%*	*2%*	*0%*	*1%*

Asset Category	Very Good	Good	Fair	Poor	Very Poor
	1-20	21-40	41-60	61-80	81-100
Base	*85%*	*14%*	*2%*	*0%*	*0%*
Sub base	*38%*	*52%*	*10%*	*0%*	*0%*
Township Roads (Unsealed)	*15%*	*31%*	*15%*	*33%*	*5%*
Rural Roads (Sealed)					
Surface	*68%*	*31%*	*1%*	*0%*	*0%*
Base	*77%*	*16%*	*7%*	*1%*	*0%*
Sub base	*71%*	*13%*	*13%*	*1%*	*1%*
Rural Roads (Unsealed)	*47%*	*18%*	*13%*	*11%*	*11%*
Off Road Carparks	*64%*	*18%*	*12%*	*6%*	*0%*
Transport Other (Guardrails)	*100%*	*0%*	*0%*	*0%*	*0%*
Kerb and Gutter	*42%*	*39%*	*18%*	*0%*	*0%*
Footpath	*68%*	*23%*	*7%*	*2%*	*0%*
Bridges	*6%*	*16%*	*37%*	*35%*	*6%*
TOTAL	***54%***	***28%***	***12%***	***4%***	***2%***

Table 10 - Transport asset condition in percentages

The Transport portfolio has an overall proposed levels of service based on maintaining a condition rating of 41-60 - Fair. When a transport asset falls below this default condition rating to poor or very poor condition (a rating of 61-100), maintenance or renewal is undertaken to ensure that the asset condition is lifted to a very good or good condition (a rating of 0-40). This cyclic process is repeated across the transport portfolio as it ensures an overall portfolio condition rating of 41-60 - Fair is sustained.

4.3 USEFUL LIFE

Table 11 displays the useful life of Council's transport assets classified into asset groups.

Asset Category	Asset group	Useful Life (Years)
Bridges	Pedestrian Bridge	80

Asset Category	Asset group	Useful Life (Years)
Bridges	Road Bridge	80
Car Parks	Surface	20-25
Car Parks	Pavement	100
Car Parks	Kerbing	70
Kerb and Gutter	Kerbing	70
Kerb and Gutter	Base	210
Footpath	Surface	20-50
Footpath	Base	40-100
Footpath	Gravel	15
Footpath	Retaining Wall	50
Township Road (Sealed)	Surface	22-65
Township Road (Sealed)	Pavement	80-100
Township Road (Sealed)	Base	70-100
Township Road (Sealed)	Sub base	210-400
Township Road (Unsealed)	Surface	15-45
Rural Road (Sealed)	Surface	18-25
Rural Road (Sealed)	Base	60-70
Rural Road (Sealed)	Sub base	180-280
Rural Road (Unsealed)	Surface	12-45
Transport Other	Guardrail	10

Table 11 - Asset Useful Life

The current evidence of climate change will inevitably affect our transport assets useful lives. The material lives of our assets will continuously change as our temperature, heatwaves, rainfall and storm intensifies. These impacts are identified in the future demands and risk management.

4.4 ASSET VALUATION

Valuations are undertaken in alignment with Australian Accounting Standard 'AASB13 Fair Value', and 'AASB116 Property Plant and Equipment'. These valuations are required every three years at minimum, with an independent audit required every five years. Valuations are undertaken to satisfy the financial reporting requirements and to understand the cost to replace assets.

The valuation of Council's Transport Assets is summarized in the table below Table 12.

Asset Category	Replacement Value	Accumulated Depreciation
Township Roads		
Sealed	$ 25,926,210	$ 8,413,458
Unsealed	$ 93,332	$ 81,004
Rural Roads		
Sealed	$ 28,249,900	$ 9,332,852
Unsealed	$ 8,989,670	$ 7,495,873
Bridges	$ 11,636,460	$ 7,883,581
Footpath	$ 3,495,661	$ 1,297,190
Kerb and Gutter	$ 12,112,835	$ 5,502,618
Off Road Carpark	$ 789,951	$ 472,454
Transport Other	$ 228,100	$ 91,252
TOTAL	**$ 91,522,118**	**$ 40,570,281**

Table 12 - Transport Assets Valuation

Council's last valuation on its transport portfolio (except for bridges) was in 2016. It is now Council's priority to have the transport assets' values validated to meet the accounting standard requirements. This is highlighted as an action in this AMP's improvement plan (section 7).

4.5 OPERATIONS AND MAINTENANCE PLAN

Operations include regular activities to provide services. Examples of typical operational activities include street sweeping, asset inspections, and traffic management costs.

Maintenance include all actions necessary for retaining an asset as near as practicable to an appropriate service condition including regular ongoing day-to-day work necessary to keep assets operating. Examples of typical maintenance activities include pothole repairs, minor kerb and footpath repairs, and street sign replacement. This work is not capitalised and does not increase the service life of the asset.

Maintenance of transport assets is largely reactive, with some planned cyclical activities and programs.

Maintenance is defined as:

- Reactive Maintenance
    - Reactive maintenance is unplanned repair work carried out in response to customer service requests and management decisions and are often carried out by Council field services. Such unplanned maintenance could include pot holes and any ad hoc requests from the community. Assessment and priority of reactive maintenance is undertaken by staff using experience and judgement.
- Planned Maintenance
    - Currently council does not have any system to manage its planned maintenance. However, Council is currently working towards the implementation of an Asset Management System (AMS), to assist with the identification and management of its planned maintenance resulting to improved service delivery performance. Council aims to go live with the new AMS in 2024.

The District of Yankalilla will operate and maintain the transport assets to provide the defined levels of service to approved budgets in the most cost effective way.

4.5.1 SUMMARY OF FUTURE COSTS

The ten year operations and maintenance expenditure forecast of transport assets is outlined in Figure 3. The budget of $2.97m per annum with no CPI increase is projected for next 10 years. However, as Australia is facing economic impacts that will have unknown consequences at this time, CPI should be factored into future maintenance budgets but subject to change on an annual basis through the LTFP.

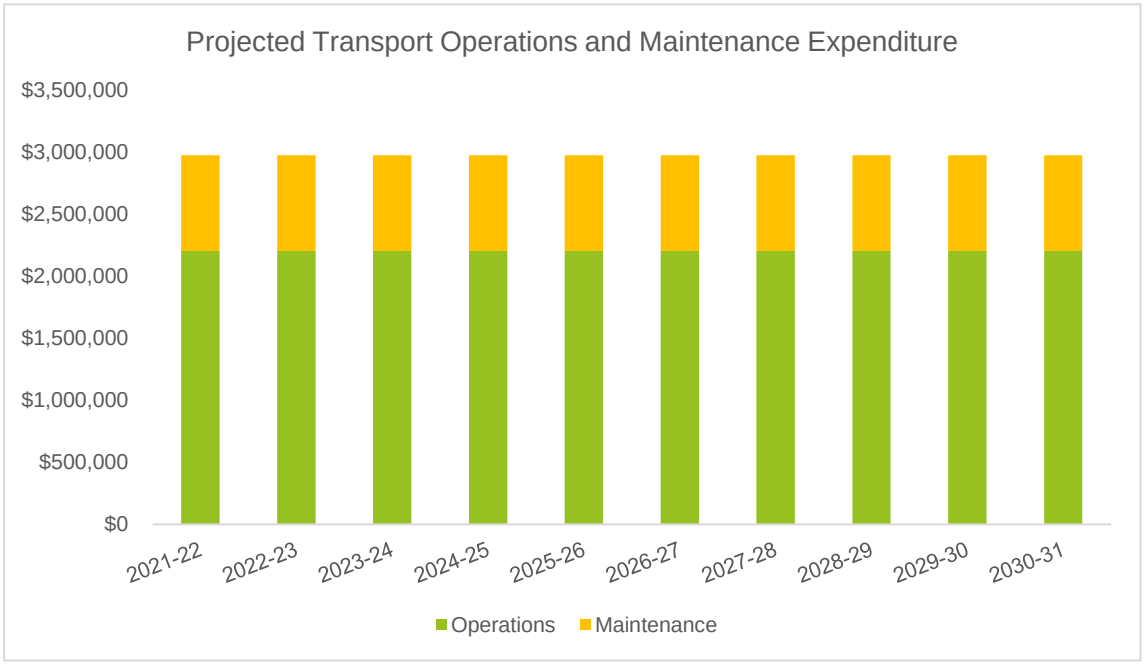


Figure 3 - 10 year Transport Operations & Maintenance Expenditure Forecast

4.6 RENEWAL PLAN

Capital renewal is major work that restores, rehabilitates, replaces, or renews an existing asset to return it to the modern equivalent standard performance and level of service. Renewal planning is essential as

it ensures adequate funding is available and assets are replaced at an optimum time to maintain the level of service.

4.6.1 RENEWAL IDENTIFICATION

Capital renewal expenditure is expected to change over time as the transport asset portfolio increase in size, complexity, and age.

Assets requiring renewal are identified by the following methods:

- Estimation of remaining life obtained from the asset register - proposed asset renewals are then inspected to confirm accuracy of remaining life estimate.
- Verified renewal proposals ranked by priority based on available funds.
- Forward projection based on historic expenditure.
- Predictive modelling of varying degrees of complexity.
- Recommendations derived from various asset inspection reports.

Data confidence level play a major role in the above methods. The more accurate the data, the more refined and accurate future renewal programs will be.

4.6.2 RENEWAL STRATEGIES

Verified renewal projects are ranked by priority and the funds available. If the cost is beyond Council's financial ability to fund the verified renewals, such projects are deferred. The impact of the deferral on the assets ability to still provide the required level of service will be assessed. Deferred renewals works may not always have an immediate impact on the short term operations of the assets, however, repeated deferrals will create a long term liability on the already deteriorating asset.

Council may discount the condition of its assets and consider early renewal interventions due to changes in standards, safety issues, changes in levels of service, funding opportunities or alignment with external projects, strategies and plans.

4.6.3 SUMMARY OF FUTURE COSTS

The ten year transports renewal expenditure forecast is displayed in figure 13.

The graph outlines the following:

- **Renewal** – This is the total replacement value of transport assets reaching towards the end of their useful life (condition based renewal).
- **LTFP** – The current Long Term Financial Plan projection
- **Projection** – This is the projected future renewal expenditure for transport asset category based on predictive modelling for roads and footpaths, and Tonkin's Road Bridge Inspection Report 2019.

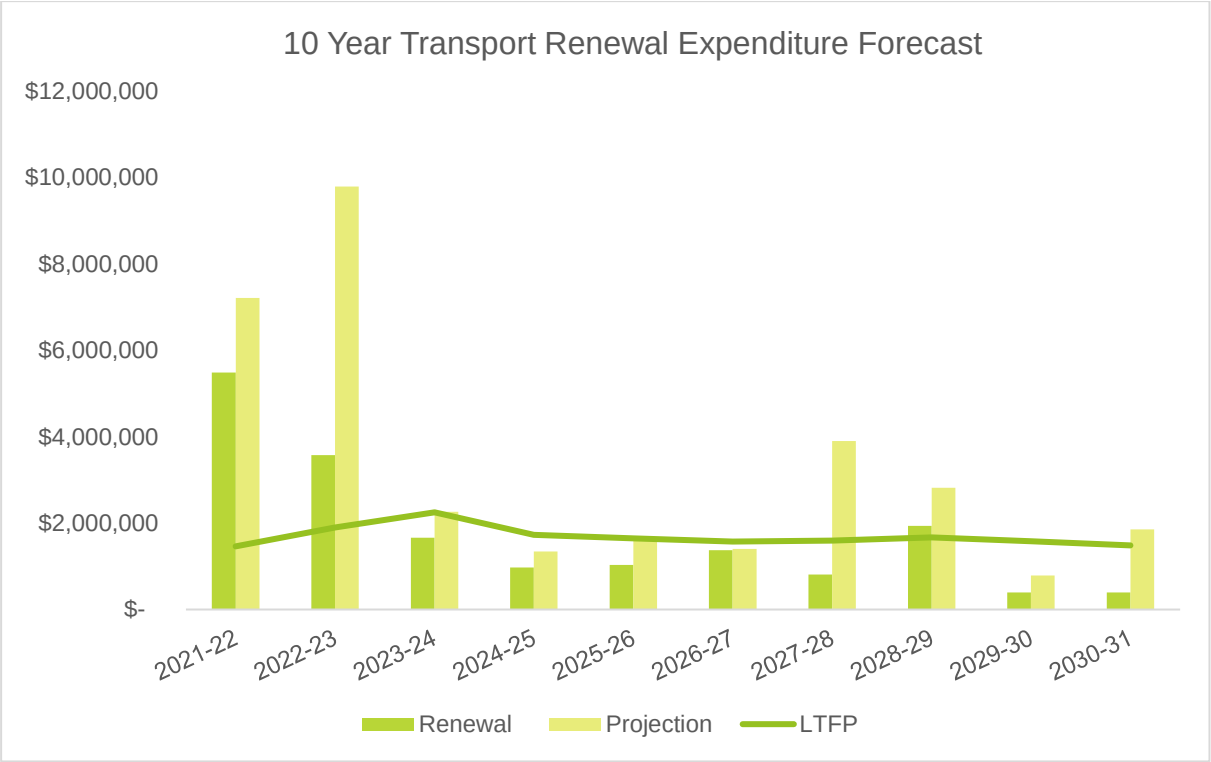


Table 13 - 10 Year Transport RENEWAL Expenditure Forecast

Asset Category	10 Year Renewal Forecast	10 Year LTFP	Asset Renewal Ratio (LTFP/Renewal Forecast)	Average Annual Renewal Budget
Unsealed Road	$6,795,186	$10,006,415	147%	$679,519
Sealed Road	$7,888,331	$4,905,301	62%	$788,833
Bridge	$2,033,688	$1,478,000	73%	$203,369
Carpark	$77,830	$74,000	95%	$7,783
Footpath	$522,430	$336,000	64%	$52,243
Kerb and Gutter	$324,255	$85,000	26%	$32,426
Transport Other	$0	$16,000	No budget required	$0
TOTAL	**$17,641,719**	**$16,900,716**	**78%**	**$1,764,172**

Table 14 - 10 year transport renewal expenditure forecast

The plan identifies a spend of $17,641,719 is required to renew Council's transport assets over the next 10 years. This is based on asset renewals where assets are gearing towards the end of its useful lives.

Council's asset renewal ratio is at 78% over the next 10 years. The ratio shows the level of capital expenditure on forecasted in the LTFP relative to the expenditure projected in this AMP.

The current LTFP expenditure of $16,900,716 is under the 10 year renewal forecast and an increase of $741,003 to the budget over 10 years will be required to maintain Council's asset renewal ratio of 100%. However, with the current rise in inflation, Council will need to revise the renewal forecast annually to ensure sufficient funds are available to renew assets and meet the required levels of service.

4.7 ACQUISTION PLAN (NEW CAPITAL)

New capital relates to major work that creates a new asset that did not previously exist. They may result from various needs derived from demands such as population growth, social and environmental change. Assets may also be acquired at no cost to the Council from land developments.

4.7.1 CAPITAL INVESTMENT STRATEGIES

New transport assets are created and decided upon from various sources:

- Community requests
- Council's resolutions
- Projects proposed for each year's annual plan aligning to the strategic priorities
- Grant opportunities
- Partnership with external organisation

New projects are then prioritised each year against all other Council's proposals and asset categories.

4.7.2 SUMMARY OF FUTURE COSTS

The transport new capital expenditure projection is shown in table 15. Each year, council reviews the proposed new capital projects, taking into consideration of community feedback, sufficient funding, and priorities. Only one year of approved projects are displayed in the Annual Business Plan.

As projects are not yet confirmed and timing and costings are still yet to be determined, the average expected budget distribution over 10 years is approximately $416,000 per year. These budgets are subject to yearly bids, Council strategies and funding opportunities and are expected to change year to year.

New transport asset capital projects in the next 10 years (adopted and priority forecast) include:

- Footpath Hutchinson Street: Myponga School
- Various Township road sealing:
  - Sealing Scenic Way
  - Sealing Gulf Close, Burnard St, Petrel Close
  - Sealing Riverside Rd/Recreation Dr, Oceanview Crescent, Catlow Rd
  - Sealing of Dolphin Ave (north and south ring), La Ronde
  - Sealing Unnamed Rd, Will Rd
  - Sealing of Davey Rd
- Guardrail upgrades on various Road Bridges
- Investigation into the construction of Wilson Drive/Martin Rd/Jervois Rd
- Footpath Network Program

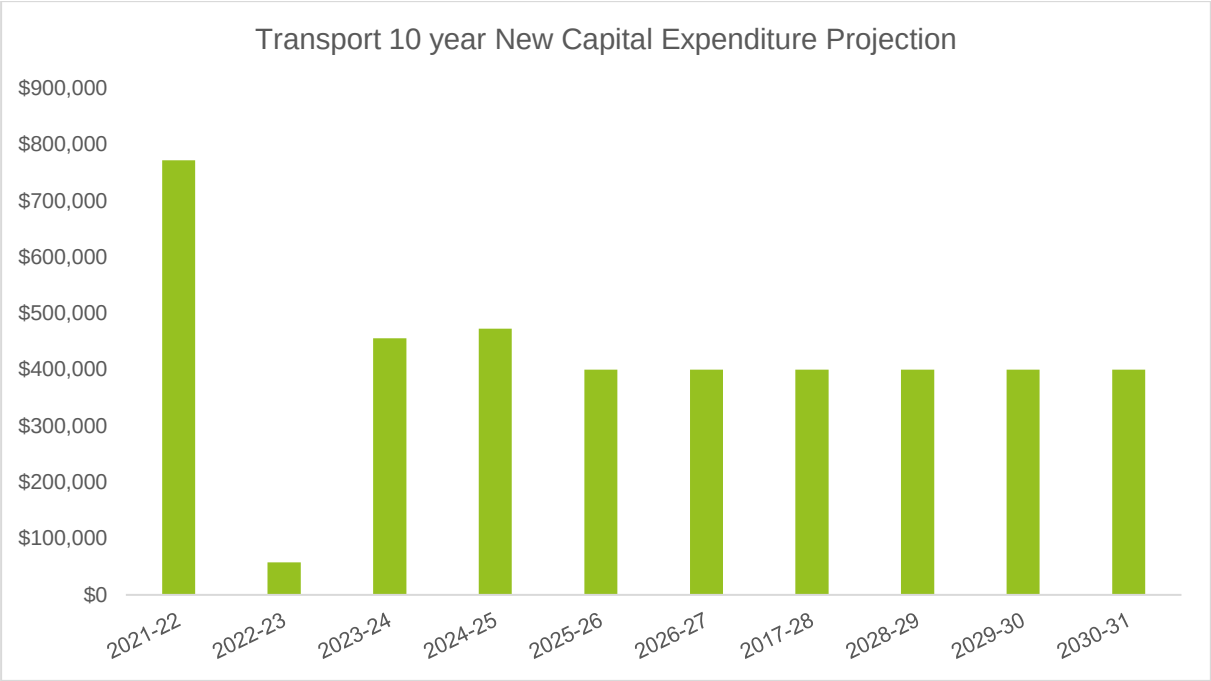


Table 15 - 10 Year Transport Capital NEW Expenditure Forecast

4.8 DECOMMISION PLAN

Disposal includes any activity associated with disposal of a decommissioned asset including sale, demolition, or relocation.

Decommission of assets can be triggered in the following situations:

- The end of useful life of existing assets.
- Safety factors inherent to the asset.
- Non-compliance of the asset, resulting in infeasible remedial budgets and prompting a modern equivalent replacement.

Decommissioning of an asset can involve the following actions:

- Design and replace the asset with a modern, fit for purpose equivalent.
- Removing the asset to repurpose the land in line with Council's long term strategy.
- Selling the asset

The Bridge Inspection report conducted by Tonkins in 2019 identified that the Rapid Bay bridge is no longer serviceable. However the bridge has since been physically closed off to traffic to both vehicles and pedestrian to removal any safety hazards posed onto the public.

Council has no planned disposals for transport assets. As such, there is no funding required or expected from the decommissioning of any assets at this point in time.

5 RISK MANAGEMENT

5.1 CRITICAL ASSETS

Critical assets in Council's transport portfolio include road bridges, roads and footpaths which directly impact public safety. Factors influencing criticality may be risk scored on safety, production, cost and reputation.

5.2 RISK ASSESSMENT

The objective of the risk management process on transport assets is to ensure that:

- All significant operational and organisational risks are understood and identified.
- The highest risks that need to be addressed in the short to medium term are identified.
- Strategies and treatments to address risks are identified and applied.

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.

Service or Asset at Risk	What can Happen	Risk Rating	Risk Treatment Plan	Responsibility	Completion Date
Bridges	Vehicle Collision on single lane bridge	High	Assess existing signage and install additional signage if required	Asset Management Team	Level 2 Bridge Assessment 2024
Bridges	Vehicle /pedestrian fall from bridge	High	Undertake new level 2 bridge network assessment, undertake barrier replacement program	Infrastructure Management Team	Level 2 Bridge Assessment 2024
Footpaths	Increased insurance claims due to substantial cracking and formation of undulating surface due to unforeseen effects of tree roots and heat expansion.	High	Trial new ways to address issue long term and implement appropriate solution based on risk	Infrastructure Management Team	Ongoing in accordance with Footpath network priority plan
Kerb and Gutter	Pram ramps not DDA compliant	High	Upgrade kerb ramps and replace non-compliant ramps based on risk.	Infrastructure Management Team	Ongoing in accordance with Footpath

Service or Asset at Risk	What can Happen	Risk Rating	Risk Treatment Plan	Responsibility	Completion Date
					network priority plan
All	Economics – Council unable to fund required capital and maintenance due to economic downturn	High	Ensure business continuance strategy includes capital and maintenance works Prioritise all capital and maintenance work i.e. essential or non-essential Have an active model to demonstrate the impact of deferring works	Infrastructure Management Team	Ongoing
All	Loss of Key Staff	High	Succession Planning and good record management	Executive Leadership Team	Ongoing
All	Incorrect AMP Modelling	High	Independent review by specialists	Infrastructure Management Team	2026
Economic Risks with increasing inflation rate; supply and demand. Inflation rate to rise to 7% by end of 2022.	Insufficient fundings to maintain, renew and build new assets.	High	Council to factor in inflation rate when establishing budgets in LTFP to cover for the volatile economic climate.	Executive Leadership Team Director of Corporate Services Executive Leadership Team	Ongoing
Poor quality data within asset management plan*	Data inconsistency and inaccuracy	Moderate	Improve the data confidence level through cleansing and collection of new data	Executive Leadership Team	2023

Table 16 - Transport Risks

6 FINANCIAL SUMMARY

This section contains the financial requirements resulting from all the information presented in sections 4 of this asset management plan. The financial projections will continue to see improvements as Council will revise the plan at an ongoing basis.

6.1 VALUATION FORECAST

Through the addition of new assets from Council's capital works projects, Council will most likely see an increase in value of its transport asset portfolio. Additional assets will likely increase the operational and maintenance cost in the future.

6.2 EXPENDITURE FORECAST

Figure 4 displays the total financial projection for maintenance, capital renewal and capital new expenditure for transport assets. This forecasted projection is set out in the Long Term Financial Plan and is set at a constant amount over the next 10 years. As no CPI was factored into the predicted budgets for operations and maintenance, methodical revision will be required in to tackle consequences from today's volatile economic and environmental climate.

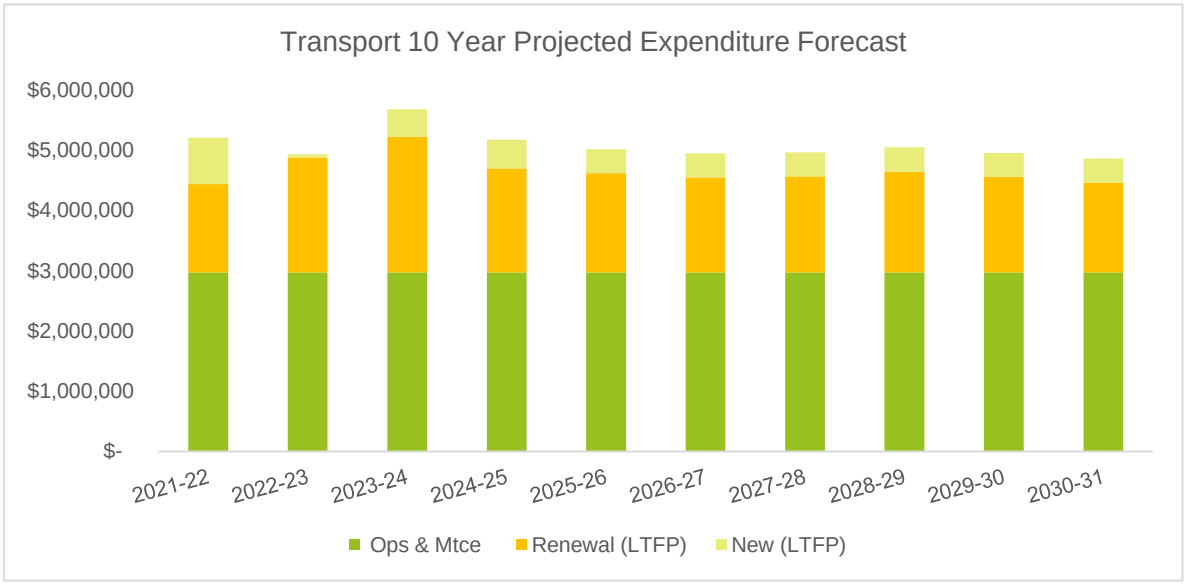


Figure 4 - Transport 10 Year Projected Expenditure Forecast

6.3 ASSET RENEWAL FUNDING RATIO

The asset renewal funding ratio indicates if Council has the financial capacity to fund asset renewal at continued existing service levels. Council's target is at 100% average over the next 10 years.

Asset Renewal Funding Ratio – Transport: 78%

This ratio is an important budget indicator over the next 10 years. Council's LTFP have only budgeted 78% of funds identified in this plan, hence not optimising the replacement of its transport assets. For Council to continue the service levels, Council should seek an extra $741,000 in funding over 10 years to raise the asset renewal funding ratio to 100%.

6.4 FUNDING STRATEGY

Projected budgets are to be funded from Council's operating, maintenance and capital budgets, loans and reserves and external fundings e.g. Roads to Recovery, Grants Commission's local and special roads grants.

6.5 KEY ASSUMPTIONS

The assumptions made in this Transport Asset Management Plan are:

- Replacement cost for roads footpath, off road carpark, kerb and gutter and transport data derived from the fixed asset register in Conquest asset database.
- Condition data for roads footpath, off road carpark, kerb and gutter and transport data derived from fixed asset register.
- Bridges condition and replacement cost data derived from Tonkin's Inspection Report 2019.
- Key financial assumptions derived from Long Term Financial Plan 2023
- The current levels of service will remain constant over the life of this AMP.
- There will be no natural disaster
- 2020-2021 is the first year of the 10 year LTFP.

6.6 DATA CONFIDENCE

The expenditure projections are based on the best available data. Data confidence is critical for expenditure projection accuracy. As new data becomes available, future plans will be updated.

Table 17 displays the 5 levels that measure data confidence.

Confidence Level	Description
A - Highly Reliable	Data based on sound records, procedures, investigations, and analysis, documented properly and agreed as the best method of assessment. Data set is complete and estimated to be accurate +-2%.
B – Reliable	Data based on sound records, procedures, investigations, and analysis, documented properly but has minor shortcomings, e.g. some of the data is old, some documentation is missing and /or reliance is placed on unconfirmed reports or some extrapolation. Dataset is complete and estimated to be accurate +-10%.
C - Uncertain	Data based on sound records, procedures, investigations, and analysis which is incomplete or unsupported, or extrapolated from a limited sample for which grade A or B data are available. Dataset is substantially complete but u to 50% is extrapolated data and accuracy estimated +-25%.
D - Very Uncertain	Data is based on unconfirmed verbal reports and/or cursory inspections and analysis. Dataset may not be fully complete, and most data is estimated or extrapolated. Accuracy +-40%.
E – Unknown	None or very little data held.

Table 17 - Data Confidence Level

Council's transport asset data confidence is shown in table 18 All asset categories with the exception of Bridges have a C rating. This will progress to level B in time through future condition assessment on these assets in the near future.

Asset Category	Confidence Level
Roads	C - Uncertain
Bridges	B – Reliable
Footpaths	C - Uncertain
Kerb and Gutter	C - Uncertain
Off Road Carparks	C - Uncertain
Transport (Other)	C - Uncertain

Table 18 - Council's Transport Data Confidence Level in Asset Category

7 IMPROVEMENT AND MONITORING

7.1 IMPROVEMENT PLAN

The improvement program derived from the plan is shown in Table 19.

Task No.	Task	Responsible Officer	Resource Required	Due Date
1	Spatial Data Validation and Engineering -Focused Visual Condition assessment for **Roads**, **Footpaths, Kerb and Gutters** including maintenance and renewal forecasts, including valuation by an accredited valuer.	Infrastructure Management Team	Internal/ External	2023
2	Review and develop Levels of Service	Infrastructure Management Team	Internal	2026
3	Review and Develop Asset Maintenance Manual for Transport Assets	Infrastructure Management Team	Internal	2024
4	Develop 5–10-year capital renewal plan for Transport Assets.	Infrastructure Management Team	Internal	2024
5	Develop 5-year capital new plan for Transport Assets.	Infrastructure Management Team	Internal	2024
6	Given the current economic climate, thorough investigation on operation and maintenance costs is required to enable true budget forecasting in the upcoming years.	Director Corporate Services, Executive Leadership Team, Infrastructure Manager	Internal	On going
7	Develop alignment with Council's Strategic Asset Management Plans and wider strategy documents.	Executive Leadership Team, Infrastructure Manager	Internal	2026
8	Revision of existing Asset Management Policy	Director Assets & Environment, Infrastructure Manager	Internal	2023

Table 19 - Improvement Plan

7.2 MONITORING AND REVIEWING

This AMP will be reviewed during annual budget planning processes and amended to recognise any material changes in service levels and or resources available to provide those services as a result of budget decisions.

This plan has a life of four years and is due for revision and updating within 2 years of each Council election.

7.3 PERFORMANCE MEASURES

Council will track the performance of the Plan through the following performance measures:

- Regular financial reporting to Executive Leadership Team and Council
- Six month Strategic Plan updates of progress to Council.
- Annual review of LTFP.
- Progress reports against the Annual Business Plan to Council within the Chief Executive's Report.
- Monitoring and reporting customer request and complaint systems.
- Delivery of improvement plan.
- Review of AMP everyone 4 years (minimum).

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