



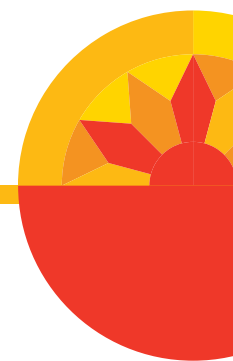
Transport

**ASSET
MANAGEMENT
PLAN 2020**

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Transport Assets Summary

BUS STOPS

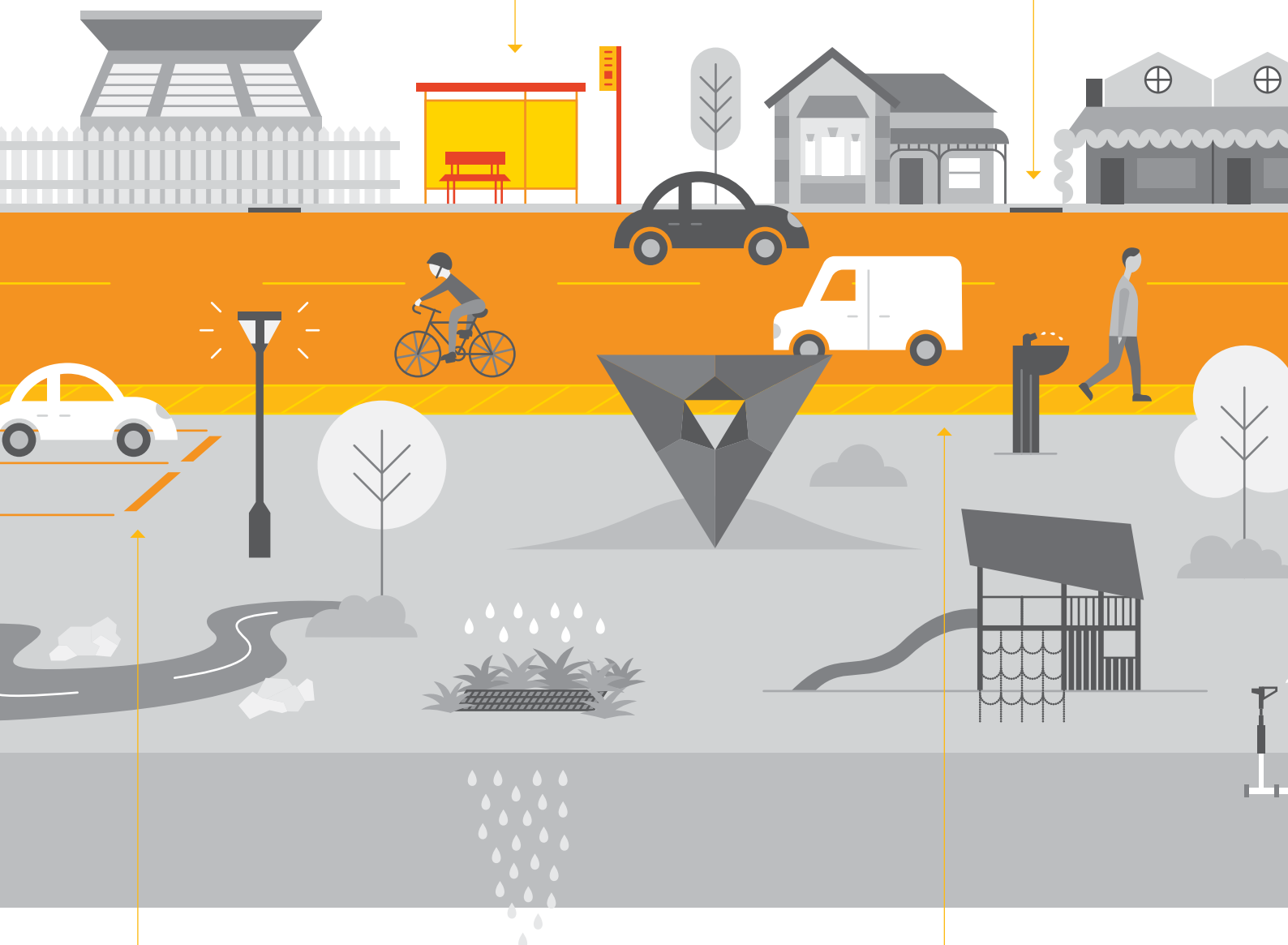
Replacement cost:
\$390,762

● Condition: 97%

KERBING

Replacement cost:
\$28,047,504

● Condition: 91%



CAR PARKS

Replacement cost:
\$3,214,725

● Condition: 100%

BRIDGES

Replacement cost:
\$9,617,655

● Condition: 74%

PATHWAY

Replacement cost:
\$57,447,644

● Condition: 99%

TRAFFIC CONTROL

Replacement cost:
\$5,700,088

● Condition: 97%

STREET LIGHTING

Replacement cost:
\$3,085,184

● Condition: 99%



ROAD

Replacement cost:
\$161,325,020

● Condition: 92%

Total

Replacement cost:
\$268,828,582

● Condition: 93%

Condition percentage represents assets in fair to very good condition.

The City of Unley (Council) has adopted four asset management plans which set out its goals and objectives for managing key infrastructure and assets, namely building, open space, stormwater and transport.



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



QUALITY

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

Population is forecast to increase 13% by 2040
Over the last five years 30% of residents are new to Council



CLIMATE CHANGE

Awareness of the Council's role in climate sustainability
Increasing trend of severe weather events



TECHNOLOGY

Global trends towards smart cities

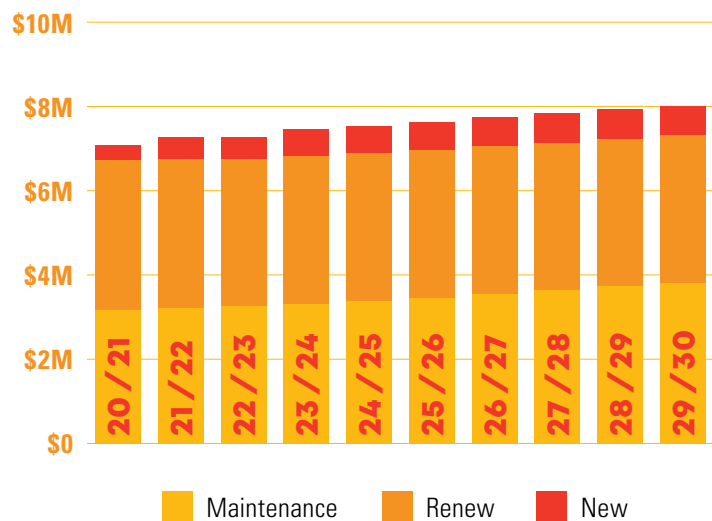
CONDITION



93% transport asset condition satisfaction

FINANCIAL SUMMARY

TRANSPORT TEN YEAR FORECAST EXPENDITURE



The forecast contained within the Plan will be reviewed annually with an update completed every four years.

Council is committed to continuously improving the quality and maturity of its asset management practices. The improvement program specifies its commitment to increase asset management maturity and data confidence. Key performance measures have been established to track Council's performance of its assets and asset management practices.

2

Introduction

2.1 Background

The Plan covers the transport assets serving Council's transportation needs by providing an effective transport network to supports 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 ten 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.

The Plan is developed and implemented in conjunction with the following Council plans, strategies and policies (Table 2-1):

PLANS, STRATEGIES & POLICIES

- Community Plan 2033
- 4 Year Delivery Plan 2017–2021
- Long Term Financial Plan 2020–21 to 2029–30
- Environmental Sustainability
- Digital Unley
- Asset Management Policy
- Active Ageing Strategy
- Walking and Cycling Plan
- Integrated Transport Strategy
- Tree Strategy
- Asset Management Plans

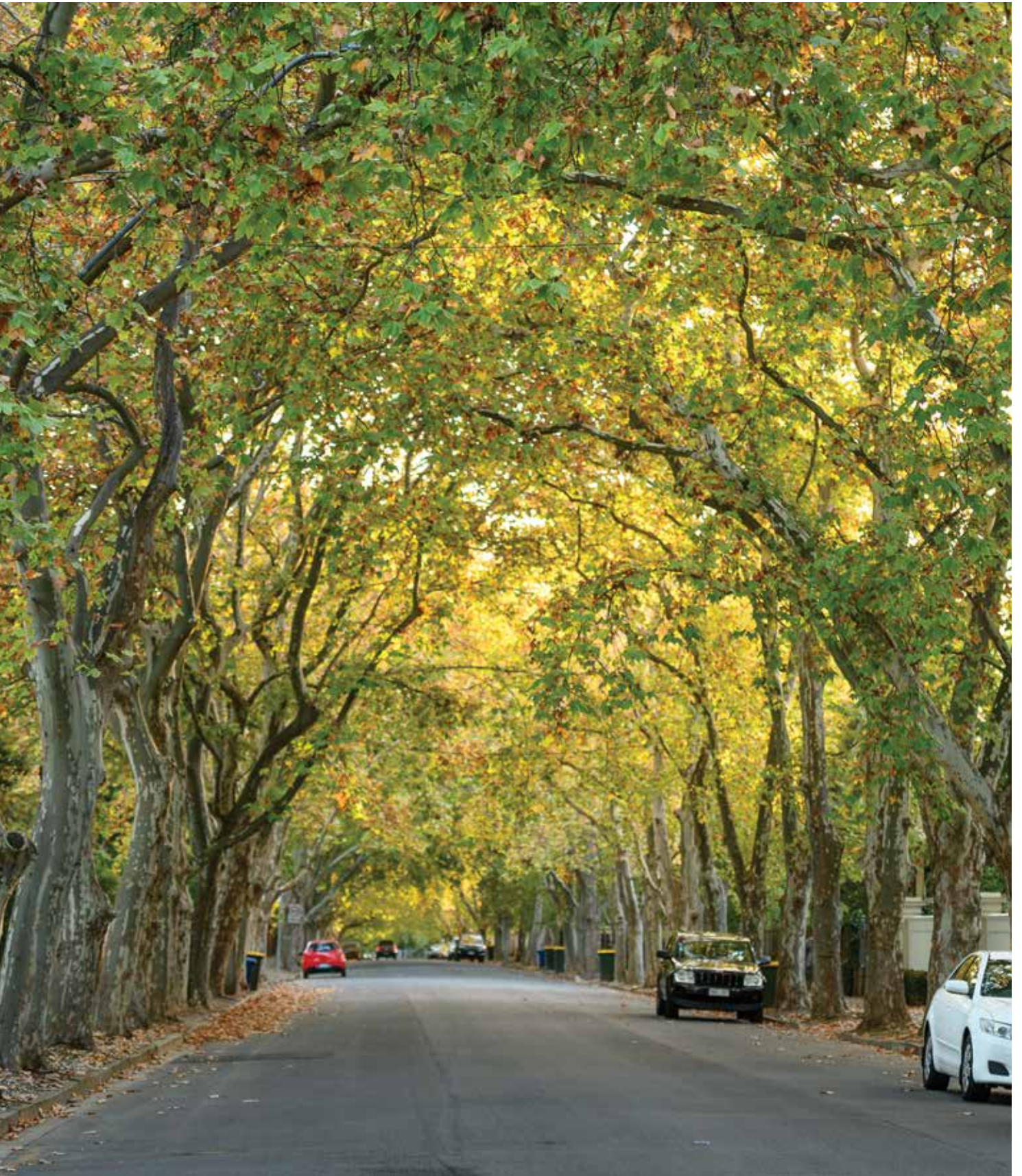
Table 2-1: Plans, Strategies and Policies.



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	<ul style="list-style-type: none"> ▶ Opportunity to provide input into the development and review of the Council's strategic management plans.
Elected Members	<ul style="list-style-type: none"> ▶ 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	<ul style="list-style-type: none"> ▶ Audit Committee will review, make recommendations and observations to Council on the financial outcomes of the Plans.
Chief Executive Officer	<ul style="list-style-type: none"> ▶ 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 – City Development	<ul style="list-style-type: none"> ▶ Ensures asset management plans are completed and reported to CEO and Council. ▶ Ensures the capital works programs are delivered in line with strategic planning. ▶ Ensures the maintenance programs are achieving service standards.
Assets and Operations Manager	<ul style="list-style-type: none"> ▶ 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 Engineering Lead	<ul style="list-style-type: none"> ▶ Manages development and review of asset management plans. ▶ 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	<ul style="list-style-type: none"> ▶ Coordinate Council resources to deliver the maintenance program.
Civil Works and Maintenance Team	<ul style="list-style-type: none"> ▶ Deliver operations and maintenance.
Asset Management Team	<ul style="list-style-type: none"> ▶ 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



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.



ENVIRONMENT STEWARDSHIP

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.



CIVIC LEADERSHIP

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 decision-making 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.

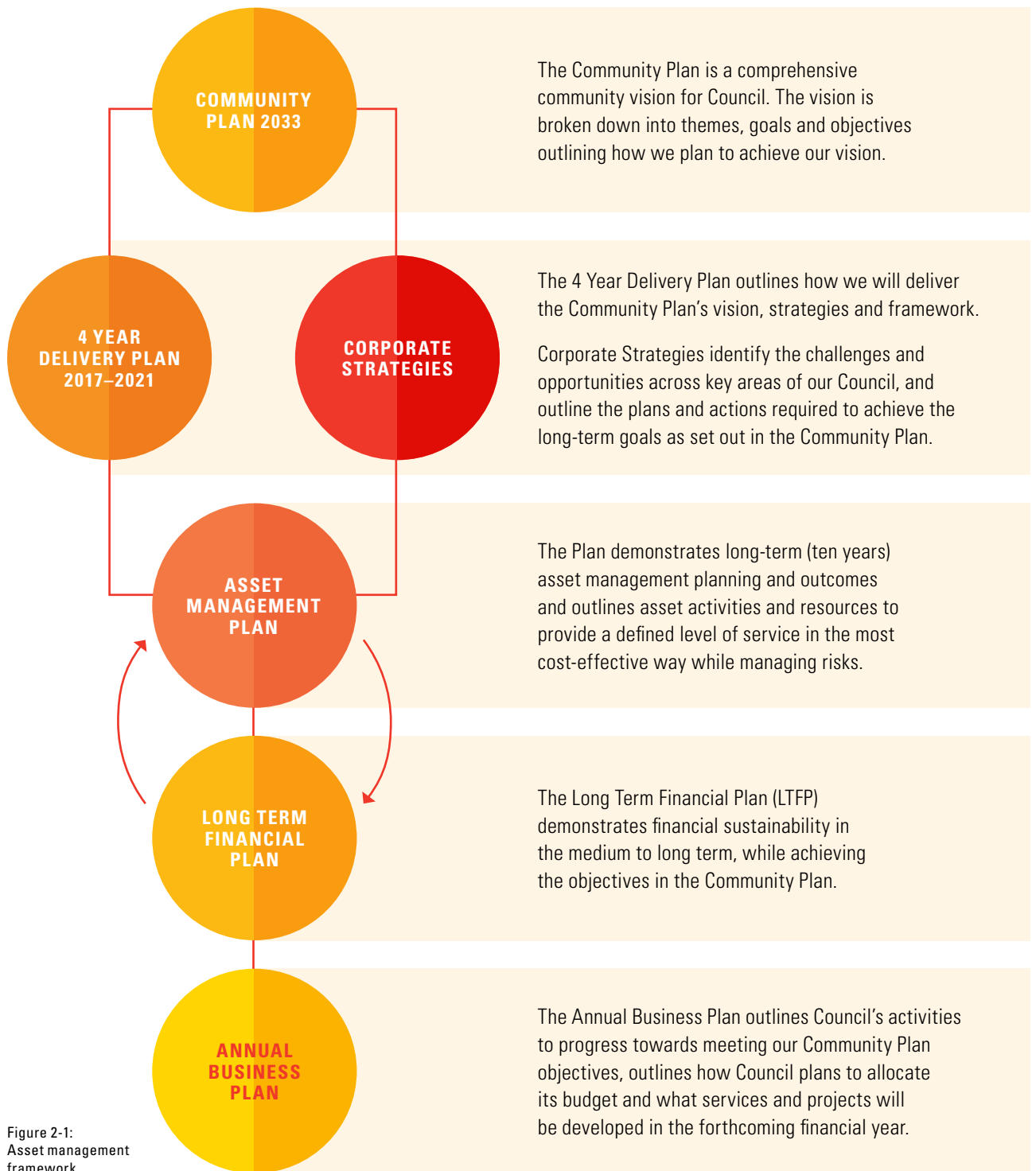


Figure 2-1:
Asset management
framework

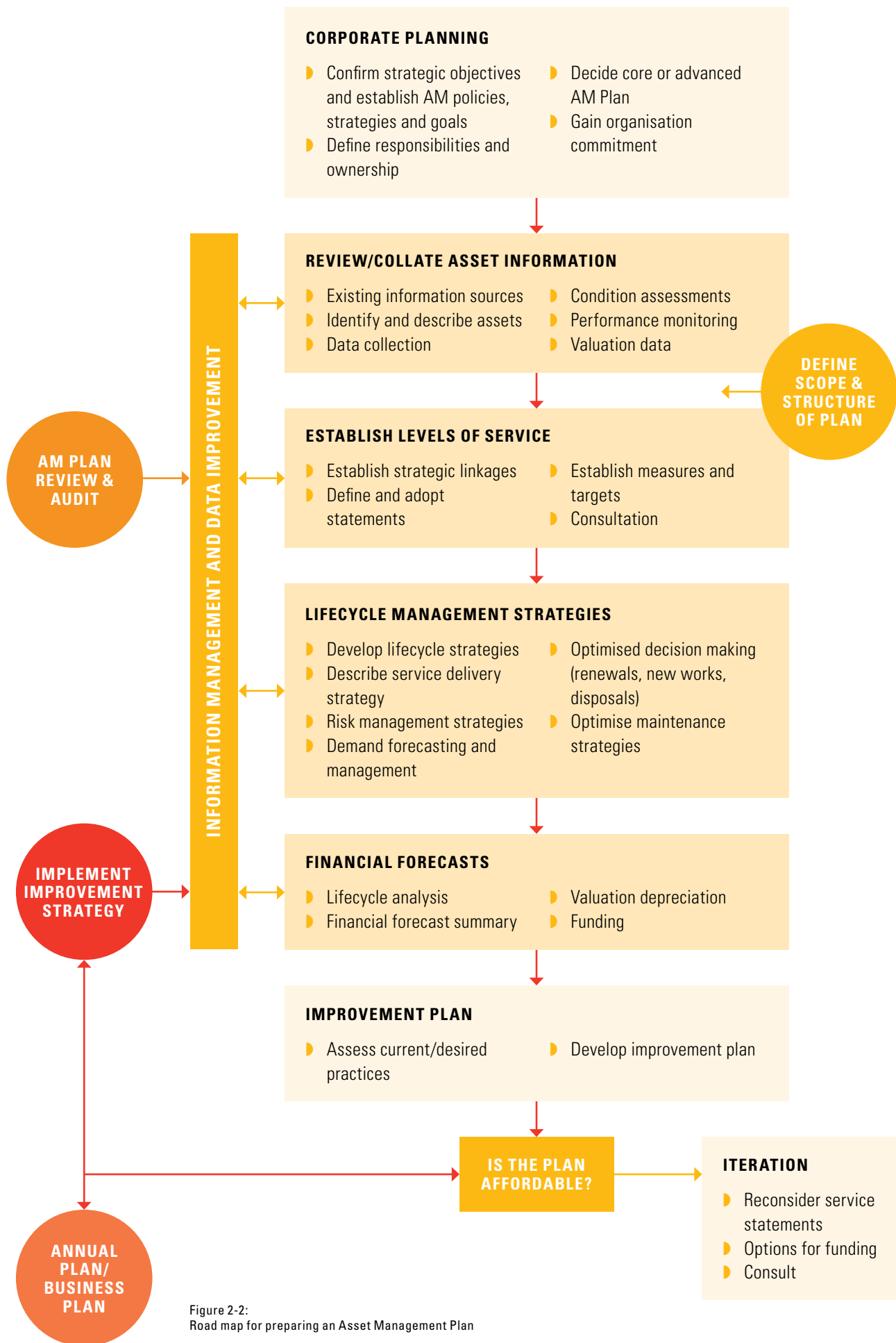


Figure 2-2: Road map for preparing an Asset Management Plan

Source: IPWEA, 2006, International Infrastructure Management Manual (IIMM) Fig 1.5.1, p 1.11

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 long-term financial planning and reporting. The improvement program (Section 8) outlines and prioritises the steps required to an advanced asset management maturity.



3

Levels of Service

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 LTFF 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 to 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	REQUIREMENT
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.
Austrroads Guide to Road Design Part 6A: Paths for Walking and Cycling	Have consideration of, adhere to and fulfil the requirements of the Standards.
Australian Accounting Standards	Standards applied in preparing financial statements, relating to the valuation, revaluation and depreciation of transport assets.
Development Act 1993	An Act to provide for planning and regulate development in the State; to regulate the use and management of land and buildings, and the design and construction of buildings; to make provision for the maintenance and conservation of land and buildings where appropriate; and for other purposes.
Disability Discrimination Act 1992	Provides protection for everyone in Australia against discrimination based on disability. It encourages everyone to be involved in implementing the Act and to share in the overall benefits to the community and the economy that flow from participation by the widest range of people.
Environmental Protection Act 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.
Local Government Act 1999	Sets out role, purpose, responsibilities and powers of local governments including the preparation of long-term financial plan supported by asset management plans for sustainable service delivery.
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 3-2.

COMMUNITY LEVELS OF SERVICE

PERFORMANCE MEASURE	LEVEL OF SERVICE OBJECTIVE	PERFORMANCE MEASURE	KPI	2020
 Quality	Streets are well maintained	Community survey on the physical quality of the streets for driving, cycling, walking and public transport.	KPI based on survey (see improvement program)	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 (see improvement program)	Survey to set baseline

TECHNICAL LEVELS OF SERVICE

PERFORMANCE MEASURE	LEVEL OF SERVICE OBJECTIVE	PERFORMANCE MEASURE	KPI	2020
 Condition	Physical state of transport assets in a serviceable condition	Average condition of transport assets	Equal or less than condition rating 3	2.1
		Average condition of bridge assets	Equal or less than condition rating 3	2.9
		Average condition of bus stop assets	Equal or less than condition rating 3	2.0
		Average condition of car park assets	Equal or less than condition rating 3	1.7
		Average condition of kerbing assets	Equal or less than condition rating 3	2.5
		Average condition of pathway assets	Equal or less than condition rating 3	1.5
		Average condition of road assets	Equal or less than condition rating 3	1.9
		Average condition of street lighting assets	Equal or less than condition rating 3	2.0
		Average condition of traffic control assets	Equal or less than condition rating 3	2.4

TECHNICAL LEVELS OF SERVICE (CONT.)





PERFORMANCE MEASURE	LEVEL OF SERVICE OBJECTIVE	PERFORMANCE MEASURE	KPI	2020	
	Renewal	Sustainably managing the renewal of assets	Asset Renewal Ratio	90%–110%	91%
			Community use of public transport	Increase use of public transport	+0.2% 11.0% in 2016 (10.8% in 2011)
	Capacity and Utilisation	Streets have the capacity to meet community need	Increase in active transport journeys to work	Increase people walking to work	-0.5% 4.4% walk in 2016 (4.9% in 2011)
				Increase people cycling to work	+0.9% 4.5% cycle in 2016 (3.6% in 2011)
	Accessibility	Streets are accessible to all	Pathway and bus stop DDA compliance	Budgeting for DDA improvements through renewal program	Yes
	Safety	Safety compliance standards are achieved	New traffic control will be compliant with relevant Australian Standards	Compliance 95%	95%

Table 3-2: Levels of service





Future Demand

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.



CURRENT POSITION	DEMAND FORECAST	DEMAND IMPACT
------------------	-----------------	---------------

POPULATION AND DEMOGRAPHICS

<p>Population increase:</p> <ul style="list-style-type: none"> Total estimated population 39,208 (ABS 2019). 	<p>Planned to accommodate an additional 5,000 people by 2040.</p> <p>Higher than average provision of medium density housing (38%), which is anticipated to further increase in the next 30 years.</p>	<p>Increased demand and use of transport assets.</p> <p>As streets have increased numbers, the demand will increase for traffic control, car parking and access for alternate forms of transport (cycling, public transport, walking).</p>
<p>Changing demographics:</p> <ul style="list-style-type: none"> 11,257 new residents have moved into the Council within the last five years – 30% are new to Council. Average age is 39 years old. A quarter of the population are families (couples with children). 	<p>Growth in aging population.</p> <p>Growth in children aged between 0–9 years.</p> <p>Increase in families moving to Council.</p> <p>Increasing multiculturalism.</p>	<p>Diverse demographics may create demand for improved accessibility and service demands through transport infrastructure. This includes:</p> <ul style="list-style-type: none"> High standards of footpaths condition and DDA requirements. Cycling infrastructure. Bus stop infrastructure. Signage including wayfinding. Traffic control to control traffic movements and integrate vehicles, cyclists and pedestrians.



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.

IMPACT ON ASSETS

Council's Walking and Cycling Plan and Local Area Traffic Management Study outcomes are delivered through 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.



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 of 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.

Table 4-1: Future demands

DEMAND MANAGEMENT PLAN

Council's Environmental Sustainability Strategy 2016–2020 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 provides opportunities for the Eastern Region to collaborate to increase resilience to climate change.

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

Include climate change within the asset risk management plan.

Council is developing a Climate and Energy Plan to be endorsed in 2020/21.

Digital Unley outlines Council's Digital 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.

IMPACT ON ASSETS

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)
- ▶ Electric car changing station at Hayward Park promoting energy efficient lifestyles in the community.

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

- ▶ An increase 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.

Smart poles provide energy efficient LED lighting with the capability for Wi-Fi signal points, sensors and public address system.

Interactive smart screens located around the City can deliver Council's messages in near real time.

Smart infrastructure and data collection provide opportunities for business improvement.

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





5

Lifecycle Management

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.

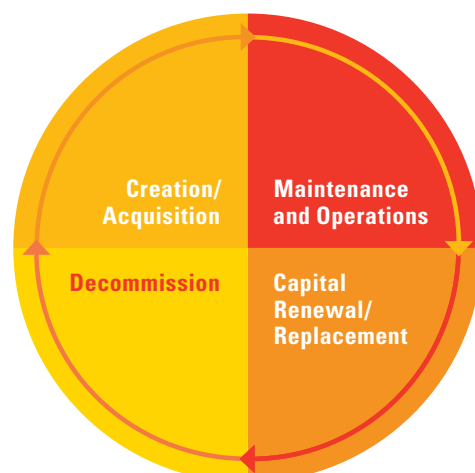


Figure 5-1:
Asset lifecycle flowchart

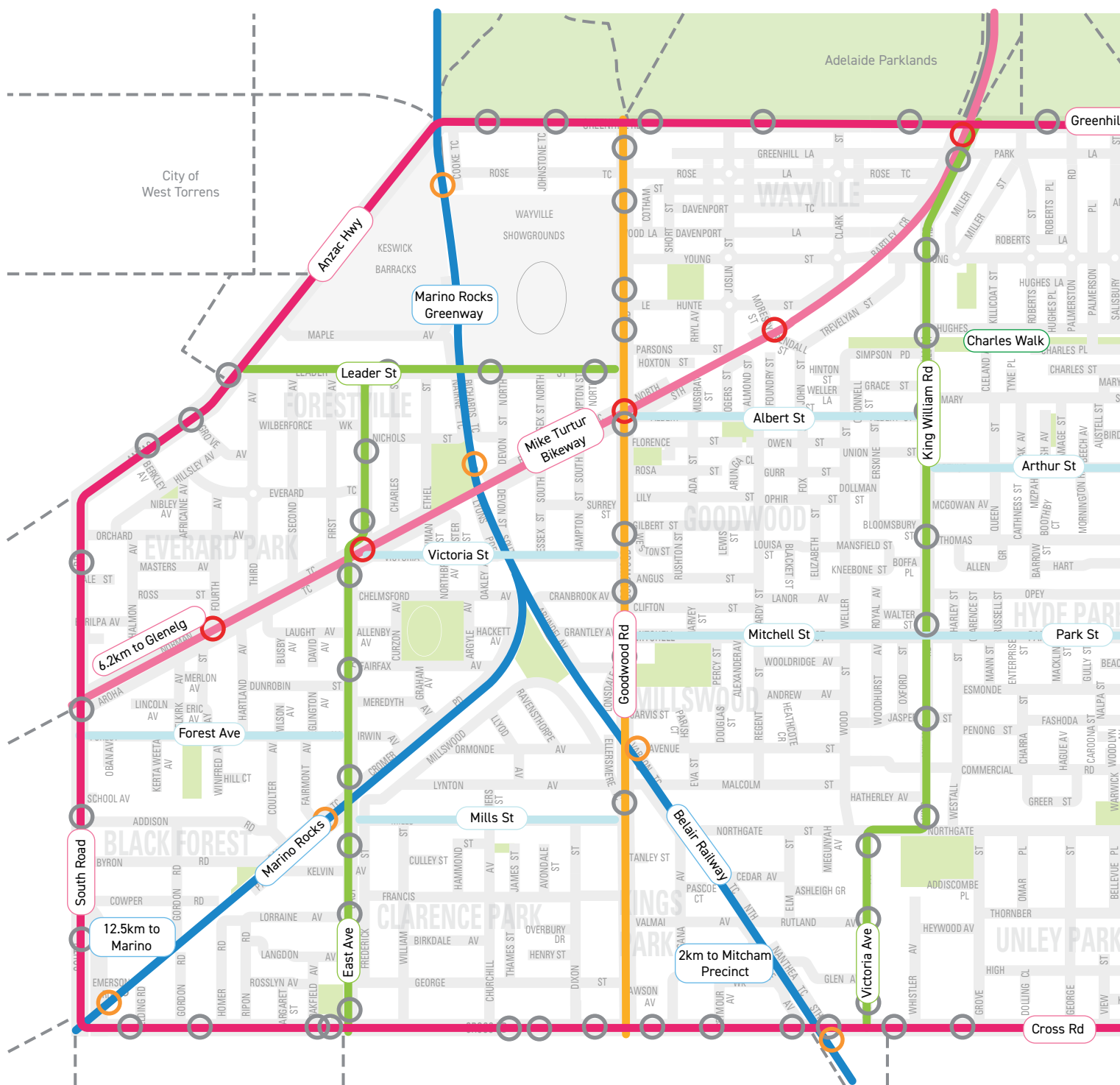
The cost of an asset lifecycle can be divided into four major stages:

- ▶ 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

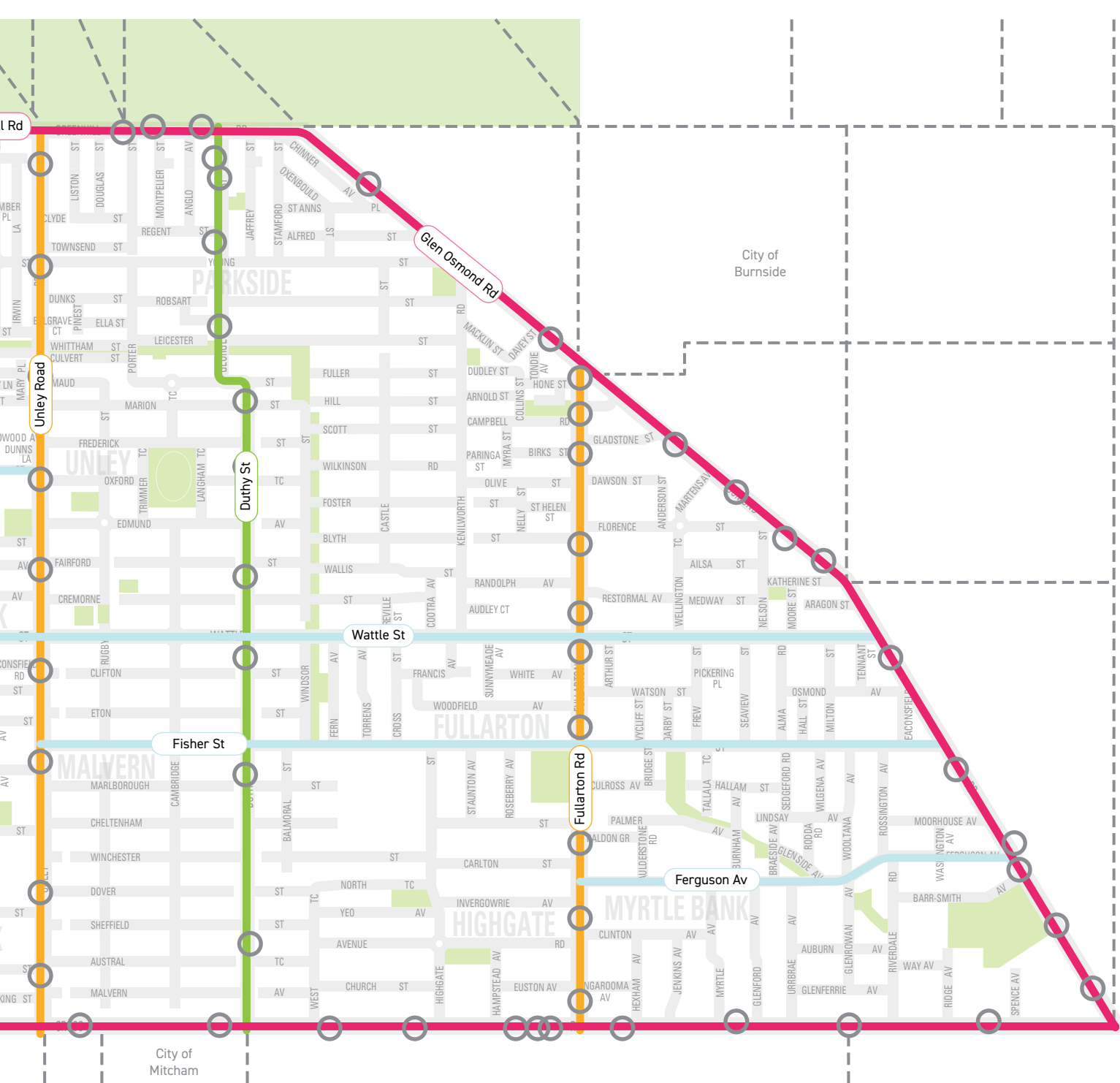
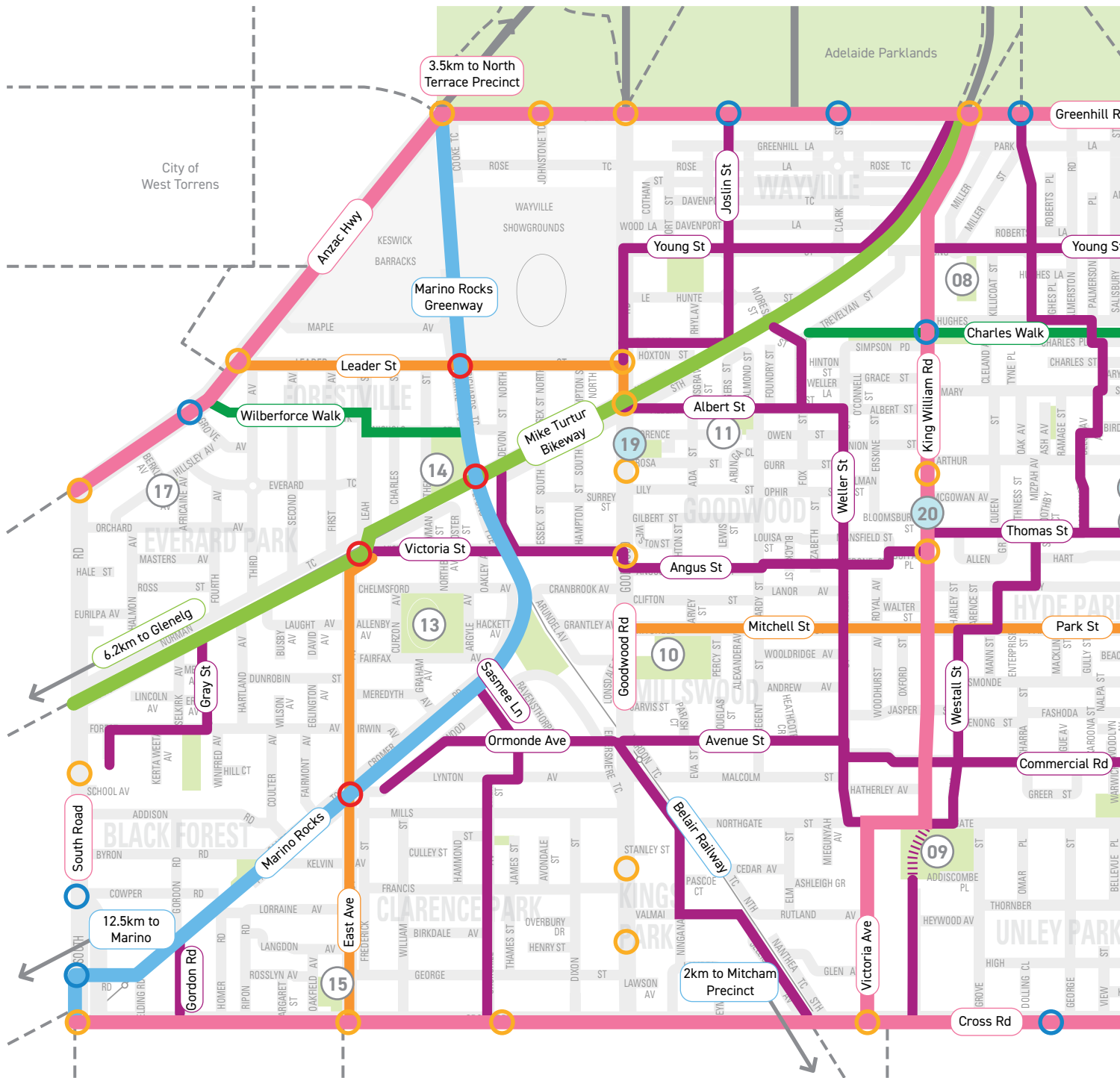
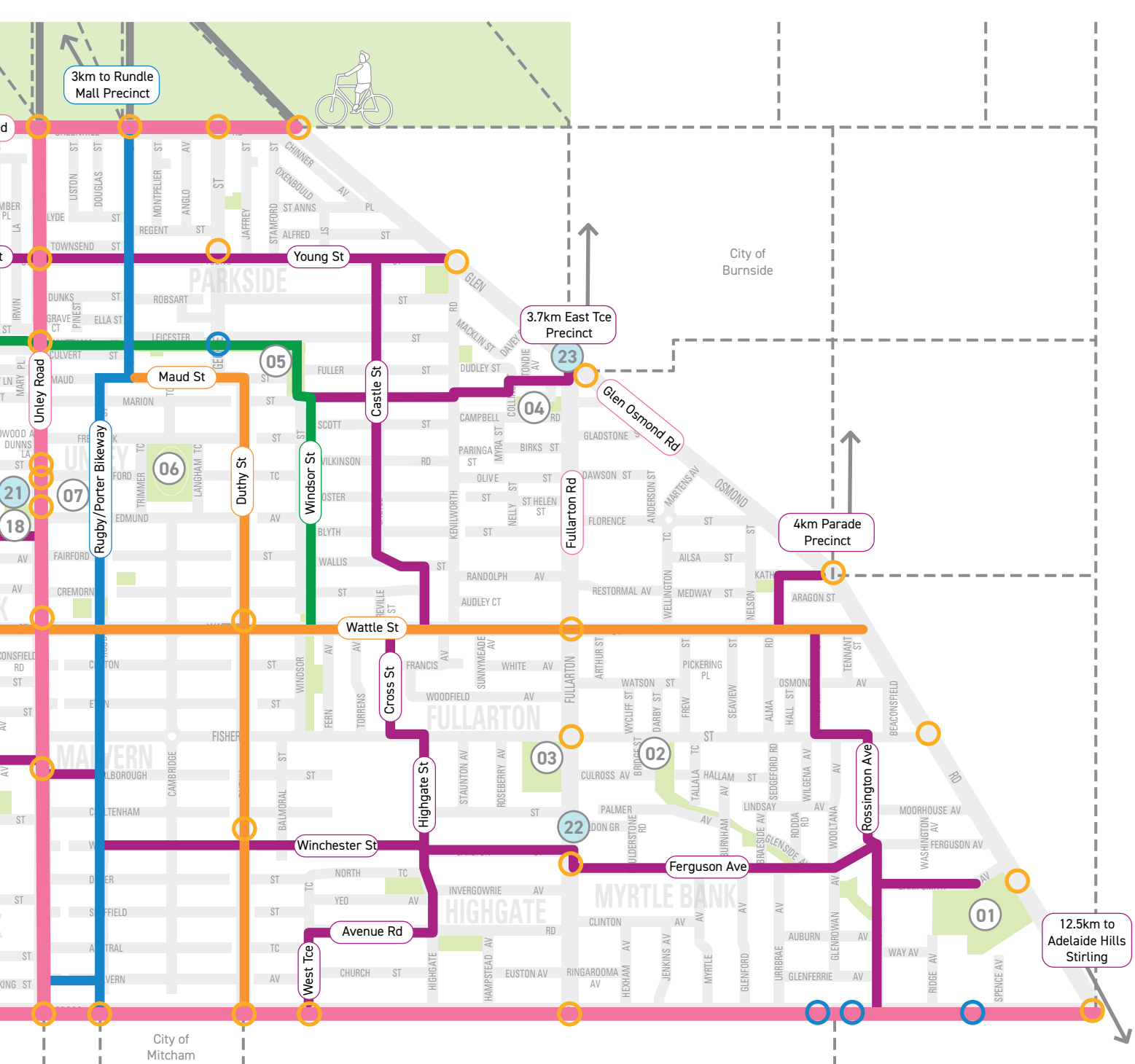


Figure 5-2:
Road network
hierarchies



LEGEND

- | | | | | | | |
|---|--|--|--|---|--|-------------------------------------|
| 01 Ridge Park
Barr-smith Ave,
Myrtle Bank | | 06 Unley Oval
Trimmer Tce,
Unley | | 11 Soutar Park
Albert St,
Goodwood | | 16 Princess M
Park
Byron Rd, |
| 02 Scammell Reserve
Fisher St,
Myrtle Bank | | 07 Village Green
Rugby St,
Unley | | 12 Dora Gild Park
Churchill Ave,
Clarence Park | | 17 Everard P
Hillsley Av
Park |
| 03 Fullarton Park/Commu-
nity Centre
Cnr Fisher St +
Fullarton Rd, Fullarton | | 08 North Unley Park
Young St, Goodwood | | 13 Goodwood Oval
Curzon Ave,
Millswood | | 18 Soldiers M
Gardens |
| 04 Howard Florey Reserve
Campbell Rd, Parkside | | 09 Heywood Park,
Addiscombe Pl,
Unley Park | | 14 Forestville Reserve
Ethel St, Forestville | | 19 Goodwood
Retail/Lib |
| 05 Henry Codd Reserve
Cnr Maud St + Windsor
St, Parkside | | 10 Orphanage Park
Mitchell St,
Millswood | | 15 Page Park
Cnr Cross Rd +
East Ave, Clarence Park | | |
| | | | | | | |
| | | | | | | |



NORTH

Margaret		20 King William Rd Precinct			Mike Turtur Bikeway
Black Forest		21 Unley Rd Precinct Retail/Library/Civic			Marino Rocks Greenway
Park Reserve, Everard		22 Fullarton Rd Precinct			Main Road Routes
Memorial		23 Glen Osmond Precinct			Rugby/Porter Bikeway
Highgate Rd Precinct					Secondary Routes
Libraries					Glen Osmond Trail
					Low Vehicle Traffic Routes
					Neighbouring Route

THE CITY of *Unley*

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 transport network supporting safe and efficient movement.

Council maintains a higher level of service within our main street precincts. These are active and economically prosperous public spaces which support community interaction and gathering. The upgraded King William Road precinct is an example of a higher level of service. The project 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, stormwater and footpaths, planting of over 80 mature trees to create a cooler environment, installation of LED lighting and the introduction of over 70 flexible street spaces for on street parking, outdoor dining and other activations. The design features key safety improvements including two additional pedestrian crossings whilst respecting the precinct's distinctive village character and heritage. Council recognises these improved levels of service required higher operational and maintenance resourcing and a King William Road maintenance guideline was created with this project to inform future operational costs. Similarly design guidelines for our other main street precincts such as Unley Road are being created to inform their unique levels of service.

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, Table 5-1 outlines the frequency of these assessments by asset category:

ASSET CATEGORY	LAST CONDITION ASSESSMENT	NEXT CONDITION ASSESSMENT
Bridges	2017	2021
Bus Stops	2020	2024
Car Parks	2020	2024
Kerbing	2017	2022
Pathway	2020	2024
Road	2017	2022
Street Lighting	2020	2024
Traffic Control	2020	2024

Table 5-1: Condition assessment schedule

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

Following the next cycle of condition assessments, the assets will be assessed on a four year cycle.

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.

Asset condition ratings are shown in the Table 5-3 by asset category. The average rating can be used as a benchmark for measuring against the desired level of service. A further breakdown of the asset condition can be seen in Table 5-4.

The transport asset categories have a level of service based on maintaining a condition rating of 3. When a transport asset falls below this default condition rating to a poor or very poor condition (a rating of 4 or 5), maintenance or renewal is programmed to ensure the asset condition is returned to condition 3 (fair) or better. This cyclic process is repeated as transport assets deteriorate, to ensure an overall portfolio condition rating of 3 is sustained. Table 5-3 summarises the average condition rating for the transport asset categories. Table 5-4 summarises the condition percentage of each asset category.

ASSET CATEGORY	LENGTH / QUANTITY	AVERAGE CONDITION	TARGET
Bridges	38 bridges	2.9	≤ 3
Bus Stops	36 bus stops	2.0	≤ 3
Car Parks	28 car parks	1.6	≤ 3
Kerbing	307km	2.5	≤ 3
Pathway	329km	1.5	≤ 3
Road	172km	Surface: 2.2 Pavement: 2.3 Sub-base: 1.3	≤ 3
Street Lighting	72 lights	2.0	≤ 3
Traffic Control	953 devices	2.4	≤ 3

Table 5-3: Average condition

ASSET CATEGORY	CONDITION 1	CONDITION 2	CONDITION 3	CONDITION 4	CONDITION 5
Bridges	8%	15%	50%	26%	2%
Bus Stops	22%	58%	17%	3%	0%
Car Parks	25%	75%	0%	0%	0%
Kerbing	17%	30%	44%	5%	4%
Pathway	57%	40%	2%	1%	0%
Road:					
▶ Surface	23%	31%	29%	11%	6%
▶ Pavement	4%	58%	32%	5%	1%
▶ Sub-base	60%	33%	5%	1%	0%
Street Lighting	17%	72%	10%	1%	0%
Traffic Control	2%	63%	33%	3%	0%
TOTAL	24%	48%	22%	6%	1%

Table 5-4: Condition percentage



5.1.3 Useful Life

A summary of useful life is further defined into asset groups in Table 5-5:

ASSET CATEGORY	ASSET GROUP	USEFUL LIFE (YEARS)
Bridges	Pedestrian Bridge	50–100
Bridges	Road Bridge	50–100
Bus Stops	Shelter	30
Car Parks	Surface	15–40
Car Parks	Pavement	80
Car Parks	Sub-base	100
Kerbing	Kerbing	35–100
Kerbing	Spoon Drain	80
Pathway	Boardwalk	10–20
Pathway	Footpath	15–50
Pathway	Reserve Path	10–50
Pathway	Shared Use Path	30–50
Road	Surface	25–35
Road	Pavement	20–100
Road	Sub-base	25–400
Street Lighting	Street Lighting	20–40
Traffic Control	Crossing	20–40
Traffic Control	Dead End	40
Traffic Control	One Way	40
Traffic Control	Protuberance	30–40
Traffic Control	Roundabout	40
Traffic Control	Slow Point	30–40
Traffic Control	Speed Hump	15–40
Traffic Control	Traffic Control	20–50
Traffic Control	Traffic Lights	40

Table 5-5: Asset useful life

The impact of climate change to infrastructure assets useful life is not yet quantified and may continue to change as increased temperature, heatwaves, higher storm and rainfall intensities will increasingly affect the useful life of infrastructure at a material level. These impacts have been identified in risk management and future demands.

5.1.4 Asset Valuation

Valuations are undertaken in alignment with Australian Accounting Standard 'AASB13 Fair Value', and 'AASB116 Property Plant and Equipment'. These valuations are required every three 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 next valuations will be at the end of the financial year following the condition assessment identified in Table 5-1.

The valuation of Council's transport assets is summarised in the Table 5-6.

ASSET CATEGORY	REPLACEMENT VALUE	ACCUMULATED DEPRECIATION	WRITTEN DOWN VALUE
Bridges	\$9,617,655	\$6,174,765	\$3,442,890
Bus Stops	\$390,762	\$77,193	\$313,569
Car Parks	\$3,214,725	\$743,971	\$2,470,754
Kerbing	\$28,047,504	\$13,925,174	\$14,122,330
Pathway	\$57,447,644	\$12,000,380	\$45,447,264
Road	\$161,325,020	\$28,405,128	\$132,919,892
Street Lighting	\$3,085,184	\$57,122	\$3,028,062
Traffic Control	\$5,700,088	\$1,786,746	\$3,913,341
TOTAL	\$268,828,582	\$63,170,480	\$205,658,103

Table 5-6: Transport Assets Valuation

5.1.5 Historical Expenditure

The maintenance budget has increase annually due to CPI and the asset portfolio growing in size, complexity and age. The new capital budget in 2019/20 was significantly increased due to the delivery of the King William Road Upgrade, with renewal funding being diverted to King William Road for the renewal portion of the project. Historical expenditure information is contained in Figure 5-4.

TRANSPORT HISTORICAL EXPENDITURE

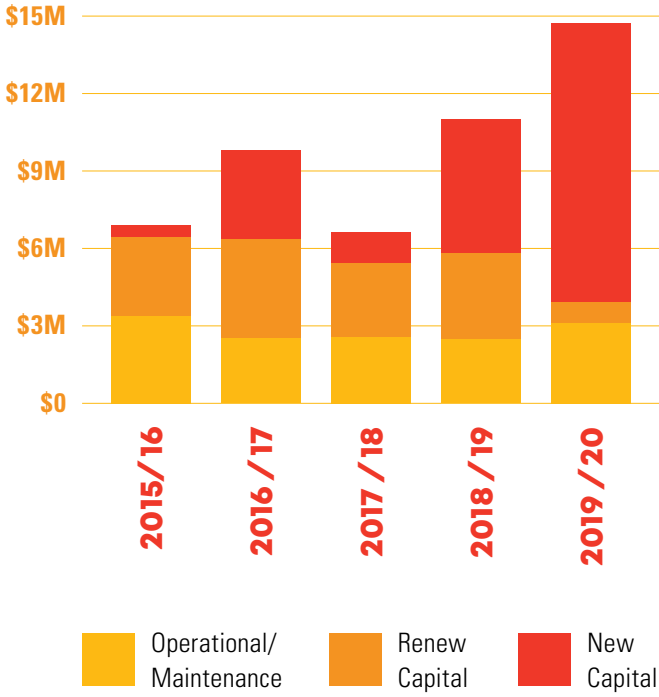
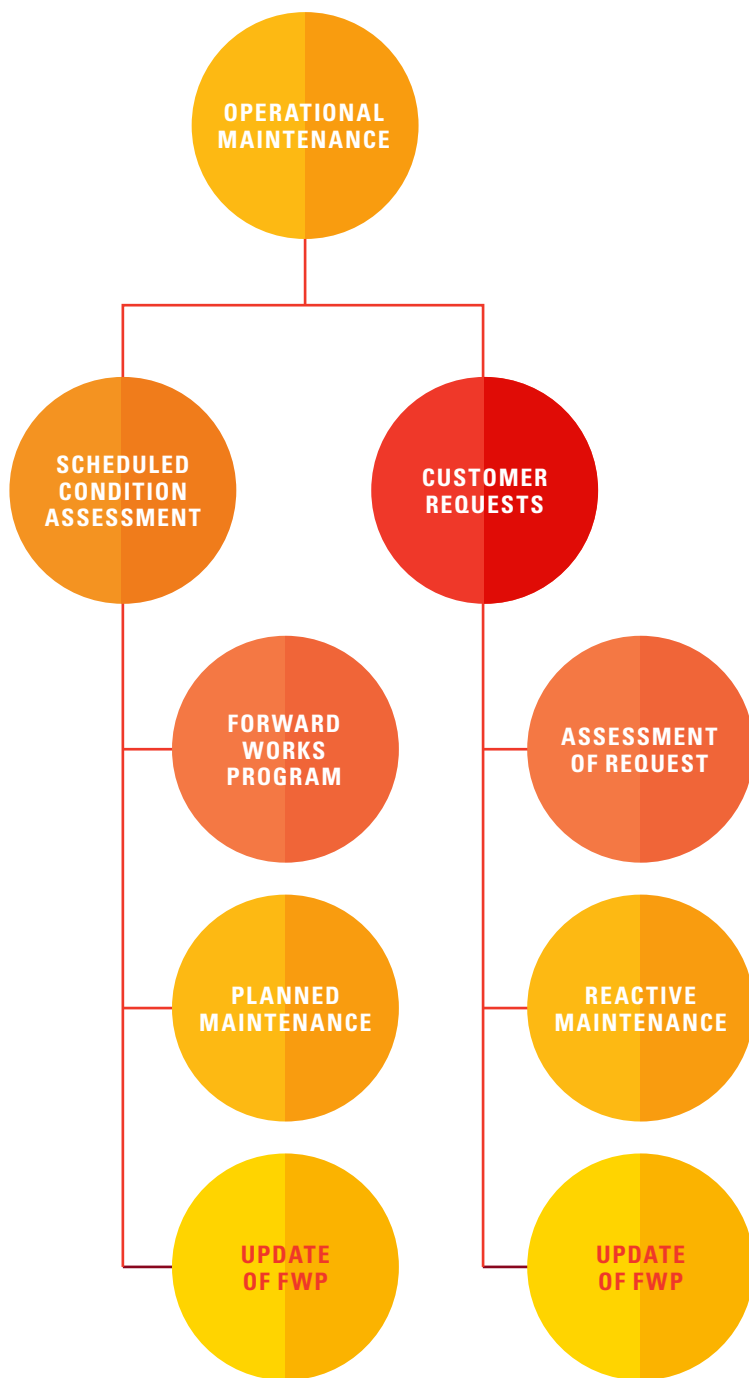


Figure 5-4: Historical expenditure



5.2 Operations and Maintenance Plan



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.

As the years progress, the maintenance budget is projected to increase due to CPI and an asset portfolio growing in size, complexity and age. Figure 5-5 outlines the asset maintenance process.

In 2020/21 Council will conduct a review of all Depot operations in terms of levels of service to identify operational and financial efficiencies.

This review will be inclusive of all levels of service and processes to identify opportunities for efficiencies across all key depot operations including:

- ▶ Civil works
- ▶ Response and signage
- ▶ Open Space, Parks and Recreation
- ▶ Arboriculture

The outcomes of this service review may impact the operational and maintenance forecast with any changes made to be reflected in the LTFP following the conclusion of the review.

Figure 5-5: Asset maintenance process flowchart

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 5-6) outlines how maintenance is programmed. The condition assessments inform the forward maintenance program and additional maintenance is identified through routine customer enquiries and staff inspections until the next cycle of condition assessments.

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.

The next bridge level 2 inspection will be completed in 2020/21 to inform the forward maintenance and capital programs. Between level 2 inspections, additional maintenance is identified through and customer enquiries and staff inspections.

Bus stop asset requirements are determined by the state government bus service routes. Council does not operate the bus services, however provides infrastructure including bus pads and bus shelters at suitable locations. Council has a target for 100% compliance of existing bus shelters and pads by 31 December 2022. A shelter is not a DDA requirement for bus stops.

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. The current contract concludes in 2021, where a new agreement will be negotiated, or the assets will be handed over to council. The bus stop assets owned by council are maintained through the internal maintenance and operations teams.

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 Network (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

Figure 5-6 outlines the forecast of planned and unplanned operations and maintenance works over the next ten years. It has been projected with CPI increase over ten years, which aligns with the LTFP. As Australia is facing economic impacts that will have unknown consequences at this time, the CPI assumptions will change on an annual basis through the LTFP.

TEN YEAR OPERATIONAL AND MAINTENANCE EXPENDITURE FORECAST

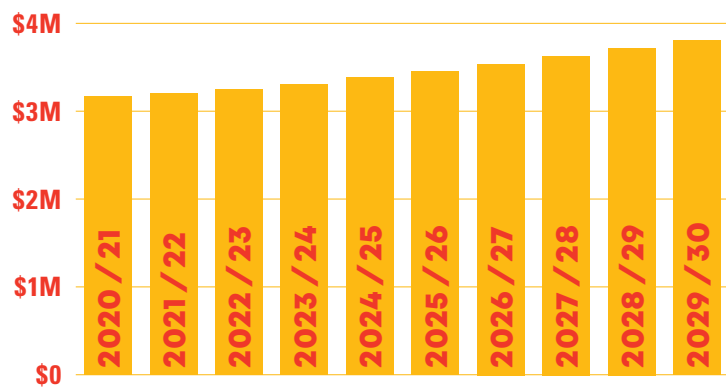


Figure 5-6: Ten Year operational and maintenance expenditure forecast



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

Projected future renewal expenditures are forecast to increase over time as the asset portfolio grows in size, complexity and age.

Renewals are programmed across asset classes using the following methods:

- 1 Forward projection based on historic expenditure.
- 2 Broad estimates based on replacing assets at the end of their useful lives.
- 3 Predictive modelling of varying degrees of complexity.
- 4 Bottom-up approach with a high confidence in asset data. Projects are identified via asset monitoring, prioritised and allocated.

These methods increase in sophistication, which is reflected by the data confidence level.

5.3.2 Renewal Strategies

Renewal works identified in terms of renewal strategies 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.

Renewals are primarily programmed 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.



5.3.3 Summary of Future Costs

The projected future required renewal expenditure is summarised in Figure 5-7 and the transport category ten year renewal forecast is contained in Table 5-9. The four sets of data in the graphs include:

- ▶ The condition-based renewal bar graph displays the replacement value of assets reaching the end of their useful life.
- ▶ The LTFP line displays the current LTFP projection based on past Plans and asset data.
- ▶ The annual depreciation dashed line displays the annual cost of depreciation for the asset class. Annual depreciation is the standard yearly rate at which depreciation is charged to a fixed asset. This rate is consistent from year to year using the straight-line method and can provide a guide to the annual spend per year for an asset class.
- ▶ The projection line indicates the projected future renewal forecasted expenditure for the asset category based on the Plan.

It is recognised matching condition-based renewal fluctuations from year to year is not generally possible from both a budget and resourcing perspective. Distributing the renewal costs over the ten year timeframe is preferable from a budget and resourcing perspective.

The average annual expenditure for the next ten years:

Renewal projection	\$3,512,875
LTFP	\$3,196,403
Annual depreciation	\$3,909,000

The condition-based renewal for road and kerbing assets contained in Figure 5-7 is based on condition modelling validated by visual assessments from Council. The projection for kerbing is based on the average annual condition-based funding and the projection for roads is based on the annual depreciation. These projections are contained in Table 5-9. Council will reassess the road and kerbing category funding following the next condition assessment in 2021/22.

A budget of \$40,000 for bus stop infrastructure renewal has been committed to 2020/21 and 2021/22 for compliance with the Disability Discrimination Act (DDA). Legislation requires all bus stops to be DDA compliant by December 2022. Following 2021/22 a \$15,000 budget will be allocated for the continuing renewal of bus stops.

TRANSPORT TEN YEAR RENEWAL EXPENDITURE FORECAST

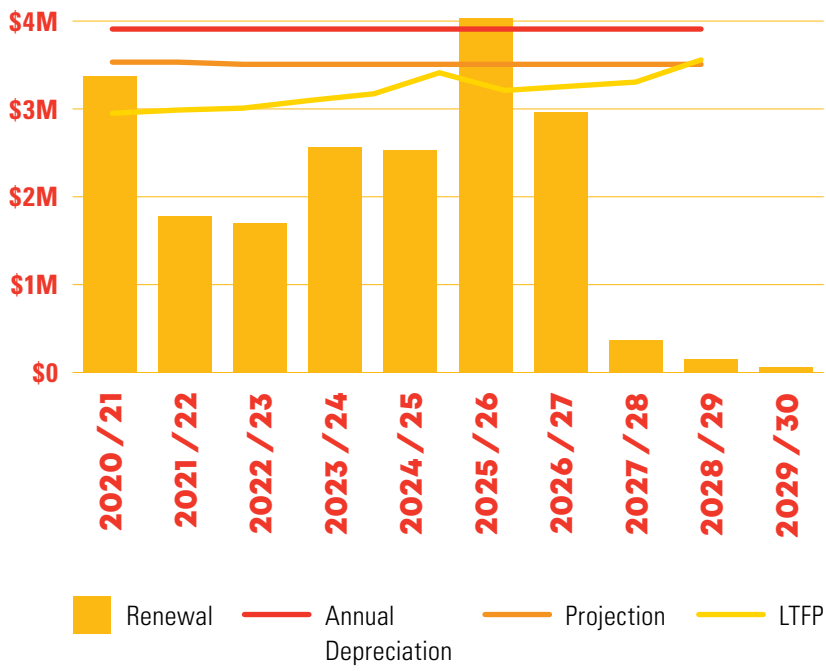
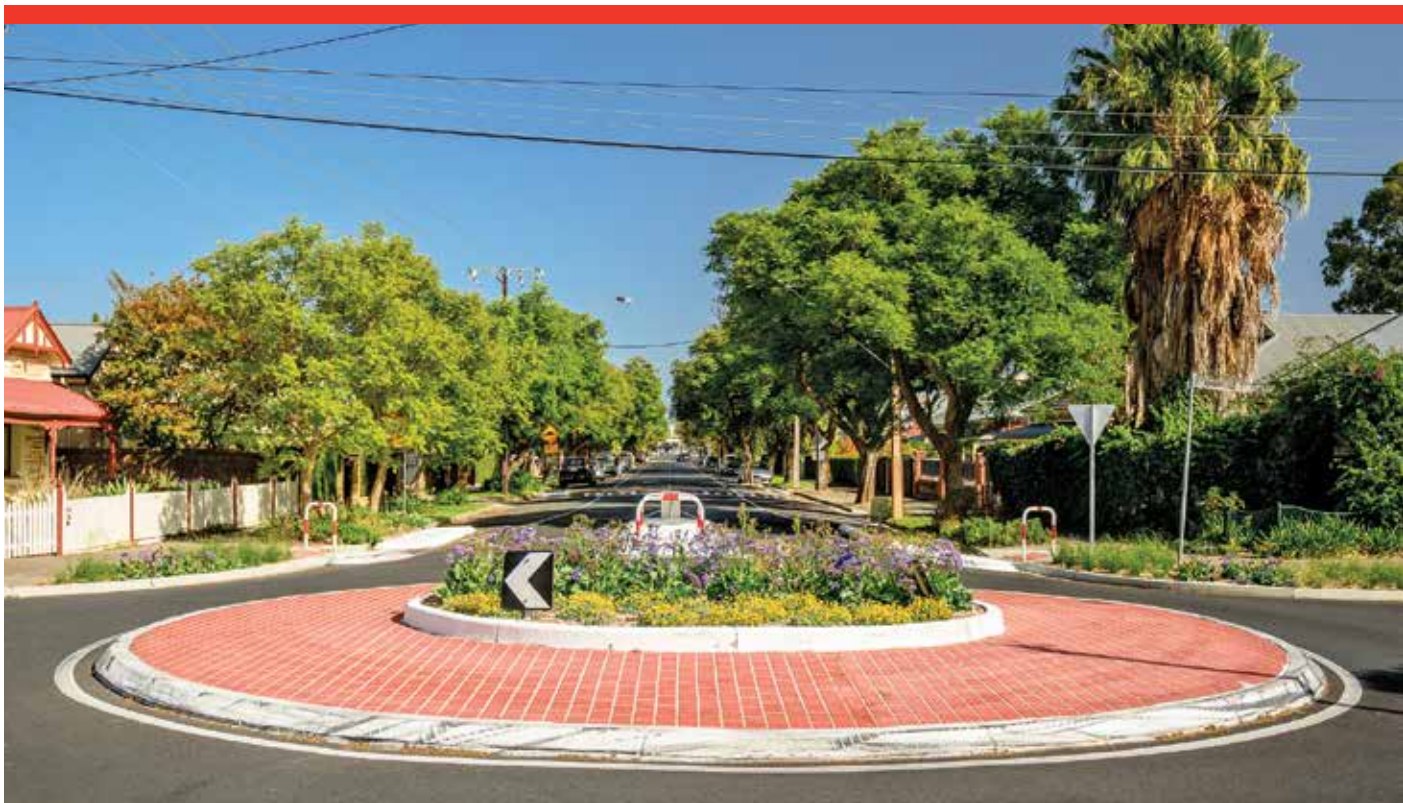


Figure 5-7: Transport ten year renewal expenditure forecast



Council's street lighting and car park assets were condition assessed and revalued in 2019/20 with high confidence. The condition of these assets has been assessed as good with minimal condition based forecasted expenditure in the next ten years. An annual budget of \$20,000 for renewals in each of these asset categories has been projected for early implementation of renewals based on changes in standards, safety issues, changes in levels of service, funding opportunities or alignment with external projects, strategies and plans.

Council's bridge asset projections are currently in line with the annual depreciation. In 2020/21 the bridge assets will undergo a condition audit to inform future renewal projections.

Council's pathway assets were condition assessed and revalued in 2019/20 with high confidence. The condition of pathways is good with minimal condition based forecasted expenditure in the next ten years. A total of \$250,000 is projected for the renewal program to improve the walkability, safety and functionality of footpaths and kerb ramps for:

- ▶ Paving lift and relay to prevent trip hazards.
- ▶ Early renewal implementation for pathway assets projected to address functionality and non-compliance.
- ▶ DDA compliance of kerb ramps based on the 2019/20 condition assessment identifying 51% of kerb ramps not meeting DDA compliance.

Council's traffic control assets were condition assessed and revalued in 2019/20. The overall condition of traffic control is fair with minimal condition based forecasted expenditure in the next ten years. An annual budget of \$50,000 for traffic control renewals is forecasted due to the criticality of these assets, physical damage attained on these assets prior to the end of their useful life and early implementation of renewals based on changes in standards, safety issues, changes in levels of service, funding opportunities or alignment with external projects, strategies and plans. This figure includes signage renewal (\$20,000).

Council's data confidence level is discussed further in Section 7.4, which dictate assumptions built into the forward program.

The Plan identifies an average annual spend of \$3,512,875 for transport asset renewal over the next ten years. The annual depreciation in 2020/21 for transport is \$3,909,000, which indicates an increase will be required in the LTFP spending for transport as the asset portfolio ages.

Council's asset renewal ratio (planned renewal / the Plan's identified renewal) is at 91% over the next ten years. The ratio represents the level of capital expenditure on the renewal of assets (LTFP) relative to the expenditure projected in the Plan.

The current LTFP expenditure is under the budget projection and an increase of \$3,165,000 to the budget over ten years will be required to maintain a ratio of 100%. Council's target is a 100% average over the next ten years.



ASSET CATEGORY	TEN YEAR RENEWAL PROJECTION	TEN YEAR LTFP	ASSET RENEWAL RATIO (LTFP / RENEWAL PROJECTION)	AVERAGE ANNUAL RENEWAL BUDGET	ANNUAL DEPRECIATION 2020/21
Bridges	\$1,090,000	\$530,000	49%	\$109,000	\$109,000
Bus Stops	\$200,000	\$220,000	110%	\$20,000	\$85,000
Car Parks	\$200,000	\$270,000	135%	\$20,000	\$75,000
Kerbing	\$11,758,750	\$9,600,000	82%	\$1,175,875	\$270,000
Pathway	\$2,500,000	\$5,550,000	222%	\$250,000	\$1,160,000
Road	\$18,680,000	\$15,040,000	81%	\$1,868,000	\$1,868,000
Street Lighting	\$200,000	\$205,000	103%	\$20,000	\$190,000
Traffic Control	\$500,000	\$549,000	110%	\$50,000	\$152,000
TOTAL	\$35,128,750	\$31,964,000	91%	\$3,512,875	\$3,909,000

Table 5-9: Transport ten year renewal expenditure projection

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 Capital Investment Strategies

The need for new transport assets arises from a variety of sources including community requests, Council resolutions, proposals identified by Council strategies, grant opportunities or partnerships with external organisations. These projects are prioritised each year against all other asset categories and Council proposals.



5.4.2 Summary of Future Costs

Figure 5-8 outlines the projected future spend through new capital works for transport assets. Council reviews its new capital projects on an annual basis, allowing only one year (2020/21) of works to be shown as approved through the Annual Business Plan. The projection for the remainder of the ten year renewal is based upon Council’s annual priorities for new capital expenditure across Council and the need for new capital across all asset classes based on upcoming projects.

Year one (2020/21) is significantly lower than the remaining years as Council has one year of decreased new capital spending the LTFP to offset the high new capital expenditure in 2019/20.

As timing and costs for these projects are still to be confirmed the projection for transport assets has been distributed with an average of \$605,000 per year expected to be budgeted across ten years. These budgets are subject to individual year bids, Council strategies and funding opportunities and are expected to fluctuate year to year.

The upcoming new capital projects for the transport asset class in the next ten years include:

- ▶ Local Area Traffic Management (LATM) Implementation.
- ▶ Walking and Cycling Plan Implementation – This project proposes to implement priorities contained in Council’s Walking and Cycling Plan as adopted in 2016.
- ▶ Unley Road Infrastructure and Public Realm Upgrade.
- ▶ Glen Osmond Road Infrastructure and Public Realm Upgrade.

TRANSPORT PROJECTED NEW CAPITAL EXPENDITURE

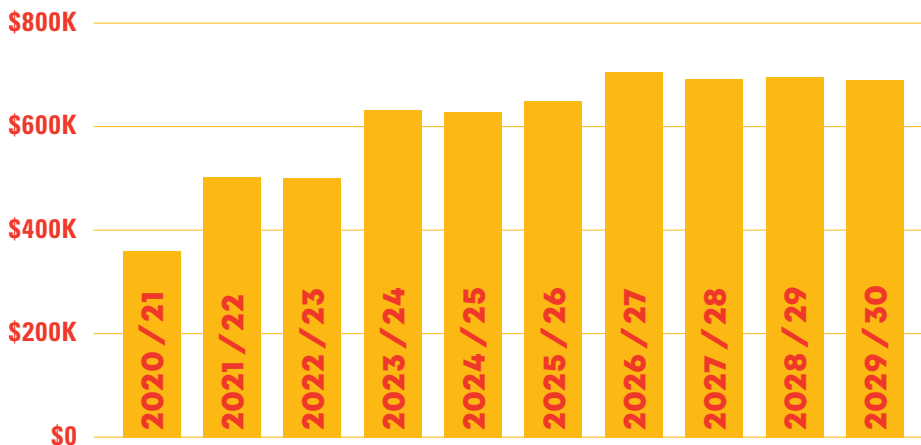


Figure 5-8: Projected new capital expenditure

5.5 Decommission Plan

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

Decommission of assets can be triggered in the following situations:

- ▶ The end of useful life of existing assets.
- ▶ Safety factors inherent to the asset.
- ▶ Non-compliance of the asset 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.







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
LIKELIHOOD	Rare	MEDIUM	MEDIUM	LOW	LOW	LOW
	Unlikely	HIGH	MEDIUM	MEDIUM	LOW	LOW
	Possible	HIGH	HIGH	MEDIUM	MEDIUM	LOW
	Likely	EXTREME	HIGH	HIGH	MEDIUM	MEDIUM
	Almost Certain	EXTREME	EXTREME	HIGH	HIGH	MEDIUM

Table 6-1: Risk matrix

RISK DESCRIPTION <small>(Event or potential event focused and their impact upon objectives)</small>	INHERENT RISK <small>Level of risk with NO controls in place</small>			CONTROLS ALREADY IN PLACE <small>(What existing controls are in place to prevent and/or manage the risk?)</small>
	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.
3 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.
4 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.
5 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

Are the Controls effective at managing the risk?	RESIDUAL RISK			Is the Residual Risk Rating Tolerable?	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 when it should be implemented/ completed)	RISK LEVEL AFTER TREATMENTS		
	Consequence	Likelihood	Risk Rating				Consequence	Likelihood	Risk Rating
Partially effective	Major	Possible	High	No	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

7

Financial Summary

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 Expenditure forecast

Figure 7-1 outlines the financial projections for maintenance and capital renewal and capital new expenditure for the transport asset class.

The total forecast expenditure for transport assets is relatively constant over the ten year period. The predictability of this budget allows Council to undertake capital programs as and when required in each year.

7.3 Asset Renewal Funding Ratio

This ratio indicates whether Council has the financial capacity to fund asset renewal at continued existing service levels. Council’s target is a 100% average over the next ten years.

ASSET RENEWAL FUNDING RATIO – TRANSPORT: 91%

This ratio is an important budget indicator over the next ten years. Council’s LTFP has budgeted 91% of funds identified in this plan for the optimal renewal and replacement of transport assets. An increase of \$3,165,000 to the renewal budget over ten years is required to maintain a ratio of 100%.

7.4 Funding Strategy

Key strategic milestones:

- ▶ The Plan will inform Council’s future LTFPs.
- ▶ The next major condition assessment and revaluation will as outlined in Table 5-1 and will inform future renewal strategies.
- ▶ The Depot operations service review will be undertaken in 2020/21, which will inform future maintenance and operating budgets.

Repayment of existing loans has been extracted from the current loan schedule. The LTFP assumption indicates no additional funding through borrowings is required to meet new capital commitments in the future. The Local Government Finance Authority (LGFA) Cash Advance Debenture (CAD) Facility will continue to be used to balance funding requirements in terms of borrowing.

The projected expenditure is to be funded from Council’s operating, maintenance and capital budgets.

TRANSPORT TEN YEAR FORECAST EXPENDITURE

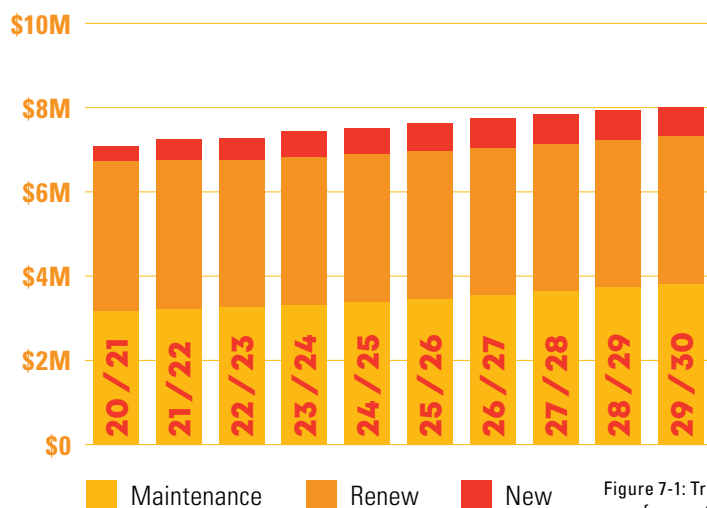


Figure 7-1: Transport ten year forecast expenditure



7.5 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:
 - ▶ Bridges Condition Assessment 2017
 - ▶ Bus Stop Condition Assessment 2020
 - ▶ Car Park Condition Assessment 2020
 - ▶ Kerbing Condition Assessment 2017
 - ▶ Pathway Condition Assessment 2020
 - ▶ Road Condition Assessment 2017
 - ▶ Street Lighting Condition Assessment 2020
 - ▶ Traffic Control Condition Assessment 2020
- ▶ Key financial assumptions derived from LTFP 2020/21.
- ▶ Operation funding will be made without reduction.
- ▶ Capital funding will be made without reduction.
- ▶ Appropriate resources will be made available to manage the Plan.
- ▶ Council income will remain consistent with LTFP.
- ▶ There will be no natural disasters.

7.6 Forecast Reliability and Confidence

CONFIDENCE LEVEL	DESCRIPTION
A – Highly Reliable	Data based on sound records, procedures, investigations and analysis, documented properly and agreed as the best method of assessment. Data set is complete and estimated to be accurate +-2%.
B – Reliable	Data based on sound records, procedures, investigations and analysis, documented properly but has minor shortcomings, e.g. some of the data is old, some documentation is missing and / or reliance is placed on unconfirmed reports or some extrapolation. Dataset is complete and estimated to be accurate +-10%.
C – Uncertain	Data based on sound records, procedures, investigations and analysis which is incomplete or unsupported, or extrapolated from a limited sample for which grade A or B data are available. Dataset is substantially complete but 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.

Table 7-1: Data confidence level

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 measures data confidence.

Council’s transport asset data confidence is displayed below in Table 7-2. Major categories including bridges, traffic control, road and kerbing have a C rating and will be progressed to B through the condition assessment program outlined in the Plan.

ASSET CATEGORY	CONFIDENCE LEVEL
Bridges	C – Uncertain
Bus Stops	B – Reliable
Car Parks	B – Reliable
Kerbing	C – Uncertain
Pathway	B – Reliable
Road	C – Uncertain
Street Lighting	B – Reliable
Traffic Control	B – Reliable
OVERALL	C – Uncertain

Table 7-2: Transport data confidence level



Improvement and Monitoring

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	Revaluation Varies (see Table 5-1)
2	Condition assessment to be completed	Senior Assets and Engineering Lead	Internal / External	Varies (see Table 5-1)
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	2024/25
5	Review classification of bridge and culvert asset definitions.	Asset Management Officer	Internal	2020/21
6	Review of the planned civil works maintenance programs through depot operations service review.	Manager Assets and Operations	Internal	2020/21

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:

- 1 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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