



Transport

ASSET MANAGEMENT PLAN 2023

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Transport **Assets Summary**



Replacement cost: \$4,700,553

Replacement cost: \$11,899,300

PATHWAY

Replacement cost: \$52,684,528



ROAD

Replacement cost: \$205,711,796

Total

Replacement cost: \$385,729,548

Executive Summary

Council owns and manages numerous transport assets which connect people and places by providing an effective transport network to support safe and efficient movement. This asset management plan (the Plan) focuses on the management of Council's transport assets.

The objective of asset management is to provide the desired level of service in the most cost-effective manner for present and future generations. A strategic approach to asset management aligning with industry standards and best-practice has been undertaken to ensure Council's sustainability.

Effective asset management for transport assets demonstrated in the Plan is essential to achieve Council's vision: "Our City is recognised for its enviable lifestyle, environment, business strength and civic leadership."

TRANSPORT LEVELS OF SERVICE



OUALITY Streets are well maintained



FUNCTION Assets meet the service needs



CAPACITY & UTILISATION Streets have the capacity to meet the community need



CONDITION Physical state of transport assets are in serviceable condition



RENEWAL Sustainably managing the renewal of assets



ACCESSIBILITY Streets are accessible to all



SAFETY Safety compliance standards are achieved

FUTURE DEMANDS



POPULATION & DEMOGRAPHICS

Nearly a quarter of the population are aged over 60 years old. 78% of residents commute to a workplace outside the area



CLIMATE CHANGE

Awareness of Council's role in climate sustainability, with increasing trend of severe weather events including extreme heat waves and demand for sustainable materials

TECHNOLOGY

Using data to assist with decision making and delivery of service



FINANCIAL SUMMARY

Planned annual renewal of \$7,296,000 per annum over 20 years

Asset Funding Renewal Ratio of 106% Asset Sustainability Ratio of 139%



TWENTY YEAR FORECAST AND PLANNED RENEWAL EXPENDITURE

Figure 1.1 Transport twenty year forecast and planned renewal expenditure



2.1 Background

The Plan covers the transport assets serving Council's transportation needs by providing an effective transport network to support safe and efficient movement, connecting people and places.

Council's transport assets covered in the Plan include:

- Bridges
- Bus Stops
- Car Parks
- Kerbing
- Pathways
- Roads
- Street Lighting
- Traffic Control.

The Plan is developed to demonstrate proactive management of assets (and services provided from assets), compliance with regulatory requirements and to communicate funding required to provide the required levels of service over a twenty year planning period. The Plan aims to:

- Align with ISO 55000:2014 (international standard for asset management) without seeking accreditation as an ISO document or process.
- Align the delivery of asset management activities with the organisation's goals and objectives; this is known as the "line of sight" with asset management.
- Create transparency and accountability through all aspects of asset management, ensuring all stakeholders understand their roles and responsibilities for achieving the Plan's aims.



PLANS, STRATEGIES & POLICIES

Community Plan 2033

4 Year Delivery Plan 2021–2025

Long Term Financial Plan 2024/25 - 2034/35

Environmental Sustainability

Smart Plan 2023-2027

Asset Management Policy

Active Ageing Strategy

Walking and Cycling Plan

Integrated Transport Strategy

Tree Strategy

Asset Management Plans

Disability Access and Inclusion Plan

Table 2-1: Plans, Strategies and Policies.



Council's transport asset key stakeholders for service delivery of the Plan are contained in Table 2-2:

KEY STAKEHOLDERS ROLES IN ASSET MANAGEMENT PLAN				
Residents / Community	Opportunity to provide input into the development and review of the Council's strategic management plans.			
Elected Members	Represent needs and views of community.			
	Ensure Council's objectives and policies are appropriate and effective.			
	Ensure Council's resource allocation, expenditure and activities, and the efficiency and effectiveness of its service delivery is appropriate.			
	Ensure Council is financially sustainable.			
Audit Committee	Audit Committee will review, make recommendations and observations to Council on the financial outcomes of the Plans.			
Chief Executive Officer	Ensures administration deliver strategic planning and direction of the Council.			
	Ensures administration implement the strategic plan goals and objectives by providing services within the allocated resourcing while managing risks.			
	Ensures Council is financially sustainable.			
General Manager –	Ensures asset management plans are completed and reported to CEO and Council.			
City Development	Ensures the capital works programs are delivered in line with strategic planning.			
	Ensures the maintenance programs are achieving service standards.			
Assets and Operations Manager	Ensures the review of asset management and the delivery of improvement strategies.			
	Manages maintenance programs to ensure they are active and achieving service standards.			
	Ensures the capital works programs are achieved.			
Senior Assets and	Manages development and review of asset management plans.			
Engineering Lead	Responsible for advancing asset management within the organisation.			
	Review infrastructure data integrity within the asset management system and GIS applications.			
	Review and manage condition audits of infrastructure.			
	Review asset valuation data.			
	Coordinates the annual capital works program.			
Team Leader Civil Works and Maintenance	Coordinate Council resources to deliver the maintenance program.			
Civil Works and Maintenance Team	Deliver operations and maintenance.			
Asset Management Team	Deliver the annual capital works programs.			
	Undertake data collection and operational asset management projects.			

Table 2-2: Key Stakeholders in Asset Management Plan



2.2 Goals and Objectives of Asset Ownership





Transport Asset Management Plan

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

The Plan demonstrates alignment with the Council's Community Plan 2033 through its vision and themes.

Our City is recognised for its enviable lifestyle, environment, business strength and civic leadership.



COMMUNITY LIVING

GOAL:

People value our City with its enviable lifestyle, activities, facilities and services.

OBJECTIVES:

- Our Community is active, healthy and feels safe.
- Our Community participates in community activities, learning opportunities and volunteering.
- Our City meets the needs of all generations.
- Our Community is proud to be part of our City.
- Our City is connected and accessible.



) ECONOMIC PROSPERITY

GOAL:

Our businesses are valued because of the range of goods, services and facilities they provide, and new businesses are supported, not burdened with bureaucracy.

OBJECTIVES:

- Unley is recognised as an easy place to do business.
- Thriving main streets and other business activities operate across our City.



GOAL:

We will maintain and enhance our urban environment and strengthen our City's resilience to climate change by providing leadership to our Community.

OBJECTIVES:

- Unley's urban forest is maintained and improved.
- Excellence in waste management is achieved through avoidance, re-use and diversion.
- The energy efficiency of the City is increased and our carbon footprint reduced.
- Efficient, effective & sustainable water management is ensured.
- The City's resilience to climate change is increased.



GOAL:

Council will listen to the community and make transparent decisions for the long-term benefit of the City.

OBJECTIVES:

- We have strong leadership and governance.
- Council provides best value services to the community.
- Our business systems are effective and transparent.

These objectives will be considered in all decisionmaking aspects regarding transport assets to ensure Council consistently strives to achieve these strategic objectives. There are several initiatives that feed into the above objectives outside of the asset management process that ultimately support the stated objectives.

2.3 Plan Framework



Key elements of the Plan include:

- Levels of service specifies the levels of service objectives and how they are measured.
- Future demand how this will impact on future service delivery and how the demand will be met.
- Lifecycle management how Council manages existing and future assets to provide the levels of service.
- Risk management how Council manages asset risks.
- Financial summary funds required to provide the levels of service.
- Improvement plan and monitoring how Council will improve asset management maturity and how the Plan will be measured to ensure it's meeting Council's objectives.

The asset management framework is shown in Figure 2-1 and the roadmap for preparing an asset management plan is in Figure 2-2.



City of Unley



2.4 Core and Advanced Asset Management

The Plan is prepared as a core level maturity over the ten year planning period, in line with the International Infrastructure Management Manual (IIMM). Core asset management is a top down approach with analysis applied at a network level. The Plan is prepared to meet legislative and organisational requirements for sustainable service delivery and longterm financial planning and reporting. The improvement program (Section 8) outlines and prioritises the steps required to an advanced asset management maturity.





3.1 Customer Research and Expectation

Council receives continuous community feedback from a variety of sources including, but not limited to:

- Community enquiries and requests
- Community Plan consultation process
- Council Strategies
- Annual Business Plan and LTFP consultation process
- Project feedback
- Development of the Asset Management Plan
- Customer satisfaction surveys
- Service satisfaction surveys.

This feedback is built into the development of the Plan and the levels of service it aims to deliver.

Through the development of the community levels of service outlined in the Plan, Council will actively survey the community on its assets and associated services to ensure it is delivering on its levels of service. These surveys will be periodically repeated over time as the Council demographics change and new residents move into Council. Council will develop a benchmark for community levels of service to measure performance against prior to the next review of the Plans.





3.2 Legislative Requirements

Council must meet many legislative requirements including Federal and State Government legislation and regulations as well as non-legislative requirements including Australian Standards and Council policies as contained in Table 3-1.

LEGISLATION LINKAGE TO ASSET MANAGEMENT PLAN			
Local Government Act 1999	Sets out role, purpose, responsibilities and powers of local governments includi preparation of the long-term financial plan supported by asset management plans sustainable service delivery.		
Austroads Guide to Road Design	Have consideration of, adhere to and fulfil the requirements of the Standards.		
Aboriginal Heritage Act 1988	An Act to provide for the protection and preservation of the Aboriginal heritage; to repeal the Aboriginal and Historic Relics Preservation Act 1965 and the Aboriginal Heritage Act 1979; and for other purposes.		
Australian Accounting Standards	Standards applied in preparing financial statements relating to the valuation, revaluation and depreciation of transport assets.		
Planning, Development and Infrastructure Act 2016	An Act that includes the Planning and Design Code that regulates development in the State; to regulate the use and management of land and buildings, and the design and construction of buildings; to make provision for the maintenance and conservation of land and buildings where appropriate; and for other purposes.		
Disability Discrimination Act 1992	Provides protection for everyone in Australia against discrimination based on disability. It encourages everyone to be involved in implementing the Act and to share in the overall benefits to the community and the economy that flow from participation by the widest range of people.		
Disability Access and Inclusion Plan 2022-2026	Sets out targets for improving access to the Transport network, including safer and more accessible footpaths and pedestrian countdown timers at crossings		
Environmental Protection Act 1993	An Act to provide the protection of the environment; to establish the Environment Protection Authority and define its functions and powers; and for other purposes. Consideration of this Act should be undertaken for the provision, development or management of transport assets.		
Highways Act 1926	An Act to provide for the appointment of a Commissioner of Highways, and to make further and better provision for the construction and maintenance of roads and works; and for other purposes.		
Road Traffic Act 1961	An Act to consolidate and amend certain enactments relating to road traffic; and for other purposes.		
Summary Offences Act 1953	This Act provides provisions for road closure to motor vehicles in accordance with section 59.		
Work Health and Safety Act 2012	An Act to provide for the health, safety and welfare of persons at work; and for other purposes.		

Table 3-1: Legislative requirements

3.3 Current Level of Service



Levels of service are a key business driver and influence all asset management decisions. It describes:

- The outputs Council intends to deliver to customers.
- The service attributes such as quality, functionality and capacity.
- The performance measures.

Performance measures are used to indicate how Council is doing in relation to delivering levels of service.

Council has defined two levels of service categories:

- Community Levels of Service measures the service the community expects.
- Technical Levels of Service measures the service the organisation provides.

Community levels of service measure the community's perception of Council's service performance, while the technical levels of service measure against technical indicators of performance.

Council's desired level of service is the technical level of service as a minimum. The level of service will be constantly monitored and reviewed with the introduction of the community survey to develop community level of service key performance indicators (KPIs.) It's anticipated the next review will be in four years. Council's levels of service are captured in Table 3-3.

COMMUNITY LEVELS OF SERVICE

PERFORMANCE MEASURE		LEVEL OF SERVICE Objective	PERFORMANCE MEASURE	KPI	CURRENT LEVEL OF SERVICE
*	Quality	Streets are well maintained	Community survey on the physical quality of the streets for driving, cycling, walking and public transport. Consideration of the quantity of Customer Requests and Complaints	KPI based on survey (to be developed, see improvement program)	N/A Survey to set baseline
\$	Function	Asset to meet service needs – 'fit for purpose'	Community survey on the functionality of the streets for driving, cycling, walking and public transport.	KPI based on survey (to be developed, see improvement program)	N/A Survey to set baseline

TECHNICAL LEVELS OF SERVICE

PERFORM MEASURE	ANCE	LEVEL OF SERVICE Objective	PERFORMANCE MEASURE	КРІ	CURRENT LEVEL OF SERVICE
?	Condition	Physical state of transport assets in a serviceable condition	Average condition of kerb assets	Equal or less than condition rating 3	3.40 (not achieved)
			Average condition of road surface assets	Equal or less than condition rating 3	2.54
			Average condition of road pavement assets	Equal or less than condition rating 3	1.35
			Average condition of footpath assets	Equal or less than condition rating 3	2.51
	Renewal	Sustainably managing the renewal of assets	Asset Sustainability Ratio	90%—110%	139%
			Asset Funding Renewal Ratio		106%

TECHNICAL LEVELS OF SERVICE (CONT.)

PERFORMANCE MEASURE		LEVEL OF SERVICE Objective	PERFORMANCE MEASURE	КРІ	CURRENT LEVEL OF SERVICE
	Capacity and Utilisation	Streets have the capacity to meet community need	Community use of public transport	Increase use of public transport	-3.2%
					7.8% in 2022 (11% in 2016)
			Increase in active transport journeys to work	Increase people walking to work	-0.5%
					3.9% walk in 2022 (4.4% walk in 2016) (4.9% in 2011)
				Increase people cycling to work	-0.1% 4.4% cycle in 2022 (4.5% in 2016) (3.6% in 2011)
				100% of bus stops to be DDA compliant	100%
1	Accessibility	Streets are accessible to all	Pathway and bus stop DDA compliance	85% of Pedestrian Ramps are DDA compliant	16% (Not achieved)
				85% of all footpaths are compliant for width	89%
	Safety	Safety compliance standards are achieved	New traffic control will be compliant with relevant Australian Standards	Compliance 95%	100%

Table 3-2: Levels of service





The community's demand for services changes overtime. The reason for change can be varied, some of the common drivers are population, demographics, environment and technology. As service demand changes, Council's assets may also need to change to meet the changing demand. A summary of Council's forecast demands and how these are proposed to be managed is contained in Table 4.1.





DEMAND MANAGEMENT PLAN

Through Council's Community Plan Objective 1.5 – Our City is connected and accessible. Council has developed the Integrated Transport Strategy with the vision: 'Unley's transport system and people movement will be safe, accessible, sustainable and effective.'

The strategy's focus areas include active transport, parking, public transport and shared transport, and traffic management and road safety. The strategy is actioned through the Walking and Cycling Plan and Local Area Traffic Management Studies.

Along with the Integrated Transport Strategy, the Council has developed an Age Friendly Streetscape Guidelines through the Community Plan Objective 1.3 and the Active Aging strategy to consider in all redevelopments of streets and open spaces.

The Disability Access and Inclusion plan outlines targets to improve accessibility in the footpath network to facilitate improved outcomes for all users.

IMPACT ON ASSETS

Council's Walking and Cycling Plan and Local Area Traffic Management Study outcomes are delivered though the new capital budget.

All transport asset renewals to be informed by modern standards and Council's integrated transport strategy.

The addition of new transport assets and any increases in standards for renewals will have ongoing maintenance and operational costs.

The Age Friendly Streetscape Guidelines includes design considerations for lighting, signage, footpaths and traffic management devices. The guidelines outline integration between transport assets and open space assets within the streets such as street furniture, seating and vegetation.

Action plan to improve kerb ramps for DDA compliance, and footpaths to ensure no obstructions and they meet minimum width requirements.



CURRENT POSITION

DEMAND FORECAST

DEMAND IMPACT



CLIMATE CHANGE

Council and the community are increasingly aware of its impact to the environment, and Council's role in environmental sustainability.

Council is committed to pursuing, supporting and creating an environment that will sustain current and future generations. This goal is shared by the community and is a primary objective of most governments across the world.

Council is committed to using fewer precious resources, reducing its carbon footprint and looking for smarter ways to achieve this objective.

Greater environmental sustainability requirements placed on the construction industry.

Increase trend in severe
weather events including
heat, droughts, storms
and storm surges.

Trend for a decrease in average annual rainfall and an increased awareness to minimise water usage.

Hot and dry consecutive summer days on the rise. The number of days over 40°C in eastern Adelaide is projected to double by 2050, and the frequency and duration of heatwaves is projected to increase.

Assets not reaching their stated useful lives due to lack of consideration of climate change.

Increasing management and maintenance demand associated with climate change adaptation.



TECHNOLOGY

Global trend towards smart cities creating simplified services through smart technology.

Growing expectation to implement digital service improvements.

Demand for increased technology provision/access. Council must adapt to the changing way the community operates, thinks and plans.

Smart technology can reduce operating and maintenance costs and assist in the prioritisation of renewal planning.

DEMAND MANAGEMENT PLAN

IMPACT ON ASSETS

Council's Environmental Sustainability Strategy 2016–2020 (currently under review) is the lead strategy implementing the Environmental Stewardship goal and objectives identified in the Community Plan 2033 and 4 Year Delivery Plan.

The Strategy's themes guide direction and inform priorities for environmental projects:

- Green Unley
- Waterwise Unley
- Resilient Unley
- Resourceful Unley
- Energywise Unley.

Council has aligned with Resilient East, providing opportunities for the Eastern Region to collaborate to increase resilience to climate change.

Investigate the impact of climate change on transport infrastructure with industry partners.

Include climate change within the asset risk management plan.

Council's Climate and Energy Plan 2023 identified actions to reduce corporate emissions for building construction and operations.

Council's Environmental Sustainability Strategy provides principals for the delivery of new and renewal of assets, these include:

- LED lighting introduced to local and collector streets.
- Natural and renewable materials to be used in the construction of transport assets (recycled roads, composite materials for boardwalks and bridges, permeable surfaces).

Integration of transport assets with natural and stormwater assets to deliver:

- An increased tree population in the streets to absorb carbon dioxide from the air.
- Water Sensitive Urban Design (WSUD) within Council streets. See Stormwater Asset Management Plan.

Higher costs are associated with environmentally sustainable construction methods.

Condition is to be monitored for changes in asset performance within extreme climate conditions.

The Smart Plan outlines Council's Vision through the strategic use of digital technologies to enhance the lifestyle of residents, better manage the environment, support the local economy and continuously improve the delivery of Council services. Emphasis on smart technologies and digital solutions are fit for purpose and can scale over time. Smart poles provide energy efficient LED lighting with the capability for Wi-Fi signal points, sensors and public address system.

Smart infrastructure and data collection provide opportunities for business improvement and management of transport infrastructure including carparking and travel times.

Maintenance and operating costs will be required for all smart systems.





5.1 Background

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

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

Significant time is spent on the decision to create or acquire a new asset, likewise, financial costs of maintaining an asset from creation to disposal or replacement will need to be planned. New assets require initial expenditure; however, the required financial commitment for the asset's lifecycle costs can be up to five times the initial expenditure.



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

- Creation/Acquisition (Planning, Design/ Procurement, Construction)
- Maintenance and Operations (Operate, Maintain, Monitor)
- Capital Renewal/Replacement (Requirements/Specifications, Upgrade/ Modify, Replace)
- Decommission (Trigger, Decommission, Disposal)

These major stages are further detailed in this Lifecycle Management section.

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

The major stages can be further divided into specific processes as listed in Figure 5-1.



ROAD HIERARCHY

LEGEND

- Primary Arterial Road (State Government Road)
- Railway Line (State Government Rail)
- Secondary Arterial Road (State Government Road)
- Tram Line (State Government Tram)
- ——— Major Collector Road
- Local Crossing Collector
- Local Road

- Train Station
- Tram Station
- **Bus Stops**





Figure 5-2: Road network hierarchies



LEGEND

- **Ridge Park** (01)Barr-smith Ave, **Myrtle Bank** Scammell Reserve **†** (02)Fisher St, Myrtle Bank Fullarton Park/Commu- 🛊 🛉 (03) nity Centre Cnr Fisher St + Fullarton Rd, Fullarton Howard Florey Reserve (04) Campbell Rd, Parkside **Henry Codd Reserve** (05)
 - **Cnr Maud St + Windsor** St, Parkside

Unley Oval (06) Trimmer Tce, Unley

Ł

- Village Green (07) Rugby St, Unley
- **†** ÷ North Unley Park (08) Young St, Goodwood
- Heywood Park, (09) Addiscombe Pl, **Unley Park**
- **Orphanage Park** (10) Mitchell St, Millswood

Soutar Park (11)Albert St. Goodwood **Dora Gild Park** (12) Churchill Ave, **Clarence Park**

15

1

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†

- **Goodwood Oval** (13) Curzon Ave, Millswood
- Forestville Reserve 14) Ł Ethel St, Forestville
 - Page Park Cnr Cross Rd + East Ave, Clarence Park

Princess N Park Byron Rd, **Everard** Pa Hillsley Av Park

(16)

(17)

19

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† †

- Soldiers M (18) Gardens
 - Goodwood Retail/Lib
 - Public Toi
 - Playspace
 - Shopping
 - Precinct



Figure 5-3

NORTH









UNLEY CYCLING ROUTES

5.1.1 Physical Parameters

Figure 5-2 and 5-3 define Council's road and cycling networks, which inform strategic decision making and levels of service to optimise the transport network, supporting safe and efficient movement.

Council Transport Assets include:

ASSET CATEGORY MEASURE

Kerbs	363 kilometres
Roads	169 kilometres and 1,410,357m ²
Footpaths	334 kilometres and 591,880m ²
Bridges	31 road bridges, and 12 pedestrian bridges
Bus Stops	36 bus shelters
Traffic Control Devices	958 devices

Table 5-1: Asset Category Breakdowns



5.1.2 Asset Condition

The objective of a condition assessment is to provide sufficient information on asset condition to allow informed strategic asset planning and asset management decisions to be made. The condition rating is based on the collected asset audits undertaken through visual inspections.

Condition assessments are undertaken every three to five years to ensure contemporary

condition data that informs renewal and planned maintenance spending.

Transport asset condition is measured using a 1-5 rating system summarised in Table 5-2, where condition rating 1 relates to assets in very good condition and rating 5 relates to assets in very poor condition.

RATING	CONDITION	CONDITION DESCRIPTION	ACTION
1	Very Good	A new or near new asset with no visible signs of deterioration.	No action required
2	Good	Early stages of minor deterioration causing no serviceability problems.	Minor defect only, no action required
3	Fair	Some obvious deterioration evident. Serviceability may be impaired slightly.	Maintenance required to sustain the level of service
4	Poor	Severe deterioration evident, starting to limit the serviceability of the asset.	Consider renewal
5	Very Poor	Serviceability problems needing immediate rehabilitation. Possible risk to remain in service.	Replace/dispose

Table 5-2: Asset condition rating

Asset condition ratings are shown below for the key major asset classes of kerb, roads, and footpath.





KERB CONDITION SUMMARY

The kerb network is generally in poor condition and does not meet the service standard of having an average network condition below 3. Being within the inner urban area adjacent the Adelaide city centre, the age of infrastructure in the area is older, with a large amount of kerb assets built following World War One. The kerbs were built using materials and construction techniques of that with segmental concrete panels and separate water tables. Many are now approaching the end of their useful life and their deterioration is exacerbated by the presence of street trees in close proximity that lift and displace the segmental units.

The condition distribution of the kerb network can be seen below showing the high amount of condition 4 assets (close to 60% of the total asset base):



Figure 5-4: Kerb Condition Summary
ROAD CONDITION SUMMARY

The road network is typically in good condition, and while the materials and construction techniques of the early 20th century were not suitable for long lived kerb assets, in contrast to the Macadam pavements built in this era, as the roads were being progressively sealed with asphalt have high strength and long lives.

Roads are condition rated based on their two essential components:

Pavement (PCI) – this is the underlying rock and rubble base that acts as the structure of the road and is designed to withstand the traffic loads and heavy vehicles.

Surface (SCI) – this is the asphalt layer that 'seals' the underlying pavement to protect the structure from weather and damage and provide a smooth riding surface for vehicles and bikes.

The condition breakdown of the road network overall can be seen below, including the breakdown for the surface condition (Road SCI) and pavement condition (Road PCI):





Figure 5-5: Road Condition Summary

ROAD CONDITION SUMMARY

4964M

6353M

4501M

Service State

0

\$6000M

\$4000M

\$2000M 1635M

\$0

Replacement Value



FOOTPATH CONDITION SUMMARY

Footpaths have been heavily invested in over the previous 20 years, with the replacement of the footpath network with interlocking pavers, and the network is in good condition overall. Similar to kerbs, footpaths are heavily influenced by street trees in the urban environment, and where footpaths are in poor condition these are typically due to tree lift and defects rather than failure of the paver assets themselves.



Figure 5-6: Footpath Condition Rating

5.1.3 Asset Valuation

Valuations are undertaken in alignment with Australian Accounting Standard 'AASB13 Fair Value', and 'AASB16 Property Plant and Equipment'. These valuations are required every three to five years, with an independent audit required every five years. Valuations are undertaken to satisfy the financial reporting requirements and to understand the cost to replace assets.

The valuation of Council's transport assets is summarised in the Table 5-3.

ASSET Category	REPLACEMENT VALUE	DEPRECIATED REPLACEMENT COST	ANNUAL DEPRECIATION
Bridges	\$12,171,631	\$5,883,925	\$230,623
Bus Stops	\$469,895	\$346,403	\$16,889
Car Parks	\$3,845,593	\$2,713,301	\$114,129
Kerbing	\$101,247,492	\$28,279,104	\$1,011,815
Footpaths	\$52,941,308	\$37,600,758	\$1,329,943
Road	\$206,742,547	\$161,349,370	\$2,195,238
Street Lighting	\$3,254,080	\$2,748,235	\$165,756
Traffic Control	\$6,871,838	\$4,614,225	\$182,720
TOTAL	\$387,544,384	\$243,535,321	\$5,247,113

Table 5-3: Transport Assets Valuation

5.1.4 Asset Unit Life

The useful life of an asset is an estimate of the number of years it is likely to remain in service, fulfilling its function before it requires replacement. Useful life estimates for transport assets are based on:

- The observed condition of assets in the field and their original construction date
- Industry standards for similar asset types
- Input from manufacturers and suppliers.

ASSET CATEGORY	USEFUL LIFE
Kerbs	100 years
Road Surface	30 years (local roads) and 25 years (collector roads)
Road Pavement	150 years (local roads) and 50 years (collector roads)
Footpath	40 years (interlocking paved)
Bridges	Typically 80 to 100 years
Bus Stops	30 years (bus shelter)
Traffic Control Devices	Typically 40 years (roundabouts, slow points, traffic lights)

Table 5-4 Asset Category Useful Lives



5.2 Operations and Maintenance Plan



Figure 5-5: Asset maintenance process flowchart

5.2.1 Operations and Maintenance Strategies

Maintenance is recurrent expenditure, which is periodically or regularly required as part of the anticipated schedule of works to ensure the asset maintains its condition, achieves its useful life and provides the required level of service. The expenditure is anticipated in determining the asset's useful life.

The civil works and maintenance team undertake maintenance and operational activities for bridges, bus stops, car parks, kerbing, pathways, roads and traffic control. The maintenance process flowchart (Figure 5-5) outlines how maintenance is programmed. The condition assessments inform the forward maintenance program and additional maintenance is identified though routine customer enquiries and staff inspections until the next cycle of condition assessments.

The assets that require the most significant input for operations and maintenance are the kerb and footpath network, which make up over half of Council's annual maintenance expenditure. As much of the kerbing network is old and in poor condition (see section 5.1.2), this typically involves addressing the sections of segmental kerb that has lifted due to tree roots and is causing a hazard or stormwater nuisance ponding. For footpaths, while much of the network is in good condition, this asset type is also strongly influenced by trees in the urban environment and requires regular lift and relay of paving to address trip hazards. Road maintenance focusses on minor repairs where the surface or pavement has suffered an isolated failure due to excess load or environmental conditions such as excess water ingress, and typically present as potholes or sunken areas that affect the ride quality for users. While roads in poor condition will be more prone to these minor failures and require higher amounts of maintenance, they generally occur randomly across the network and are usually reported through customer requests.

Council maintains a higher level of service for maintenance of kerbs, roads, and footpaths within our main street precincts. These are active and economically prosperous public spaces which support community interaction and gathering such as King William Road, Unley Road, and Goodwood Road.

Bridges are identified as a critical asset and can undergo three levels of assessments to inform maintenance and operational programs, along with capital programs:

- Level 1: Routine maintenance inspection, visual inspection to check the general serviceability of the structure, particularly for the safety of road users, and to identify any emerging problems.
- Level 2: Condition rating inspection to assess and rate the condition of a structure (as a basis for assessing the effectiveness of past maintenance treatments, identifying current maintenance needs, modelling and forecasting future changes in condition and estimating future budget requirements).

Level 3: Special inspection, typically an engineering inspection to provide improved knowledge of the condition, load capacity, in-service performance or any other characteristic beyond the scope of other types of inspection.

Bus stop asset requirements are determined by the state government bus service routes. While Council does not operate the bus services, it does however provide infrastructure including bus pads and bus shelters at suitable locations. Council currently has an external agreement for the operation and maintenance of 50 additional bus shelters to the Plan. The maintenance obligations include 24-hour response to personal safety hazards, 48-hour response to hazards preventing use and a weekly inspection and cleaning program.

Council has completed a LED changeover for all local street lighting and is progressing this rollout to all collector roads. A vast majority of lighting on the Council's road network are South Australia Power Networks (SAPN) owned lighting, with asset renewal and maintenance covered by tariffs. The remaining lights are either CLER lighting (customer lighting equipment rate) owned by council or individually metered lighting where it's not practical to connect to the SAPN lighting network. All lighting is renewed and maintained to SAPN and Australian Standards.

5.2.2 Summary of Future Costs

COUNCILS PLANNED EXPENDITURE FOR THE 2023/2024 FINANCIAL YEAR: \$1,871,602.

This consists of the following breakdown:

ASSET CATEGORY	ANNUAL MAINTENANCE EXPENDITURE	MAINTENANCE AS A PERCENTAGE OF TOTAL ASSET VALUE
Kerbs	\$799,615	0.80%
Roads	\$361,190	0.17%
Footpath	\$663,353	1.25%
Bridges	\$4,279	0.03%
Bus Stops	\$7,147	1.52%
Traffic Control & Lighting	\$3,000	0.03%

Table 5-5 Transport Asset Maintenance Expenditure

Over time the maintenance expenditure for the key asset classes of kerbs, footpaths, and roads is expected to reduce as Council moves to more planned maintenance activities rather than reactive. The transition to this approach is currently underway through the Operations team using prioritised defect data collected through condition audits to drive planned program work that allows for optimised spending.

This will be complemented by the planned renewal works being progressively implemented for kerbing assets, aimed at addressing the poor condition of the network. This should result in a large reduction of high-risk defects and customer complaints around lifting and water ponding in the street as the assets are steadily replaced with new concrete kerb. Footpath maintenance is expected to reduce over time through undertaking planned partial renewals in the network, targeting 'pick up and relay' of footpaths with high amounts of defects due to tree roots. This will remove the trip hazards while retaining the existing paver units that are typically still in good condition.

The savings in expenditure through planned maintenance and progressive renewal of the failing assets may be offset by the rising cost in materials. As maintenance of transport assets typically require materials made from non-renewables (such as asphalt, cement, and quarry materials) combined with the cartage fuel costs.

5.3 Renewal Plan (Capital)

Asset renewal is the replacement or refurbishment of an existing asset to return it to the modern standard equivalent performance and level of service. Renewal planning is necessary to ensure adequate funding is available, and assets are replaced at an optimum time to maintain the level of service.

5.3.1 Renewal Identification and Planning

Renewals are primarily programmed based on condition, however early replacement of assets may also be undertaken for upgrades or due to changes in function, standards, safety issues, changes in levels of service, funding opportunities or alignment with external projects, strategies and plans. Similarly, some assets may experience extended useful lives due to a high level of maintenance over its life.

Renewals are primarily identified based on condition, however early implementation of renewal may be undertaken for upgrades and replacements due to changes in standards, safety issues, changes in levels of service, funding opportunities or alignment with external projects, strategies and plans.

Over time, through the implementation of Council's Smart Plan (2023-2027) it is intended that the data captured on the way the community interact and engage with our transport network will help to better inform the way we identify assets for renewal, including the way we plan and design their replacement to better meet the needs of our community.

Renewals are strategically planned using a 'fenceline to fenceline' approach looking at the overall condition of all assets within the road reserve and combining reconstruction where possible to minimise disruption to residents and achieve cost savings. With many kerbs in poor condition overall, they have been prioritised based on where the road asset also requires renewal at the same time, with footpath maintenance or renewal undertaken in conjunction. This is similar where major traffic renewal projects are planned, such as roundabout renewals to include adjoining road and kerb renewals.

Main Street renewals such as kerbing and footpath along Unley Rd or King William Rd are prioritised to link in with major developments along arterial roads and following completion of building works where there can be synergies achieved by working in with the developer and/or State Government. Where renewals are planned for main streets, these go beyond the standard 'like for like' and are replaced to a higher standard and level of service. The previously upgraded King William Road precinct is an example of a higher level of service for a renewal project. The street was designed through surveys, research, discussions and feedback from the community to deliver social, environmental and economic benefits on top of the scheduled asset renewal. The project included renewal of the road pavement, kerbing and footpaths, installation of LED lighting and the introduction of over 70 flexible street spaces for on street parking, outdoor dining and other activations.



Council recognises these improved levels of service required higher upfront capital renewal costs. Design guidelines for main street precincts such as Unley Road have been created to inform their unique levels of service and better forecast the required renewal expenditure for future years, as they are progressively implemented over the next ten years.

Renewal works may be deferred if the cost is beyond the current financial ability to fund it. This can occur when there are higher priority works on other asset groups. When renewal works are deferred, the impact of the deferral on the assets ability to still provide the required level of service will be assessed. Although the deferral of some renewal works may not impact significantly on the short-term operation of the assets, repeated deferral will create a liability in the longer term.

5.3.2 Forecast Renewal Expenditure

The forecast renewal for each of the asset groups within the Transport asset class has been based on the condition audits and validated by visual assessments by Council.

The figures below show the required forecast spend over a twenty year period and includes, (based on the 2022 asset condition data) the forecast replacement year of assets based on their useful life. As the asset classes of roads, kerbs, and footpaths account for over 90% of the Transport assets total replacement value, detailed projections have been undertaken only for these classes. For the remainder of the asset classes (Bridges, Traffic Control, Bus Stops, Lighting) the forecast renewal expenditure is consistent with the depreciation for these assets over the twenty year period.

KERB RENEWAL

The forecast expenditure for kerb renewal can be seen in Figure 5.6. It shows a significant initial backlog of unfunded renewals and a large spend required through years one to fourteen that are reflective of the deteriorating and poor condition of the kerb network (see Section 5.1.2).



Average Annual

Treatment Cost

Figure 5-6: Kerbs twenty year renewal expenditure forecast

\$64.3M Total Treatment

Cost

ROAD RENEWAL

The forecast expenditure for kerb renewal can be seen in Figure 5.7. Similar to kerbing, there is a large initial backlog of unfunded renewals, of which over 50% relate to pavement reconstructions on key collector roads including King William Rd (paved), East Ave, Duthy Street, and Victoria Ave.

Generally the forecast renewal projection is consistent with the shorter life of asphalt surface assets (thirty years) and approximately 75% of the renewals forecast in this period relate to resurfacing works.



Figure 5-7: Roads twenty year renewal expenditure forecast

FOOTPATH RENEWAL

The forecast expenditure for footpath assets can be seen below in Figure 5.8. While many of the footpath assets are in good condition, this is reflected in the projected renewal that is typically low over the majority of the twenty year period. Of note are the high projected costs towards the end of the forecast period for renewal of paving along key arterial routes. While the projections are based on condition alone, they are not reflective of strategic planned renewals around Main Street precincts (refer Section 5.3.1), and the additional costs these incur.

\$22M Total Treatment Cost

\$1.1M Average Annual Treatment Cost



Figure 5-8: Footpaths twenty year renewal expenditure forecast

5.3.3 Renewal Funding Strategy

It is recognised that matching the conditionbased renewal fluctuations from year to year as projected in Section 5.3.2 is not generally possible from both a budget and resourcing perspective. Distributing the renewal costs over the longer period timeframe is preferable from a budget and resourcing perspective.

KERBING

It can be seen from the forecast projections in 5.3.2 that there is a significant spend required in the kerbing asset class initially and over the period. This fits the condition and age profile of Council's kerb network, with the average condition of 3.40 being higher than the service level standard. The projected condition score average based on the forecast renewals would not achieve an average score below 3.0 until the year 2035:



TWENTY YEAR PROJECTED CONDITION SCORE FORECAST

Figure 5.9 Kerb twenty year projected condition score forecast

While Council's current target service level is to maintain the kerbing asset stock at a condition average under 3.0, this class requires significant spending initially to both address the unfunded renewals, and to prevent the significant amount of assets deteriorating around the ten year mark. This needs to be balanced against the peaks forecast around 2035 and that matching this required expenditure is not practical and the works will be required to be spread out over the remainder of the twenty year period.

This planned smoothing of expenditure creates some risks, particularly toward the end of the forecast period where the expenditure will change from undertaking renewals ahead of schedule, to returning to a backlog with unfunded renewals. The average annual planned expenditure to achieve a smoothed consistent spend for the next twenty years can be seen below with planned renewal \$3,200,000 annually:

	TOTAL (20 YRS)	AVERAGE (20 YRS)
Planned Asset Renewal	\$64,000,000	\$3,200,000
Forecast Asset Renewal	\$64,278,626	\$3,213,931
Annual Depreciation	\$20,236,300	\$1,011,815

ASSET SUSTAINABILITY RATIO OVER THE TWENTY YEAR PERIOD: 316%

ASSET FUNDING RENEWAL RATIO OVER THE TWENTY YEAR PERIOD: 99.5% The impact on kerbing assets over the short term through smoothing the renewal costs over the twenty-year period is that some assets may be replaced before reaching the end of their useful life. Over the long term, this will be offset as some assets will be pushed beyond their useful life and this may be poorly received by the community. The risk will be mitigated through planning works in arterial roads and streets of higher use. This is recognised through the asset funding renewal ratio that over the twenty year period is 99.5%, however, when considered in 10 year windows, is quite different:

	TOTAL (YRS 1-10)	TOTAL (YRS11-20)
Forecast Asset Renewal	\$25,329,274	\$38,949,352
Planned Asset Renewal	\$32,000,000	\$32,000,000
Asset Funding Renewal Ratio	126%	82%



ROADS

It can be seen from the forecast projections in 5.3.2 that there is a significant spend required in the road asset class, initially to address the unfunded renewals for poor condition pavements. It is worth considering that this backlog of pavement renewals is only a small percentage of the network and overall the condition is very good.

Similar to kerbs, roads have a high initial forecast spend required and includes peaks around 2034. While ensuring Council's current target service level of maintaining the road asset stock is at a condition average under 3.0, this class requires significant spending initially to both address the unfunded renewals, and to prevent the significant amount of

ASSET SUSTAINABILITY RATIO OVER THE TWENTY YEAR PERIOD: 91.1%

ASSET FUNDING RENEWAL RATIO OVER THE TWENTY YEAR PERIOD: 104.7%

assets deteriorating around the peaks. It is recognised that matching this required forecast expenditure is not practical and the works will be required to be spread out over the remainder of the twenty year period.

This planned smoothing of expenditure creates some risks, particularly toward the end of the forecast period where the expenditure will change from undertaking renewals ahead of schedule to returning to a backlog with unfunded renewals. The average annual planned expenditure to achieve a smoothed consistent spend for the next twenty years can be seen below with planned renewal \$2,000,000 annually:

	TOTAL (20 YRS)	AVERAGE (20 YRS)
Planned Asset Renewal	\$40,000,000	\$2,000,000
Forecast Asset Renewal	\$38,191,580	\$1,909,579
Annual Depreciation	\$43,904,760	\$2,195,238



The impact on road assets over the short term through smoothing the renewal costs over the twenty-year period is that some assets may be replaced before reaching the end of their useful life. Over the long term this will be offset as some assets will be pushed beyond their useful life and this may be poorly received by the community. The risk will be mitigated through prioritising road renewals in collector roads that have higher use and heavier traffic loads and are more critical to ensure access for the community.

It is recognised that while the asset sustainability ratio is only 91.1%, this is still within the target range based on service levels, and also takes into account that many of the road pavement assets have very long lives (150 years for local roads) and will not require renewal for many, many years. When considering the breakdown in expenditure and ratios for the shorter life road surface alone, this demonstrates a balance against the annual depreciation:

	AVERAGE (20 YRS)
Planned Asset Renewal Asphalt Surface	\$1,600,000
Forecast Asset Renewal Asphalt Surface	\$1,591,346
Annual Depreciation Asphalt Surface	\$1,538,583

ASSET SUSTAINABILITY RATIO OVER THE TWENTY YEAR PERIOD FOR ROAD SURFACES: 104%

ASSET FUNDING RENEWAL RATIO OVER THE TWENTY YEAR PERIOD FOR ROAD SURFACES: 100%



City of Unley

FOOTPATHS

While the projection for footpath renewals are very low in the short term, over time the steady deterioration in the network towards the high expenditure spend forecast at the end of the twenty year period will be reflected in the overall condition of the network, reaching a point where it no longer meets the service level of standard of an average condition of 3.0 by 2033.

By undertaking a planned smoothing of expenditure over the period, this ensures the condition of the network overall is maintained below 3.0. While this does mean some footpaths are brought forward in their planned renewal, they will be prioritised to align with kerb and road renewals or strategic main street projects on arterial roads. The planned expenditure will also be higher than the forecast renewals to reflect the inclusion of these strategic main street renewals and that in some cases the existing footpath asset may not have reached the end of their life when being replaced.

The average annual planned expenditure to achieve a smoothed consistent spend for the next twenty years can be seen below with planned renewal \$1,500,000 annually:

ASSET SUSTAINABILITY RATIO OVER THE TWENTY YEAR PERIOD: 112%

ASSET FUNDING RENEWAL RATIO OVER THE TWENTY YEAR PERIOD: 136%

	TOTAL (20 YRS)	AVERAGE (20 YRS)
Planned Asset Renewal	\$30,000,000	\$1,500,000
Forecast Asset Renewal	\$22,041,966	\$1,102,098
Annual Depreciation	\$26,598,860	\$1,329,943



TWENTY YEAR PROJECTED CONDITION SCORE FORECAST

Figure 5.9 Kerb twenty year projected condition score forecast

TRANSPORT ASSETS TOTAL

When considered in aggregate, the planned renewal funding strategy can be seen below:

	AVERAGE FORECAST RENEWAL EXPENDITURE (PER ANNIIM)	PLANNED RENEWAL EXPENDITURE (PER ANNIIM)
Kerbs	\$3,213,931	\$3,200,000
Roads	\$1,909,579	\$2,000,000
Footpath	\$1,102,098	\$1,500,000
Bridges	\$127,000	\$127,000
Bus Stops	\$17,000	\$17,000
Lighting	\$170,000	\$170,000
Traffic Control	\$167,000	\$167,000
Car Parks	\$115,000	\$115,000
TOTAL	\$6,936,608	\$7,296,000

Table 5-3: Transport Assets Valuation

ASSET SUSTAINABILITY RATIO OVER THE TWENTY YEAR PERIOD: 139%

ASSET FUNDING RENEWAL RATIO OVER THE TWENTY YEAR PERIOD: 106%



5.4 Creation / Acquisition Plan (New Capital)

New capital relates to new assets or a significantly improved level of service that did not previously exist. They may result from various needs derived from demands such as population growth, environmental and technology change (as mentioned in Section 4).



5.4.1 New Capital Identification

The need for new transport assets arises from a variety of sources including:

- Community requests
- Council resolutions
- Proposals identified by Council strategies
- Grant opportunities
- Partnerships with external organisations.

These projects are prioritised each year against all other asset categories and Council proposals. New assets may also be created as part of major subdivisions creating new Council owned roads, kerb, and footpath.

5.4.2 Summary of Future New Capital

The following list details areas where new capital funds are forecast for Transport assets linked to Council strategies, main street upgrades, and major subdivisions, and do not consider unplanned State Government and Federal Government grant programs that can alter the amounts required annually to maximise the opportunity to leverage grant funding that can be received.

WALKING AND CYCLING PLAN

Council's walking and cycling plan (2022-2027) includes a proposed five-year delivery plan that outlines a number of new asset construction projects linked with improving sustainable transport around the City. Assets constructed through this strategy will predominantly be new traffic control devices, shared bike paths, and kerbing assets.





- Identified priority arterial road crossing points and interventional constraints for and extrained on the second secon
 - inter-regional connections for pedestrian and bicycle improvements
 - Possible additional priority projects subject to further investigation and/or State Government partnership funding opportunities.

Young Street Neighbourhood Bicycle Route

Wilberforce Walk Stage 2 and Stage 3

Figure 5-11: Walking and Cycling Priority Projects 2022-2027

P4

P5



5.5 Decommission Plan

MAIN STREET PRECINCT UPGRADES

It is recognised that when renewing key main streets 'like for like' renewal is not appropriate to achieve the level of service planned for the precinct, and when works are undertaken, additional new assets of a higher standard are included.

Footpath assets will be upgraded to a higher quality bespoke paver as part of the works in line with the design guidelines for the location.

As well as upgraded assets, new assets may be created including new lighting, kerbing, and traffic control devices.



URBAN PALETTE

NEW TRANSPORT ASSETS

- Leader Street (former LeCornu Site) This location is subject to a large scale subdivision to create high density residential allotments, and featuring internal roads, kerbs, footpaths, and lighting.
- Mary Street (Brethren Site) A smaller multi lot subdivision that will feature a central internal roadway with traffic control devices, kerbing, and footpaths.

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

Decommission of assets can be triggered in the following situations:

- > The end of useful life of existing assets.
- Safety factors inherent to the asset.
- Non-compliance of the asset and prompting a modern equivalent replacement.

Decommission of assets can involve the following courses of action:

- Design and replacement of the asset with a modern fit for purpose equivalent.
- Removal of the asset with the aim of repurposing the land in line with the long term strategy of Council.
- The sale of the asset (in part or in whole), in situations where Council is looking to consolidate the asset portfolio.

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Risk Management



6.1 Critical Assets

Critical assets are those assets which have a high consequence of failure, but not necessarily a high likelihood of failure. The identification of critical assets and failure modes means investigative activities, condition inspection programs, maintenance and capital expenditure plans can be effectively targeted.

Factors influencing criticality may be risk scored on safety, production/ effort, cost and reputation.

Critical assets within the transport assets include road bridges, traffic control and street lighting, which all directly impact public safety. Other critical transport assets include the roads and pathways, making sure Council provide surfaces that are rideable for vehicles and cyclists and walkable for all users.

6.2 Risk Assessment

The process for managing Council's risks is consistent with the International Risk Management Standard ISO 31000:2018. It involves five key steps, additional steps to ensure feedback through a monitoring and review process and appropriate communication and consultation.

Council is committed to effective risk and opportunity management to:

- Improve its ability to deliver community priorities, service delivery and outcomes for Council.
- Maximise opportunities and minimise the impact and likelihood of risk.
- Protect its employees, assets, liabilities and its community by avoiding or mitigating losses.

Provide greater certainty for its employees, residents, stakeholders and the community in which Council operates by understanding and managing its risks.

Council acknowledges risk management is an essential part of best practice asset management. The risk assessment process identifies credible risks, the likelihood of the risk event occurring, and the consequences should the event occur, develops a risk rating, evaluates the risk and develops a risk treatment plan for unacceptable risks.

An assessment of risks associated with transport assets using Council's risk matrix (Table 6-1), has identified, analysed and evaluated transport risks. Table 6-2 outlines Council's risk management for transport assets and is to be reviewed annually at a minimum outside of the Plan.

		CONSEQUENCE								
		Catastrophic	Major	Moderate	Minor	Insignificant				
	Rare	MEDIUM	MEDIUM	LOW	LOW	LOW				
000	Unlikely	HIGH	MEDIUM	MEDIUM	LOW	LOW				
ELIH(Possible	HIGH	HIGH	MEDIUM	MEDIUM	LOW				
LIKI	Likely	EXTREME	HIGH	HIGH	MEDIUM	MEDIUM				
	Almost Certain	EXTREME	EXTREME	HIGH	HIGH	MEDIUM				

.

Table 6-1: Risk matrix

RISK DESCRIPTION

(Event or potential event focused and their impact upon objectives)

INHERENT RISK

CONTROLS ALREADY IN PLACE

Level of risk with NO controls in place

(What existing controls are in place to prevent and/or manage the risk?)

		Consequence	Likelihood	Risk Rating	
1	Unsustainable management of assets due to poor quality data within asset management plan.	Major	Likely	High	Periodic delivery of condition assessments and revaluations in line with industry standards.
2	Council staff and/or members of the public injured as a result of poorly maintained infrastructure.	Catastrophic	Likely	Extreme	Annual maintenance budgets. Periodic delivery of condition assessments. Maintenance inspections. Timely response to reported hazards in alignment with the service level agreement.
4	Council staff and/or members of the public injured as a result of non-compliance to standards.	Catastrophic	Likely	Extreme	Engaging suitably qualified consultants to undertake transport designs compliant to relevant Australian Standards.
3	Council unable to fund required capital and maintenance due to economic downturn.	Moderate	Likely	High	Maintain strong sustainability ratio to avoid a backlog of capital works. Ability to fund capital program through borrowings. Ability to reduce levels of service.
4	Climate change not appropriately planned for with respect to asset management.	Moderate	Likely	High	High level targets are set through the objectives and targets within the Environmental Sustainability Strategy.

Table 6-2: Transport risks

s effective s risk?	RESIDUAL RISK Level of risk if existing controls are effective		Risk e?	TREATMENTS/ ADDITIONAL CONTROLS (Additional controls that can be implemented to further reduce the level of risk)	TREATMENT OWNER & TIMING (Who is responsible for implementing the treatment and	RISK LEVEL AFTER TREATMENTS If treatments implemented are effective			
Are the Control at managing the	Are the Control at managing th Consequence Likelihood	Risk Rating	ls the Residual Rating Tolerabl		When it should be implemented/ completed)	Consequence	Likelihood	Risk Rating	
Effective	Major	Possible	Medium	Yes	Continuous improvements in asset management maturity and activities through the improvement program.	Assets and Operations and Finance & Procurement. See improvement program (Section 8.2).	Major	Unlikely	Medium
Majority effective	Catastrophic	Rare	Medium	Yes	N/A	N/A	N/A	N/A	N/A
Majority effective	Catastrophic	Rare	Medium	Yes	N/A	N/A	N/A	N/A	N/A
Majority effective	Moderate	Rare	Low	Yes	N/A	N/A	N/A	N/A	N/A
Partially effective	Moderate	Possible	Medium	No	Climate change addressed with respect to Councils impact on the environment as well as the environments impact to councils' assets. Include climate change as a considered factor throughout the Plan's, outlining the impact and associated demand on assets. Address assets within Climate and Energy Plan.	Assets and Operations. Ongoing as asset management plans and council strategies are updated.	Moderate	Rare	Low



This section contains the financial requirements resulting from all the information presented in Section 5 of the Plan. The financial projections will be refined as part of the ongoing revision of the Plan.



7.1 Valuation Forecast

Asset values are projected to increase as additional assets are added through capital works. Additional assets will generally increase the operational and maintenance requirements in the longer term, as well as the need for renewal. Additional assets will be included for future depreciation forecasts.

7.2 Planned Renewal Expenditure

Figure 7-1 outlines the financial projection for forecast asset renewal and planned renewal. These figures are based on current costs and no indexation has been applied:

7.3 Asset Renewal Funding and Sustainability Ratio

These ratios indicates whether Council has the financial capacity to fund asset renewal at continued existing service levels. Council's target is to achieve between 90 to 110% average.

ASSET SUSTAINABILITY RATIO OVER TWENTY-YEAR PERIOD: 139%

ASSET FUNDING RENEWAL RATIO OVER TWENTY-YEAR PERIOD: 106%

This ratio is an important budget indicator over the ten period of planned expenditure, as it demonstrates Council is adequately planning for and funding the replacement of open space assets as they reach the end of their life.



TWENTY YEAR FORECAST AND PLANNED RENEWAL EXPENDITURE

Figure 7-1: Transport twenty year forecast and planned renewal expenditure



7.4 Key Assumptions

The assumptions and data used in presenting this forecast information were:

- Replacement costs derived from the fixed asset register in Technology One asset database.
- Condition data derived from condition audits and revaluations.
- Appropriate resources will be made available to manage the Plan.
- Council income will remain consistent with LTFP.
- > There will be no natural disasters.

7.5 Forecast Reliability and Confidence

The expenditure projections are based on the best available data. Data confidence is critical for an accurate expenditure projection. As new data becomes available, the forward plans will be updated. There are five levels that measure data confidence. Council's transport asset data confidence is currently *(B) Reliable* across condition, spatial and financial data. The confidence level has increased since the asset management plans in 2020 with the creation of a single 'source of truth' database of assets that comprehensively details their attributes, spatial location, and value.

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

CONFIDENCE LEVEL DESCRIPTION

Table 7-1: Data confidence level



8.1 Status of Asset Management Practices

Council is committed to improve the data quality and confidence by implementing actions within the improvement program in Table 8-1.

8.1.1 Accounting and Financial Systems

Council uses Technology One as its financial management and accounting system. Technology One has the capability to report the full lifecycle of assets, providing full transparency from acquisition to disposal of assets.

8.1.2 Asset Management System

Council uses Technology One – Enterprise Asset Management software as its Asset Management System. Initial set up of the asset management system is crucial to ensure integration between operating and financial functions. Council's initial set up of the asset management system was incomplete and is being addressed through the improvement program, periodically updating the asset registers during revaluations.

A future improvement is to integrate the financial system and asset management system following each asset categories condition assessment and revaluation.

Council's geographic information system (GIS) data is stored within a specialised GIS software suite. An improvement will be to integrate the GIS data with the asset register to provide live spatial data.



8.2 Improvement Programs

The improvement program derived from the Plan is shown in Table 8-1.

TASK NO.	TASK	RESPONSIBLE OFFICER	RESOURCE REQUIRED	DUE DATE
1	Continual review and update of the asset register.	Asset Management Officer	Internal	Ongoing
2	Condition assessment to be completed.	Senior Assets and Engineering Lead	Internal / External	Ongoing
3	Integration of transport assets with Asset Management System, the finance module in TechOne and GIS.	Asset Management Officer Manager Business Systems Solutions	Internal	Ongoing staged approach
4	Undertake customer research on transport assets. This will provide data for future planning of transport assets ensuring the required level of services are met.	Senior Assets and Engineering Lead	Internal	2025/26
5	Inclusion of a dedicated asset sustainability and resilience section for future Asset Management Plans outlining how the management of transport assets caters for climate change and carbon neutrality.	Senior Assets and Engineering Lead	Internal / External	Ongoing

Table 8-1: Improvement program

8.3 Monitoring & Review Procedure

Council will schedule the Plan review into its strategic and annual planning and budget processes. The Plan has a life of four years.

8.4 Performance Measures

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

- Level of Service Key Performance Indicators (KPIs).
- **2** Delivery of improvement program.
- 3 Improved data confidence.
- 4 Review of the Plan minimum every four years.









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