



TRANSPORT

ASSET MANAGEMENT PLAN 2020



Welcome



Amanda Wilson
Mayor
City of Holdfast Bay

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

Assets are the foundation stones of the City of Holdfast Bay and include the streets we drive on, the parks and reserves our family play on, the stormwater network we rely on, and the community and sporting facilities we enjoy across Holdfast Bay.

Here we present the Transport Asset Management Plan, which covers 178km of transport network which caters for road users, including vehicles, pedestrians, and cyclists.

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

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

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

I encourage you to have a look at the Asset Management Plans and review whether the service levels presented here are consistent with your vision for the future of Holdfast Bay.

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TRADITIONAL CUSTODIANS

We acknowledge the Kurna people as the traditional custodians of this land. We respect their spiritual relationship with the country that has developed over thousands of years, and the cultural heritage and beliefs that remain important to the Kurna people today.

Abbreviations

Asset Management Plan	AMP
Levels of Service	LoS
Long Term Financial Plan	LTFP

Executive Summary

The City of Holdfast Bay has 178km of transport network catering for road users, including vehicles, pedestrians and cyclists. Key road assets include roads, kerbs, bridges and footpaths, as well as supporting infrastructure such as street lighting, bus shelters, line marking and signage. Our road assets are used for movement of vehicles as well as on-street parking.

Whilst the physical condition of the assets is considered good and the number of community complaints is low, there are views within the community that the function of some roads is below standard; for example through congestion, excessive speed, narrow road width, intersection treatments, lack of on street parking, lack of safe cyclist and pedestrian paths or insufficient lighting.

Council has recently commenced discussion around an Integrated Transport Plan to identify options to improve how our transport assets service the community, businesses and visitors to the area.

ROADS

The City of Holdfast Bay has 178km of road. Based on a detailed condition audit in 2015 and review in 2019, the road condition is considered to be good.

Council's historical investment in the roads has been based on;

- › the road wearing base course are in good condition, as was indicated by the condition ratings from the audit in 2015,
- › roads are able to remain serviceable, safe and functional to a condition 5 (failed),
- › roads are resealed every 35 years (on average), and
- › rejuvenation treatments (liquid bitumen applied to the surface) are implemented regularly.

The City of Holdfast Bay has typically stable soils which result in sound pavements. Many of the roads were constructed in 1960s when the area was developed, and this age portfolio will mean that the roads will need to be renewed at a similar time.

However, given an observed increase in surface cracking and pavement failure, the aging profile of the roads, increased traffic and commercial vehicles, and high community expectations for road quality, there is an expectation that Council will need to increase the required investment in the short

to medium term. To allow for this we have applied a flat 25 year program for road treatment works, including patching failures and resealing roads. We have also commenced targeted pavement testing.

A detailed condition assessment is undertaken every 4–6 years. Following each new condition assessment, Council reviews its strategy, its past performance, and it's future needs. This is to provide the most cost efficient method to maintain the roads for the community and to ensure the optimal asset life is reached for roads. Council wishes to ensure we are not under or over-investing in our road network.

KERB & WATERTABLE

The City of Holdfast Bay has 389km of concrete kerb and spoon drains. A majority of this is along public roads. Our kerbing, based on the detailed condition audit in 2015 is considered to be in good condition.

Council has typically very flat surface grades along our kerbs and combined with narrow roads and street trees a small lift in kerbing can create significant surface pooling and nuisance. Treatments to alleviate this include replacing segments of kerb or other innovative treatments such as tree inlet pits which drain the ponded areas and provide valuable water to the adjoining trees.

Investment in kerb is partially completed through the road treatment program, and partially through sectional replacements to address water pooling as a result of tree root uplift and grade issues. Following a review of the actual kerb replacement requirements this level of funding was reduced from 50% to 40% kerb replacement during road treatment, and an annual general kerb budget of \$150,000 included to address other areas of kerb lift (often resulting in water pooling). Whilst concrete kerbs should last 100 years, due to tree damage and replacement to overcome pooling of water, the typical life of the kerb will be around 50 years.

FOOTPATH & SHARED PATHS

Council has 313km of footpaths and shared paths along our public roads, including sections of Coast Park and the Mike Turtur Bikeway.

Council's on-road footpath consists generally of a path both sides of every road and they are predominantly a



paved path. Our coasts park trail similarly is a paved path, whilst the Mike Turtur Bikeway is predominately asphalt. A footpath audit was completed in 2019 and identified that the footpath assets are in generally good condition, although a large number of local defects were identified. Many of the defects are as a result of tree roots lifting the footpath creating localised mounding or trip hazards. Council has embarked on an accelerated footpath repair program to repair defects to improve safety. An increased level of community satisfaction on the paths has been received following the repair works.

Investment in the replacement of the footpath network is sufficient to maintain current service levels, with backlog in maintenance recently addressed through the accelerated footpath program in 2019–20.

BRIDGES

Council has four bridges, the largest being the Michael Herbert Bridge at Glenelg North over the Patawaalonga which was reconstructed in 2011. The other bridges are smaller road bridges or pedestrian bridges. A recent assessment in 2019 confirmed bridges are in good condition, consistent with their expected life. There has been no notable changes to this program.

OTHER

Condition data from visual assessments indicates other transport items, such as traffic control devices, traffic lights, bus shelters, signage, line marking, off street car parks and roundabouts are in good condition with sufficient maintenance, operational and renewal budgets. This is a small component of the overall program and at this stage there has been no notable changes to this program.

LED Street Lighting fixtures (luminaires only) with a value of \$920,000, have recently transferred to Council and have a long warranty and expected life. Their maintenance and operational costs are included in the forecast budget. It is anticipated this will be sufficient to maintain these items on an ongoing basis.

OVERALL

Overall, City of Holdfast Bay's transport assets appear to be in good condition, and investment is largely adequate to maintain current service standards, with the exception of the road network where there is a concern we are under-investing in the short to medium term. The forecast Renewal, Maintenance and Operational budgets in this AMP represent a sound approach to managing our transport assets from the information available.



Transport Asset Management Plan

We will drive a systematic approach to the development, maintenance and replacement of our assets and ensure that these assets meet the needs of our community.

TOTAL VALUE OF ASSETS: \$259M



TRAFFIC FACILITIES



CAR PARKS



FOOTPATHS



BUS SHELTERS



ROADS



KERBS



BRIDGES

OVERALL TRANSPORT ASSET CONDITION IS GOOD

79% LIFE REMAINING

LEVELS OF SERVICE



COMMUNITY

- › Quality
- › Function/ Capacity
- › Safety
- › Cost Effectiveness
- › Responsiveness



TECHNICAL

- › Condition
- › Function/ Accessibility
- › Safety
- › Cost Effectiveness
- › Responsiveness



OPERATIONAL

- › Cleaning Standards
- › Maintenance
- › Capital Renewal
- › Responsiveness



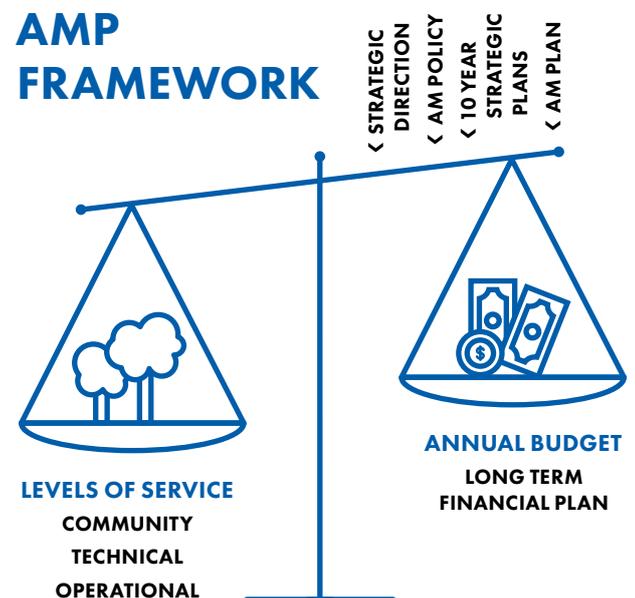
An effective customer-centred organisation

- › Providing customer-centred service
- › Enabling high performance
- › Being financially accountable
- › Supporting excellent, efficient operations

An accessible, vibrant and safe coastal city that celebrates our past to build for our future

- › Creating lively and safe places
- › Developing walkable, connected neighbourhoods

AMP FRAMEWORK

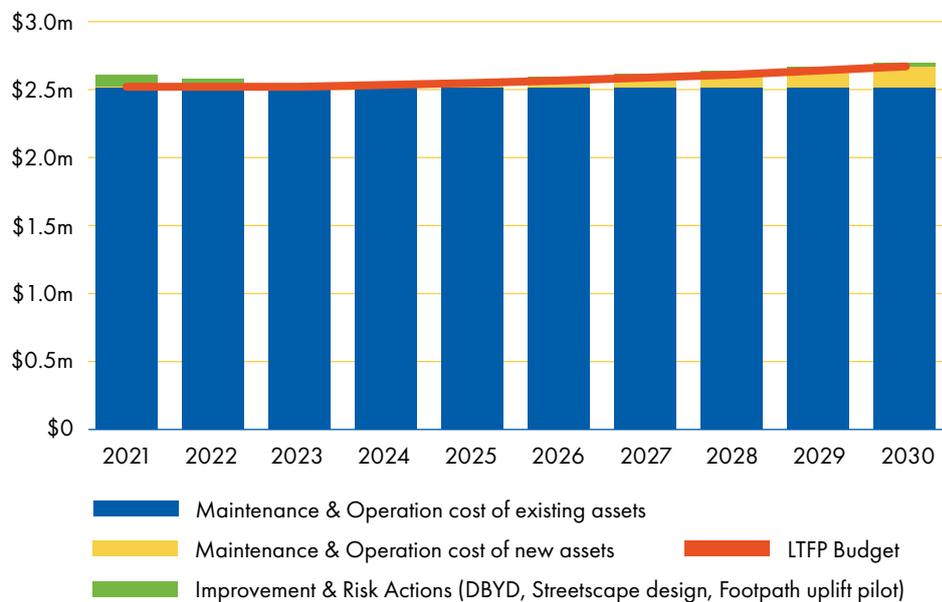


ASSET RENEWAL FUNDING RATIO: 100%

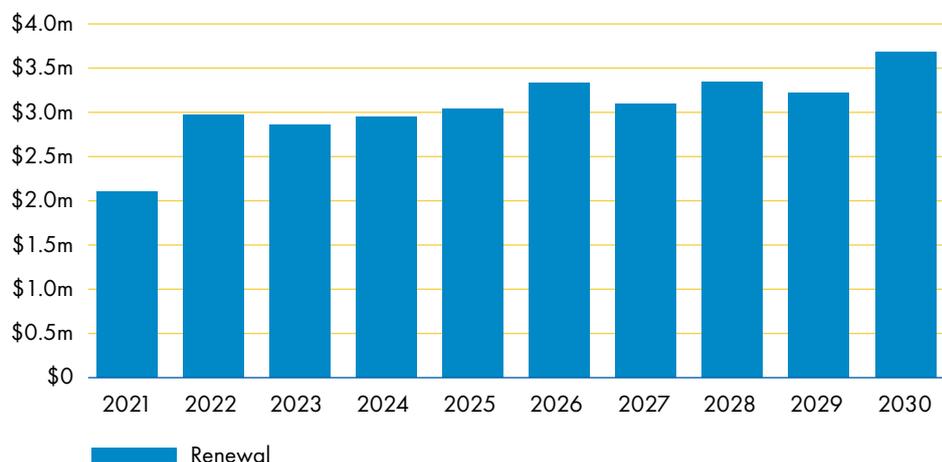
The Asset Renewal Funding Ratio indicates whether Council has the financial capability to fund the asset management strategy in this 10 year plan. Over the next 10 years of forecasting, City of Holdfast Bay expects to have 100% of the funds required for the optimal renewal and replacement of transport assets.

COUNCIL TARGET:
90–110%
OVER 5 YEARS

10 YEAR OPERATIONS & MAINTENANCE SUMMARY



10 YEAR RENEWAL FORECAST



1. Introduction



PLACEMAKING

An accessible, vibrant and safe coastal city that celebrates our past to build for our future

In accordance with the *Local Government Act 1999* (the Act) and the Strategic Plan (*Our Place 2030*), the Council provides a range of community services to the members of the local community and visitors. The services include transport services, waste management services, environmental services, social and recreational services, open space services, stormwater drainage services, and coastal and beach management services.

Under the Act, Council is required to develop and adopt an infrastructure and asset management plan covering a period of at least 10 years. In addition, Council is required to adopt a long-term financial plan (LTFP) associated with such service plans also covering a period of at least 10 years. There is a direct link between the development and implementation of these two plans, with the LTFP updated to reflect forecast expenditure as detailed within these plans. Variations to the scheduled works within the AMP and the LTFP may be adjusted as the need arises.

The primary intent of asset management is to meet a required level of service (LoS) in the most cost-effective way, through the creation, acquisition, maintenance, operation, rehabilitation, and disposal of assets to provide for present and future community needs. The Transport Asset Management Plan will be a living document over the next 3 to 4 years complying to all legislative requirements, and to communicate funding required to provide the required LoS over a 10-year planning period.

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

The Transport Asset Management Plan works in conjunction with the following Council’s plans, strategies, and policies (Table 1.0):

Plans, Strategies and Policies

<i>Asset Management Policy</i>	<i>Quality of Life and Business Confidence Reports</i>
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<i>Integrated Transport Strategy (In Progress)</i>	<i>Resilient South Regional Plan</i>
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<i>Disposal Policy</i>	<i>The Annual Business Plan</i>
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<i>Long Term Financial Plan</i>	<i>Holdfast Bay City Council Roads State of the Assets Report 2015</i>
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Our Place 2030 Strategic Plan

Table 1.0 Plans, Strategies and Policies





DEFINITIONS

Asset: A resource controlled by an entity as a result of past events and from which future economic benefits are expected to flow to the entity. This typically includes infrastructure, property, buildings, plant and equipment.

Infrastructure assets: Physical assets that contribute to meeting the needs of organisations or the need for access to major economic and social facilities and services, e.g. roads, drainage, footpaths, cycle-ways, stormwater drainage, and buildings.

Level of service: The defined service quality for a particular service/activity against which service performance may be measured.

Operational: Activities undertaken to ensure efficient operation and serviceability of the assets. This will ensure that the assets retain their service potential over the course of their useful life. Includes cleaning and minor repairs, such as stormwater GPT cleaning, street sweeping, and pothole repairs. Includes overheads, such as wages and utility costs incurred during operational activities.

Renewal: Provides a program of progressive renewal of individual assets. Deteriorating asset condition primarily drives renewal needs, with increasing maintenance costs also considered.

Acquisition: Provides a program of works to create new assets or substantially upgrade existing assets. This is primarily driven by community, growth, social and/or environmental needs/desires.



1.1 LEGISLATION AND RELEVANT ACTS

Council also adheres to and maintains assets in alignment with the following acts:

Legislation	Requirements
<i>AS / NZS 1428.2 Pedestrian & Cycling Paths</i>	Have consideration of, adhere to and fulfil the requirements of the Standards.
<i>Australian Accounting Standards</i>	Standards applied in preparing financial statements, relating to the valuation, revaluation and depreciation of transport assets.
<i>Development Act 1993</i>	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.
<i>Planning, Development and Infrastructure Act 2016</i>	An Act to provide for matters that are relevant to the use, development and management of land and buildings, including by providing a planning system to regulate development within the State, rule with respect to the design, construction and use of buildings, and other initiatives to facilitate the development of infrastructure, facilities and environments that will benefit the community.
<i>Disability Discrimination Act 1992</i>	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.
<i>Environmental Protection Act</i>	An Act to provide the protection of the environment; to establish the Environment Protection Authority and define its functions and powers; and for other purposes. Consideration of this Act should be undertaken for the provision, development or management of open space.
<i>Highways Act 1926</i>	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.
<i>Local Government Act 1999</i>	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.
<i>Work Health and Safety Act 2012</i>	An Act to provide for the health, safety, and welfare of persons at work; and for other purposes.
<i>Road Traffic Act 1961</i>	An Act to consolidate and amend certain enactments relating to road traffic; and for other purposes.
<i>Summary Offences Act 1953</i>	This Act provides provisions for road closure to motor vehicles in accordance with Section 59.

Table 1.1 Transport Asset Management Plan Legislative Requirements

2. Asset Class Information

TRANSPORT ASSET CLASS

ROADS (SEALED, UNSEALED, PAVEMENT, SUB BASE)

Replacement Value: \$126m
Average Condition: Good
Length: 178km

TRAFFIC CONTROL DEVICES

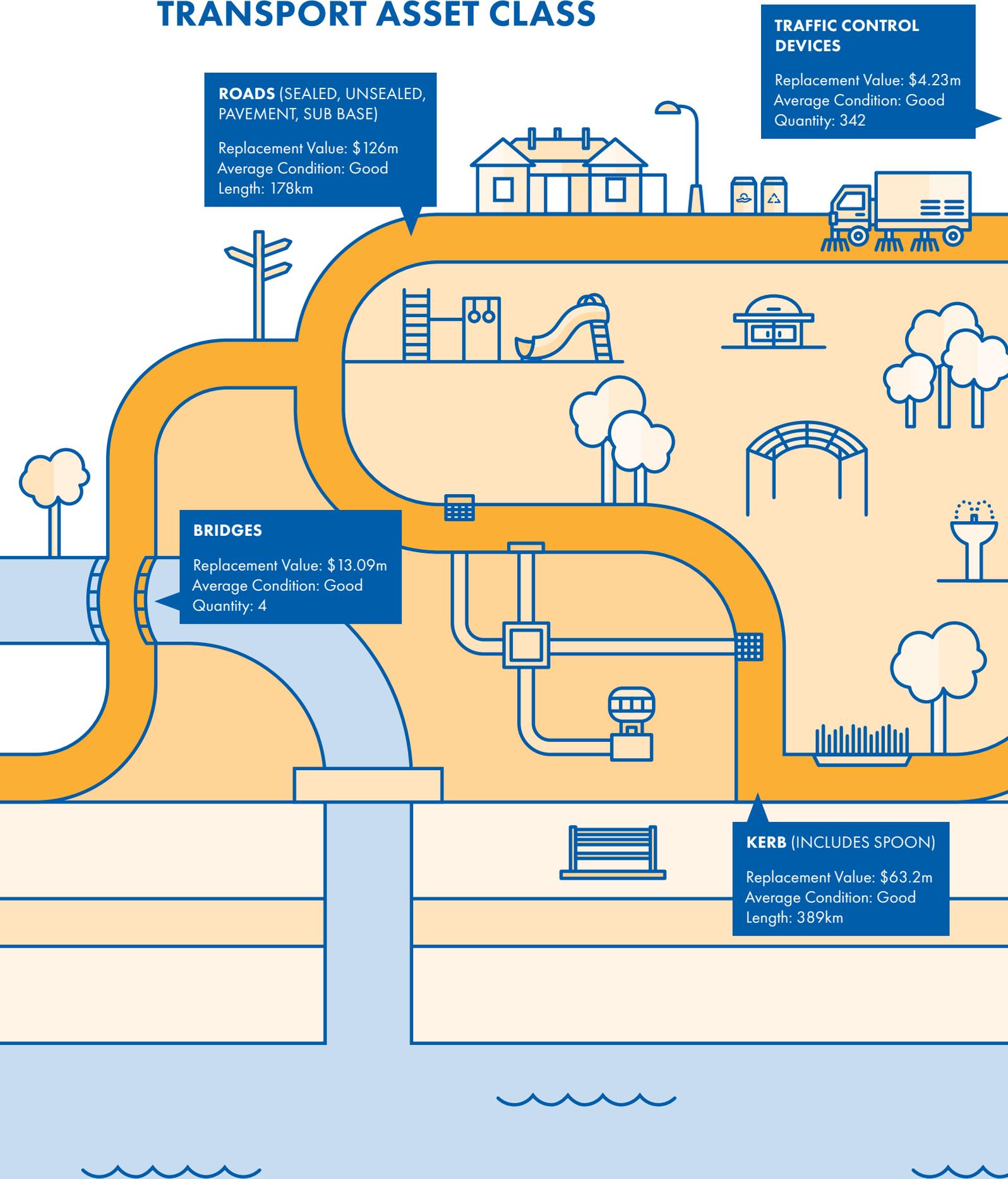
Replacement Value: \$4.23m
Average Condition: Good
Quantity: 342

BRIDGES

Replacement Value: \$13.09m
Average Condition: Good
Quantity: 4

KERB (INCLUDES SPOON)

Replacement Value: \$63.2m
Average Condition: Good
Length: 389km



BUS SHELTERS

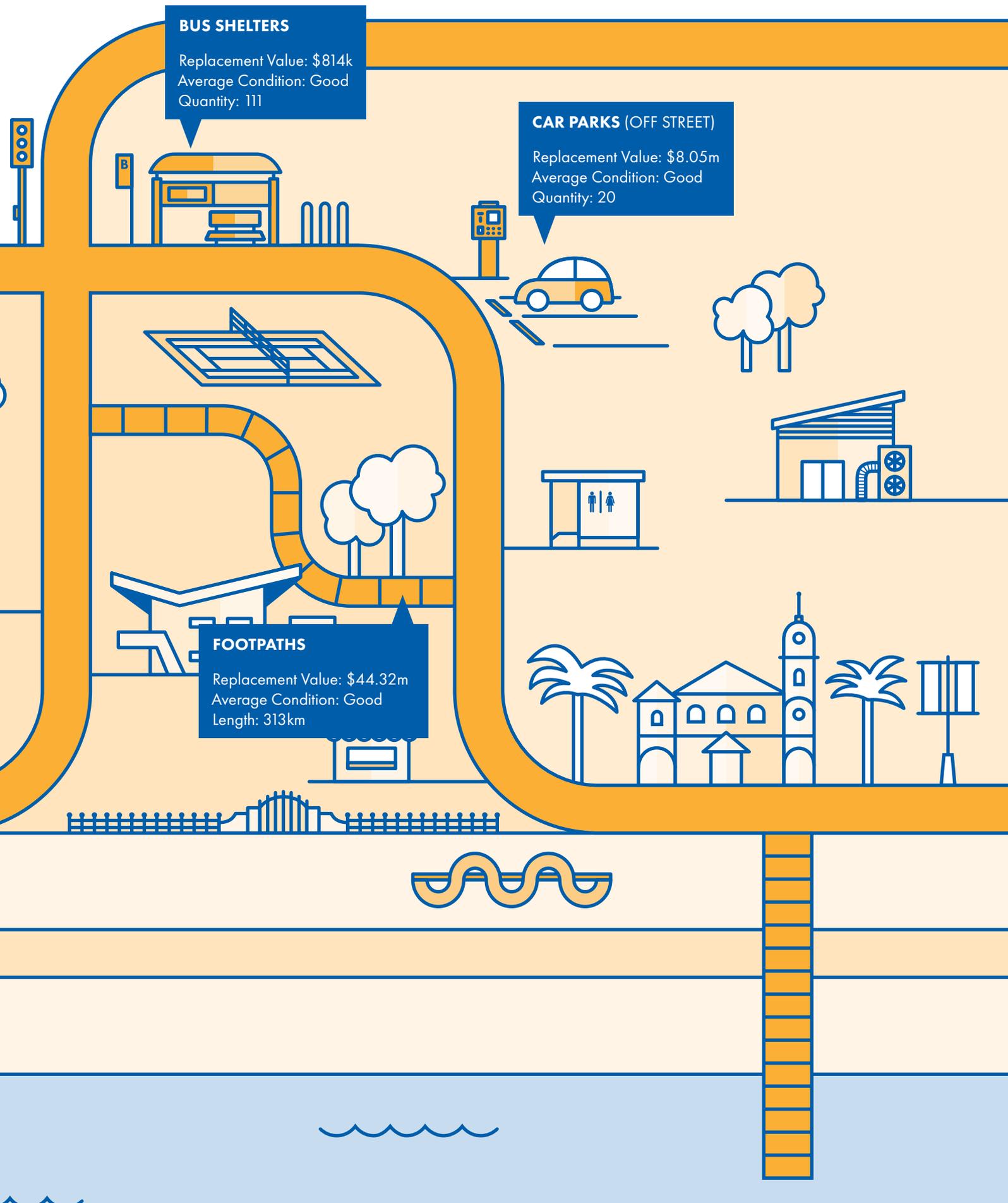
Replacement Value: \$814k
Average Condition: Good
Quantity: 111

CAR PARKS (OFF STREET)

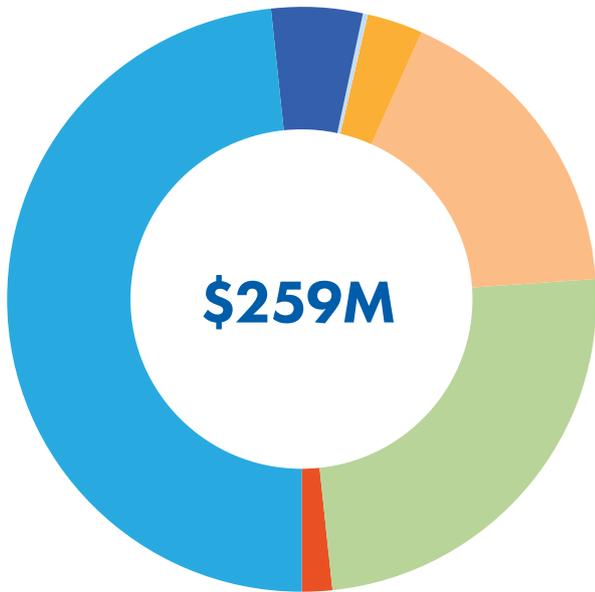
Replacement Value: \$8.05m
Average Condition: Good
Quantity: 20

FOOTPATHS

Replacement Value: \$44.32m
Average Condition: Good
Length: 313km



TOTAL CURRENT REPLACEMENT COST OF TRANSPORT



Roads	\$125,719,013	●
Bridges	\$13,090,627	●
Bus shelters	\$813,953	●
Car parks	\$8,050,663	●
Footpaths	\$44,316,205	●
Kerbs	\$63,185,546	●
Traffic control	\$4,233,539	●



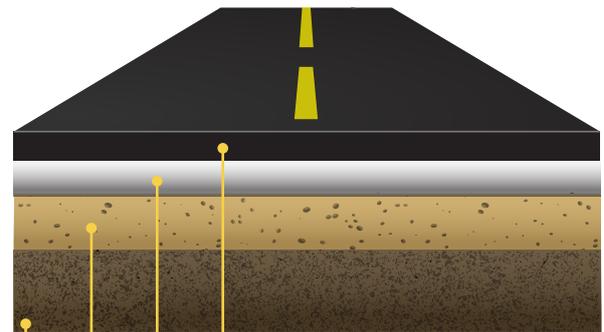
CONDITION RATING



This AMP covers the class of transport assets for the City of Holdfast Bay. A transport asset is defined as any fixed or permanent structure that services Council's transport network. The infrastructure services include: roads for motor vehicles, bicycle ways for bicycles, facilities for public transport, footpaths, verges, kerbs and watertable for drainage services, car parks and streetscapes for aesthetics.

The physical boundary of each asset will be divided practically, by function and material. These will be interlinked at a higher level to the Transport Segment ID to allow for cyclical maintenance and operation programs, as well as forming the foundation for prioritisation and risk management. The individual asset categories (Road, Footpath, etc.) are used primarily for customer request management, renewal, maintenance, defect management and other asset management functions.

ROADS – Roads are divided into four layers



Wearing Course Surface of roads that create a smooth and water-resistant surface layer.

Base Course Layer of the road, excluding shoulders, above the design subbase level for the support of the wearing course.

Subbase Course (Optional) Layer of crushed rock or similar material located above the subgrade, but beneath the base course of a road pavement.

Subgrade (Existing Soil) Natural material.



FOOTPATHS

Footpaths are divided into four types based on material type (base course is included in the total footpath cost):



PAVED



CONCRETE



GRAVEL



ASPHALT

KERB & WATERTABLE

Kerb and watertables are divided into five types based on material type and functionality (pram ramps are included as part of the kerb segment):



CONCRETE



MIXED



ASPHALT



STONE



SPOON DRAIN

CARPARK

Carpark assets have been separated from other transport assets due to their specialised strategic and operational requirements. A car park asset is further divided into its functional type:

- › Footpath
- › Kerb & Watertable
- › Landscape
- › Pavement
- › Seal

Car parks include off-street car parking only that is managed and/or owned by Council and may be associated with a property or reserve but remain a transport class asset.

BUS SHELTERS

Bus shelters include all shelters owned and/or managed (leased) by City of Holdfast Bay. The asset is inclusive of the shelter structure, bench and any paving works associated with its installation. It is not inclusive of signage or tactile.

TRAFFIC CONTROL DEVICES

Traffic control devices include:

- › Pedestrian crossings
- › Roundabouts
- › Speed restrictions (i.e. road humps)
- › Traffic islands
- › Traffic signals
- › Line marking
- › Signs (regulatory signs)

The asset register only includes physical infrastructure owned and/or managed by City of Holdfast Bay associated with these traffic items.

BRIDGES

Bridges include road and footbridges currently owned and/or managed by City of Holdfast Bay. Bridges components are further divided into structure, electrical, plumbing and street lighting.

2.1 ASSET HIERARCHY

An asset hierarchy provides a framework for structuring data in an information system to assist in the collection of data, reporting information and making decisions. The hierarchy includes the asset class and component used for asset planning and financial reporting and service level hierarchy used for service planning and delivery. Table 2.1 below outlines Council's service levels for each level of hierarchy.

The criteria for a high service level street include close proximity to metropolitan and neighbourhood open space and coastal areas, education facilities and aged care facilities, as well as road usage (vehicles per day).

Council's asset hierarchy and associated service levels are detailed in Appendix 1.

Hierarchy Level	Description
High (Premium)	Premium service level assets cater for tourists, residents, and visitors at a metropolitan and Interstate level – For example, Jetty Road (Glenelg), Moseley Square.
High	High service level transport assets cater for residents and visitors at a neighbourhood or metropolitan level. For example, Jetty Road (Brighton), Esplanade, Major Bus Routes.
Medium	For example, residential and industrial local roads.
Low	For example, laneways and low volume roads.

Table 2.1 Asset Hierarchy

2.2 ASSET EXPECTED LIFE

All assets are provided with a baseline straight line useful life value (blue line), used for the purposes of lifecycle cost planning and accounting for asset valuation and depreciation. This straight-line depreciation is used in Council’s financial reporting.

The service life of transport assets differs from the standard design life and the useful life, as it also accounts for the ongoing maintenance and renewal of the asset to maintain a designated technical LoS (black line). The setting of service levels will be undertaken by Council staff in consultation with the community and elected members, to optimise whole of life costs for the assets.

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

Figure 2.2 shows that the deterioration curves, red and black, show a true reflection on an assets aging profile, as it typically deteriorates faster towards the end of its life.

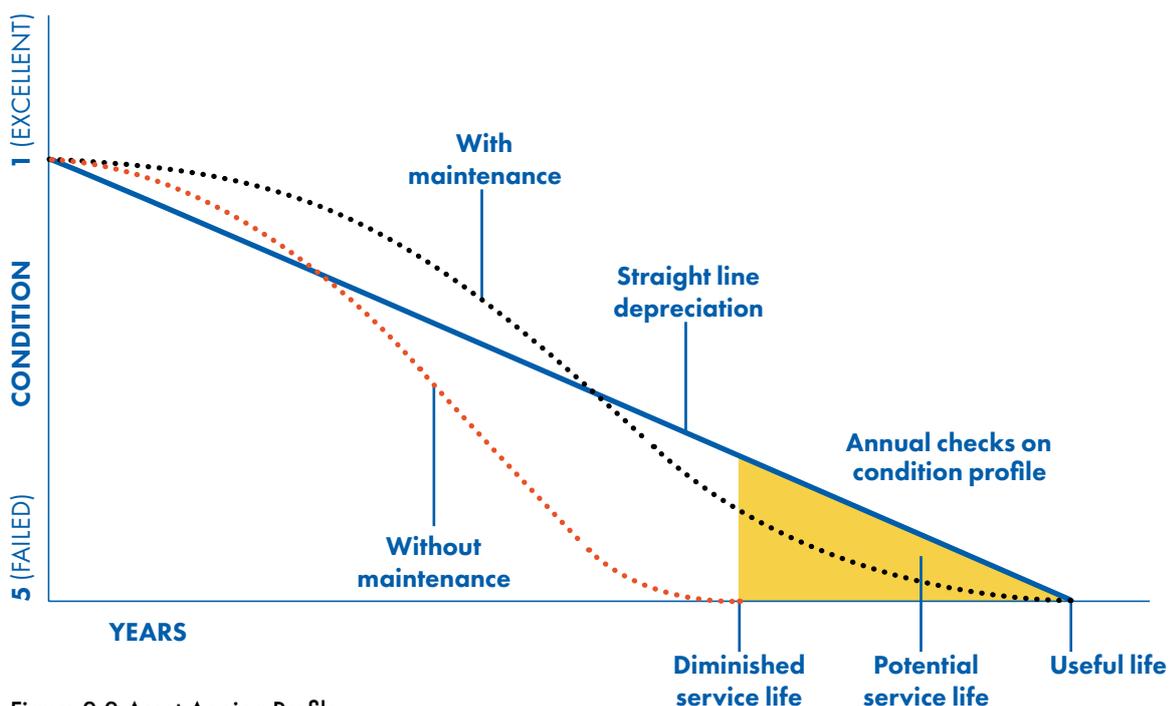
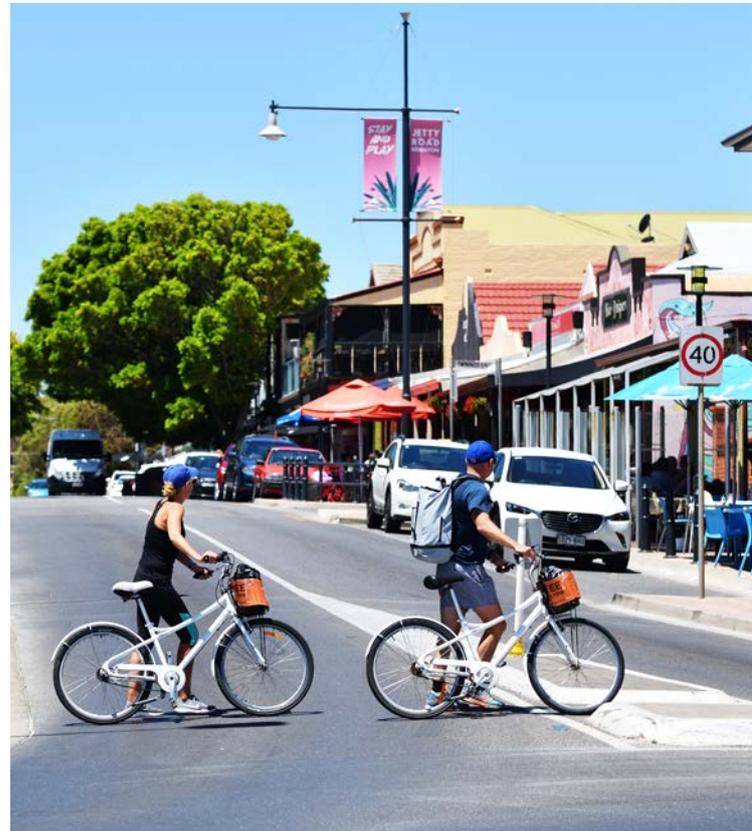


Figure 2.2 Asset Ageing Profile

2.3 ASSET QUALITY AND DISTRIBUTION

The City of Holdfast Bay has a responsibility to maintain the appropriate condition of transport assets as defined by the LoS.

This includes:

- › Forward works planning – capital and maintenance program
- › Overseeing works undertaken
- › Organising of specific traffic and transport audits.

Internal inspections of transport assets will be undertaken through a four-year program, managed by the Assets and Finance Teams. The inspection frequency is based on criticality. An external, comprehensive condition and defect audit of transport assets should be completed every 4–5 years, to satisfy legislative requirements.

Transport assets incorporate a 1–5 condition rating score (Table 2.3) for each asset.



CONDITION RATING



Condition Rating	Condition Description	Actions
1	Very Good	No action required
2	Good	Minor defects only
3	Fair	Maintenance required to return to accepted level of service
4	Poor	Consider renewal
5	Very Poor	Approaching unserviceable

Table 2.3: Condition Assessment System (based on International Infrastructure Management Manual 2015, IIMM)

Each transport segment and subsequent transport asset has been provided with a full set of condition ratings during transport audits, last undertaken in 2019 (roads), 2019 (footpaths), 2018 (bridges), 2015 (all other transport assets). Road, kerb & watertable and footpath assets are scored every 20m for condition and defects, and their scores averaged for the entire segment to produce the overall condition score.



JETTY ROAD BRIGHTON

STAY AND PLAY
JETTY ROAD BRIGHTON

STAY AND PLAY
JETTY ROAD BRIGHTON

STAY AND PLAY
JETTY ROAD BRIGHTON

40

40



3. Stakeholders

Transport assets are managed through the City of Holdfast Bay Assets division with support services from the Finance and Innovation Technology services department. The key stakeholders and their roles are defined in Table 3.1.

Key Stakeholders	Roles in Asset Management Plan
Residents and Ratepayers	<ul style="list-style-type: none">› Ultimate beneficiaries of the AMP process› Feedback collected throughout the year› Annual satisfaction survey undertaken
Visitor/Tourists	<ul style="list-style-type: none">› Regular satisfaction surveys undertaken, and feedback collected
Business Owners; Traders; Service Providers	<ul style="list-style-type: none">› Play a significant role in providing services› Feedback is collected through regular consultation› Suppliers provide the goods and services to manage the assets and infrastructure
Council	<ul style="list-style-type: none">› To act as custodians of community assets› To set asset management policy and vision› Allocate resources to meet Council objectives in providing services while managing risks
Chief Executive Officer/Senior Leadership Team	<ul style="list-style-type: none">› To provide leadership and strategic direction› Review Asset Management Policy and Asset Management Strategies› To ensure that community needs and the outcomes of service reviews are incorporated into asset management planning and Long-Term Financial Plan› To ensure that training of Councillors and staff in financial and asset management practices is provided› To ensure that accurate and reliable information is presented to Council› To ensure appropriate delegations and approval processes are followed



Key Stakeholders Roles in Asset Management Plan

Asset Management Leadership Team	<ul style="list-style-type: none">› Facilitate development of Asset Management Plans› To oversee the implementation of the Asset Management Policy and Asset Management Strategies› To oversee the ongoing development and review of service plans and asset management plans› To ensure that community needs and the outcomes of service reviews are incorporated into asset management plans› To promote and raise awareness of asset management within the organisation› To ensure relevant health and wellbeing, human rights and equity principles and strategies are taken into consideration› To develop and implement asset management improvement plan› To provide and manage the asset management information system(s)› Integrate asset management and financial plans and reporting
Asset Manager(s) and Staff	<ul style="list-style-type: none">› To lead the development of the Asset Management Plans› To develop and implement maintenance, renewal and capital works programs in accordance with the Asset Management Policy, Strategy, Plans, as well as budget allocations› Develop Specific Management Plans (upgrade, renewal, maintenance, operations, disposal)› To deliver levels of service to agreed risk and cost standards and expectations› To report asset related risk and damage› To establish and monitor asset compliance and risk inspection regimes› To manage asset condition assessments› To provide technical expertise to Asset Management Leadership Team

Table 3.1 High Level Organisational Structure

4. Current and Desired Levels of Service (LoS)

Levels of Service or objectives and the way these are benchmarked and measured annually and quarterly, are the single biggest point of difference between previous AMPs and ISO 55000 standard plans. By its very definition, ISO 55000 is measurable and definable outcome that typifies an outcome-based paradigm.

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

The City of Holdfast Bay have two defined levels of service:

- > Customer (Community) LoS
- > Technical LoS

Customer (Community) Level of Service

Strategic Goal(s)	Performance Measure	Level of Service Objective	Performance Measure	KPI
Culture: Supporting excellent, efficient operations	Quality	Provision of clean and serviceable facilities.	Percentage of assets that are better than our service level targets (Appendix 1 Asset Hierarchy).	Above 95%
Culture: Supporting excellent, efficient operations	Function/Capacity	Generally, meet user requirements and are available when required.	Quality of Life Community Survey on the functionality of transport assets.	Above 7.0
Placemaking: Creating lively and safe places	Safety	Facilities are free from hazards and accessible to all groups.	Number of incident/injury reports.	0 report per year
Culture: Being financially accountable	Cost Effectiveness	Provide services in a cost-effective manner.	Quality of Life Community Survey on the cost effectiveness of transport services.	Above 7.0
Culture: Supporting excellent, efficient operations	Responsiveness	Provide services with determined response time.	Time taken to respond to request are better than our service level targets (Appendix 1 Asset Hierarchy).	Above 95%



Technical Level of Service

Strategic Goal(s)	Performance Measure	Level of Service Objective	Performance Measure	KPI
Culture: Supporting excellent, efficient operations	Condition	Appropriate maintenance works and regular condition assessment.	Maintenance and inspection better than our service level targets (Appendix 1 Asset Hierarchy).	Above 95%
Placemaking: Creating lively and safe places Placemaking: Developing walkable, connected neighbourhoods	Function/ Accessibility	Provide access and services for all user groups.	Function and amenities better than our service level targets (Appendix 1 Asset Hierarchy).	Above 95%
Placemaking: Creating lively and safe places	Safety	Provide safe suitable facilities free from hazards.	Average number of defects per asset.	Equal to exceeding agreed service level defect targets
Culture: Being financially accountable Culture: Supporting excellent, efficient operations	Cost Effectiveness	Provide service in a cost-effective manner.	Asset Renewal Funding Ratio.	100%
Environment: Building an environmentally resilient city	Environmental	Environmental Strategy.	Projects consider environmental outcomes and options.	100%

5. Future Demand

Over time, the community’s demand for the services that the City of Holdfast Bay provides changes. The reason for change can be varied, but some of the common drivers are population, demographics, technology, environmental, economic and political. Naturally as service demand changes, the City of Holdfast Bay’s assets may also need to change.

Current Position	Demand Forecast	Demand Impact	Demand Management Plan	Impact on Assets
<p>Population increase:</p> <ul style="list-style-type: none"> › Total estimated population: 36,520. 	<p>Planned to accommodate for 40,313 by 2031.</p>	<p>Increased demand and use of transport assets will affect the useful life of the assets which will increase the maintenance and renewal program.</p> <p>The demand for more roads and footpaths are unlikely but it will increase the demand for traffic control devices such as car parks.</p>	<p>To protect the base from degradation through:</p> <ul style="list-style-type: none"> › Efficient maintenance of potholes › Condition surveys every 4 years to ensure reseal works are performed at timely intervention points. 	<p>Increase demand on traffic load which will reduce the useful life of road assets.</p>



Current Position	Demand Forecast	Demand Impact	Demand Management Plan	Impact on Assets
Changing demographics: › City of Holdfast Bay's Median Age is 46 years.	Growth in aging population.	With the increase in the aging population, there will be a strong demand for the accessibility of transport infrastructure (e.g. better footpaths to walk on, bus shelters due to increase use of public transport), signage and other traffic control measures.	Track community service level KPI for Functionality. Are we providing the correct assets to suit the changing needs of the community?	Investigate methods to reduce the impact of tree roots on existing and new footpaths constructed.
Housing density: › 51% of dwellings are medium to high density.	Increase in housing density.	Increase in redevelopment will pose an increase demand on transport assets. Increase parking therefore more congestion. Increase use of public transport.	Ensure post-development remediation works are completed to required standard. Ensure Bus Stops are DDA compliant.	More demand for minor maintenance.
Climate/ Environmental Change: › Increase trend in severe weather events including droughts, storms and storm surges.	Exponential severe weather events to continue based on current trends. Greater environmental sustainability requirements placed on the construction industry.	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.	Ensure safety issues are investigated, prioritised, and appropriately addressed as resources allow. Investigate the impact of rising activity on transport infrastructure with Council's partners e.g. DIT.	Higher costs associated with construction methods that are environmentally sustainable, e.g. disposal of contaminated old road pavement material.
Legislative Requirements: › The increasing level of DDA compliance on transport assets.	Higher standards of safety and improved transport assets.	Higher LoS may impact on the amount of maintenance and renewal able to be undertaken with allocated budget.	Review the DDA compliance impacts on existing assets and adjust forecast asset replacement costs and design lives.	Redesigning networks and specific assets to meet legislative requirements.

Table 5.1 Future Demands

6. Life Cycle Planning/Strategies

The lifecycle management plan details how the City of Holdfast Bay plans to manage and operate the assets at the agreed levels of service while managing life cycle.

The assets covered by this Transport Asset Management Plan are shown in Section 2, Asset Class Information. The City of Holdfast Bay’s transport network is generally in fair condition, having been well funded in the past 10 years. However, failures in the consistency and quality of treatment programs, as well as a wearing course design not suited to modern capacity requirements, has led to the development of early pavement failures. These are currently under investigation. Whilst funding requirements are modest in the short term, there are risks that these may substantially increase in the medium term.

This section presents an analysis of Council’s available transport assets information and the life cycle management plans covering the four key work activities to manage transport assets.

- › **Operations and Maintenance Plan** – Activities undertaken to ensure efficient operation and serviceability of the assets. This will ensure that the assets retain their service potential over the course of their useful life.
- › **Renewal Plan** – Provides a program of progressive renewal of individual assets. Deteriorating asset condition primarily drives renewal needs, with increasing maintenance costs also considered.
- › **Acquisition Plan** – Provides a program of works to create new assets or substantially upgrade existing assets. This is primarily driven by community, growth, social and/or environmental needs/desires.
- › **Disposal Plan** – Any activity associated with the disposal of a decommissioned asset including sale, demolition, or relocation. Any costs or revenue gained from asset disposals is included in the LTFP.

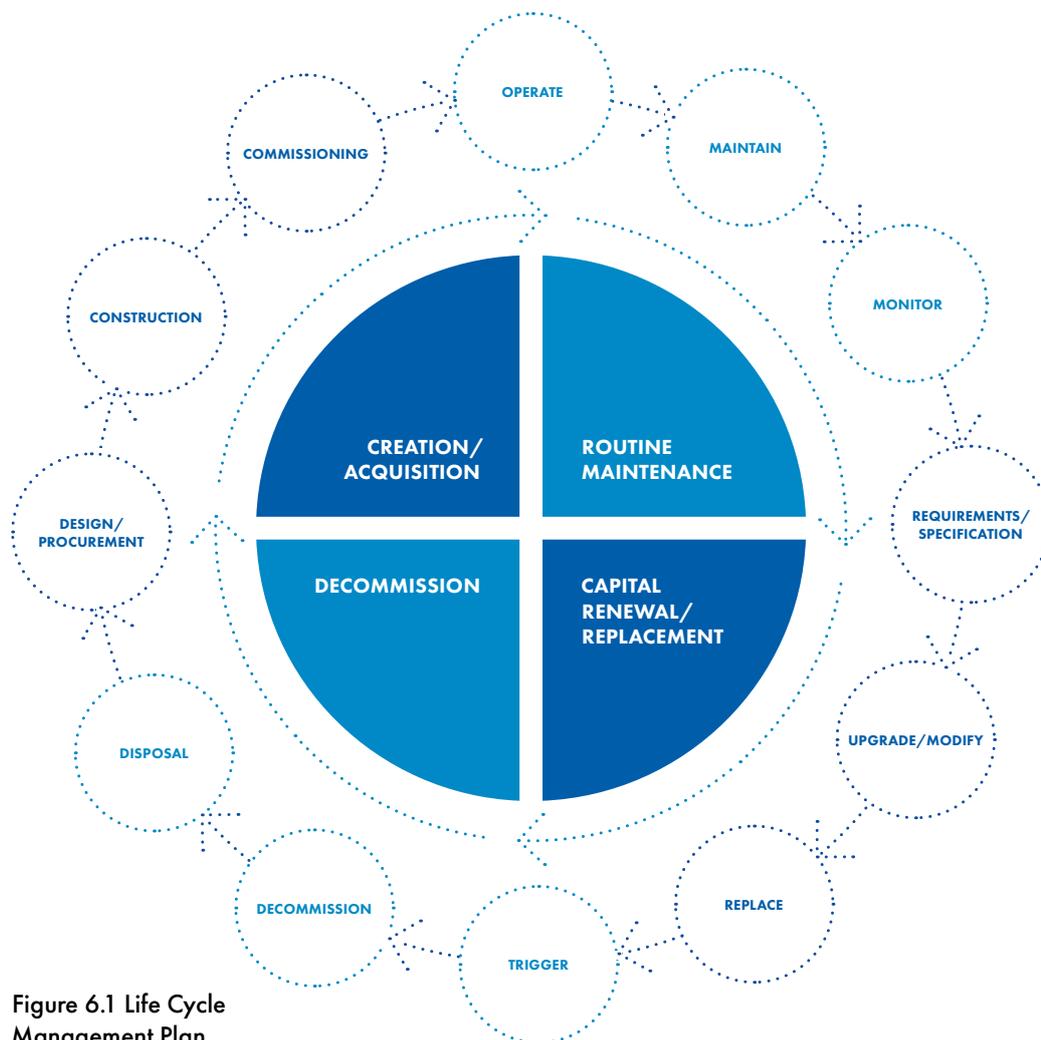


Figure 6.1 Life Cycle Management Plan

6.1 OPERATIONS & MAINTENANCE PLAN

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

Maintenance include all actions necessary for retaining an asset as near as practicable to an appropriate service condition including regular ongoing day-to-day work necessary to keep assets operating. Examples of typical maintenance activities include pothole repairs, minor kerb and footpath repairs, and street sign replacement.

Maintenance of transport assets is largely reactive, with some planned cyclical activities and programs. With the shift towards proactive maintenance programs we will see an increase in expenditure in the short term followed by a gradual decrease as efficiencies are realised.

Maintenance is classified as:

› **Reactive Maintenance**

Reactive maintenance is unplanned repair work carried out in response to customer service requests and management decisions and are often carried out by Council field services. Such unplanned maintenance could include storm damage and any ad hoc requests from the community. Assessment and priority of reactive maintenance is undertaken by staff using experience and judgement.

› **Planned Maintenance**

Planned maintenance is identified and managed through an Asset Management System (AMS). AMS activities include inspection, road patching, minor kerb replacements and trip stop. These activities include inspection, condition assessment and reporting what was done to develop a maintenance history and improve maintenance and service delivery performance.

The City of Holdfast Bay will operate and maintain the transport assets to provide the defined LoS to approved budgets in the most cost-effective manner.

6.2 RENEWAL PLAN

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

Assets requiring renewal are identified using the asset register data to project the renewal costs (current replacement cost) and renewal timing (acquisition year plus updated useful life to determine the renewal year).

In the 10-year Forecast Renewal Program, Council will:

- › Maintain 385 Roads
- › Replace 233 Footpaths
- › Upgrade 40 Bus Shelters
- › Renew 17 Traffic Control Devices.

6.2.1 RENEWAL RANKING CRITERIA

Asset renewal is typically undertaken to either:

- › Ensure the reliability of the existing infrastructure to deliver the service it was constructed to facilitate, or
- › To ensure the infrastructure is of sufficient quality to meet the service requirements (e.g. condition of a playground).

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

- › Have a high consequence of failure;
- › Have high use and subsequent impact on users would be significant,
- › Have higher than expected operational or maintenance costs, and
- › Have potential to reduce life cycle costs by replacement with a modern equivalent asset that would provide the equivalent service.²

The ranking criteria used to determine priority of identified renewal proposals are detailed in Table 6.2.

2. Based on IPWEA, 2015, IIMM, Sec 3.4.5, p3 | 97

Criteria	Weighting
Service Level Hierarchy (High, Med, Low)	50%
Risk rating: Social, political, environmental implications of failure	25%
Potential to reduce life cycle costs by replacement with a modern equivalent	25%
Total	100%

Table 6.2 Renewal Priority Ranking Criteria

As detailed in the risk section of this AMP, the pavement design and condition remain a risk until the testing results have been received. This may have a significant impact on the Renewal Program. Additionally, the localised impacts of climate change is not yet known upon the transport assets. This remains a risk until these impacts have been reviewed and an action plan implemented.

6.3 ACQUISITION PLAN

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

6.3.1 SELECTION CRITERIA

Proposed upgrade of existing assets, and new assets, are identified from various sources such as community requests, proposals identified by strategic plans or partnerships with others. Potential upgrade and new works should be reviewed to verify that they are essential to the Entities needs.

When Council commits to new assets, they must be prepared to fund future operations, maintenance, and renewal costs. They must also account for future depreciation when reviewing long term sustainability. This is outlined in City of Holdfast Bay's Asset Management Policy (Section 3.3.3).

The only Council approved forecast constructed acquisitions approved by Council are the Holdfast Community Centre Car Park Ramp and Jetty Mainstreet Project Costs. The recently installed LED street lighting was added as a donated costs, which will require ongoing maintenance and operational funding. It is anticipated further upgrades and acquisitions will emerge from the Integrated Transport Strategy once actions have been finalised and approved.

6.4 DISPOSAL PLAN

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

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

7. Financial Summary

This section contains the financial requirements resulting from all the information presented in the previous sections of this AMP. The financial projections will be improved as further information becomes available with the introduction of a new strategic asset management modelling system in future AMPs, on desired LoS and current and projected future asset performance.

A summary of all financials is provided in Appendix 2.

7.1 ASSET VALUATIONS

Valuations are undertaken in alignment with Australian Accounting Standard 'AASB13 Fair Value'. 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 Table 7.1 and Figure 7.1.

Asset Category	Current Replacement Cost	Accumulated Depreciation
Bridges	\$13,090,627	\$4,159,948
Bus Shelters	\$813,953	\$322,896
Car Parks	\$8,050,663	\$2,207,669
Footpath	\$44,316,205	\$24,695,174
Kerb	\$63,185,546	\$27,817,465
Traffic Control	\$4,233,539	\$1,502,715
Roads	\$125,719,013	\$49,812,340
TOTAL	\$259,409,546	\$110,518,207

Table 7.1 Valuation of Transport Assets – by Asset Category

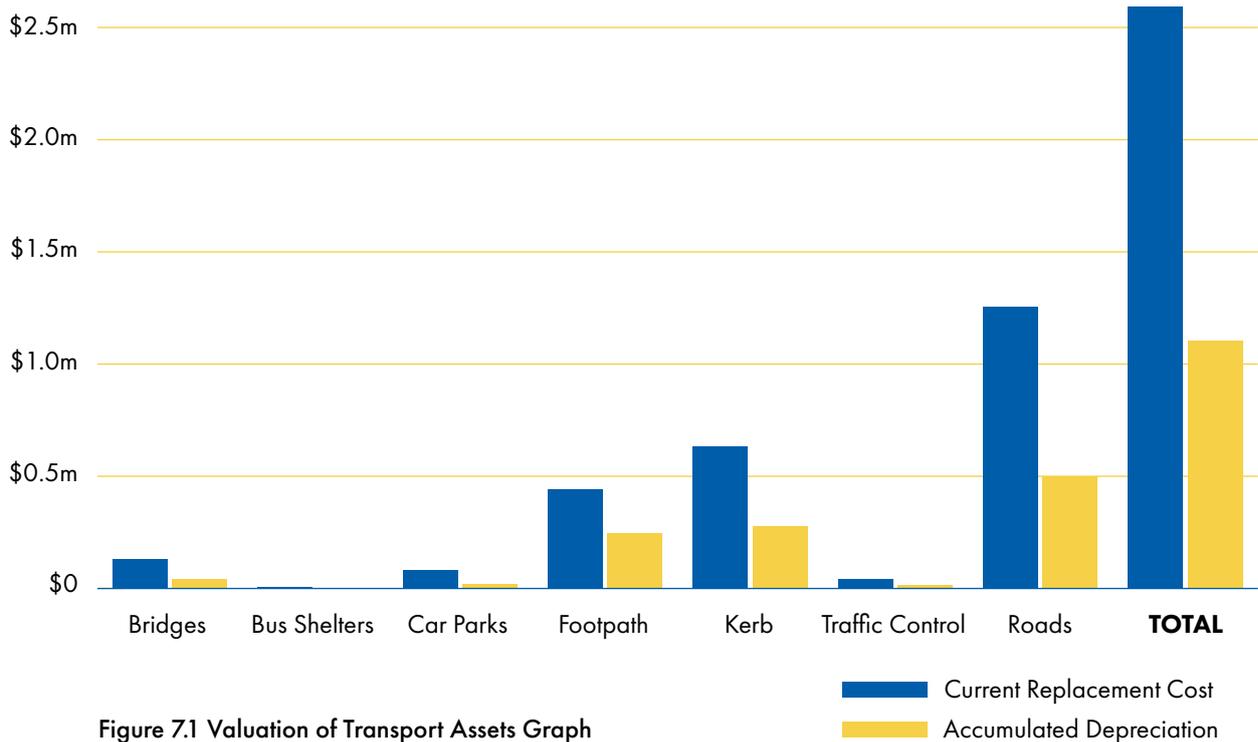


Figure 7.1 Valuation of Transport Assets Graph

7.2 MAINTENANCE AND OPERATIONS TRENDS AND FORECASTS

Figure 7.2.1 displays the maintenance and operational expenditure trend of Council’s transport assets.

Maintenance budget levels are considered to be adequate to meet projected service levels, which may be less than or equal to current service levels. Where maintenance budget allocations are such that they will result in a lesser LoS, the service consequences and service risks have been identified and are highlighted in this AMP and service risks considered in the Infrastructure Risk Management Plan.

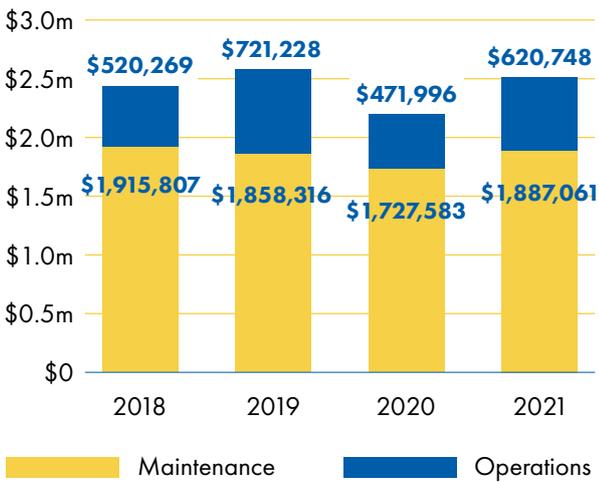


Figure 7.2.1 Transport Maintenance and Operations Expenditure Trend

7.3 FUTURE OPERATIONS AND MAINTENANCE FORECAST

Forecast operations and maintenance costs are expected to vary in relation to the total value of the asset stock. If additional assets are acquired, the future operations and maintenance costs are forecast to increase. If assets are disposed of, the forecast operation and maintenance costs are expected to decrease. Figure 7.3.1 shows the forecast operations and maintenance costs relative to the proposed operations and maintenance planned budget.

The operation and maintenance costs on Council’s transport assets are forecast to (cumulatively) increase by approximately \$955,390 over the next 10 years:

- › Additional maintenance and operations cost of \$605,390 is required for newly acquired assets (included in LTFP Budget). This is largely the result of the Jetty Road Masterplan project, which has been fully allocated to the transport portfolio.
- › Additional \$350,000 of operational costs is required to action risks identified in the Risk Management Plan as well as improvement items outlined in the Improvement Plan (not included in LTFP budget). This includes DBYD registration, streetscape design, and Roads Comprehensive Condition Data Collection and Optimized Treatment Strategy.

10 YEAR OPERATIONS & MAINTENANCE SUMMARY

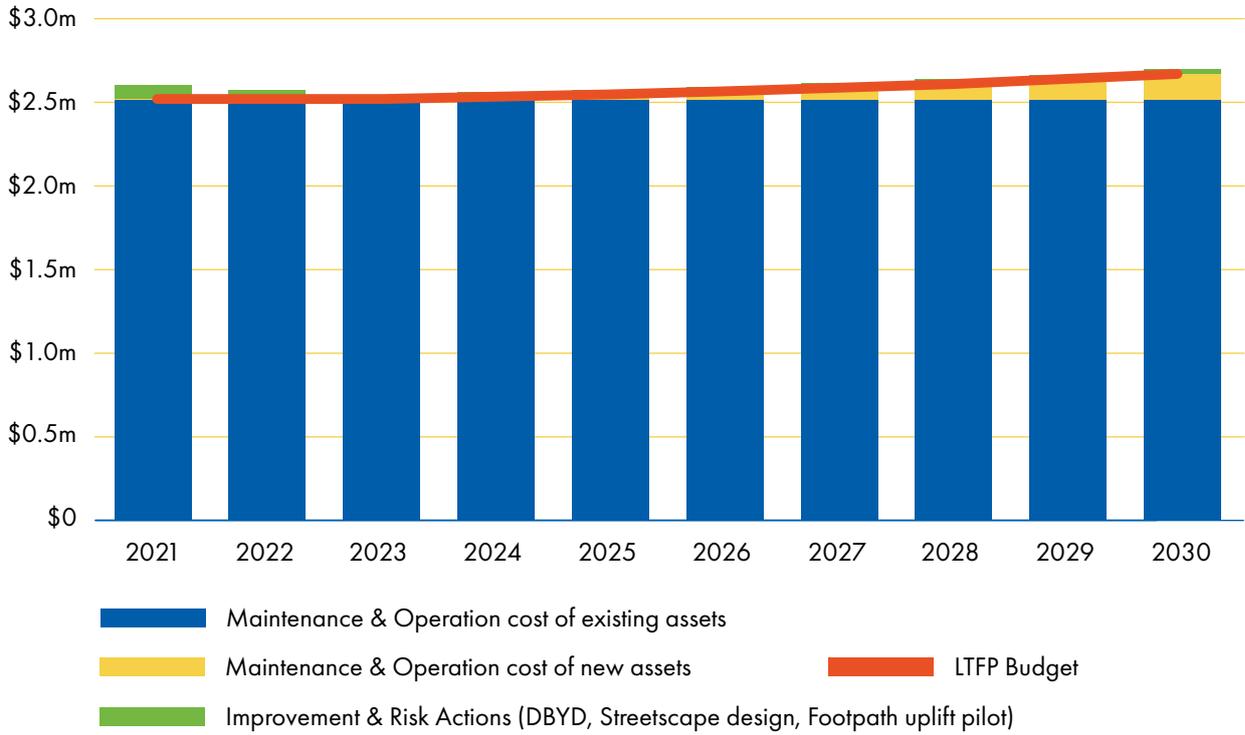


Figure 7.3.1 Operations and Maintenance Summary





7.4 FUTURE RENEWAL FORECAST

The forecast renewal costs are consistent with the planned renewal budget over the next 10 years. This is because Council has committed to adopting the renewals as detailed in the Asset Management Plan.

Council's LTFP renewal forecast for the next 10 years is \$31,140,007 and this projection is shown in Figure 7.4.1.

The total expenditure forecast for transport assets for the next 10 years is shown in Figure 7.3.1. The shortfall in funds (where the column exceeds the red LTFP Budget line) relates to the maintenance and operational costs that was explained earlier in section 7.3.

10 YEAR RENEWAL FORECAST

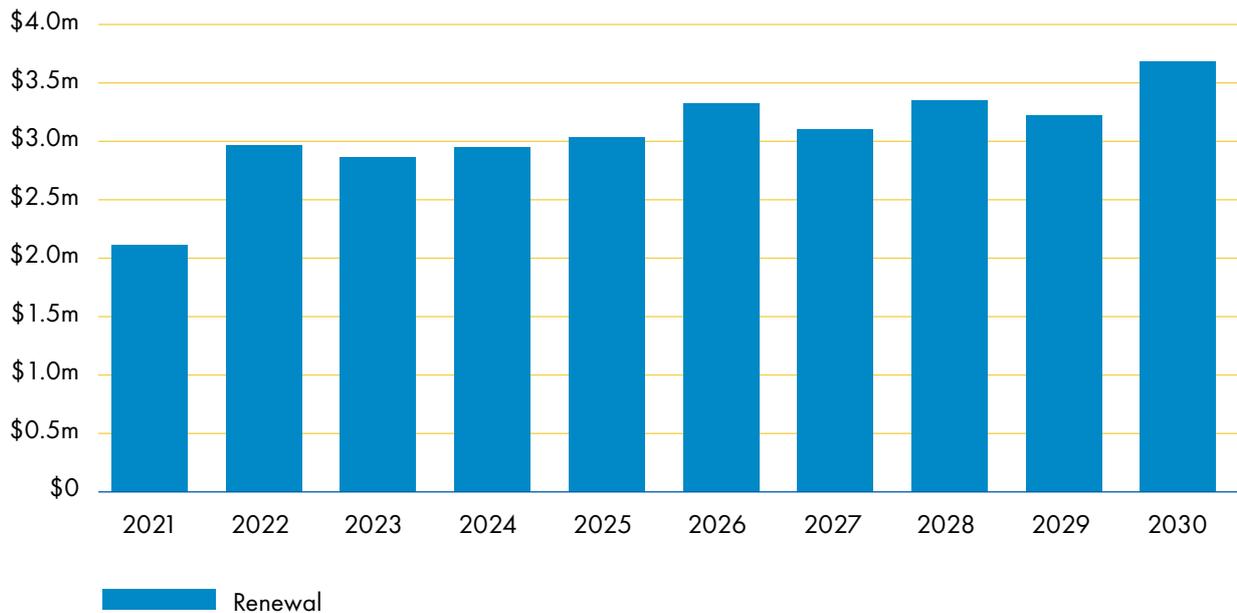


Figure 7.4.1 10 Year Renewal Forecast

7.5 FUTURE ACQUISITION FORECAST

Council’s acquisition forecast and LTFP budget for the next 10 years is displayed in Figure 7.5.1.

The majority of anticipated acquisition costs are from the Jetty Road Mainstreet Masterplan Project. There is also \$1 million allocation for additional costs associated with the Moseley Street Reconstruction planned for 2022–23.

7.6 ASSUMPTIONS

The following key assumptions were applied in this financial forecast:

- › Remaining life-based renewal program.
- › Annual refurbishment included (seal rejuvenation, deep lift patching, crack sealing).

- › Kerb replacement lines 40% current replacement cost to allow for reseal-based refurbishment, except for DIT maintained roads with 100% current replacement cost.
- › Only major reconstruction required in the next 10 years is Moseley Street.

7.7 DATA CONFIDENCE

The expenditure and valuations projections in this AMP are based on best available data. Currency and accuracy of data is critical to effective asset and financial management. Data confidence is classified as ‘C – Uncertain’ based on the IPWEA data confidence scale. 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%.

See Appendix 3 for data confidence grading system.

10 YEAR ACQUISITION FORECAST

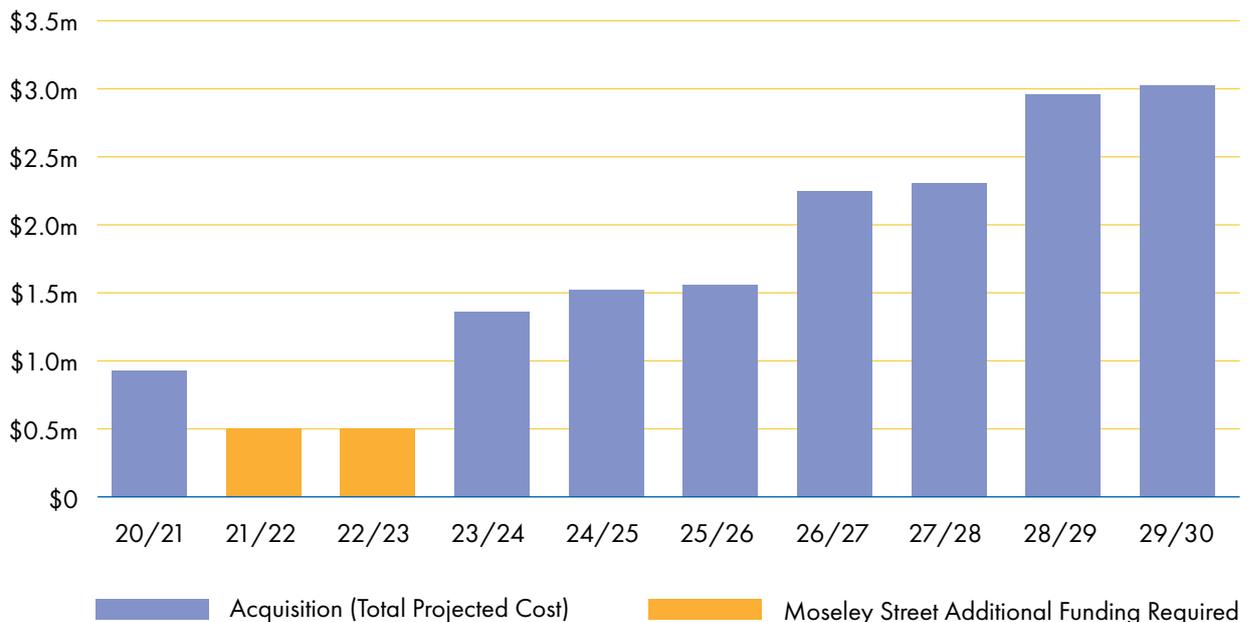


Figure 7.5.1 10 Year Acquisition Forecast



8. Risk Management

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

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

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

High and Very High Risks that have been identified are:

- › Whilst Council has begun the process of remediating footpath defects through an accelerated program, there remains a risk of an undulating surface due to the effects of tree roots and heat expansion. This will be mitigated with a Footpath Tree-lift Remediation Pilot, included in forecast maintenance and operations program.
- › There is a risk that Bus Shelters and Stops under care and control of Council do not fully comply with current DDA requirements. Council is currently undertaking an audit to assess this, and a budget has been included in this AMP for remediation works.
- › A lack of coordination between Council and Third Parties, such as neighbouring councils and SA Water. This leads to a reduction in expected life due to patching and heavy vehicle use. A budget for DBYD vendor registration has been included in this asset plan to help mitigate this risk.
- › Economics – Council unable to fund required capital and maintenance.

A risk treatment action has been included in the forecast costs for this asset plan, and in some cases is already underway. For a full list of risks and treatment plans see Appendix 4.

9. Plan Improvement and Monitoring

9.1 MONITORING AND REVIEWING

The Transport Asset Management Plan is not a one-off document but part of the Council's business planning process. For this reason, it is necessary to review and update any key assumptions, strategic change or budget decision that may affect the planned service levels and future expenditure requirements. To keep this AMP current, Council will schedule the plan review into its strategic and annual planning and budget processes. This AMP has a life of four years.

9.2 IMPROVEMENT PLAN

Improvement items that form a part of Council's ongoing business as usual improvements include:

- › Refine asset register – review useful lives and unit rates used for valuation purposes
- › Generate project based rolling works program spanning 3 to 5 years for seal/pavement and kerb based on detailed visual inspection.
- › Undertake footpath inspection program to determine required renewals on a segment by segment basis
- › Undertake carpark inspection program to determine required renewals on an individual basis
- › Undertake bridge inspection program to determine required renewals on an individual basis.

Specific Business Improvement Actions that will be a focus for the next three years are listed in Appendix 5. Key items include:

- › Consider works for a whole street to improve service delivery and reduce overall costs
- › Undertake detailed inspections and investigations including geotechnical investigations to determine pavement solutions
- › Review unsealed laneways to determine whole of life cost if upgraded
- › Investigate wearing course approach to life cycle – rejuvenation vs reseal options
- › Further develop and implement transport service levels and review road hierarchy
- › Improve the data confidence level through cleansing and collection of new data.

All improvement actions have been included in the forecast costs for this asset plan, and in some cases are already underway. For a full list of improvement items see Appendix 5.

Appendix 1

Transport Service Levels

Asset Hierarchy Level	Purpose	Maintenance & Operations	Renewal Thresholds
High (Premium)	Premium service level assets cater for tourists, residents, and visitors at a metropolitan and Interstate level – For example Jetty Road (Glenelg), Moseley Square.	These transport assets are maintained at a high standard, with daily inspections and prioritisation of repairs. Response time with a week.	<ul style="list-style-type: none"> › Overall condition rating is 3.5 (poor) or higher › Safety is compromised › Functionality and amenity are below required levels
High	High service level transport assets cater for residents and visitors at a neighbourhood or metropolitan level. For example, Jetty Road (Brighton), Esplanade, Major Bus Routes.	These transport assets are maintained at a high standard, with quarterly inspections and prioritisation of repairs. Maximum response time for repairs 90 days.	<ul style="list-style-type: none"> › Overall condition rating is 3.5 (poor) or higher › Major defects cover 25% of asset › Safety is compromised › Functionality is 3.5 (poor) or higher
Medium	For example, residential and industrial local roads.	These transport assets are maintained at a moderate standard, with quarterly inspections. Maximum response time for repairs 90 days.	<ul style="list-style-type: none"> › Overall condition rating is 3.8 (poor) or higher › Major Defects cover 25% of asset › Safety is compromised › Functionality is 3.5 (poor) or higher
Low	For example, laneways and low volume roads.	These transport assets are maintained at a safe standard, with inspections annually. Maximum response time for repairs 90 days.	<ul style="list-style-type: none"> › Overall condition rating is 4.2 (very poor) or higher › Major defects cover >25% of asset › Safety is compromised

Appendix 2

Financial Summary

AMP 2020

Year	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30
Acquisition (Total Project Cost)	\$926,000	\$0	\$0	\$1,361,000	\$1,520,000	\$1,558,000	\$2,248,000	\$2,304,000	\$2,955,000	\$3,028,000
Maintenance & Operation cost of existing assets	\$2,507,809	\$2,507,809	\$2,507,809	\$2,507,809	\$2,507,809	\$2,507,809	\$2,507,809	\$2,507,809	\$2,507,809	\$2,507,809
Maintenance & Operation costs of new assets	\$9,260	\$0	\$0	\$13,610	\$15,200	\$15,580	\$22,480	\$23,040	\$29,550	\$30,280
Improvement & Risk Actions (DBYD, Streetscape design, Footpath uplift pilot)	\$86,000	\$56,000	\$26,000	\$26,000	\$26,000	\$26,000	\$26,000	\$26,000	\$26,000	\$26,000
Moseley Street Additional Funding Required	\$500,000	\$500,000								
Renewal	\$2,108,249	\$3,119,894	\$3,254,475	\$2,946,076	\$3,034,043	\$3,327,903	\$3,098,821	\$3,348,648	\$3,219,620	\$3,682,278
Disposal	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL COST	\$5,637,318	\$6,183,703	\$6,288,284	\$6,854,495	\$7,103,052	\$7,435,292	\$7,903,110	\$8,209,497	\$8,737,979	\$9,274,367
External/Grant Funding Allocation	-\$920,000	\$0	\$0	-\$1,103,415	-\$760,078	-\$779,080	-\$1,124,191	-\$1,152,295	-\$1,477,285	-\$1,514,217
COUNCIL FUNDING REQUIRED	\$4,717,318	\$6,183,703	\$6,288,284	\$5,751,080	\$6,342,974	\$6,656,212	\$6,778,919	\$7,057,202	\$7,260,694	\$7,760,150

Figures are in nominal (current Year) values.



Financial Summary (cont.)

AMP 2020 ACQUISITION WORKS (TOTAL PROJECT COST)*

Year	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30
Holdfast Community Centre Car Park Ramp	\$6,000									
LED Street Lighting Upgrade	\$920,000									
Jetty Road Masterplan				\$1,361,000	\$1,520,000	\$1,558,000	\$2,248,000	\$2,304,000	\$2,955,000	\$3,028,000
TOTAL	\$926,000	\$0	\$0	\$1,361,000	\$1,520,000	\$1,558,000	\$2,248,000	\$2,304,000	\$2,955,000	\$3,028,000

* Upgrade component of project only. Replacement costs of existing is already included in renewal budget.

AMP 2020 EXTERNAL/GRANT FUNDING ALLOCATION *

Year	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30
LED Street Lighting Upgrade	-\$920,000									
Jetty Road Masterplan				-\$1,103,415	-\$760,078	-\$779,080	-\$1,124,191	-\$1,152,295	-\$1,477,285	-\$1,514,217
TOTAL	-\$920,000	\$0	\$0	-\$1,103,415	-\$760,078	-\$779,080	-\$1,124,191	-\$1,152,295	-\$1,477,285	-\$1,514,217

* Upgrade component of project only. Replacement cost of existing is already included in ongoing maint and ops budgets.

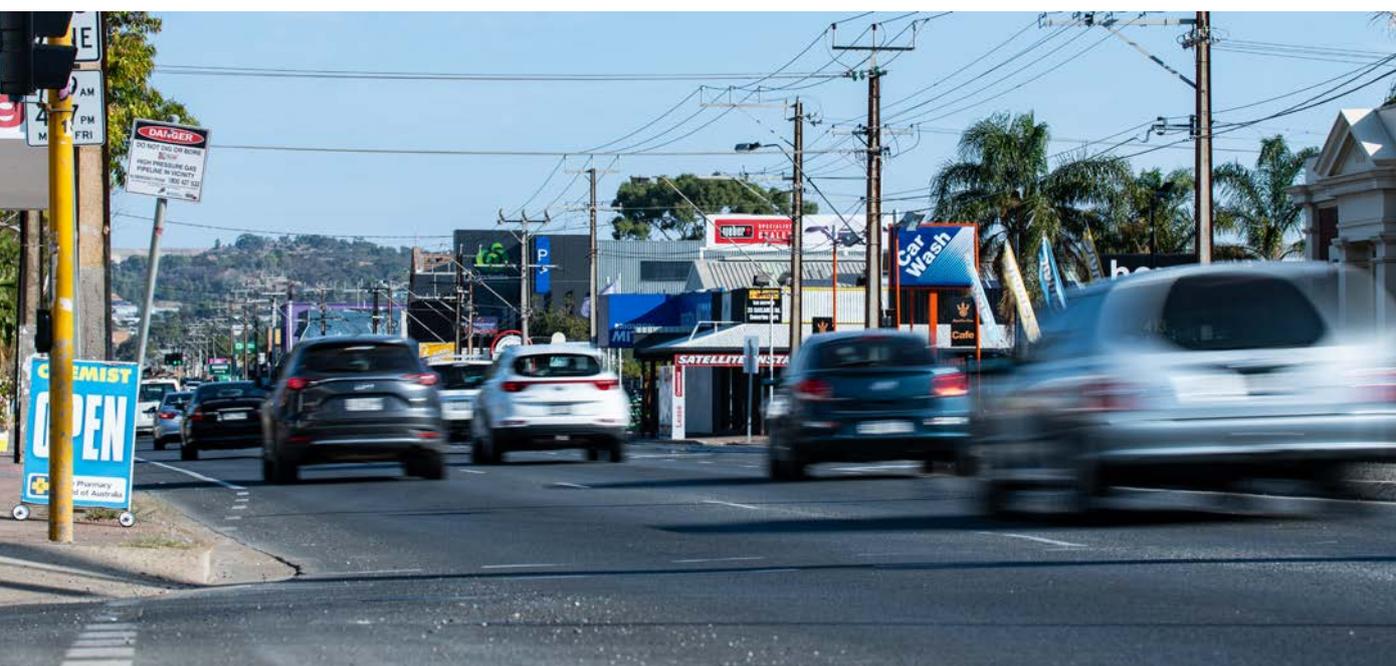
AMP 2020 RENEWAL WORKS

Year	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30
Bridges	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Bus Shelters	\$30,000	\$30,000	\$28,075	\$30,000	\$30,000	\$30,000	\$30,075	\$30,150	\$30,225	\$30,300
Car Parks	\$57,564	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$253,050
Footpath	\$218,116	\$126,736	\$201,255	\$285,259	\$373,226	\$593,944	\$437,929	\$638,775	\$453,021	\$576,859
Kerb	\$763,827	\$1,153,956	\$1,123,379	\$1,091,819	\$1,091,819	\$1,091,819	\$1,091,819	\$1,091,819	\$1,091,819	\$1,091,819
Pavement*	\$40,000	\$142,593	\$254,092	\$40,000	\$40,000	\$72,742	\$40,000	\$88,906	\$99,357	\$215,852
Sealed	\$994,916	\$1,498,998	\$1,498,998	\$1,498,998	\$1,498,998	\$1,498,998	\$1,498,998	\$1,498,998	\$1,498,998	\$1,498,998
Spoon	\$0	\$37,600	\$0	\$0	\$0	\$40,400	\$0	\$0	\$46,200	\$15,400
Sub Base*	\$0	\$50,100	\$148,676	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Traffic Control	\$3,826	\$79,911	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Unsealed	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL	\$2,108,249	\$3,119,894	\$3,254,475	\$2,946,076	\$3,034,043	\$3,327,903	\$3,098,821	\$3,348,648	\$3,219,620	\$3,682,278

Appendix 3

Data Confidence Grading System

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. Dataset is complete and estimated to be accurate $\pm 2\%$.
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 $\pm 10\%$.
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 $\pm 25\%$.
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 $\pm 40\%$.
E – Unknown	None or very little data held.



Appendix 4

Transport Risks

Service or Asset at Risk	What can Happen	Risk Rating	Risk Treatment Plan	Responsibility	Completion Date
Roads	Unforeseen asset condition and maintenance requirements.	Moderate	Rolling 3 year program and regular inspections.	Asset Manager(s) and Staff	2023
Footpaths	Increased insurance claims due to substantial cracking and formation of undulating surface due to unforeseen effects of tree roots and heat expansion.	High	Complete trial of new ways to address footpath trip hazard.	Asset Manager(s) and Staff	2023
			Develop a plan for footpath trip hazard remediation, and integrate with relevant strategic plans.		2025
Transport	Congestion due to limited expansion of our Transport Network.	Moderate	Develop an Implementation Plan for the Integrated Transport Strategy.	CEO/ Senior Leadership Team	2025
Streetscape	Unsatisfied ratepayers as the existing streetscape is not maintained appropriately for visual aesthetics.	Moderate	Consult with community and identify agreed streetscape expectations and design.	CEO/ Senior Leadership Team	2025
Bus Stops (including shelters where provided)	Not complying with DDA requirements.	Very High	Upgrade bus stops and replace non compliant bus shelters based on risk: Stage 1 High Risk Items.	Asset Manager(s) and Staff	2022
			Upgrade bus stops and replace non compliant bus shelters based on risk: Stage 2 Medium Risk/ Low Risk Items		2025

Transport Risks (cont.)

Service or Asset at Risk	What can Happen	Risk Rating	Risk Treatment Plan	Responsibility	Completion Date
Kerb and Water Table	Increased insurance claims (trip hazards and flood) due to substantial cracking and formation of undulating surface due to effects of tree roots and heat expansion.	Moderate	Audit and accelerated remediation program if required.	Asset Manager(s) and Staff	2025
Kerb and Water Table	Pram Ramps not DDA Compliant.	High	Upgrade pram ramps and replace non-compliant ramps based on risk: stage 1 high risk and foreshore items.	Asset Manager(s) and Staff	2022
			Upgrade pram ramps and replace non-compliant ramps based on risk: stage 2 medium risk items.		2025
Streetscape	Vegetation in the rail reserve are poorly maintained due to confusion on lease agreements.	Moderate	Confirm responsibility and maintenance and ensure all parties manage necessary works.	Asset Leadership Team	2023
Roads, Footpaths	Coordination between Council and Third Parties, such as DPTI and SA Water, with regard to capital works is currently poor. This leads to a reduction in expected life due to patching and heavy vehicle use.	Moderate	Explore proprietary works software.	Asset Manager(s) and Staff	2022
			Where possible establish direct data share arrangement with 3rd parties.		2022
		High	Become a DBYD vendor.	Asset Manager(s) and Staff	2022
			Have a standard reinstatement detail for works and adequate resourcing to monitor and inspect works.		2023

Service or Asset at Risk	What can Happen	Risk Rating	Risk Treatment Plan	Responsibility	Completion Date
All	Economics – Council unable to fund required capital and maintenance.	High	<p>Ensure business continuance strategy includes capital and maintenance works.</p> <p>Prioritise all capital and maintenance work in annual capital program and maintenance systems.</p> <p>Have an active model to demonstrate the impact of deferring works.</p>	Asset Leadership Team	2023
All	Climate Change – material useful life may reduce and early failure occur.	Moderate	<p>Integrate IPWEA Practice Note 12.1. into our project planning and design processes.</p> <p>Participate in the 'Incorporating Climate Risk into Asset Management Project'.</p>	Asset Leadership Team	2023
All	Loss of Key Staff.	High	Succession Planning and good record management.	CEO/Senior Leadership	2023
All	Political Changes – Change in Executive Staff or Council.	High	<p>Documentation of procedures, policies, and workflows.</p> <p>Provide regular updates to elected members on asset management.</p>	CEO/Senior Leadership	2023
All	AMP modelling or condition data inaccurate.	High	Independent review by specialists.	Asset Leadership Team	2023
All	Change in community service standards or expectations.	High	Review community feedback through complaints or surveys.	Council	2023

Appendix 5

Transport Improvement Plan

Task No	Task	Responsibility	Resources Required	Established	Due
1	Develop a rolling 3 year works program identifying assets to be renewed. Publish this for community information	Asset Manager(s) and Staff	Medium	2020	2022
3	Implement the risk mitigation strategies identified in this plan	Asset Leadership Team	Medium	2020	2023
4	Establish Maintenance Standards and Plans	Asset Manager(s) and Staff	Low	2020	2022
5	Create budget lines to capture maintenance expenditures, and improve processes to allocate costs against budget	Asset Leadership Team	Low	2020	2022
7	Develop process to complete renewal projects on time and on budget, and to the required quality	Asset Leadership Team	Medium	2020	2022
9	Consider works for a whole street to improve service delivery and reduce overall costs	Asset Manager(s) and Staff	Low	2020	2022
10	Identify new technology for improved asset life and/or environmental benefit, or reduced whole of life cost	Asset Manager(s) and Staff	Low	2020	2022
11	Undertake detailed inspections and investigations including geotechnical investigations to determine pavement solutions	Asset Manager(s) and Staff	Medium	2020	2022
12	Review unsealed laneways to determine whole of life cost if upgraded	Asset Manager(s) and Staff	Low	2020	2022
13	Develop a pavement reinstatement standard for third-party works and implement an agreement	Asset Manager(s) and Staff	Low	2020	2022
14	Investigate wearing course approach to life cycle – rejuvenation vs reseal options	Asset Leadership Team	Low	2020	2022

Task No	Task	Responsibility	Resources Required	Established	Due
15	Further develop and implement transport service levels and review road hierarchy	Asset Leadership Team	Low	2020	2022
16	Add street lighting fixtures to the transport asset register. Explore the option of a lighting and electrical specific AMP	Asset Manager(s) and Staff	High	2020	2022
17	Improve the data confidence level through cleansing and collection of new data	Asset Manager(s) and Staff	High	2020	2025
18	Benchmark our asset condition data and renewal strategies against similar LGAs	Asset Manager(s) and Staff	Low	2020	2023
19	Allocate asset portfolios to managers and provide training and support	Asset Leadership Team	Low	2020	2021
20	Facilitate annual reviews and provide report to CEO	Asset Leadership Team	Low	2020	2022



