



ASSET MANAGEMENT PLAN

Road, Kerb, and Footpath

Version V1.0 – July 2024



QUALITY ASSURANCE

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V0.1	May 2024	First draft of combined asset management plan released for public consultation.	BFJ	Council
V0.2	June 2024	Minor changes to forecast lifecycles costs and updated graphs. Retraction of item under 1.6.2 and 6.4.1 "Renew all poorly conditioned assets in the short term". Minor formatting changes. Addition of provision of service impact to Table 11 and corresponding addition to Table 12. Additions to Table 14 as a result of Community Consultation. Insertion of paragraph under item 5.2.1. Retraction of items in Table 18 that are not expensed against these asset classes. Updated Asset Renewal Ratio item 7.1.1.1. Updates to Table 25 and level of confidence. Update to item 8.1.2 responsible officer for asset register.	BFJ	Council

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EXECUTIVE SUMMARY

1 Executive Summary

1.1 The Purpose of the Plan

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

This plan is a major update in the development of asset management plans for Wattle Range Council as it proposes to combine three existing plans into one being the Road Asset Management Plan (V1.0 Nov 2015), Footpath Asset Management Plan (V1.0 June 2017) and Kerb Asset Management Plan (V1.0 Nov 2017)

1.2 Asset Description

This plan covers the infrastructure assets that allow for public transportation.

The road, kerb and footpath network comprises of:

- Sealed Roads, 536km
- Unsealed Roads, 1,217km
- Sealed Footpaths, 52km
- Unsealed Footpaths, 25km
- Kerbing, 154km
- Car Parks, 33,000m²

The above infrastructure assets have replacement value estimated at \$224,128,625.

Table 1: Road, Kerb, and Footpath Infrastructure Replacement Cost

Asset Class and Sub-class	Replacement Cost (\$)
Roads	185,256,116
Sealed Road	149,048,779
Unsealed Road	36,207,337
Kerb	25,367,161
Footpaths	13,505,348
Sealed	10,953,435
Unsealed	2,551,913
Total	224,128,625

1.3 Levels of Service

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

The main service consequences of the Planned Budget are:

- Asset deterioration
- Not meeting Community Values and Levels of Service

1.4 Future Demand

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

- Population (including static growth, seasonal growth, and aging population)
- Legislation changes and planning code amendments
- Technology advancement (environmental sustainability)
- Change in vehicle types utilising local roads, including commercial and industrial practices
- Condition of infrastructure
- Economic factors
- Seasonal changes and environmental impacts

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

- Optimise the utilisation / performance of existing assets.
- Reduce or defer the need for new or upgraded assets.
- Meet the organisation's strategic objectives.
- Deliver a more sustainable service.
- Respond to community needs.

1.5 Lifecycle Management Plan

1.5.1 What does it Cost?

The forecast lifecycle costs necessary to provide the services covered by this AMP includes operation, maintenance, renewal, acquisition (upgrade, new and gifted), and disposal of assets. Although the AMP may be prepared for a range of time periods, it typically informs a Long-Term Financial Planning period of 10 years. Therefore, a summary output from the AMP is the forecast of 10 year total outlays, which for the road, kerb, and footpath infrastructure is estimated as \$6,367,576 on average per year.

1.6 Financial Summary

1.6.1 What we will do

Estimated available funding for the 10 year period is \$63,981,000 or \$6,398,100 on average per year as per the Long-Term Financial plan or Planned Budget. This is 99.52% of the cost to sustain the current level of service at the lowest lifecycle cost.

The infrastructure reality is that only what is funded in the Long-Term Financial Plan can be provided. The informed decision making depends on the AMP emphasising the consequences of planned budgets on the service levels provided and risks.

The anticipated planned budget for road, kerb and footpath assets leaves a shortfall of \$305,237 in total of the forecast lifecycle costs required to provide services in the AMP compared with the planned budget currently included in the Long-Term Financial Plan. This is shown in the figure below.

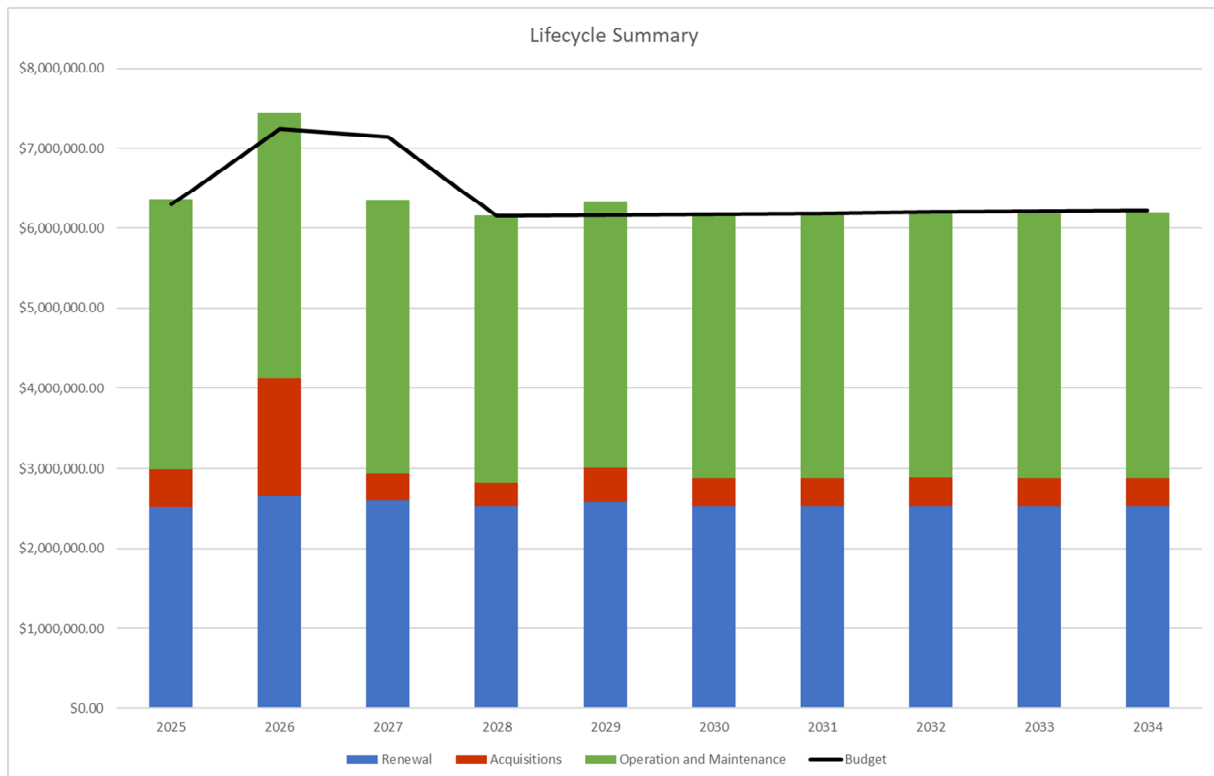


Figure 1: Forecast Lifecycle Costs and Planned Budgets

Figure values are in current day dollars and do not account for CPI.

1.6.2 What we cannot do

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

- Projects where Council budget is not sufficient to cover the full project cost and therefore external funding is required for the project to proceed; if external funding is not approved, the projects are not undertaken but deferred until a time where suitable funds are available.
- Where large capital new/upgrade projects are identified in this AMP, which are discretionary in nature, will be considered individually each financial year and as such the future capital expenditure profile documented in this AMP will change.
- Maintain 100% of the unsealed road network each year to the expected community levels of service due to variations in weather conditions that significantly impact on both the condition and also the ability to undertake maintenance effectively.
- Upgrade the entire network of unsealed roads to sealed roads or to provide dust suppression works to all areas.
- Provide new kerbing to all residential properties on a sealed road.
- Urban CBD footpath renewals across the three main townships of Beachport, Millicent, and Penola in a short timeframe.
- Obtain 100% compliance with the Disability Discrimination Act 1992, Disability Inclusion Act 2018 (SA), and Development Act 1993 (SA) within the medium to long term.

1.6.3 Managing the Risks

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

The main risk consequences are:

- Asset condition deterioration resulting in decreased levels of service and community satisfaction.
- The Council's financial capacity to achieve the identified maintenance and renewal program over the 10-year period in line with adopted budgets.

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

- Routine inspections and maintenance including undertaking regular external condition assessments and revaluations on a four-year cycle. This will develop and inform a detailed works program for renewal and new / upgrade
- Timely response to customer requests and complaints
- Prioritisation of renewals and upgrades

1.7 Asset Management Planning Practices

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

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

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

This AMP is based on a medium level of confidence information.

This plan aligns with key organisational documents including the current Council Strategic Plan, Annual Business Plan and Asset Policy, and Asset Management Strategy.

1.8 Monitoring and Improvement Program

This plan is a living document that is owned by the Manager Assets and Environment and will be internally reviewed annually. A full review will be undertaken to coincide with asset revaluation and condition assessments and to meet the requirements of the *Local Government Act 1999*.

Key areas of improvement include:

- Improve asset register to enable better prioritising and planning of renewals before asset failure occurs. Improvements include but are not limited to:
 - Collection of asset details and condition to enable accurate asset register to be developed
 - Development and implementation of scheduled maintenance programs
 - Spatial representation of assets that is accurate and aligns with the asset register
- Clearly document processes and methodologies
- Ensure relevant strategic documents are regularly updated and are in alignment with one another
- Address staffing shortfalls through review of responsibilities, outsourcing and/or upskilling
- Establish and define roles and responsibilities between Wattle Range Council and external organisations to ensure all parties are aware of their obligations towards asset maintenance, including where jurisdictions begin and end

INTRODUCTION

2 Introduction

2.1 Background

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

The AMP is to be read with the Wattle Range Council planning documents. This should include the Asset Policy and Asset Management Strategy, where developed, along with other key planning documents:

- Strategic Plan 2023-2027
- Annual Business Plan
- Long Term Financial Plan 2023-2033
- Records Management Policy
- Procurement Policy
- Wattle Range Council 25 Strategic Land Use Plan V5, 9 August 2022
- Wattle Range Council Disability Access and Inclusion Plan 2019-2023

For a detailed summary of the assets covered in this AMP refer to Table 13 in Section 5.

The infrastructure assets included in this plan have a total replacement value as per the below table.

Table 2: Infrastructure assets replacement value

Asset Class and Sub-class	Replacement Cost (\$)
Roads	185,256,116
Sealed Road	149,048,779
Unsealed Road	36,207,337
Kerb	25,367,161
Footpaths	13,505,348
Sealed	10,953,435
Unsealed	2,551,913
Total	224,128,625

Key stakeholders in the preparation and implementation of this AMP are shown in Table 3.

Table 3: Key Stakeholders in the AMP

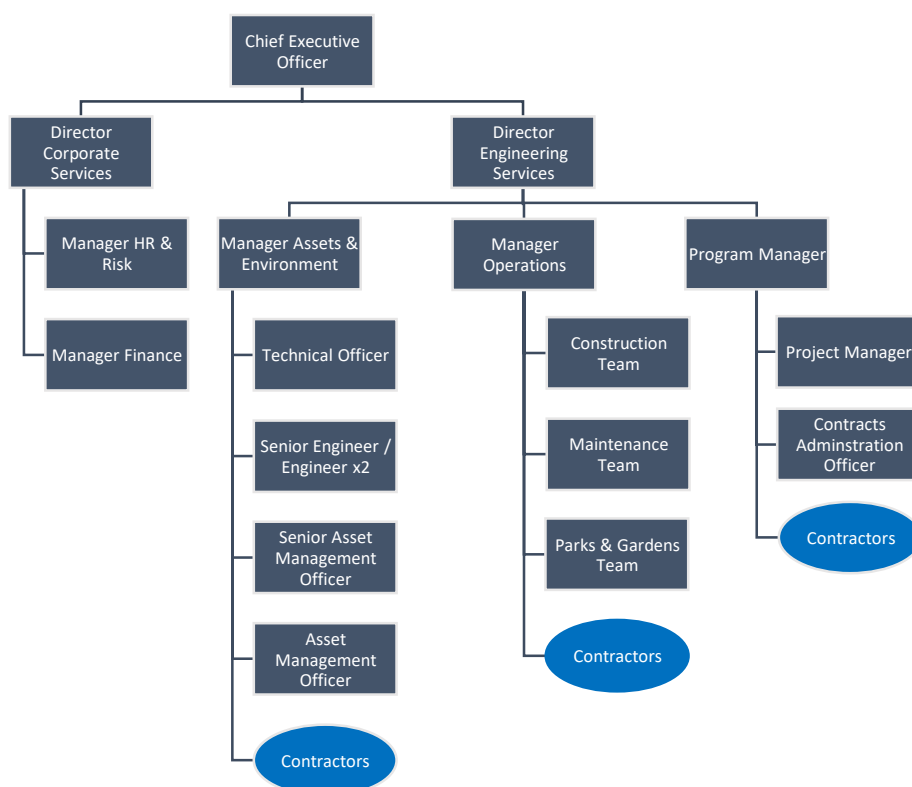
Stakeholder	Responsibilities
Council	To act as stewards for infrastructure assets. To set corporate asset management policy and vision with linkage to the Strategic Plan (available on Council's public website). To set levels of service, risk and cost standards. Ensure the development of asset management plans and improvement strategies and monitor the outcomes. To ensure appropriate resources and funding for asset management activities are made available to integrate asset management policies and asset management plans into the corporate governance framework. Conduct maintenance, renewal and upgrade programs on road, kerb, and footpath assets.

Stakeholder	Responsibilities
Asset Management Steering Committee	Internal Council Committee made up of employees which contribute to and review asset management plans and asset management business rules.
Maintenance Contractor	Preventative maintenance and emergency repairs as directed by Council staff. Conduct maintenance, renewal and upgrade programs on road, kerb, and footpath assets.
State Government (Including but not limited to: Environment Protection Authority, Essential Services Commission of South Australia, Office of the Technical Regulator, Department for Infrastructure and Transport)	Legislators / Regulators / Licensing. Maintenance on state road network. Approve changes to local road network.
Community (residents and visitors but not Ratepayers).	Utilise infrastructure. Report issues or defects. Provide review and input of the AMP.
Ratepayers	Contribute to the funding of the services through general rate revenue. Utilise infrastructure. Report issues or defects. Provide review and input of the AMP.

Best practice asset management is seen as a whole of organisation activity, that is, it impacts on or includes staff from across the organisation who are involved with the lifecycle management of the Council's assets or delivering services supported by those assets.

The Council, Executive Leadership Team, and key asset management staff have defined roles, responsibilities, and commitments within the Council's Asset Policy.

Our organisational structure for service delivery from infrastructure assets is detailed below.



2.2 Goals and Objectives of Asset Ownership

Our goal for managing infrastructure assets is to meet the defined level of service (as amended from time to time) in the most cost effective manner for present and future consumers. The key elements of infrastructure asset management are:

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

Key elements of the planning framework are

- Levels of service – specifies the services and levels of service to be provided,
- Risk Management,
- Future demand – how this will impact on future service delivery and how this is to be met,
- Lifecycle management – how to manage its existing and future assets to provide defined levels of service,
- Financial summary – what funds are required to provide the defined services,
- Asset management practices – how we manage provision of the services,
- Monitoring – how the plan will be monitored to ensure objectives are met,
- Asset management improvement plan – how we increase asset management maturity.

Other references to the benefits, fundamental principles and objectives of asset management are:

- International Infrastructure Management Manual 2015
- ISO 55000

2.2.1 Related Documents

Council's Strategic Asset Management Framework (Figure 2) illustrates the relationship of this asset management plan with relevant documentation. The following Wattle Range Council documents are directly related to this plan.

This AMP has been developed in line with the principles laid out in ISO 55000:2014, ISO 55001:2014 and ISO 55002:2018 that prescribe the international standards for asset management. This plan has been documented following the NAMS+ Asset Management Plan Template which provides guidance on how to meet the ISO principles.

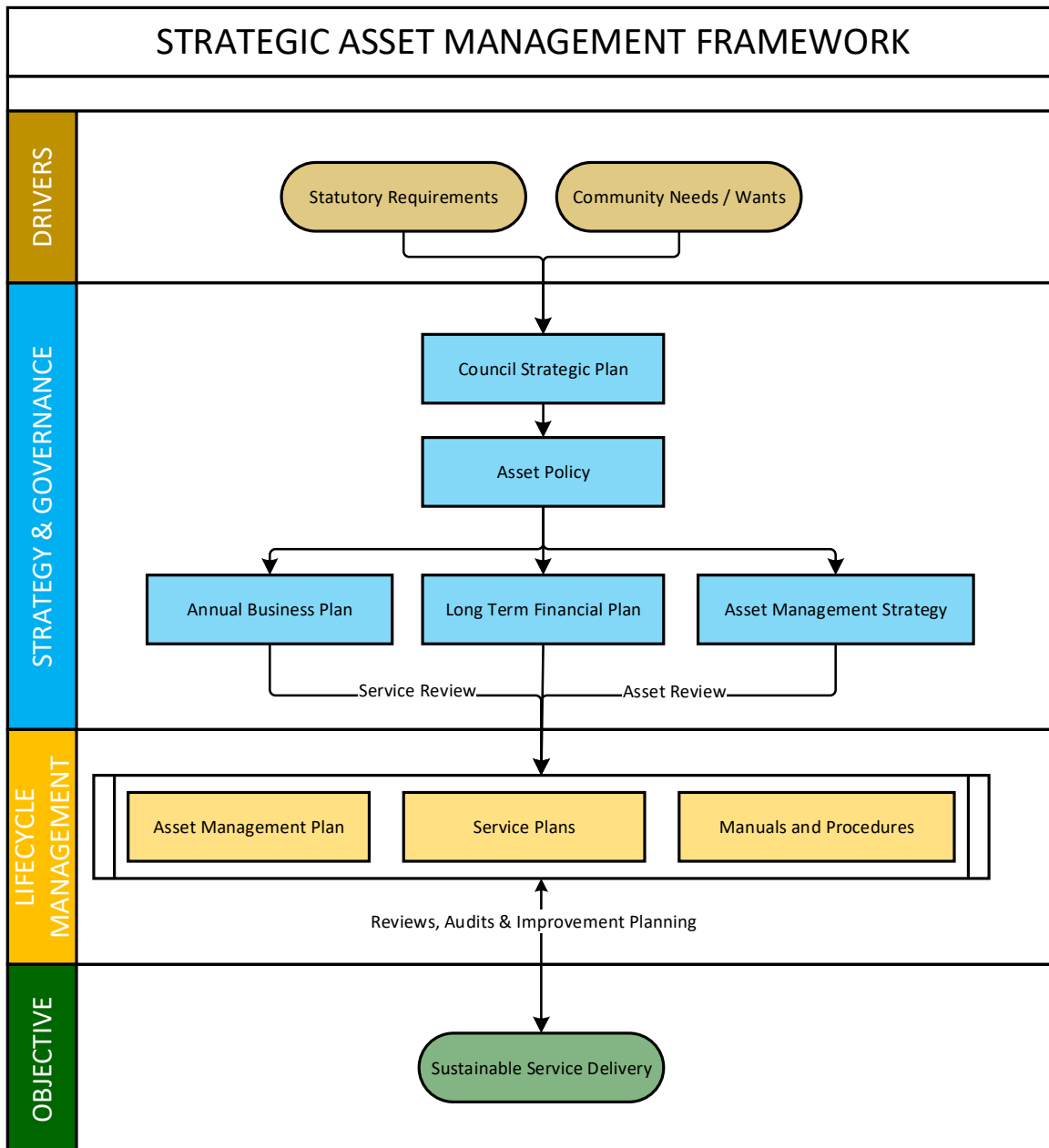


Figure 2: Strategic Asset Management Framework

2.2.2 Infrastructure Assets

Council is responsible for road (sealed, unsealed, car parks), kerb, and footpath (sealed and unsealed) assets across the Wattle Range Council area. For details of the assets covered under this AMP refer to Table 13 in section 5 Lifecycle Management.

Wattle Range Council borders four other Local Government entities being Naracoorte Lucindale Council (SA), District Council of Grant (SA), West Wimmera Shire Council (VIC), and Glenelg Shire Council (VIC). Boundary road agreements are in place for some of the road assets which transverse the government boundaries. These agreements establish the responsibility for maintenance and renewal / upgrades of the road assets. Council notes that the current boundary road agreements require updating.

Council road assets are complimented by DIT's state road network. These are generally main arterial roads (highways) to which Council roads connect into or have complimentary infrastructure such as kerb & gutter or footpaths. Roles and responsibilities need to be established and clearly defined moving forward to ensure both parties are aware of their obligations towards asset maintenance and where their jurisdiction begins and ends. It is worth noting that while some of Council's road, kerb, and footpath assets adjoin DIT's state road network, this AMP covers Council assets only. For a full list of DIT roads, refer to Appendix 6.

Council's road, kerb, and footpath assets are also complemented by South Eastern Water Conservation and Drainage Board (SEWCDB) infrastructure such as bridges and culverts forming part of the open drain network. While Council's road, kerb, and footpath assets may traverse the open drain network managed by SEWCDB, the bridge structures and culvert assets located directly over an open drain (outside of Millicent township zone) are maintained by SEWCDB and do not form part of this AMP.

Assets which are not included in this AMP are listed below:

- Private road assets (including forestry access, private property or subdivision access, and four-wheeled driving tracks)
- Road assets under a current Boundary Road Agreement
- Road assets under the care and control of Department for Infrastructure and Transport (DIT) (refer to Appendix 6)
- Unmade road reserves are not considered to be assets and are not maintained by Council or included within the scope of this AMP
- Unformed footpaths i.e. nature strips or walking tracks

There is currently inconsistencies and incomplete data for these assets, it is hoped development of the asset register will capture and further develop this information to assist with future AMP revision and capital and maintenance programs. This is captured as an action in the Improvement Program (Appendix 3).

Table 4 shows the accepted audited values of these assets as at 1 July 2023.

Table 4: Adopted Road, Kerb, and Footpath Infrastructure Values as at 1 July 2023

Location	Replacement Cost (\$)	Depreciated Replacement Cost (\$)	Accumulated Depreciation (\$)	Depreciation Expense (\$)
Roads	185,256,116	119,495,358	65,760,758	2,796,782
Kerbs	25,367,161	14,391,902	10,975,260	361,875
Footpaths	13,505,348	8,409,518	5,095,430	384,894
Total	224,128,625	142,296,777	81,831,848	3,543,551

LEVELS OF SERVICE

3 Levels of Service

3.1 Community Research and Expectations

This AMP is prepared to facilitate consultation prior to adoption of levels of service by the Wattle Range Council. Future revisions of the AMP will incorporate community consultation on service levels and costs of providing the service. This will assist the Wattle Range 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.

We currently have no research on community expectations. This will be investigated for future updates of the AMP.

Council monitors the number and nature of customer service requests recorded each financial year to determine the standard of customer expectations. Furthermore, Council addresses complaints as per the Customer Experience Policy, Requests for Service Procedure, and Compliments and Complaints Handling Procedure and maintains a complaints register in accordance with legislative requirements.

3.2 Strategic and Corporate Goals

This AMP has been prepared with consideration to Council's vision, mission, values, themes, and objectives. Table 5 identifies how this plan links to Council's themes and objectives as set in the Strategic Plan 2023-2027.

Table 5: Strategic Plan Alignment

Theme		Objective	Strategy	Action	Alignment
1	Community Vibrancy & Presentation	Generate and support community vibrancy through advocacy and maintenance of community services and enhanced public facilities.	1.1 Maintain and enhance public space areas including parks, public spaces, car parking, street lighting and streetscapes to provide vibrant, attractive areas.	No specific action listed.	This AMP aids in enhancing public space areas through the connection of public pathways and developing overall masterplans for footpaths and car parking.
3	Infrastructure and Asset Sustainability	Provide functional, safe, fit for purpose assets that meet the changing needs of the community.	3.1 Create a sustainable stock of assets, with appropriate long-term asset planning and optimal use.	Review, update and implement Asset Management Plans for all major asset classes.	This AMP prioritises work based on consumption, condition, and best practice across the asset class in a single document for easy reference and transparency. It also defines the strategic objectives to be reflected in the operational plans.
			3.2 Plan and provide for a safe local road network that meets the future and	Review and update the rolling dust mitigation program.	This AMP highlights areas of concern regarding dust mitigation program.

Theme		Objective	Strategy	Action	Alignment
			current needs of our community.	Advocate and lobby State Government for the upgrade of State owned roads.	This AMP captures the risks associated with the condition and deterioration of the State Road network which can be used for evidentiary purposes to lobby for their upgrade and repair. Council is already taking measures to see the upgrade and continued maintenance of the State Road network and this AMP will ensure this continues.
			3.3 Advocate for safe and trafficable network of State Roads.	In conjunction with State Government agencies lineal trail development within the Council area on abandoned railway lands.	Council has already started to develop abandoned railway lands into walking paths and community space. This AMP continues to progress this vision and sets out future development potential.

Theme		Objective	Strategy	Action	Alignment
			3.5 Plan for the expansion and replacement of Council's stock of footpaths, walkways, and trails to meet the future and current needs of our community.	Develop automated reports, dashboards and workflows that informs decision making and operating efficiency.	This AMP explores utilising innovative technology and software for capturing asset and maintenance data remotely by developing the Maintenance module within Council's Asset Register software, Brightly. Using this technology will mean an increase in data accuracy for financial reporting and will streamline maintenance and renewal programs.

3.3 Legislative Requirements

Wattle Range Council complies with the South Australian legislation relating to road, kerb, and footpath infrastructure wherever practical. This includes:

- *Aboriginal Heritage Act 1988*
- *Australian Road Rules*
- *Development Act 1993*
- *Disability Discrimination Act 1992 and Disability Inclusion Act 2018*
- *Essential Services Commission Act 2002 and Regulations 2019*
- *Highways Act 1926*
- *Landscape South Australia Act 2019 and associated regulations*
- *Local Government Act 1999 and associated regulations*
- *Roads (Opening and Closing) Act 1991*
- *Road Traffic Act 1961*
- *Work Health and Safety Act 2012 and Regulations 2012*

There are a wide range of codes, standards, policies and guidelines relating to road, kerb, and footpath infrastructure in South Australia. Where practical, Council seeks to operate within these guidelines, including:

- *Australian Standards*
- *AS ISO 19600:2015 – Compliance Programs*
- *AS/NZS ISO 3100: Risk management – Principles and Guidelines*
- *Australian Accounting Standards*
- *Aust Roads*
- *Department for Infrastructure and Transport Code of Technical Requirements and Guidelines*

3.4 Community Values

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

Community values indicate:

- What aspects of the service is important to the community;
- Whether they see value in what is currently provided; and
- The likely trend over time based on the current budget provision.

Table 6 captures customer values and Table 7 builds on these further detailing the community levels of service.

Table 6: Community Values

Community Values	Community Satisfaction Measure	Current Feedback	Expected Trend Based on Planned Budget
Assets are safe for travel / use	Number of incidents reported	Roads: Av. 2 per year Kerbs: Av. 2 per year Footpaths: Av. 8 per year	This number is expected to remain stable based on current budget and renewal projections
Road and footpath assets reliable to travel with minimal service disruption and maximum comfort	Number of complaints received	Roads: Av. 367 per year Footpaths: Av. 41 per year	This number is expected to remain stable based on current budget and renewal projections
Assets are well maintained and kempt	Community survey % of renewal and upgrade programs completed	No current performance measure Data not available at the time of AMP	This number is expected to remain stable based on current budget and renewal projections

3.5 Community Levels of Service

The Community Levels of Service are considered in terms of:

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

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

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

In Table 7 under each of the service measures types (Condition, Function, Capacity/Use) there is a summary of the performance measure being used, the current performance, and the expected performance based on the current budget allocation.

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

Table 7: Community Levels of Service

Type of Measure	Level of Service	Performance Measure	Current Performance	Expected Trend Based on Planned Budget
Condition	Assets are constructed and maintained in accordance with legislative requirements	Routine condition inspections with knowledgeable staff	4 yearly condition audits Routine maintenance and operational programs	This number is expected to remain stable based on current budget and renewal projections
	Confidence levels		Medium Professional judgement supported by data sampling	Medium Professional judgement supported by data sampling
	Assets are well maintained, safe and are not hazardous to general public	Customer complaints received	Refer to Table 9	This number is expected to remain stable based on current budget and renewal projections
	Confidence levels		Medium Professional judgement supported by data sampling	Medium Professional judgement supported by data sampling
	Annual maintenance and renewal programs are completed as scheduled and according to budget	% of renewal and upgrade programs completed	Not currently captured	This is expected to remain stable based on current budget and forecast lifecycle projections
	Confidence levels		Low Limited data sampling	Low Limited data sampling
	Safety incidents are responded to in a timely manner	Timeframe responding to reported safety incidents	Not currently captured	N/A
	Confidence levels		Low Limited data sampling	Low Limited data sampling
Function	Measure of whether the assets are appropriate for their intended use	The proportion of the assets which are “fit for purpose”	Based on current condition rating of assets. Refer to 5.1.3 Asset Condition	This is expected to remain stable based on current budget and renewal projections
	Confidence levels		Low Limited data sampling	Medium Professional judgement supported by data sampling
Capacity	Infrastructure networks have capacity to meet existing and projected demands	Customer complaints received	Refer to Table 9	This is expected to remain stable based on current budget and renewal projections and predicted growth as detailed in section 4.2.1
	Confidence levels		Medium Professional judgement supported by data sampling	Medium Professional judgement supported by data sampling

3.6 Technical Levels of Service

To deliver the community values, and impact the achieved Community Levels of Service, are operational or technical measures of performance. These technical measures relate to the activities and allocation of resources to best achieve the desired customer outcomes and demonstrate effective performance.

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

- **Acquisition** – the activities to provide a higher level of service (e.g. widening a road, sealing an unsealed road) or a new service that did not exist previously (e.g. a new footpath).
- **Operation** – the regular activities to provide services (e.g. inspections, sweeping).
- **Maintenance** – the activities necessary to retain an asset as near as practicable to an appropriate service condition. Maintenance activities enable an asset to provide service for its planned life (e.g. road patching, unsealed road grading).
- **Renewal** – the activities that return the service capability of an asset up to that which it had originally provided (e.g. reseals, resheets).

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

Table 8 shows the activities expected to be provided under the current 10 year planned budget allocation, and the forecast activity requirements being recommended in this AMP.

Table 8: Technical Levels of Service

Lifecycle Activity	Purpose of Activity	Activity Measure	Current Performance*	Recommended Performance **
Acquisition	New and upgraded assets to meet demand	Areas and assets identified for new / upgrade in the AMP	What Council cannot achieve due to budget constraints in relation to acquisition, the forecast capital expenditure profile will change and projects will be deferred until there is sufficient budget	As recommended in the AMP
		Budget	Refer to Figure 10: Forecast Acquisition Costs Av. \$583,000 budget per year over 10 years	Refer to Figure 10: Forecast Acquisition Costs Av. \$583,000 budget per year over 10 years
Operation	Roadside slashing, weed spraying, mowing	Frequency	As required	This will be monitored and reviewed as environmental factors change
		Budget	Refer to Figure 7: Forecast Operation and Maintenance Costs over a 10 year period Av. \$3,514,400 budget per year over 10 years* *operating and maintenance budget	Refer to Figure 7: Forecast Operation and Maintenance Costs over a 10 year period Av. \$3,514,400 budget per year over 10 years* *operating and maintenance budget
Maintenance	Patrol Grading	Frequency Customer Complaints	As required Upon request	This will be monitored and reviewed as environmental factors and condition of assets change
	Sealed road potholing, patching etc	Frequency Customer Complaints	As required Upon request	This will be monitored and reviewed as environmental factors and condition of assets change
	Line marking	Frequency	Annual program	This will be monitored and reviewed as environmental factors and condition of assets change
		Budget	Refer to Figure 7: Forecast Operation and Maintenance Costs over a 10 year period Av. \$3,514,400 budget per year over 10 years*	Refer to Figure 7: Forecast Operation and Maintenance Costs over a 10 year period Av. \$3,514,400 budget per year over 10 years*

Lifecycle Activity	Purpose of Activity	Activity Measure	Current Performance*	Recommended Performance **
			*operating and maintenance budget	*operating and maintenance budget
Renewal	Reseals	Renewal as determined by condition of assets	Currently limited by budget. Renewals are prioritised based on condition assessments and visual inspection of assets	As recommended in the AMP
	Resheets	Renewal as determined by condition of assets	Currently limited by budget and capacity. Renewals are prioritised based on condition assessments and visual inspection of assets	As recommended in the AMP
		Budget	Refer to Figure 9: Forecast Renewal Costs for the next 10 years Av. \$2,300,700 budget per year over 10 years	Refer to Figure 9: Forecast Renewal Costs for the next 10 years Av. \$2,300,700 budget per year over 10 years

Note: * Current activities related to Planned Budget.

** Expected performance related to forecast lifecycle costs.

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

3.6.1 Current Performance and Satisfaction

Council currently receives many customer requests and complaints each year regarding road, kerb, and footpath assets, particularly in the winter months when the asset condition can rapidly deteriorate due to weather conditions, however maintenance may not be undertaken until the drier months of the year. This is demonstrated below in Table 9 and Figure 3Error! Reference source not found.. The effect of weather and climate change on road, kerb, and footpath assets is discussed in section 4.2.6. Known deficiencies in the network at the time of this AMP have been documented in Table 14.

Table 9: Customer requests received for previous three financial years

Financial Class	Requests Received 2020/2021	Requests Received 2021/2022	Requests Received 2022/2023	Average Number of Requests Per Year
Road	339	381	381	367
Unsealed	286	326	338	317
Sealed	53	55	43	50
Kerb	8	8	5	7
Footpath	43	45	36	41

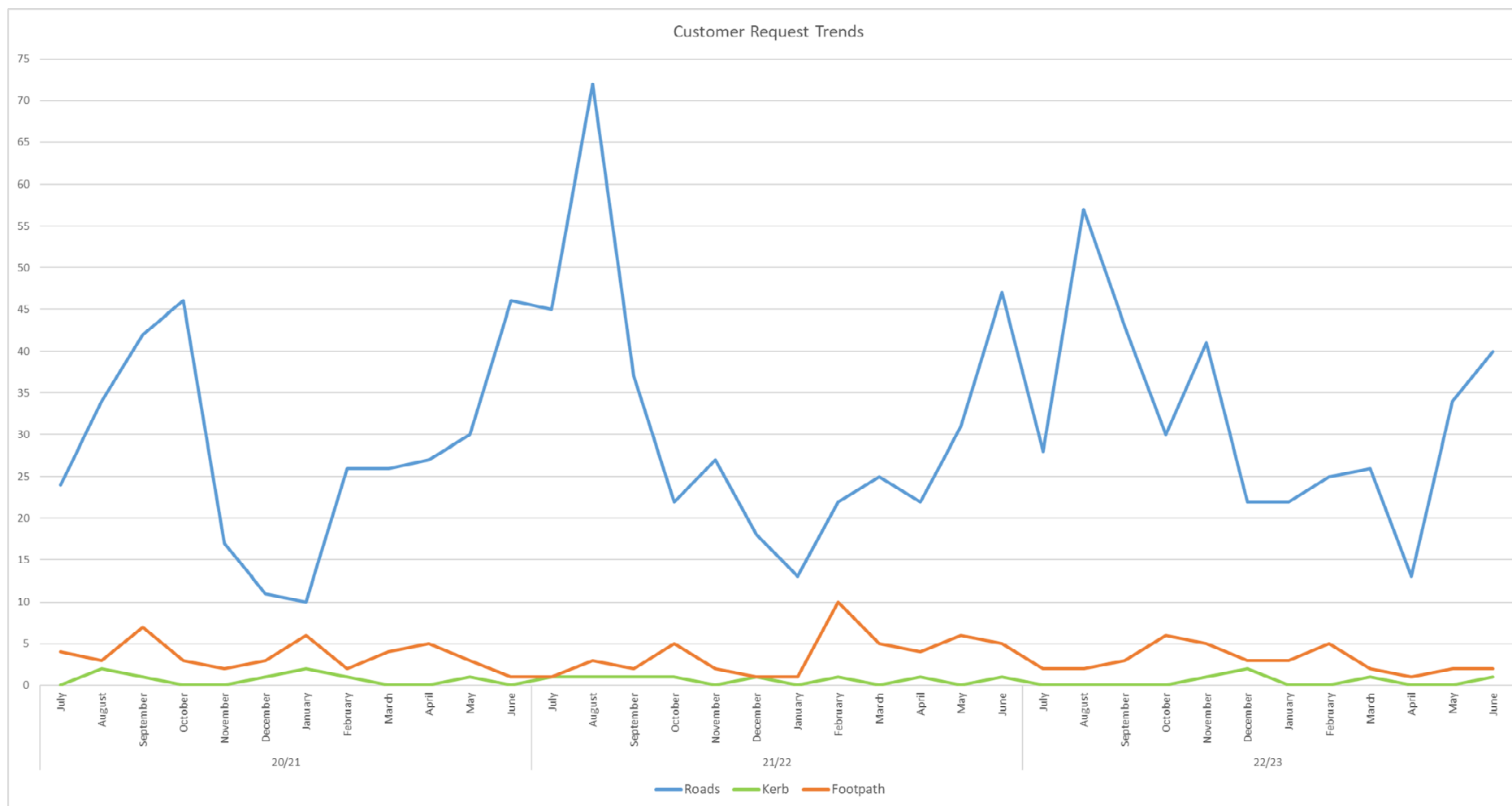


Figure 3: Customer request trends for previous three financial years

FUTURE DEMAND

4 Future Demand

4.1 Demand Drivers

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

4.2 Demand Forecast

4.2.1 Population

4.2.1.1 Static Population Growth

The most recent data available is from the Australian Bureau of Statistics (ABS) 2021 census. According to this data, Wattle Range Council area has a population of 11,888, with Millicent being home to approximately 40% of the district's population, and Penola being the second largest township. The population grew by 211 people between the 2016 and 2021 census data. Similarly, the total number of private dwellings also grew by 268. This demonstrates the strong demand for new land supply for residential development. The Wattle Range Strategic Land Use Plan 2022 summarises that there is a substantial amount of land that could see an increase in urban development, particularly subdivision of rural living allotments that is currently used as agricultural land. Council is also currently undergoing an amendment to the Planning Code for all townships which could lead to a significant increase in population with higher density housing allotments planned. For private land subdivision developments, the developer is required to provide essential infrastructure, such as road access, for the new allotments and does so in agreement and consultation with Council. It is noted that Council does not pay for the acquisition cost of these assets but will inherit the assets from the developer after the agreed defect liability period has been met. For this reason, ongoing maintenance costs and depreciation of any new assets, through residential or commercial development, will need to be considered in the forecast lifecycle costs of the assets.

Overall, the population in Wattle Range Council area remains stable with no recent significant growth, however, should the population significantly increase, it is likely to have an impact on road, kerb, and footpath assets placing a greater demand on existing infrastructure or acquiring additional infrastructure through development.

4.2.1.2 Seasonal Population Growth

Coastal townships of Beachport and Southend see a large increase in seasonal population (namely holidaymakers) during the peak summer holiday period. Beachport and Southend are attractive sea-change destinations for retirees or holiday homes. Housing supply is strong in these areas, however, is severely constrained by environmental factors. Penola and Coonawarra also see strong tourism numbers due to the world-renowned wine region and historic sites in the area. Recent times have seen development of the Penola/Coonawarra Rail Trail, which spans from Penola to north of Coonawarra. Tourist demand assists in driving these types of projects, along with Wattle Range Council strategic plans such as the 25 Year Strategic Land Use Plan which lists an action of supporting the development of walking/cycling trails and other infrastructure which supports tourism.

4.2.1.3 Ageing Population

The median age of residents in the Wattle Range Council area is 48, which is higher than the state-wide figure of 40. This has the potential to impact on infrastructure services, for example footpaths, to support improved access to areas surrounding health services or CBD hubs through development of safer footpaths of sealed standard with the inclusion of pram ramps.

4.2.2 Legislation Changes

Legislation relating to road, kerb, and footpath assets is detailed in section 3.3. At the time of this AMP there are no anticipated legislation changes, however, it is reasonable to assume that any changes to legislation could impact this AMP. Upon any significant changes to legislation, Council will amend the AMP and associated works programs during the documents annual review process.

4.2.3 Technology Advancement

Advancing technology of road, kerb, and footpath construction could have an impact on future demand as well as the materials and the way in which renewal and upgrade works are conducted i.e. increased use of recycled materials for construction. Consideration should also be given to the technology advancement of vehicles and transportation methods utilising the roads e.g. electric vehicles or motorised bicycles.

4.2.4 Condition of Infrastructure

Council regularly undertakes condition assessments of the road, kerb, and footpath assets on a schedule as determined in the Asset Management Strategy which gives an indication of asset condition and reassesses useful life, and in doing so, allows the development of operational works programs to renew the poorly conditioned assets back to an acceptable standard. As supported in item 3.5, Council also sets high community level of service standards which establishes response times to customer requests for reported deficiencies. These processes ensure that overall asset condition is regularly maintained and renewed to service level standards, therefore, reducing the risk factors of ageing or poor conditioned infrastructure. Refer to 5.1.3 for condition profiles of the assets.

4.2.5 Economic Factors

Ever-changing economic factors could result in some uncertainty around Council's position to upgrade existing infrastructure or install new infrastructure. In realisation of this circumstance, Council will look to focus on renewal projects rather than discretionary new or upgrade projects.

The economy external to Council could still largely impact the road, kerb and footpath asset stock and the use of the assets, for example, a global pandemic resulting in lowered use of the assets due to movement restrictions and downturn in industry. This example could result in an increase to asset useful lives therefore impacting the forecast renewal costs. Any financial impacts would likely be addressed and adjusted for in the regular condition assessment and revaluation of the assets as well as the annual review of the associated works programs.

4.2.6 Seasonal Changes and Environmental Impact

With the increased volatility of Australia's weather patterns, there is an increased likelihood of infrastructure damage by natural disasters. Following any natural disaster event, damaged infrastructure will need to be assessed and replaced/renewed accordingly. Due to the reactive nature of these works, Council will often be required to divert resources away from the routine cycle of renewal and maintenance works, which can create infrastructure renewal backlogs.

In addition to any natural disaster events that may occur, infrastructure within the Council area may be impacted by changes in rainfall intensity and changes to average temperatures. According to the Department for Environment and Water's Guide to Climate Projections for Risk Assessment Planning

in South Australia 2022, the state can expect the number and intensity of heavy rainfall events to increase, along with higher temperatures and increased frequency of hot weather periods. Council acknowledges that this could impact the condition of some road, kerb, and footpath infrastructure.

Climate change could also influence erosion and rising sea levels in coastal and low-lying townships, such as Beachport and Southend, which may result in loss or destruction to property and assets. This will need to be considered when assessing new, upgrade, or renewal work.

4.2.7 Commercial and Industry Practices

Wattle Range Council district contains a large amount of farming and agricultural land and a variety of industrial and commercial enterprise such as timber plantation / logging and renewable energy. Transportation to and from these premises largely involves the use of heavy vehicles and farm machinery which utilise the sealed and unsealed road network. Generally, the weight or size of vehicles can directly impact the condition of these road assets. Changes to commercial and industrial practices (e.g. economic changes resulting in downturn in production) would be expected to directly impact not only the condition of the assets, but the demand / capacity as well.

4.3 Demand Impact and Demand Management Plan

The impact of demand drivers that may affect future service delivery and use of assets are shown in Table 10.

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

Opportunities identified to date for demand management are shown in Table 10. Further opportunities will be developed in future revisions of this AMP.

Table 10: Demand Management Plan

Demand driver	Current position	Projection	Impact on services	Demand Management Plan
Population	Population of 11,888 as per Australian Bureau of Statistics (ABS) 2021 census	Minimal growth expected	Any population growth is expected to impact on demand for services from these assets	Monitor customer complaints and implement community feedback program to determine any new trends in community priorities. Monitor population growth upon review of AMP.
Seasonal Changes and Environmental Impact (Climate Change)	An increasing number of extreme weather events	Increased number of heavy rainfall events and intensity	More frequent flooding with increased adverse impact.	Monitor trends and plan asset lifecycle activities accordingly

Demand driver	Current position	Projection	Impact on services	Demand Management Plan
			Assets may be adversely affected	

4.4 Asset Programs to Meet Demand

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

Acquiring new assets will commit the Wattle Range Council to ongoing operations, maintenance and renewal costs for the period that the service provided from the assets is required. These future costs are identified and considered in developing forecasts of future operations, maintenance and renewal costs for inclusion in the long-term financial plan (Refer to Section 5).

4.5 Climate Change Adaptation

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

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

As a minimum we consider how to manage our existing assets given potential climate change impacts for our region.

Risk and opportunities identified to date are shown in Table 11.

Table 11: Managing the Impact of Climate Change on Assets and Services

Climate Change Description	Projected Change	Potential Impact on Assets and Services	Management
Climate Change	Anticipated that rainfall patterns will change (more frequent, intensity)	Could increase the rate of asset deterioration resulting in more maintenance and earlier renewal	Monitor trends and adjust lifecycle activities accordingly
	Forecast that minimum and maximum temperatures will increase	Harsh sun and periods of drought may increase the rate of asset deterioration, resulting in more maintenance and earlier renewal. Potential for increase in severity and occurrence of natural disasters e.g. bushfire	Monitor trends and adjust lifecycle activities accordingly Emergency management/response plans (contingency planning) should be developed and regularly

			reviewed/updated
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Additionally, the way in which we construct new assets should recognise that there is opportunity to build in resilience to climate change impacts. Building resilience can have the following benefits:

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

Table 12 summarises some asset climate change resilience opportunities.

Table 12: Building Asset Resilience to Climate Change

New Asset Description	Climate Change impact These assets?	Build Resilience in New Works
Change to rainfall patterns and intensity	More extreme weather events	Shape of sealed surfaces should direct water away from infrastructure to prevent water ponding resulting in asset deterioration e.g. potholes
Increased temperatures and periods of drought	More rapid deterioration of assets, potential increase in severity and occurrence of natural disasters e.g. bushfire	Use renewable water sources for maintenance program e.g. patrol grading Emergency response and contingency planning should be considered for new / upgrade projects e.g. communities where there is only one access road in/out are at higher risk from bushfire Requires further investigation for inclusion into the next AMP

The impact of climate change on assets is a new and complex discussion and further opportunities will be developed in future revisions of this AMP.

LIFECYCLE MANAGEMENT PLAN

5 Lifecycle Management

The lifecycle management plan details how the Wattle Range Council plans to manage and operate the assets at the agreed levels of service (refer to section 3) while managing life cycle costs.

5.1 Background Data

5.1.1 Physical Parameters

The assets covered by this AMP are summarised in Table 13.

These assets include sealed and unsealed roads, car parks, sealed and unsealed footpaths, and kerbs.

Table 13: Assets covered by this Plan

Asset Category	Dimension	Replacement Value (\$)
Car parks	33,000 m ²	Included within the value for Roads
Pathways	77 km	13,505,348
Sealed	52km	10,953,435
Unsealed	25km	2,551,913
Kerbs	154 km	25,367,161
Roads	1,753 km	185,256,116
Sealed	536km	149,048,779
Unsealed	1,217km	36,207,337
TOTAL		\$224,128,625

5.1.2 Asset Capacity and Performance

Assets are generally provided to meet design standards where these are available. However, there is insufficient resources to address all known deficiencies. Locations where deficiencies in service performance are known are detailed in Table 14. These service deficiencies were identified from network knowledge by Council field staff.

Table 14: Known Service Performance Deficiencies

Location	Asset Type	Service Deficiency
Crusher Road, Mount McIntyre	Unsealed Road	Road is in poor condition and deteriorates rapidly with heavy vehicle movement to/from nearby quarry
Alexander Square, Millicent	Sealed Road	Road is in poor condition and seal deteriorates rapidly with vehicle movement adjacent to nearby hardware store
Beach Road Roundabout, Beachport	Sealed Road	Road is in poor condition and seal deteriorates rapidly due to invasion from tree roots
Glens Lane, Tantanoola	Sealed Road	Road is in poor condition and deteriorates rapidly with heavy vehicle movement to/from nearby timber mill

Location	Asset Type	Service Deficiency
O'Neils Lane, Furner	Sealed Road	Roadway is subject to flooding in wet season and impacts expected levels of service
Plunkett Terrace, Millicent	Sealed Road	Road is in poor condition and is required to be reshaped
Mullins Lane, Millicent	Unsealed Road	Road is in poor condition and no longer meets expected levels of service
Southend Access Road, Southend	Sealed Road	Road is in poor condition and is required to be reshaped
Railway Terrace, Beachport	Kerb	Kerb is in poor condition and seal deteriorates rapidly due to invasion from tree roots
Beach Road Roundabout, Beachport	Kerb	Kerb is in poor condition and seal deteriorates rapidly due to invasion from tree roots
Ridge Terrace, Millicent	Unsealed Footpath	Footpath no longer meets expected levels of service
Millicent Road, Beachport	Sealed Footpath	Footpath is in poor condition and deteriorates rapidly due to invasion from tree roots
Belt Road, Millicent	Sealed Footpath	Footpath is in poor condition and deteriorates rapidly due to invasion from tree roots
Williams Road, Millicent	Unsealed Footpath	Footpath no longer meets expected levels of service
Oberlander Street, Millicent	Unsealed Footpath	Footpath no longer meets expected levels of service
Walker Street, Millicent	Naturally Formed Footpath	Shared footway between Walker Street and Sullivan Street no longer meets expected level of service
Clarke Street, Penola	Sealed Footpath	Footpath is in poor condition and no longer meets expected levels of service

5.1.3 Asset Condition

Council will be undertaking revaluation and condition assessments of asset classes in accordance with the Asset Policy on a four-yearly cycle as determined in the Asset Management Strategy. This data will be kept in Council's asset register, currently maintained in the Brightly software system (formerly Assetic). The data will be used to assist in prioritising future capital works and maintenance programs.

Asset condition is measured on several factors including formation, aggregate binding, surface defects, cracking, drainage etc each of which are given an individual score which is then used to determine an overall condition rating. Previous condition assessment profiles have been measured inconsistently between the asset classes, with kerbs and footpaths on a 0-6 rating scale (0 being as new and 6 being at end of useful life), sealed roads from 1-10, and unsealed roads from 1-5. Future condition assessments will be rated in a consistent manner across all asset classes and will be based on a six-point scale as detailed in Table 15: Condition is also closely monitored in an informal way by Council field staff.

Table 15: Asset Condition Rating Description

Condition	Description	Remaining Useful Life
0 Brand New	Asset is brand new or in brand new condition	100%
1 Excellent	Asset has no defects, asset is new, within defect liability period. Subject to preventative maintenance only.	99% - 92%
2 Good	Asset exhibits normal wear and tear, minor defects, minor signs of deteriorated surfaces finishes. Minor maintenance required (about 5% of asset).	91% - 80%
3 Fair	Asset is in an average condition, building services are functional. Building fabric displays sign of defects, signs of deterioration to surface finishes requiring attention with intervention levels for building fabric triggered. Repairs are required to prevent faster degradation of asset life. Significant maintenance required (about 5-20% of asset).	79% - 60%
4 Poor	Asset has deteriorated badly, serious problems with building services, general appearance of building fabric is poor and can be associated with cracks. The asset is still functional but shows signs of major wear and tear and defects, backlog maintenance work exists. Significant renewal work required (about 20-50% of asset).	59% - 26%
5 Very Poor	Asset has reduced functionality. Asset has significant defects affecting many components, deteriorated surfaces require significant attention, services are functional but failing spasmodically, major backlog maintenance work exists. Over about 50% of asset requires replacement.	25% - 10%
6 End of Life	Asset has reached the end of its useful life. Asset requires replacement.	0%

Current asset condition is indicated in Figure 4, Figure 5, and Figure 6 below.

Figure 4 Condition Profile for Kerb and Footpath Assets

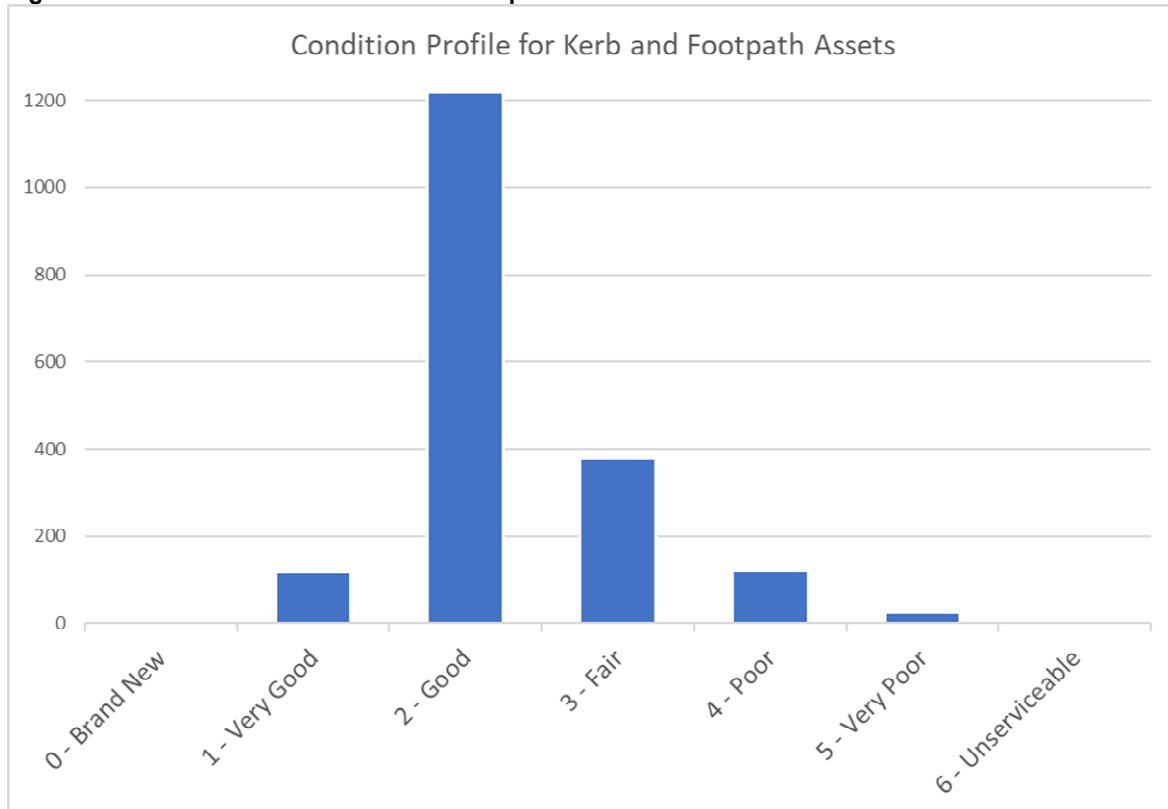


Figure 5 Condition Profile for Sealed Road Assets

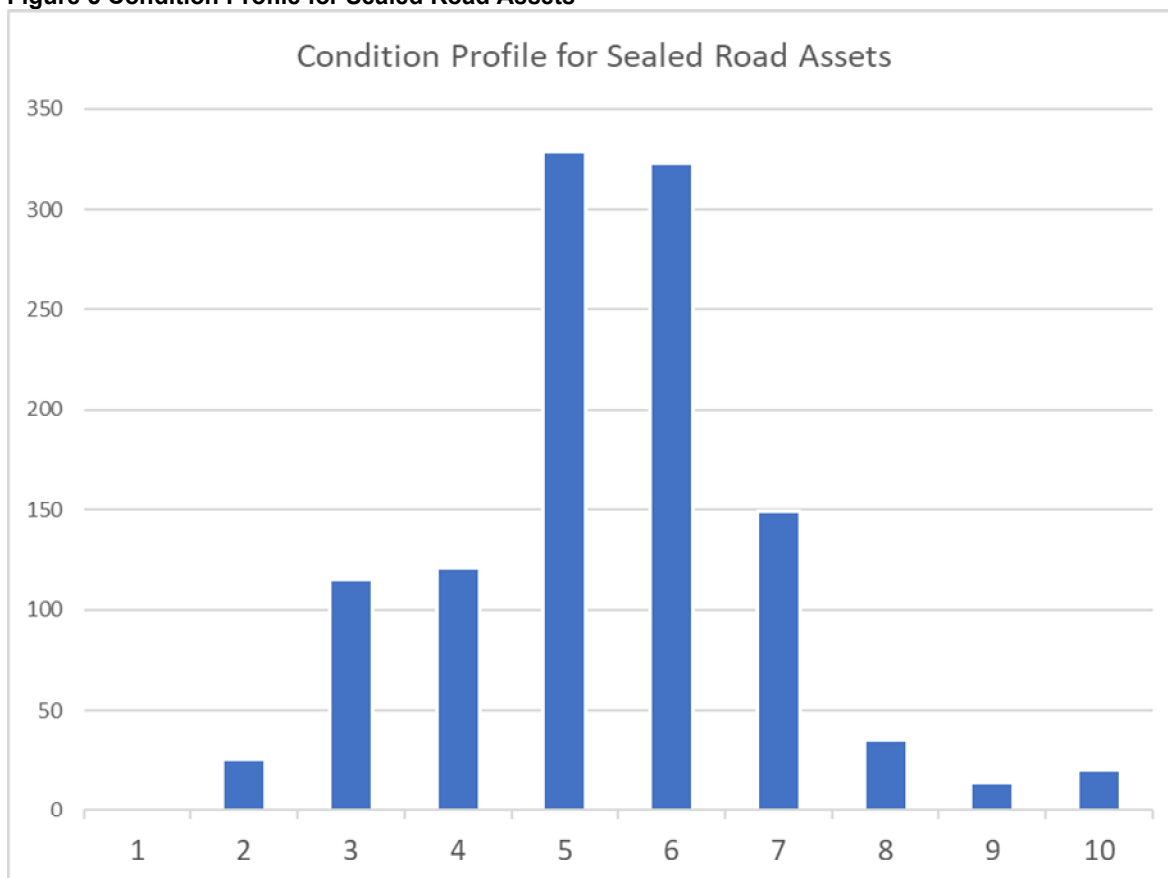
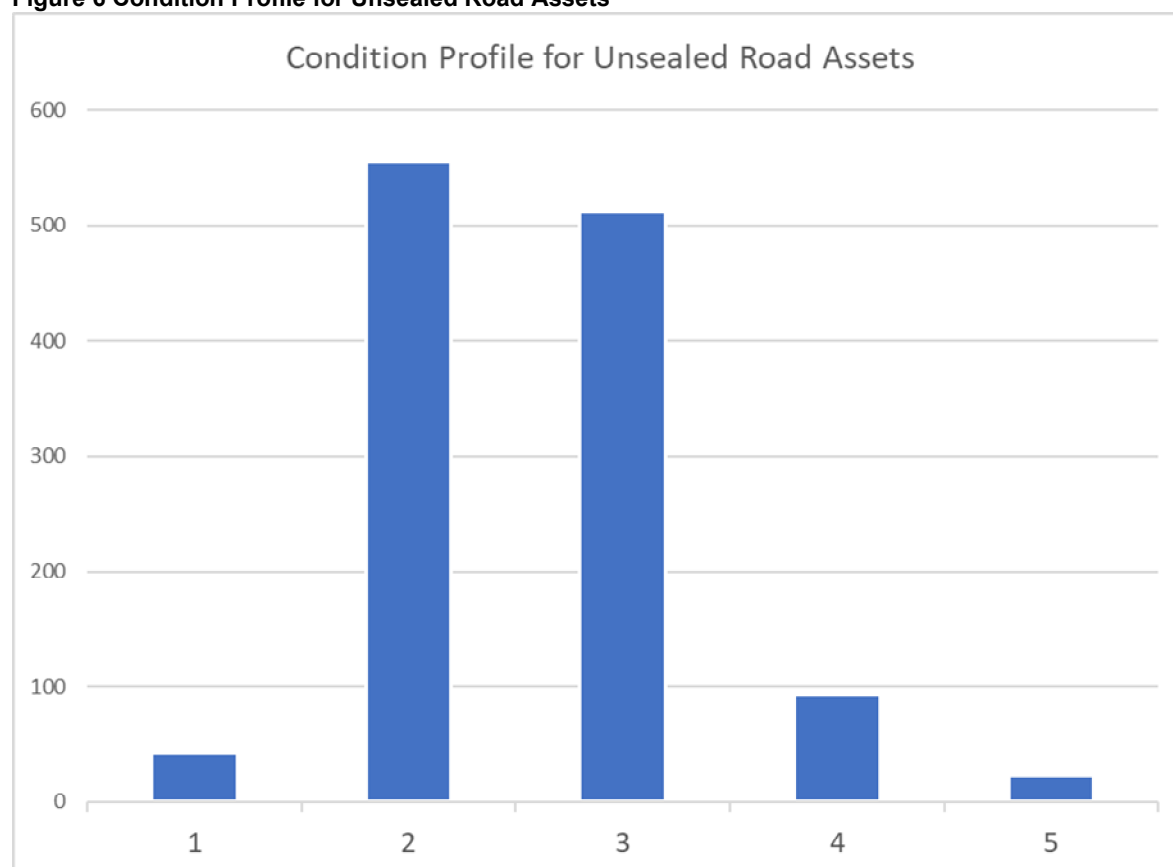


Figure 6 Condition Profile for Unsealed Road Assets



5.2 Operations and Maintenance Plan

Operations include regular activities to provide services. Examples of typical operational activities include street sweeping and asset inspection.

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

While Council aims to undertake the majority of the maintenance in-house, resourcing for some projects isn't always available, therefore, some operational and maintenance may be undertaken by third party contractors.

The trend in operational and maintenance budgets are shown in Table 16.

Table 16: Operational and Maintenance Budget Trends

Year	Budget \$
2022 - 2023	\$3,521,000
2023 - 2024	\$3,532,000
2024 - 2025	\$3,463,000

Maintenance budget levels are considered to be adequate to meet projected service levels, which may be less than or equal to current service levels. Where maintenance budget allocations are such

that they will result in a lesser level of service, the service consequences and service risks have been identified and are highlighted in this AMP and service risks considered in the Infrastructure Risk Management Plan.

Assessment and priority of reactive maintenance is undertaken by staff using experience and judgement.

Asset Hierarchy

An asset hierarchy provides a framework for structuring data in an information system to assist in 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. Currently Wattle Range Council only have a hierarchy structure for road assets.

The service hierarchy is shown in Table 17.

Table 17: Road Asset Service Hierarchy

Road Hierarchy	Description
Arterial	Carries long distance through traffic external to specific areas; Principal connection between and to major regional centres and towns in rural areas.
Distributor	Through traffic movements between towns; Longer distance strategic traffic movements; Primary connection between town and employment, economic, education or entertainment centres; Line haul public transport task; Primary freight and dangerous goods routes;
Collector	Through traffic between arterial roads; Connections between local areas and arterial roads; Access to public transport; Through movement of public transport; Regional – local cycle movements.
Local Road – A	Sealed Road: Daily vehicle movements >150 Unsealed Road: Daily vehicle movements >45
Local Road – B	Sealed Road: Daily vehicle movements between 75 and 150 Unsealed Road: Daily vehicle movements between 16 and 45
Local Road - C	Sealed Road: Daily vehicle movements between 20 and 75
Local Road – Property Access	Sealed Road: Daily vehicle movements <10 Unsealed Road: Daily vehicle movements <10

5.2.1 Maintenance Budget

Forecast operations and maintenance costs are expected to vary in relation to the total value of the asset stock. If additional assets are acquired, the future operations and maintenance costs are forecast to increase. If assets are disposed of the forecast operation and maintenance costs are expected to decrease. Figure 7 shows the forecast operations and maintenance costs relative to the proposed

operations and maintenance planned budget. The forecast has been determined by an Alternate Method of averaging the previous actual expenditure for operational and maintenance costs for these asset financial classes.

This forecast does not include additional/ongoing operation or maintenance costs for newly acquired assets during the planning period. These forecast costs should be included upon acquisition of assets.

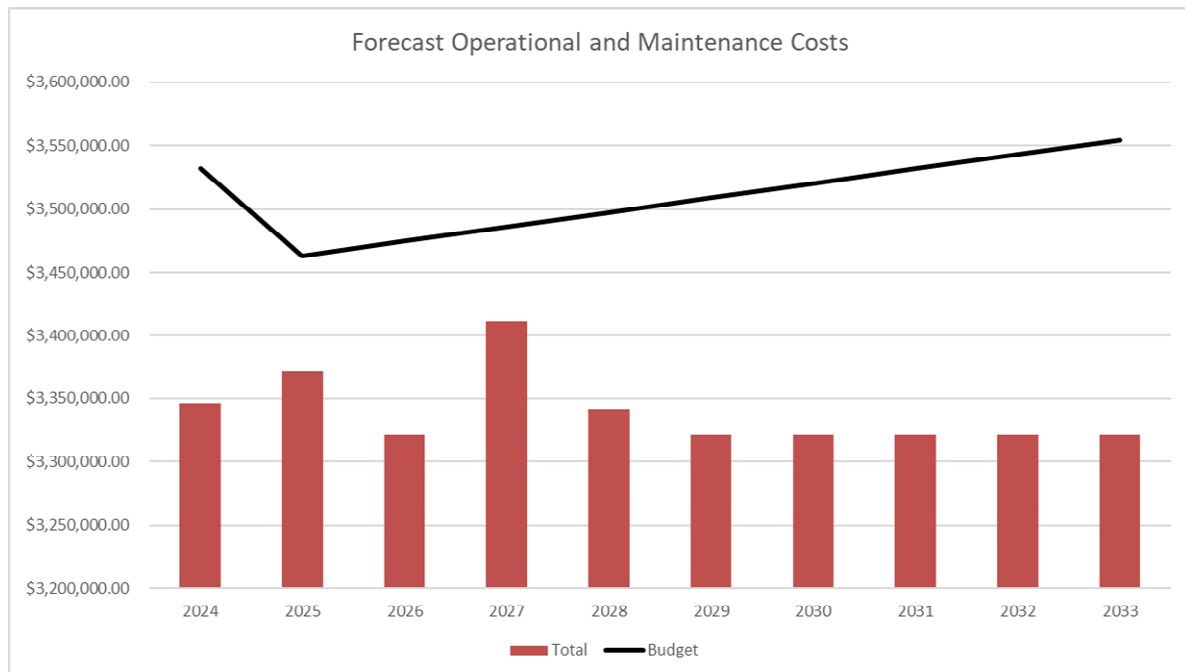


Figure 7: Forecast Operation and Maintenance Costs over a 10 year period

Historical data from previous financial years maintenance and capital works funding to maintain, renew, and upgrade the road, kerb, and footpath infrastructure is presented in Figure 8. With the implementation of Datascape, it is expected that greater granularity of expenditure will be captured in the future.

All figure values are shown in current day dollars.

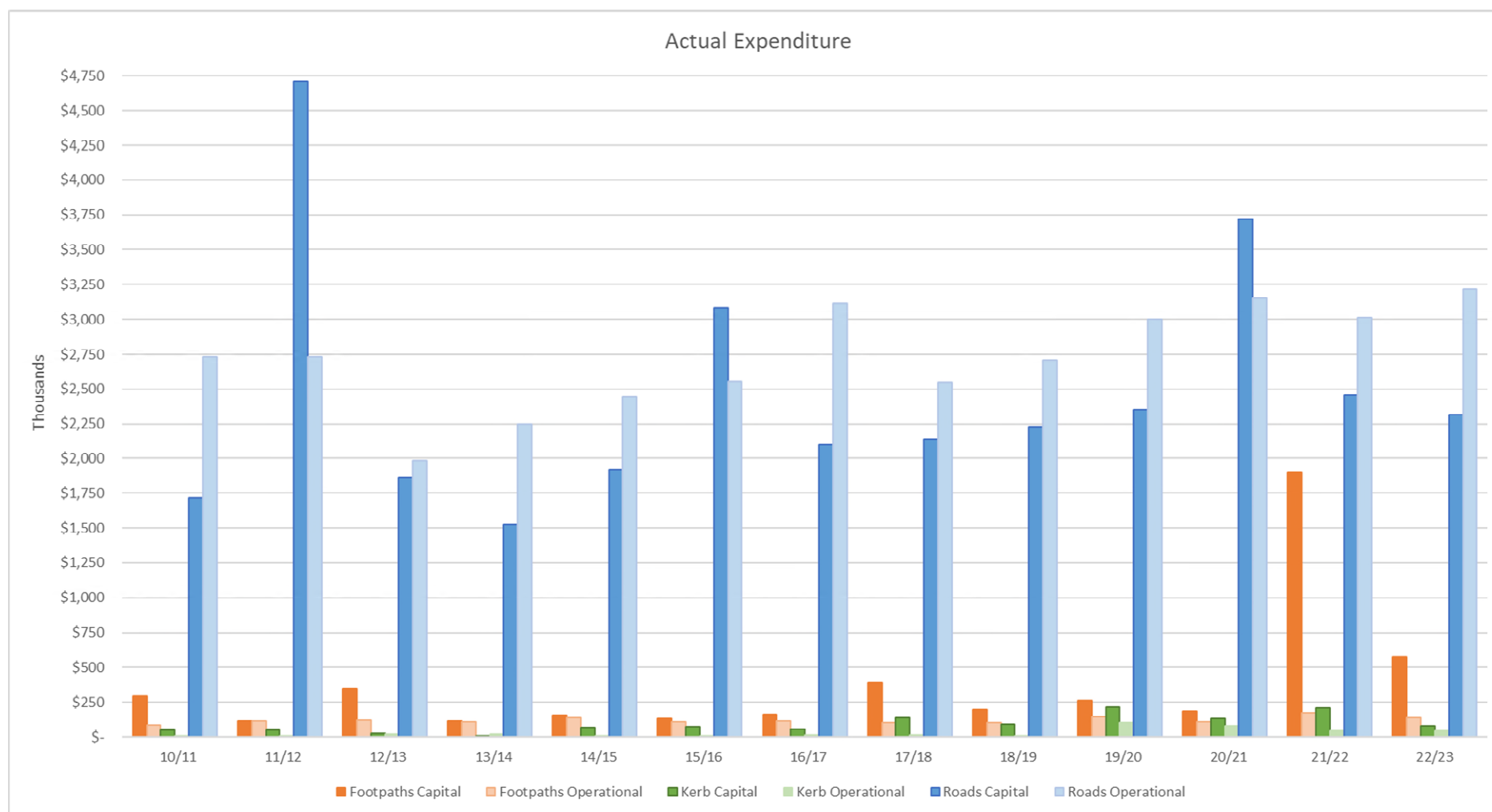


Figure 8: Historic Capital and Operational Expenditure

5.2.2 Operations and Maintenance Strategies

General maintenance strategies include:

- Ensuring the infrastructure is maintained in accordance with agreed levels of service.
- Deferring maintenance work and grouping in the capital program annually unless urgent or safety related.

Currently maintenance has been undertaken:

- Proactively through condition assessments which drive annual operational and capital works programs; and
- Reactively when issues are observed during inspections, service levels are compromised, or customer requests are received.

This plan outlines the work required to transition the asset class into a data driven renewal and maintenance program to assist Council in meeting its obligations to regulators and users. A proactive-focused maintenance program should also allow Council to reduce maintenance costs and strategically tender for services and goods, as well as improve community levels of service through reduced customer requests.

Table 18 identifies the standard operational and maintenance activities, including frequency and responsible agent.

Table 18: Routine Operational and Maintenance Inspections and Actions

Activity	Frequency	Responsibility
Sealed Road Line Marking	Annual program	Contractor
Unsealed Road Patrol Grading	As required	Council
Unsealed Road Heavy Patching	As required	Council
Road/Street Sign Maintenance	As Required	Council
Road, Kerb and Footpath General Maintenance and Repairs including potholing, asphalt patching	As Required	Council

5.3 Renewal Plan

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

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

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

The typical useful lives of assets used to develop projected asset renewal forecasts are shown in Table 19. Asset useful lives are reviewed in conjunction with revaluation of assets which occurs as per the schedule determined in the Asset Management Strategy.

Table 19: Useful Lives of Assets

Asset Description	Useful Life (Years)
(Road) Spray Seal Surface – 10-5mm	25
(Road) Spray Seal Surface – 10-7mm	25
(Road) Spray Seal Surface – 10mm	25
(Road) Spray Seal Surface – 14-7mm	25
(Road) Spray Seal Surface – 14mm	25
(Road) Spray Seal Surface – 16mm	25
(Road) Spray Seal Surface – 5mm	25
(Road) Spray Seal Surface – 7mm	25
(Road) Hotmix Surface	40
(Road) Paver Surface	80
Rural Arterial Sheeted Surface	30
Rural Collector Sheeted Surface	30
Rural Distributor Sheeted Surface	30
Rural Local Sheeted Surface	30
Rural Property Access Sheeted Surface	30
Urban Collector Sheeted Surface	30
Urban Local Sheeted Surface	30
Urban Property Access Sheeted Surface	30
Concrete Upright Kerb and Gutter	70
Concrete Rollover Kerb and Gutter	70
Concrete Spoon Drain	70
Concrete Median Kerb and Gutter	70
Concrete Median Kerb Only	70
Concrete Upright Kerb Only	70
Concrete Rollover Kerb Only	70
Concrete Barrier Kerb Only	70
Timber Kerb	40
(Footpath) Spray Seal	20
(Footpath) Concrete	50
(Footpath) Paver	50
(Footpath) Asphalt	20
(Footpath) Gravel	30
(Footpath) Other	15

The estimates for renewals in this AMP were based on the alternate method.

5.3.1 Renewal Criteria

Asset renewal is typically undertaken to either:

- Ensure the reliability of the existing infrastructure to deliver the service it was constructed to facilitate, or
- To ensure the infrastructure is of sufficient quality to meet the service requirements.

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

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

As assets begin to reach the end of their useful life it would be expected that condition assessment and visual inspections would be undertaken more regularly to ensure increased maintenance, renewal work, or replacement could be schedule before failure occurs.

Renewals will be assessed to determine the appropriate scope of works. This means that both the infrastructure and the approach will be assessed to establish whether works should be a renewal or an upgrade. This will ensure that the outcome is fit-for-purpose and cost effective.

5.4 Summary of Future Renewal Costs

Forecast renewal costs are projected to increase over time if the asset stock increases through new or gifted assets.

The forecast renewal expenditure for the next 10 years has been presented in Figure 9. This forecast of expenditure will be adjusted as the Council budget is reviewed annually and as condition assessments are undertaken to inform the renewals.

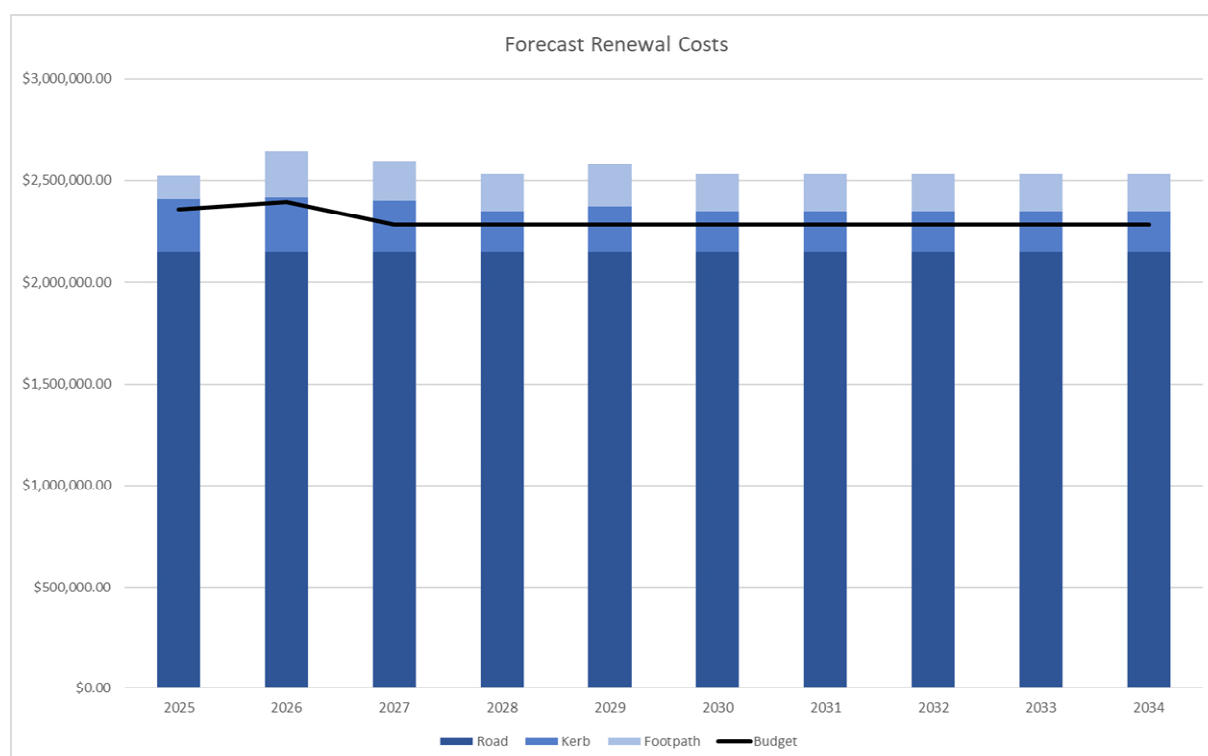


Figure 9: Forecast Renewal Costs for the next 10 years

All figure values are shown in current day dollars and do not account for CPI.

The renewal budget is insufficient to match the forecast renewal cost. As updated condition data is obtained and assets age, ongoing renewal costs are expected to increase. If further budget is not allocated, there will be consequences to the level of service provided by the assets, refer to section 3.5.

5.5 Acquisition Plan

Acquisition reflects are new assets that 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 gifted to the Wattle Range Council by third party.

As documented in section 6.4.1, what Council cannot achieve due to budget constraints in relation to discretionary projects (new and upgrade), the forecast capital expenditure profile will change if projects are deferred. These changes will be incorporated into this AMP in the documents annual review process.

5.5.1 Selection Criteria

Proposed acquisition of new assets, and upgrade of existing assets, are identified from various sources such as community requests, proposals identified by strategic plans or partnerships with others. Potential upgrade and new works should be reviewed to verify that they are essential to the organisation's needs. Proposed upgrade and new work analysis should also include the development of a preliminary renewal estimate to ensure that the services are sustainable over the longer term.

5.5.2 Forecast Acquisition Costs

The forecast acquisition costs at the time of this plan have been captured in the figure below. When an organisation 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. When reviewing the long-term impacts of asset acquisition, it is useful to consider the cumulative value of the acquired assets being taken on by the organisation.

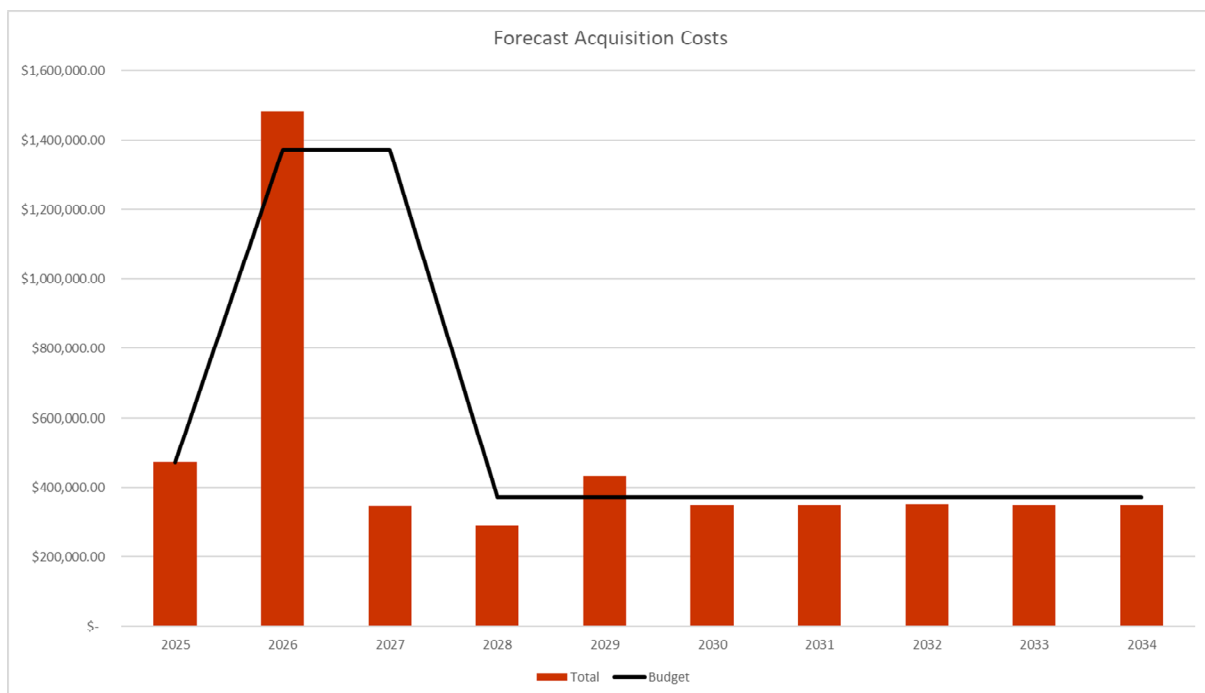


Figure 10: Forecast Acquisition Costs for the next 10 years

All figure values are shown in current day dollars and do not account for CPI.

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

5.6 Disposal Plan

Council's Contracts and Tenders – Sale of Assets Policy outlines the procedure to be undertaken when disposing of Council's assets including all road, kerb, and footpath infrastructure. Disposal includes any activity associated with the disposal of a decommissioned asset including sale, demolition, or relocation.

Asset	Location	Reason for disposal	Date of expected disposal
Bowman Scenic Drive	Beachport	Partial asset disposal to allow for realignment of road around Pool of Siloam	TBA

5.7 Summary of Asset Forecast Costs

The financial projections from this asset plan are shown below. These projections include forecast costs for acquisition, operation and maintenance, renewal, and disposal. The forecast costs are shown relative to the proposed budget.

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

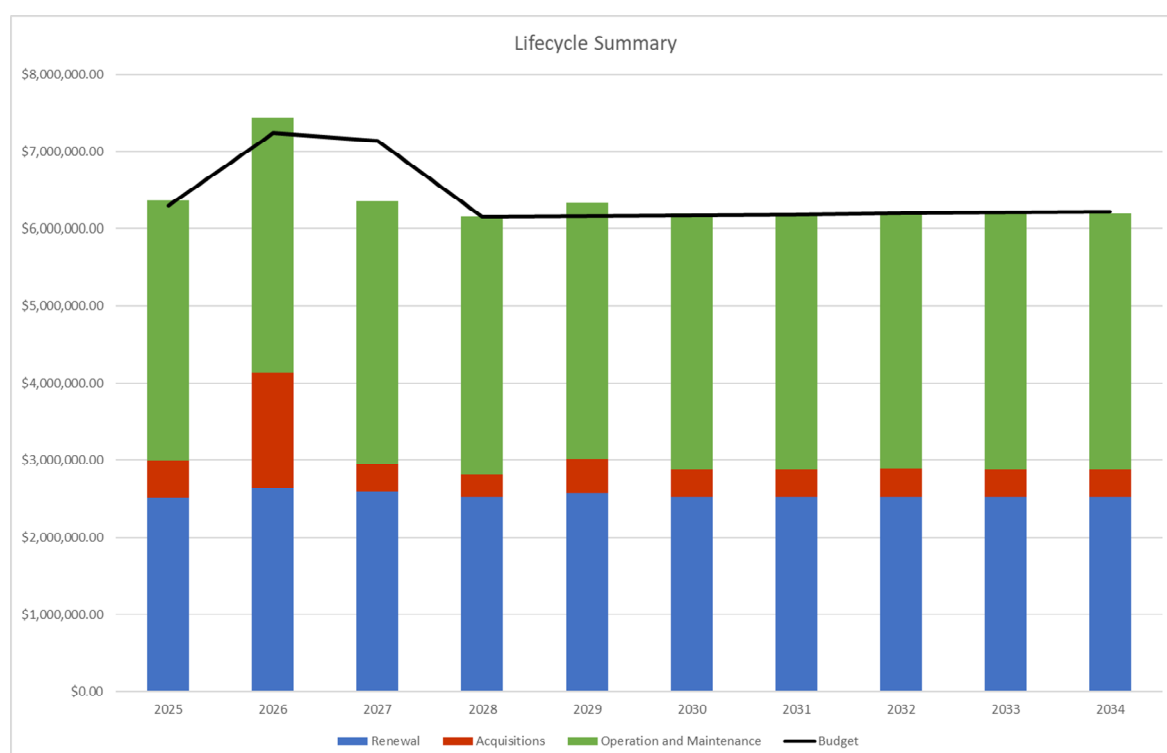


Figure 11: Lifecycle Summary for the next 10 years

RISK MANAGEMENT PLANNING

6 Risk Management Planning

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

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

An assessment of risks associated with service delivery will identify risks that will result in loss or reduction in service, personal injury, environmental impacts, a ‘financial shock’, reputational impacts, or other consequences. The risk assessment process identifies credible risks, the likelihood of the risk event occurring, and the consequences should the event occur. The risk assessment should also include the development of a risk rating, evaluation of the risks and development of a risk treatment plan for those risks that are deemed to be non-acceptable.

6.1 Critical Assets

Critical assets are defined as those which have a high consequence of failure causing significant loss or reduction of service. By identifying critical assets and failure modes an organisation can ensure that investigative activities, condition inspection programs, maintenance and capital expenditure plans are targeted at critical assets.

Critical road, kerb and footpath assets have not been determined at the time of this AMP.

6.2 Risk Assessment

The risk management process used is shown in Figure 12 below.

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

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

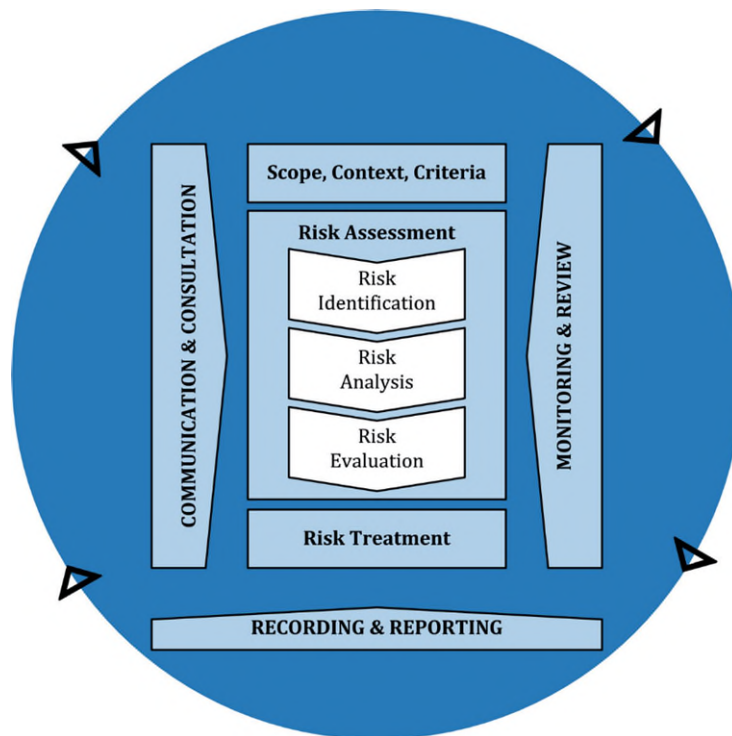


Figure 12: Risk Management Process – Abridged

Source: ISO 31000:2018, Figure 1, p9

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

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

Risks are identified in accordance with Council’s Risk Management Policy and utilising Council’s Risk Matrix. Council maintains an online Corporate Risk Register, which is regularly reviewed by staff, ELT, and the Audit and Risk Committee. The Audit and Risk Committee is comprised of Elected Members, Council staff, and suitably qualified independent community members. The risks that are assessed to have a residual risk of High (H15 – H20) or Extreme (E21 – E25) will be carried up and incorporated into Council’s Corporate Risk Register.

Table 20: Risks and Treatment Plans

Service or Asset at Risk	What can Happen	Risk Rating	Risk Treatment Plan	Residual Risk *	Treatment Costs
Road, Kerb, Footpath Assets	Loss of Key Staff and Knowledge Base	High	Succession planning Staff rewards and recognition	Low	Within existing budget
Road, Kerb, Footpath Assets	Asset Failure	High	Regular inspections and maintenance Renew assets before they fail	Low	Within existing budget Budget does not meet forecast renewal spend. \$243,622 per year on average is required to meet the renewal gap
Road, Kerb, Footpath Assets	Inability to recruit skilled staff	High	Organisational structure review Investigate alternative sources of staff, upskill existing staff	Low	Within existing budget Unknown at this time
Road, Kerb, Footpath Assets	Non-compliance with legislative requirements	High	Address current staffing shortfalls through review of responsibilities, outsourcing and/or upskilling	Low	Within existing budget

6.3 Infrastructure Resilience Approach

The resilience of the road, kerb, and footpath infrastructure is vital to the ongoing provision of services to community. To adapt to changing conditions, the need to understand our capacity to ‘withstand a given level of stress or demand’, and to respond to possible disruptions to ensure continuity of service.

We do not currently measure our resilience in service delivery. This will be included in future iterations of the AMP. Condition assessments of the road, kerb, and footpath infrastructure will further benefit the approach to resilience.

6.4 Service and Risk Trade-Offs

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

6.4.1 What we cannot do

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

- Projects where Council budget is not sufficient to cover the full project cost and therefore external funding is required for the project to proceed; if external funding is not approved, the projects are not undertaken but deferred until a time where suitable funds are available.
- Where large capital new/upgrade projects are identified in this AMP, which are discretionary in nature, will be considered individually each financial year and as such the future capital expenditure profile documented in this AMP will change.
- Maintain 100% of the unsealed road network each year to the expected community levels of service due to variations in weather conditions that significantly impact on both the condition and also the ability to undertake maintenance effectively.
- Upgrade the entire network of unsealed roads to sealed roads or to provide dust suppression works to all areas.
- Provide new kerbing to all residential properties on a sealed road.
- Urban CBD footpath renewals across the three main townships of Beachport, Millicent, and Penola in a short timeframe.
- Obtain 100% compliance with the Disability Discrimination Act 1992, Disability Inclusion Act 2018 (SA), and Development Act 1993 (SA) within the medium to long term.

6.4.2 Service trade-off

If there is forecast work (operations, maintenance, renewal, acquisition, or disposal) that cannot be undertaken due to available resources, then this will result in service consequences for users. These service consequences are discussed in section 3 of this document.

6.4.3 Risk trade-off

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

- Asset condition deterioration resulting in decreased levels of service and community satisfaction.
- The Council's financial capacity to achieve the identified maintenance and renewal program over the 10-year period in line with adopted budgets.

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

- Routine inspections and maintenance including undertaking regular external condition assessments and revaluations on a four-year cycle. This will develop and inform a detailed works program for renewal and new / upgrade
- Timely response to customer requests and complaints
- Prioritisation of renewals and upgrades

These actions and expenditures are considered and included in the forecast costs, and where developed, Appendix 2 Risk Management Plan.

FINANCIAL SUMMARY

7 Financial Summary

This section contains the financial requirements resulting from the information presented in the previous sections of this AMP. The financial projections will be improved as the discussion on desired levels of service and asset performance matures.

7.1 Financial Sustainability and Projections

7.1.1 Sustainability of service delivery

There are two key indicators of sustainable service delivery that are considered in the AMP for this service area. The two indicators are the:

- Asset Renewal Funding Ratio (proposed renewal budget for the next 10 years / proposed renewal outlays for the next 10 years shown in the AMP), and
- Lifecycle Funding Ratio (proposed lifecycle budget for the next 10 years / proposed lifecycle outlays for the next 10 years shown in the AMP).

7.1.1.1 Asset Renewal Funding Ratio

Asset Renewal Funding Ratio¹ 90.13%

The Asset Renewal Funding Ratio is an important indicator and illustrates that over the next 10 years we expect to have 90.13% of the funds required for the optimal renewal of assets.

7.1.1.2 Lifecycle Funding Ratio – 10-year financial planning period

This AMP identifies the forecast operations, maintenance, and renewal costs required to provide an agreed level of service to the community over a 10-year period. This provides input into 10 year financial and funding plans aimed at providing the required services in a sustainable manner.

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

The forecast operations, maintenance and renewal costs over the 10-year planning period is presented in section 5.7.

The proposed (budget) operations, maintenance, and renewal funding is \$2,907,550 on average per year giving a 10 year funding shortfall of \$745,602. *Note, these calculations exclude acquired assets.*

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

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

Table 21 shows the forecast costs (outlays) required for each asset financial class for consideration in the 10-year Long-Term Financial Plan.

Providing services in a financially sustainable manner requires a balance between the forecast outlays required to deliver the agreed service levels and the planned budget allocations in the Long-Term Financial Plan.

A gap between the forecast outlays and the amounts allocated in the financial plan would indicate that further work is required to review service levels in the AMP and/or financial projections in the LTFP.

¹ AIFMM, 2015, Version 1.0, Financial Sustainability Indicator 3, Sec 2.6, p 9.

The 'gap' will be managed by developing this AMP to provide guidance on future service levels and resources required to provide these services in consultation with the community.

Forecast costs are shown in current day dollars and do not account for CPI.

Table 21: Forecast Costs (Outlays) for the Long-Term Financial Plan

Year	Operation and Maintenance	Renewal	Acquisition	Disposal
2025	\$3,371,101	\$2,522,000	\$473,100	-
2026	\$3,321,101	\$2,643,645	\$1,481,197	-
2027	\$3,411,101	\$2,596,519	\$347,120	-
2028	\$3,341,101	\$2,530,775	\$289,944	-
2029	\$3,321,101	\$2,578,775	\$434,650	-
2030	\$3,321,101	\$2,530,775	\$350,000	-
2031	\$3,321,101	\$2,530,775	\$350,000	-
2032	\$3,321,101	\$2,530,775	\$353,150	-
2033	\$3,321,101	\$2,530,775	\$350,000	-
2034	\$3,321,101	\$2,530,775	\$350,000	-

7.2 Funding Strategy

Funding for assets is outlined in the Council's Annual Budget and Long-Term Financial Plan.

Council's financial strategy determines how funding will be provided, whereas the AMP communicates how and when this will be spent, along with the service and risk consequences of various service alternatives.

There are three main sources of funding for renewals and maintenance of the road, kerb, and footpath assets;

- General rates revenue,
- Loan borrowings, and
- External grants from State Government and/or the LGA.

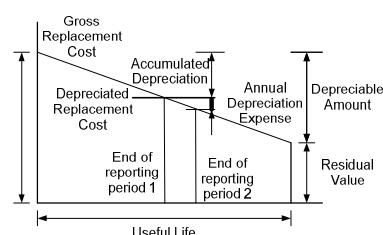
Expenses from operational and capital works are taken from a reserve account that holds excess funds collected through service charges and the cost of loans and loan interest payments are also drawn off the reserve account.

7.3 Valuation Forecasts

7.3.1 Asset valuations

The best available estimate of the value of assets included in this AMP are shown below and in Table 4. The assets are valued using the application of unit rates as detailed in Section **Error! Reference source not found.**

Current (Gross) Replacement Cost	\$ 224,128,625
Depreciable Amount	\$ 224,128,625
Depreciated Replacement Cost ²	\$ 142,296,777



² Also reported as Written Down Value, Carrying or Net Book Value.

Depreciation \$ 3,543,551

7.3.1.1 Useful Lives and Unit Rates

Asset revaluation and condition assessments review the useful life and unit rates of assets, generally by component material. Council's adopted useful lives and unit rates are presented in Table 22. The useful lives were generated based on those recommended by the Australian Taxation Office in their publication TR 2021/3 - Income tax: effective life of depreciating assets. Unit rates for the networks as of 1 July 2022 were largely generated from Rawlinsons Australian Construction Handbook 2021 (Rawlinsons).

Table 22: Asset Useful Life and Unit Rate

Asset Description	Unit Rate (\$)	Network Measure	Useful Life (Years)
(Road) Spray Seal Surface – 10-5mm	5.1	Area (m ²)	25
(Road) Spray Seal Surface – 10-7mm	5.1	Area (m ²)	25
(Road) Spray Seal Surface – 10mm	4.8	Area (m ²)	25
(Road) Spray Seal Surface – 14-7mm	6	Area (m ²)	25
(Road) Spray Seal Surface – 14mm	5.8	Area (m ²)	25
(Road) Spray Seal Surface – 16mm	16.1	Area (m ²)	25
(Road) Spray Seal Surface – 5mm	3.6	Area (m ²)	25
(Road) Spray Seal Surface – 7mm	3.6	Area (m ²)	25
(Road) Hotmix Surface	70	Area (m ²)	40
(Road) Paver Surface	65	Area (m ²)	80
Rural Arterial Sheeted Surface	5.1	Area (m ²)	30
Rural Collector Sheeted Surface	5.1	Area (m ²)	30
Rural Distributor Sheeted Surface	5.1	Area (m ²)	30
Rural Local Sheeted Surface	5.1	Area (m ²)	30
Rural Property Access Sheeted Surface	2.5	Area (m ²)	30
Urban Collector Sheeted Surface	5.1	Area (m ²)	30
Urban Local Sheeted Surface	5.1	Area (m ²)	30
Urban Property Access Sheeted Surface	2.5	Area (m ²)	30
Concrete Upright Kerb and Gutter	148	Length (m)	70
Concrete Rollover Kerb and Gutter	162	Length (m)	70
Concrete Spoon Drain	190	Length (m)	70
Concrete Median Kerb and Gutter	148	Length (m)	70
Concrete Median Kerb Only	140	Length (m)	70
Concrete Upright Kerb Only	140	Length (m)	70
Concrete Rollover Kerb Only	150	Length (m)	70
Concrete Barrier Kerb Only	140	Length (m)	70
Timber Kerb	50	Length (m)	40
(Footpath) Spray Seal	45	Area (m ²)	20
(Footpath) Concrete	106	Area (m ²)	50
(Footpath) Paver	249	Area (m ²)	50
(Footpath) Asphalt	85	Area (m ²)	20
(Footpath) Gravel	35	Area (m ²)	30
(Footpath) Other	0	Area (m ²)	15

Table 23: Revaluation Methodology

Asset Group	Replacement Cost =	Accumulated Depreciation =
Area based assets i.e. roads, footpaths	Area of asset * applicable unit rate	Replacement Cost * consumed useful life
Length based assets i.e. kerbs	Length of asset * applicable unit rate	Replacement Cost * consumed useful life

7.3.2 Valuation Forecast

Asset values are forecast to increase as additional assets are constructed, and regular indexation and financial revaluations occur.

Additional assets will generally add to the operations and maintenance needs in the longer term. Additional assets will also require additional costs due to future renewals. Any additional assets will also add to future depreciation forecasts.

7.4 Key Assumptions Made in Financial Forecasts

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

Key assumptions made in this AMP are:

- Current asset age and useful life are accurate.
- Where acquisitions and renewals were forecast, a best estimate useful life has been utilised for depreciation expense forecasting as the actual infrastructure to be installed is not known at the time of this plan.

7.5 Forecast Reliability and Confidence

The forecast costs, proposed budgets, and valuation projections in this AMP are based on the best available data at this point in time. For effective asset and financial management, it is critical that the information is current and accurate. Data confidence is classified on a A - E level scale³ in accordance with Table 24.

Table 24 Data Confidence Grading System

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

The estimated confidence level for and reliability of data used in this AMP is shown in Table 25.

³ IPWEA, 2015, IIMM, Table 2.4.6, p 2 | 71.

Table 25: Data Confidence Assessment

Data	Confidence Assessment	Comment
Demand drivers	B. High	Operator knowledge of the systems is reliable and accurate, but not documented. Based on accurate data used for forecasting e.g. historic Census data.
Growth projections	B. High	Recent Wattle Range Strategic Land Use Plan 2022 and ABS Census data 2021.
Acquisition forecast	D. Low	These are predicted based on local knowledge at the time of this plan.
Operation and Maintenance forecast	C. Medium	Forecast was calculated based on average actual expenditure, used to set future budgets.
Renewal forecast - Asset values	B. High	Asset revaluation occurred in 2020 (kerb & footpath) and 2021 (roads) and indexation of assets as of 1 July 2022.
- Asset useful lives	C. Medium	Asset revaluation occurred in 2020 (kerb & footpath) and 2021 (roads)
- Condition modelling	B. High	Condition assessments occurred in 2020 (kerb & footpath) and 2021 (roads) Sound staff knowledge on overall condition of assets and network deficiencies.
Disposal forecast	E. Very Low	Little information on forecast disposals.

The estimated confidence level for and reliability of data used in this AMP is considered to be Medium.

PLAN IMPROVEMENT AND MONITORING

8 Plan Improvement and Monitoring

8.1 Status of Asset Management Practices

8.1.1 Accounting and financial data sources

This AMP utilises accounting and financial data. The source of the data is Council's financial and records software system, Synergy and Brightly (formerly Assetic). Synergy contains accounting and financial data up to financial year 2020/21 whilst Brightly contains the asset specific financial data. In 2021/22 Council transitioned to Datascope software for finance.

8.1.2 Asset management data sources

This AMP also utilises asset management data. The source of the data is Brightly which is the asset management system that holds the asset register and the asset relevant financial data. Data in Brightly is managed by the Asset Management Officer.

8.2 Improvement Plan

It is important that the organisation recognises areas of their AMP and planning process that require future improvements to ensure effective asset management and informed decision making. The Improvement Plan generated from this AMP is provided in Appendix 3.

8.3 Monitoring and Review Procedures

This AMP will be reviewed during the Annual Budget planning process to consider any material changes in service levels, risks, forecast costs and proposed budgets as a result of budget decisions.

The AMP will be reviewed annually and updated if there is a significant change to the asset values, forecast operations, maintenance, renewals, acquisition and asset disposal costs and planned budgets. These forecast costs and proposed budget will be incorporated into the Long-Term Financial Plan. Annual review changes to the AMP do not warrant public consultation and adoption by Council, but instead will be recognised as an amendment. Changes where the greater content of the document is revised, i.e. Levels of Service, will be subject to the mandated public consultation period and adoption by Council.

This AMP will be reviewed upon changes to related documents, including but not limited to Long-Term Financial Plan and Strategic Plan.

The AMP has a maximum life of 4 years and will be reviewed within 2 years of a Local Government election or a complete revision within 2 years of an asset financial revaluation.

8.4 Performance Measures

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

- The degree to which the required forecast costs identified in this AMP are incorporated into the Long-Term Financial Plan,
- The degree to which the 1-5 year detailed works programs, budgets, business plans and corporate structures consider the 'global' works program trends provided by the AMP,
- The degree to which the existing and projected service levels and service consequences, risks and residual risks are incorporated into the strategic planning documents and associated plans,

- The Asset Renewal Funding Ratio achieving the Organisational target (this target is 90 – 110%).

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Appendix 1 List of Definitions

Term	Definition
ABCB	Australian Building Codes Board
ABS	Australian Bureau of Statistics
AIFMM	Australian Infrastructure Financial Management Manual
AMP	Asset Management Plan
ATO	Australian Taxation Office
Council	Wattle Range Council
DIT	Department for Infrastructure and Transport
ELT	Wattle Range Council Executive Leadership Team Made up of Chief Executive Officer, Director Corporate Services, Director Development Services, Director Engineering Services, and Executive Assistant
EPA	Environment Protection Authority
EPHC	Environment Protection and Heritage Council
ESCOSA	Essential Services Commission of South Australia
Gifted Asset	An asset where initial cost outlay is incurred by third party but ownership is then gifted to Council for ongoing maintenance
IM	Injury Management
IOT	Internet of Things
IPWEA	Institute of Public Works Engineering Australasia
ISO	International Organisation for Standardization
KPI	Key Performance Indicator
LGA	Local Government Association
LTFP	Long Term Financial Plan
NAMS+	A subscription-based product designed to provide high value/low cost infrastructure planning and decision support for any asset intensive organisation irrespective of size
NCC	National Construction Code
NPV	Net Present Value
Rawlinsons	Rawlinsons Australian Construction Handbook 2021
Redundant	The asset is not providing a service function but is physically still in situ. The asset is not intended to return to use but will have to be maintained for WHS concerns until it is physically removed.
SA	South Australia
SEWCDB	South Eastern Water Conservation and Drainage Board
WHS	Work Health Safety

Appendix 2 Risk Management Plan



Document Control		Risk Management Plan			
Document ID :					
Rev No	Date	Revision Details	Author	Reviewer	Approver
V0.1	May 2024	First draft	BFJ	PEH	Council

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1. INTRODUCTION

1.1 Purpose

The purpose of this infrastructure risk management plan is to document the results and recommendations resulting from periodic regular identification, assessment and treatment of risks associated with providing services to the community organization from infrastructure, using the fundamentals of International Standard ISO 31000:2018 Risk management – Guidelines.

Risk Management is defined in ISO 31000:2018 as: “coordinated activities to direct and control an organisation with regard to risk” .

1.2 Objectives

The objectives of the risk management plan are:

- ▣ to identify risks to the Wattle Range Council that may impact of the delivery of services from infrastructure
- ▣ to select credible risks for detailed analysis,
- ▣ to analyse and evaluate risks in accordance with ISO 31000:2018,
- ▣ to prioritise risks,
- ▣ to identify risks requiring treatment by management action,
- ▣ to develop risk treatment plans identifying the tasks required to manage the risks, the person responsible for each task, the resources required and the due completion date.

1.3 Infrastructure Risk Management Plan

This infrastructure risk management plan has been designed to be read as a supporting document to the Road, Kerb and Footpath Asset Management Plan. It has been prepared using the fundamentals of International Standard ISO 31000:2018 Risk management – Guidelines.

Organisations aiming at being an effective manager of risk should comply with the following principles.

- ▣ Risk management is an integral part of all organizational activities.
- ▣ A structured and comprehensive approach to risk management contributes to consistent and comparable results.
- ▣ The risk management framework and process are customized and proportionate to the organization's external and internal context related to its objectives.
- ▣ Appropriate and timely involvement of stakeholders enables their knowledge, views and perceptions to be considered. This results in improved awareness and informed risk management.
- ▣ Risks can emerge, change or disappear as an organization's external and internal context changes. Risk management anticipates, detects, acknowledges and responds to those changes and events in an appropriate and timely manner.
- ▣ The inputs to risk management are based on historical and current information, as well as on future expectations. Risk management explicitly takes into account any limitations and uncertainties associated with such information and expectations. Information should be timely, clear and available to relevant stakeholders.

1.4 Scope

This plan considers risks associated with delivery of services from road, kerb and footpath infrastructure.

1.5 The Risk Management Context

Organisations implement management practices and procedures to identify and manage risks associated with providing services from infrastructure assets. These include:

- operating a reactive maintenance service for all assets and services;
- operating a planned maintenance system for key assets;
- monitoring condition and remaining service life of assets nearing the end of their service life;
- renewing and upgrading assets to maintain service delivery;
- closing and disposing of assets not providing the required service level; and
- acquiring or constructing new assets to provide new and improved services.

The Wattle Range Council has assigned responsibilities for managing risks associated with assets and service delivery to the following departments.

Engineering Services

Director Engineering Services

Manager Asset & Environment Services

Senior Asset Management Officer

Asset Management Officer

1.6 Risk Management Process

The risk management process used in this project is shown in Figure 1.6 below.

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

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

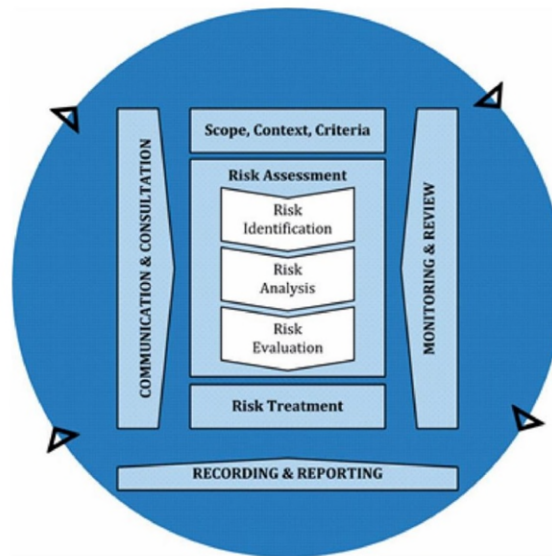


Fig 1.6. Risk Management Process – Abridged

Source: ISO 31000:2018, Figure 1, p9

An abridged version of the process from the previous ISO 21000:2009 (now withdrawn) describes and expands the process

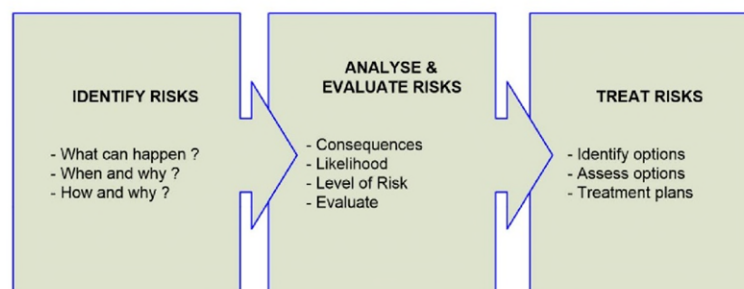


Fig 1.7. Risk Management Process – Abridged

Source: ISO 31000:2009 (now withdrawn)

2. COMMUNICATION AND CONSULTATION

Risk communication and consultation is to “assist relevant stakeholders in understanding risk, the basis on which decisions are made and the reasons why particular actions are required”.

Appropriate communication and consultation seeks to:

- ‘bring different areas of expertise together for each step of the risk management process;
- ensure that different views are appropriately considered when defining risk criteria and when evaluating risks;
- provide sufficient information to facilitate risk oversight and decision-making;
- build a sense of inclusiveness and ownership among those affected by risk.’
- The development of this infrastructure risk management plan was undertaken using a consultative team approach to: -
- Identify stakeholders and specialist advisors who need to be involved in the risk management process;
- Discuss and consider the views of stakeholder and specialist advisors
- Communicate the results of the risk management process to ensure that all stakeholders are aware of and understand their roles and responsibilities in risk treatment plans.
- Create “ownership”

The results from the risk management planning process will frequently identify areas requiring expenditure. This might be in the form of additional operations and maintenance activities, asset renewals, or the creation of upgraded / new assets. It is essential that this forecast work be prioritised and included for funding consideration in the related Asset Management Plans.

Risks that are rated as ‘high’ or ‘very high’ and needing near term activities to manage are summarized and included in the related Asset Management Plan.

3. RISK IDENTIFICATION

3.1 General

Risk identification seeks to identify the risks that need to be managed. A well-structured systematic process is crucial, because a potential risk not identified at this stage is excluded from further analysis. All risks should be identified, whether or not they are under the control of the organisation.

The risks are identified in three stages:

- What can happen? The aim is to generate a comprehensive list of events which might affect each element of the organisation's service delivery.
- How and why it can happen? It is necessary to consider possible causes and scenarios. There are many ways and event can be initiated. It is important that no significant causes are omitted.
- Are risks credible? An assessment of credibility of all risk is undertaken to ensure that credible risks receive proper and due consideration.

Potential risks associated with providing services from infrastructure were identified at meetings of the council's infrastructure risk management team .

Team members were asked to identify "what can happen, where and when" to the various council services, at the network level and for critical assets at the asset level, then to identify possible "why and how can it happen" as causes for each potential event together with any existing risk management controls.

Each risk was then tested for credibility to ensure that available resources were applied to those risks that the team considered were necessary to proceed with detailed risk analysis

The assets at risk, what can happen, when, possible cause(s), existing controls and credibility are shown in Appendix 2.1 – Risk Identification.

Credible risks are subjected to risk analysis in Section 4.4.5. Risks assessed as non-credible were not considered further and will be managed by routine procedures.

4. RISK ANALYSIS

4.1 General

Risk is analysed by combining estimates of likelihood and consequences in the context of existing control measures. The objective of a risk analysis is to separate the minor acceptable risks from the major risks and to provide data to assist in the assessment and treatment of risk.

The level of risk is determined by considering two aspects against existing controls:

- how likely it is that things may happen (likelihood, frequency of probability), and
- the possible consequences (impact or magnitude of the effect) if they do occur.
- The risk analysis process is to:
 - identify the existing management controls, technical systems and procedures to control risk,
 - evaluate the likelihood of events occurring and their consequences in the context of these existing controls, and
 - combine the evaluation of likelihood and consequences to produce a level of risk.

4.2 Likelihood

Likelihood is a qualitative description of chance of an event occurring. The process of determining likelihood involves combining information about estimated or calculated probability, history or experience. Where possible it is based on past records, relevant experience, industry practice and experience, published literature or expert judgement.

4.3 Consequences

Consequences are a qualitative description of the outcome of an event affecting objectives. The process of determining consequences involved combining information about estimated or calculated effects, history and experience.

4.4 Method

The risk analysis method uses the risk rating chart shown in Section 4.4.3. This process uses a qualitative assessment of likelihood/probability and history/experience compared against a qualitative assessment of severity of consequences to derive a risk rating.

The qualitative descriptors for each assessment are shown below.

4.4.1 Likelihood

Likelihood	Descriptor	Probability of occurrence
Rare	May occur only in exceptional circumstances	More than 20 years
Unlikely	Could occur at some time	Within 10-20 years
Possible	Might occur at some time	Within 3-5 years
Likely	Will probably occur in most circumstances	Within 2 years
Almost certain	Expected to occur in most	Within 1 year

	circumstances	
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4.4.2 Consequences

Consequence	Injury	Service Interruption	Environment	Finance	Reputation
Insignificant	Nil	< 4 hrs	Nil	< \$20k	Nil
Minor	First Aid	Up to 1 day	Minor short term	\$20k - \$100k	Minor media
Moderate	Medical treatment	1 day – 1 week	Wide short term	\$100k - \$500k	Moderate media
Major	Disability	1 week – 1 month	Wide long term	\$500k - \$1M	High media
Catastrophic	Fatality	More than 1 month	Irreversible long term	> \$1M	Censure/ Inquiry

4.4.3 Risk Assessment

The risk assessment process compares the likelihood of a risk event occurring against the consequences of the event occurring. In the risk rating table below, a risk event with a likelihood of 'Possible' and a consequence of 'Major' has a risk rating of 'High'. This rating is used to develop a typical risk treatment in Section 5.3.

Likelihood	Consequence				
	Insignificant	Minor	Moderate	Major	Catastrophic
Almost certain	Medium (M14)	High (H19)	High (H20)	Extreme (E24)	Extreme (E25)
Likely	Medium (M12)	Medium (M13)	High (H18)	Extreme (E22)	Extreme (E23)
Possible	Low (L6)	Medium (M10)	Medium (M11)	High (H17)	Extreme (E21)
Unlikely	Low (L4)	Low (L5)	Medium (M8)	Medium (M9)	High (H16)
Rare	Low (L1)	Low (L2)	Low (L3)	Medium (M7)	High (H15)

Fig. 4.4.3 Risk Matrix

4.4.4 Indicator of Risk Treatment

The risk rating is used to determine the required timing and type of risk treatments. Risk treatments can range from immediate corrective action (such as stop work or prevent use of the asset) for 'Very High' risks to being managed by routine procedures for 'Low' risks.

An event with a 'High Risk' rating will require 'Prioritised action'. This may include actions such as reducing the likelihood of the event occurring by physical methods (limiting usage to within the asset's capacity, increasing monitoring and maintenance practices, etc), reducing consequences (limiting speed of use, preparing response plans, etc) and/or sharing the risk with others (insuring the organisation against the risk).

Risk Rating	Action Required and Timing
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VH	Very High Risk	Immediate corrective action
H	High Risk	Prioritised action required
M	Medium Risk	Planned action required
L	Low Risk	Manage by routine procedures

Immediate corrective action may include combinations of stopping work, making the area safe, preventing use of the asset and/or scheduling replacement as soon as possible. Prioritised action may include making the areas safe and implementing a short term work program to reduce the risk through improved maintenance or replacement of the asset. Planned action may include shifting the asset from a reactive maintenance to a planned maintenance management regime and/or scheduling component/asset replacement in the current or next budget. Manage by routine procedures involves managing the risk through existing operations and maintenance procedures.

4.4.5 Analysis of Risk

The team conducted an analysis of credible risks identified in section 3.1 using the method described above to determine a risk rating for each credible risk.

The credible risks and risk ratings are shown in Appendix 2.2 – Risk Analysis

4.5 Risk Evaluation

The risk management team evaluated the need for risk treatment plans using an overall assessment of the following evaluation criteria to answer the question “is the risk acceptable?”

Criterion	Risk Evaluation Notes
Operational	Risks that have the potential to reduce services for a period of time unacceptable to the community and/or adversely affect the council’s public image.
Technical	Risks that cannot be treated by council’s existing and/or readily available technical resources.
Financial	Risks that cannot be treated within council’s normal maintenance budgets or by reallocation of an annual capital works program.
Legal	Risks that have the potential to generate unacceptable exposure to litigation.
Social	Risks that have the potential to:- cause personal injury or death and/or- cause significant social/political disruption in the community.
Environmental	Risks that have the potential to cause environmental harm.

The evaluation criteria are to provide guidance to evaluate whether the risks are acceptable to the council and its stakeholders in providing services to the community. Risks that do not meet the evaluation criteria above are deemed to be unacceptable and risk treatment plans are required to be developed and documented in this Risk Management Plan, for consideration by Council .

“Decisions on managing risk should take account of the wider context of the risk and include consideration of the tolerance of the risks borne by parties, other than the organisation that benefits from the risk. Decisions should be made in accordance with legal, regulatory and other requirements.

In some circumstances, the risk evaluation can lead to a decision to undertake further analysis. The risk evaluation can also lead to a decision not to treat the risk in any way other than maintaining existing controls. This decision will be influenced by the organisation's risk attitudes and the risk criteria that have been established.”

5. RISK TREATMENT PLANS

5.1 General

The treatment of risk involves identifying the range of options for treating risk, evaluating those options, preparing risk treatment plans and implementing those plans. This includes reviewing existing guides for treating that particular risk, such as legislation and regulations, International Standards and Best Practice Guides.

Developing risk treatment options starts with understanding how risks arise, understanding the immediate causes and the underlying factors that influence whether the proposed treatment will be effective.

One treatment option is to remove the risk completely by discontinuing the provision of the service.

Options for managing risk are shown below. The optimum solution may involve a combination of options.

- Avoid the risk by deciding not to proceed with the activity that would incur the risk, or choose an alternative course of action that achieves the same outcome,
- Reduce the level of risk by reducing the likelihood of occurrence or the consequences, or both;
 - the likelihood may be reduced through management controls, organisational or other arrangements which reduce the frequency of, or opportunity for errors, such as alternative procedures, quality assurance, testing, training, supervision, review, documented policy and procedures, research and development.
 - the consequences may be reduced by ensuring that management or other controls, or physical barriers, are in place to minimise any adverse consequences, such as contingency planning, contract conditions or other arrangements.
- Transfer the risk by shifting the responsibility to another party (such as an insurer), who ultimately bears the consequences if the event occurs. Risks should be allocated to the party which can exercise the most effective control over those risks.
- Accept and retain the risks within the organisation where they cannot be avoided, reduced or reduced or transferred, or where the cost to avoid or transfer the risk is not justified, usually because the risk is acceptable or low. Risks can be retained by default, ie. Where there is a failure to identify and/or appropriately transfer or otherwise manage risks

The cost of managing risks needs to be commensurate be less than with the benefits obtained, the significance of the event and the risks involved.

5.2 Risk Treatment Options

The risk treatment process comprises 5 steps.

Step 1. Review causes and controls

The risk identification process documented in Section 5 included identifying possible causes and documenting existing controls.

Step 2. Develop treatment options

Treatment options include those that eliminate risk, reduce the likelihood or the risk event occurring, reducing the consequences should the risk event occur, sharing of the risk with others and accepting the risk.

Step 3. Assess risk treatment options against costs and residual risk

The method of assessment of risk treatment options can range from an assessment by a local group of stakeholders and practitioners experienced in operation and management of the assets/service to detailed risk cost and risk reduction cost/benefit analysis.

Step 4. Select optimum risk treatment

Step 5. Develop risk treatment plans

5.3 Risk Treatments

The risk treatments identified for non-acceptable risks are detailed in Appendix 2.3 – Risk Treatment.

5.4 Risk Treatment Plans

From each of the risk treatments identified in Appendix A – Risk Register, risk treatment plans were developed.

The risk treatment plans identify for each non-acceptable risk: -

1. Proposed action
2. Responsibility
3. Resource requirement/budget
4. Timing
5. Reporting and monitoring required

The risk treatment plan is shown in Appendix 2.4 A – Risk Treatment Plan.

6. MONITORING AND REVIEW

Monitoring and review is an essential and integral step in the process of managing risk. It is necessary to monitor risks, the effectiveness of any plans, strategies and management systems that have been established to control implementation of risk management actions.

The plan will be monitored and reviewed as follows.

Activity	Review Process
Review of Risk Management Plan	4 yearly review in alignment with Asset Management Plan review

7. REFERENCES

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ISO, 2009, ISO 31000:2009, Risk management – Principles and guidelines, Standards Australia, Sydney.(now withdrawn)

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Standards Australia, 2004, AS/NZS 4360:2004, Australian/New Zealand Standard, Risk Management, Sydney (superseded by ISO 3100:2009).

Standards Australia, 2004, HB 436:2004, Risk Management Guidelines, Companion to AS/NZS 4360:2004, Sydney.

Appendix 1 - Risk Register Summary for inclusion in Asset Management Plans

The Very High/High risks should be summarised and included in the Asset Management Plan Table 6.2

Critical Risks and Treatment Plans

Risk Number	What can happen	Asset Providing the Service	When can it occur	Is the risk credible?
1	Loss of Key Staff and Knowledge Base	Road, Kerb, Footpath Assets	Anytime now	yes
2	Asset Failure	Road, Kerb, Footpath Assets	Anytime now	yes
3	Inability to recruit skilled staff	Road, Kerb, Footpath Assets	Anytime now	yes
4	Non compliance with legislative requirements	Road, Kerb, Footpath Assets	Anytime now	yes
5	Injuries associated with deteriorating assets	Road, Kerb, Footpath Assets	Anytime now	yes

Appendix 2 - Risk Register

A. Identification

Risk Number	What can happen	Asset Providing the Service	When can it occur	Possible cause	Existing controls	Is the risk credible?
1	Loss of Key Staff and Knowledge Base	Road, Kerb, Footpath Assets	Anytime now	High Staff Turnover	No existing controls	yes
2	Asset Failure	Road, Kerb, Footpath Assets	Anytime now	Underfunding Renewals	Asset Management Planning	yes
3	Inability to recruit skilled staff	Road, Kerb, Footpath Assets	Anytime now	Regional location means shortage of people with appropriate skills	No existing controls	yes
4	Non compliance with legislative requirements	Road, Kerb, Footpath Assets	Anytime now	Staffing shortages	No existing controls	yes
5	Injuries associated with deteriorating assets	Road, Kerb, Footpath Assets	Anytime now	Underfunding Renewals	Asset Management Planning	yes

B. Analysis

Risk Number	What can happen	Asset Providing the Service	Likelihood	Overall Consequence	Risk Rating	Action Required
1	Loss of Key Staff and Knowledge Base	Road, Kerb, Footpath Assets	Likely	Moderate	High	Prioritised action required
2	Asset Failure	Road, Kerb, Footpath Assets	Likely	Moderate	High	Prioritised action required
3	Inability to recruit skilled staff	Road, Kerb, Footpath Assets	Almost Certain	Moderate	High	Prioritised action required

Risk Number	What can happen	Asset Providing the Service	Likelihood	Overall Consequence	Risk Rating	Action Required
4	Non compliance with legislative requirements	Road, Kerb, Footpath Assets	Possible	Moderate	High	Prioritised action required
5	Injuries associated with deteriorating assets	Road, Kerb, Footpath Assets	Unlikely	Moderate	Medium	Planned action required

C. Treatment

Treatment Options	New Consequences	New Likelihood	Cost	Residual Risk
Succession planning	Minor	Possible	Staff time – within current budget	Low
Regular inspections and maintenance	Minor	Unlikely	Within current budget	Low
Renew assets before they fail	Minor	Unlikely	\$243,622	Low
Organisational structure review	Minor	Unlikely	Staff time – within current budget	Low
Investigate alternative sources of staff, upskill existing staff	Minor	Possible	Unknown	Low
Ongoing maintenance	Minor	Unlikely	Within current budget	Low
Address current staffing shortfalls	Minor	Unlikely	Unknown	Low

D. Risk Plan

Treatment Option	Treatment Action	Responsibility	Resources	Due Date
Renew assets before they fail	Improve asset register to enable better prioritising and planning of renewals before asset failure occurs	Manager Assets & Environment		31/12/2024
	Clearly document processes and methodologies	Manager Assets & Environment		30/06/2026

Treatment Option	Treatment Action	Responsibility	Resources	Due Date
	Ensure relevant strategic documents are regularly updated and are in alignment with one another	Manager Assets & Environment		30/06/2033
Address staffing shortfalls	Through review of responsibilities, outsourcing and/or upskilling	Director Engineering Services		31/12/2024

Risk Number	Asset Providing the Service	What can happen	When can it occur	Risk Rating	Possible cause	Existing controls	Is the risk credible?
1	Road, Kerb, Footpath Assets	Loss of Key Staff and Knowledge Base	Anytime now	High	High Staff Turnover	No existing controls	yes
2	Road, Kerb, Footpath Assets	Asset Failure	Anytime now	High	Underfunding Renewals	Asset Management Planning	yes
3	Road, Kerb, Footpath Assets	Inability to recruit skilled staff	Anytime now	High	Regional location means shortage of people with appropriate skills	No existing controls	yes
4	Road, Kerb, Footpath Assets	Non compliance with legislative requirements	Anytime now	High	Staffing shortages	No existing controls	yes
5	Road, Kerb, Footpath Assets	Injuries associated with deteriorating assets	Anytime now	Medium	Underfunding renewals	Asset Management Planning	yes

E. Asset Management Plan Table

Asset Providing the Service	What can happen	Risk Rating	Risk Treatment Plan	Residual Risk	Treatment Costs
Road, Kerb, Footpath Assets	Loss of Key Staff and Knowledge Base	High	Succession planning Staff rewards and recognition	Low	Within existing budget
Road, Kerb, Footpath Assets	Asset Failure	High	Regular inspections and maintenance Renew assets before they fail	Low	Within existing budget Budget does not meet forecast renewal spend. \$243,622 per year on average is required to meet the renewal gap
Road, Kerb, Footpath Assets	Inability to recruit skilled staff	High	Organisational structure review Investigate alternative sources of staff, upskill existing staff	Low	Within existing budget Unknown at this time
Road, Kerb, Footpath Assets	Injuries associated with deteriorating assets	Medium	Ongoing maintenance Renew assets before they fail	Low	Within existing budget Budget does not meet forecast renewal spend. \$243,622 per year on average is required to meet the renewal gap
Road, Kerb, Footpath Assets	Non compliance with legislative requirements	High	Address current staffing shortfalls through review of responsibilities, outsourcing and/or upskilling	Low	Within existing budget

Appendix 3 Improvement Program

Task	Task Description	Responsibility	Resources Required	Proposed Commencement Date	Status
1	Improve asset register to enable better prioritising and planning of renewals before asset failure occurs	Manager Assets & Environment	Manager Assets & Environment Senior Asset Management Officer Asset Management Officer	2024	In Progress
2	Clearly document processes and methodologies	Manager Assets & Environment	Manager Assets & Environment Senior Asset Management Officer Asset Management Officer	2024	In Progress
3	Ensure relevant strategic documents are regularly updated and are in alignment with one another	Manager Assets & Environment	Manager Assets & Environment Senior Asset Management Officer Asset Management Officer	2024	In Progress
4	Address staffing shortfalls through review of responsibilities, outsourcing and/or upskilling	Director Engineering Services	Manager Assets & Environment	2024	Proposed
5	Establish and define roles and responsibilities between Wattle Range Council and external organisations to ensure all parties are aware of their obligations towards asset maintenance, including where jurisdiction begins and ends	Manager Assets & Environment	Manager Assets & Environment Senior Asset Management Officer Asset Management Officer	2025	Proposed

Appendix 4 Forecast Capital Projects

Key capital projects known at the time of this AMP are included in the table below. Some of the financial implications of these projects are not known at the time of this AMP and have not been included in the forecast lifecycle costs.

Location	Asset Type	Description	Forecast Financial Year of commencement
All Areas	Sealed Road	Sealed Road Reseals	Ongoing
All Areas	Unsealed Road	Unsealed Road Resheets	Ongoing
Beachport	Sealed Road	Railway Terrace (Beachport Anchorage) Car Park Development	2025
Beachport	Unsealed Road	Admella Drive Upgrade	2029
Beachport	Unsealed Road	Beach Road Car Park Upgrade	2025
Beachport	Sealed Road	Realignment of Scenic Drive	TBA
Penola	Sealed Road	Upgrade to Tower Road	2025
Beachport	Kerb	Construction of kerb on Parklands Terrace	2025
Millicent	Kerb	Construction of kerb edging at Millicent Cemetery	2025
Beachport	Sealed Footpath	Construction of sealed footpath on Foster Street	2025
Millicent	Unsealed Footpath	Upgrade footpath on Ridge Terrace	2026
Millicent	Unsealed Footpath	Upgrade footpath on Second Street	2026
Millicent	Unsealed Footpath	Upgrade footpath on Holzgrefe Street	2029

Location	Asset Type	Description	Forecast Financial Year of commencement
Beachport	Sealed Footpath	Renew Surf Beach Shared Path	2026
Beachport	Sealed Footpath	Footpath extension on Somerville Street	2026
Millicent	Unsealed Footpath	Upgrade footpaths on Williams Road and Oberlander Street	2027
Millicent	Sealed Footpath	Construction of Shared Path from Swimming Lake to Lake McIntyre	2027
Southend	Sealed Footpath	Construction of footpath of Cape Buffon Drive	2025
Beachport	Sealed Footpath	Extension of footpath on Lagoon Road	2026
Millicent	Unsealed Footpath	Construction of footpath between Sullivan Street and Walker Street	2027

Appendix 5 Forecast Operational and Maintenance Projects

The table below identifies key operational and maintenance projects identified at the time of this AMP. Note the below table does not include routine maintenance activities such as sealed surface patching, street sweeping etc.

Location	Asset Type	Description	Forecast Financial Year of commencement
All Areas	Sealed Road	Annual Linemarking Program	2025
All Areas	Unsealed Road	Annual Dust Suppression Program	2025
All Areas	All Assets	Routine and General Maintenance	Ongoing

Appendix 6 DIT Roads

It is worth noting that the Department for Infrastructure and Transport (DIT) are responsible for approximately 464 km of main arterial routes / highways within the Wattle Range Council area. DIT are responsible for maintenance and upgrade programs, including roadside slashing works, and these roads are therefore not included in the scope of this AMP. A summary of DIT roads is provided in the table below. Further clarification in relation to responsibilities of kerb and footpath assets when abutted to DIT roads is required and this has been captured as a task in the Improvement Program, Appendix 3.

Road Name	Location
Casterton Road	Penola
Clay Wells Road	Penola / Short / Kangaroo Inn
Diagonal Road	Glencoe
Edenhope Road	Comaum
George Street	Millicent
Kangaroo Flat Road	Glencoe / Kalangadoo
Mile Hill Road	Glencoe / Tantanoola
Millicent Road	Beachport
Mount Burr Road	Millicent / Mount Burr / Penola
Mount McIntyre Road	Mount McIntyre / Kalangadoo
Nangwarry Road	Kalangadoo / Nangwarry
Overland Track	Mount Burr / Glencoe
Princes Highway	Kangaroo Inn / Hatherleigh / Millicent / Tantanoola
Riddoch Highway	Coonawarra / Penola / Nangwarry
Ridge Terrace	Millicent
Southern Ports Highway	Millicent / Rendelsham / Beachport
Tantanoola Road	Tantanoola
The Springs Road	Burrungule / Glencoe
Wattle Range Road	Wattle Range
Williams Road	Millicent