

Transport Asset Management Plan 2025/26–2034/35



Contents

Executive Summary	4
Background and Objectives	5
Purpose of this Asset Management Plan	5
Information used in the Asset Management Plan.....	5
Focus of this Asset Management Plan.....	6
Corporate Document Relationships	7
Time Period of the AMP and Review Process	8
Service Levels	8
Introduction.....	8
Community Perceptions Survey.....	8
Service Level Performance.....	9
Service Demand	9
Historic Demand.....	10
Future Demand	11
Demand Management	12
Risk Management	12
Transport Network Physical Parameters.....	13
Transport Network Condition	14
Transport Network Data Confidence and Reliability.....	15
Lifecycle Management Strategies	15
Operation and Maintenance (O&M) Strategy	15
Renewal Strategy	15
Upgrade/New Strategy	17
Disposal Strategy	18
Financial	20
Current operation & maintenance, renewal, upgrade and new expenditure	20
Capital Expenditure Requirements	20
Projected Renewal Expenditure Required over the Long Term.....	20
Projected Required Renewal Expenditure – Long Term to Medium Term.....	21
Projected Upgrade and New Expenditure	22
Planned Expenditure Requirements (renew, upgrade, new)	23
Plan Improvement and Monitoring	24
Performance Measures	24
Asset Consumption Ratio (ACR)	24
Asset Sustainability Ratio (ASR).....	25
Asset Renewal Funding Ratio (ARFR).....	26
Improvement Plan	28

Version Control

Version	Date	Details	Author	Ref.
1	19/6/2023	Endorsed	Executive Leadership Team	Transport Asset Management Plan Final Draft 23-33 v1.2.docx
2	23/01/2025	Endorsed	Executive Leadership Team	Transport Asset Management Plan 24-34 v1.1 docx
3	30/04/2025	Draft AMP 2025/26–2034/35	Correy Jansen van Vuuren, Asset Management Specialist Data and Systems	Transport Asset Management Plan 2025/26-2034/35 Draft docx
4	27/08/2025	Reviewed draft	Sonja Pienaar, Manager Assets	Transport Asset Management Plan 2025/26-2034/35 Draft docx
5				

Approval

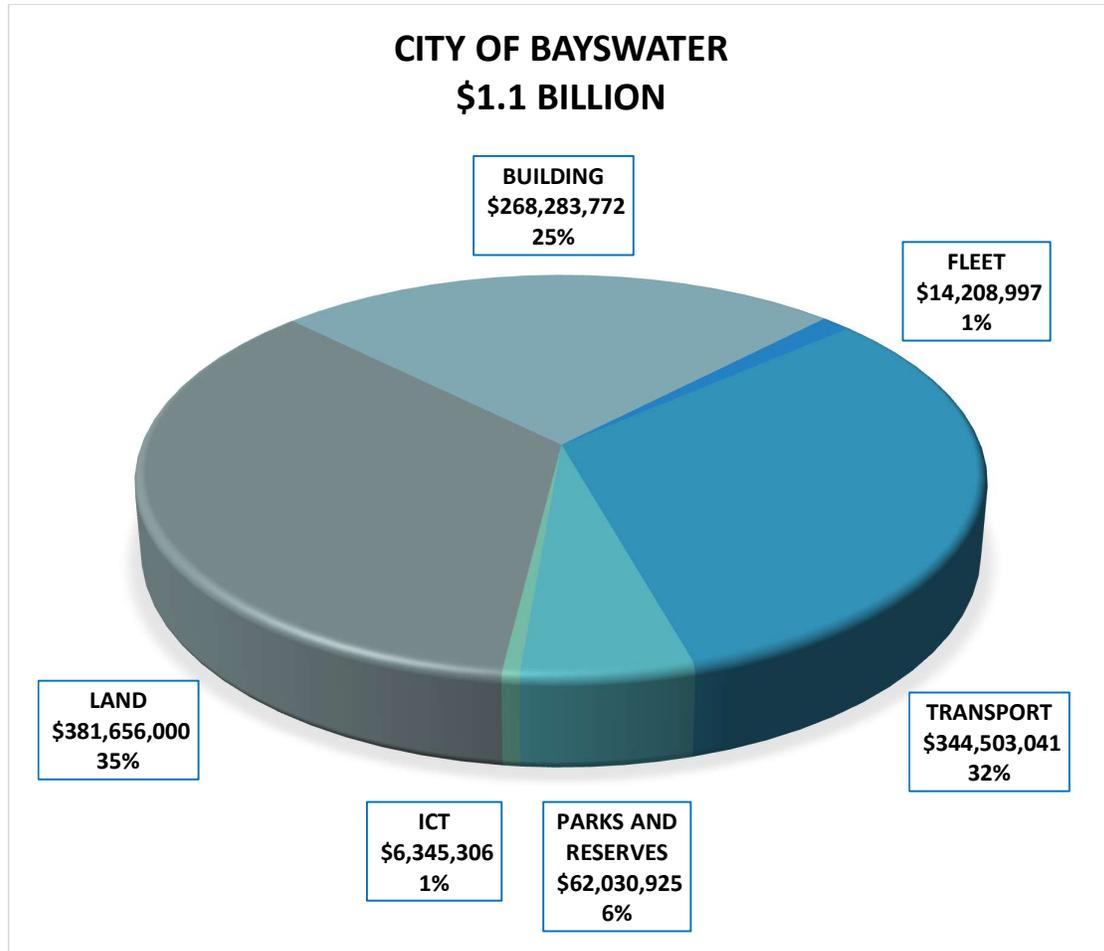
Name	Date	Details
Executive Leadership Team	6/10/2025	Endorsed

Approval Process

The City's Executive Leadership Team (ELT) to endorse the annual review and present outcomes to Council according to the *Asset Management Policy (2024)*.

Executive Summary

The City of Bayswater maintains a range of assets to provide an integrated approach to the delivery of service. The City is responsible for community infrastructure with a replacement value of close to \$1.1 billion.



In order to ensure that the City effectively manages this large portfolio of assets, the City's Asset Management Working Group is committed to continuous improvement of its asset management practices, including preparing a suite of asset management plans as informing strategies to the Strategic Community Plan (SCP) and the Long-Term Financial Plan LTFP).

The purpose of an Asset Management Plan (AMP) is to assist the City to manage their infrastructure and other assets to an agreed level of service, and to ensure this is sustainable into the future. It is a plan for the appropriate renewal, upgrade, acquisition, maintenance and disposal of assets that balances aspirations with affordability.

The City manages the transport network in partnership with other stakeholders such as Main Roads WA, Metronet, Public Transport Authority and adjoining local governments.

On 30 June 2024, the City's Transport portfolio had a current replacement value of \$345m. This excludes non-depreciable assets, such as the road formation. The available data indicates that approximately \$5.5m will be required annually over the long term to renew Transport assets to sustain the current service levels. This plan also explores the short to medium term requirements through the development of a 10 year Forward Capital Works Program (FCWP).

This figure excludes ongoing operation and maintenance expenditure and in 2023/24 financial year it amounted to approximately \$9.2m.

It is anticipated that a number of likely changes will occur to transport network demand. Some of the more significant changes will be due to the increase in population, the increase in traffic volumes, climate change, vehicle technology changes, promotion of active travel models such as cycling and walking and improved Metronet infrastructure.

While care has been taken to represent accurate available information, the City is committed to continuous improvement to ensure that the organisation's asset management maturity continues to evolve.

In order to improve asset management practices and the accuracy of this plan, a number of key tasks have been identified. These have been listed within the Improvement Plan for future implementation.

All readers of this asset management plan must understand its limitations and applied assumptions before acting on any information contained within it.

Background and Objectives

Purpose of this Asset Management Plan

As part of the Integrated Planning and Reporting Framework, the City has prepared AMP's and FCWP as informing strategies to the Strategic Community Plan (SCP) and the Long-Term Financial Plan (LTFP).

This document is the City's AMP for the Transport network and documents related management practices, processes and strategies. The objective of the Transport AMP is to ensure that transport assets are maintained to agreed service levels and balanced against long term resource availability and sustainability.

Information used in the Asset Management Plan

The City's financial asset register for the Infrastructure asset class is required to hold assets at a current fair value as opposed to historic/purchase price. The financial system obtains its fair value valuations from the City's infrastructure asset management system that holds details on each asset and its components as well as unit cost and age/condition information used to estimate the fair value. The values presented in this report is aligned with the City's financial system and annual capitalisation practices. Revaluations are only required every five years with the next revaluation due on 30 June 2027. In subsequent years purchase price is considered sufficient to represent fair value.

Focus of this Asset Management Plan

The AMP focus on assets that support a fit for purpose transport network. The key assets that make up the network and their values are detailed in Table 1.

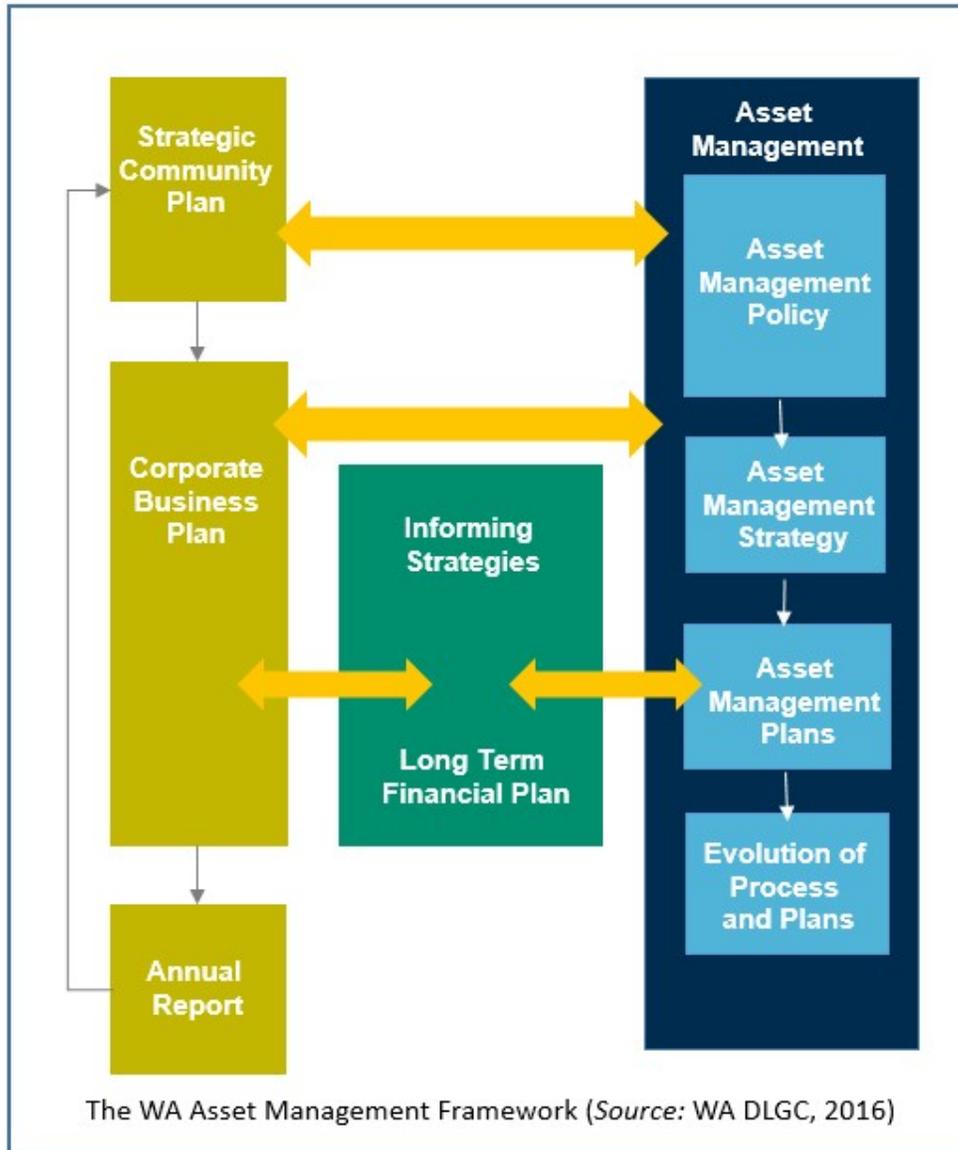
Table 1: Assets covered by Transport AMP (as on 30 June 2024)

Asset Type	Quantity	Current Replacement Cost
Roads	460 km	
Pavement	3,485,733 m ²	\$130,756,737
Seal	3,088,153 m ²	\$50,175,360
Kerbing	737,484 m	\$25,294,449
		\$206,226,546
Carparks		
Pavement	165,081 m ²	\$5,989,935
Seal	163,769 m ²	\$2,832,800
Kerbing	32,048 m	\$1,101,989
		\$9,924,724
Roads Total		\$216,151,270
Drainage		
Pits and Covers	19,254 items	\$15,682,271
Pipes	243,773 m	\$49,852,807
Headwalls	407 items	\$419,962
		\$65,955,040
Paths	347 km 728,478 m ²	\$51,980,161
Miscellaneous (Other Infrastructure)		
Street Furniture	519 items	\$1,224,252
Bus Shelters	153 Items	\$2,053,388
Public Litter Bins	171 items	\$157,806
Street Lighting	777 items	\$2,288,077
Signage	12,322 items	\$2,432,700
Entry Statements	13 items	\$499,575
Guard Rails	46 items	\$230,200
Traffic management Devices	95 items	\$1,530,574
		\$10,416,570
Total		\$344,503,041

Corporate Document Relationships

This AMP integrates with the following City documents as part of an integrated planning and reporting framework:

- Strategic Community Plan
- Corporate Business Plan
- Long Term Financial Plan
- Asset Management Policy
- Annual Budget



The Transport AMP is also guided by the following informing strategies:

- The Bayswater Bike Plan (BBP) 2023
- Safe Routes to School Implementation Plan (collaborative effort between City of Bayswater and the Department of Transport).
- Access and Inclusion Plan 2020 - 2024

- Environmental Liveability Framework 2021 - 2045
- Provision of Bus Shelters Management Practice
- Footpath Policy

Funding programs and their requirements, such as Roads to Recovery (R2R), Local Roads and Community Infrastructure Program (LRCIP), Metropolitan Region Road Project Grants (MRRG), Road Safety Program (Blackspot program), Low-Cost Urban Road Safety Program (LCURS) will guide project eligibility and plays an important role in managing Transport Assets.

Time Period of the AMP and Review Process

The Transport Asset Management Plan (AMP) 2025/26 to 2034/35 covers a 10-year period and is subject to annual review by the City’s Executive Leadership Team (ELT), after which it is presented to Council in accordance with the Asset Management Policy (2024).

The AMP, together with the supporting Forward Capital Works Program (FCWP), informs the annual review of the Long-Term Financial Plan (LTFP) and Budget process as part of the integrated planning and reporting framework.

Service Levels

Introduction

Service Levels describe the outputs that the City provides from its Transport network. These have been developed through the consideration of strategic and policy inputs, community perceptions and community needs.

Community Perceptions Survey

The City’s last Community Perceptions Survey was in 2023 and indicated the following performance results and trends as shown in Table 2.

Table 2: Customer Perception Survey

Focus	Very Satisfied or Satisfied 2023	Very Satisfied or Satisfied 2021	Trend
Road Maintenance	75.7%	78.6%	Decreasing
Footpaths and Cycle ways	68.2%	73.0%	Decreasing

Service Level Performance

Table 3 details the targeted service levels to be refined in future revisions of the plan.

Table 3: Service Level Performance

KPI	Service level - Target	Service level - Performance
Accessibility	All designs of new asset to address accessibility.	Monitoring and reporting annually
Aesthetics	Visual Condition 1-3 for 80%+	Monitoring and reporting annually
Availability	Reduce unplanned failures to a minimum.	Monitoring and reporting annually
Compliance	All designs of new asset to adhere to standards and regulations	Monitoring and reporting annually
Financial Sustainability	Asset Ratios	Monitoring and reporting annually
Quality	Aim to reduce whole of life cost	Monitoring and reporting annually
Safety	Traffic accident data	Monitoring and reporting annually

Service Demand

This section summarises likely factors which may affect the demand for transport network over the life of the Transport AMP.

Some of the more significant changes will be due to the increase in population, the increase in traffic volumes, climate change, vehicle technology changes, promotion of active travel models such as cycling and walking and improved Metronet infrastructure.

Historic Demand

The following table outlines the key factors that have affected historical service demand change.

Table 4: Historic Demand Drivers*

Driver Type	Effect	Demand Change
Vehicle Ownership	Dwellings with a registered motor vehicle up from 24,258 in 2016 to 25,842 in 2021.	Increase
Travel to Work	Number of people travelling to work up from 22,199 (2016) to 23,885 (2021). Car is by far the most common mode. On census day 2021 in the City of Bayswater 65.3% (2016, 67.2%) travelled to work in a private car, 10.5% (2016, 13.2%) took public transport and 2.2 % (2016, 2.3 %) rode to work on a bike or walked. 7.5% (2016, 3.1%) worked from home.	Increase
Population	The population grew from 69,283 in 2021 (Census data) to an estimated total of 75,981 in 2024 (ABS Estimated Residential Population - next census in 2026). This figure is expected to grow to 100,000 people by 2050.	Increase
Demographics	The median age declined slightly between 2006 and 2016 from 38 to 37 years of age and rose again to 38 by 2021 (Census data).	Neutral
Recreation	Participation in recreational activities that utilise transport assets (i.e. walking on paths) remained virtually unchanged in recent years.	Neutral
Climate	IPWEA provides some guidelines on how to assess physical damage and chemical deterioration impact on useful life of assets due to changing climates. Future plans may attempt to determine these past changes to allow for better future projections of useful lives.	Changing patterns

*Next Census will take place in 2026 (5 year cycle)

Future Demand

Consideration was given to six possible future demand drivers for transport assets.

Table 5: Future Demand Drivers

Driver Type	Effect	Demand Change
Political	Possible increased demand for additional municipal resources as a result of decreasing external grant funding.	Increase
Economic	The long-term outlook is for transport maintenance costs to at least match inflation increases. While road fleets will progressively move to electrical power, the overall cost of motoring is unlikely to change significantly.	Neutral
Social	Increased demand due to population growth and densification on transport infrastructure. Increased availability of alternative transport modes such as new train stations, mid-tier transport opportunities will impact current and future planned transport infrastructure. The “Green Dreams” Urban canopy strategy is advocating for healthier and more sustainable transport options such as cycling and walking.	Increase
Technological	Opportunity exists to manage and maintain the transport network more efficiently and sustainably through the use of technology and software solutions.	Increase
Legal	Benefits (i.e. stronger risk mitigation) may be realised though improving the City’s formal defect identification and correction practices to reduce interruptions in the transport network and ensure safe traveling options.	Neutral
Environmental	Increased demand for more environmentally sustainable construction and maintenance practices. Increased need to understand future rainfall events and maximum temperatures and allow for shorter asset lives and higher maintenance costs. The application of water sensitive urban design principals and living streams will increase in future as part of mitigating the environmental impact of traditional infrastructure and climate change.	Increase

Demand Management

A review of past and future demand factors shows that change has occurred and will also likely occur into the future. Looking forward, the following initiatives/improvements are proposed in order to meet demand changes.

- Regularly review strategies to consider, and plan for, the possible effects that identified demand drivers may have on transport assets.
- Investigate the need for a transport strategy, a walkability plan and drainage improvement plan to address the complexity of challenges and changes in the demand for transport infrastructure in the City.
- Aligning the Long-Term Financial Plan and Annual Budget with the AMP supported 10-year Forward Capital Works Program will ensure that demand is managed in a sustainable way.
- Review the City's current approach to the reuse/recycling of transport asset material.

Risk Management

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

The City proactively monitors the condition of Transport assets. Early identification of potential issues, along with an understanding of the likelihood and consequences of asset failure, enables the City to take timely corrective action. This helps prevent unplanned failures and ensures service levels are maintained as agreed.

Service or Asset at Risk	What can happen	Risk rating	Risk Treatment Plan
Road Pavement	Accelerated deterioration due to insufficient resurfacing.	H	Proactive maintenance and condition inspections, prioritisation of maintenance requests based on asset criticality. Secure sufficient funding for renewal and prioritise critical maintenance.
Road Seal and Surface	Poor skid resistance leads to accidents	H	Surface treatment programs, routine condition assessments and resurfacing. Secure sufficient funding for renewal and prioritise critical maintenance.
Kerb	Cracked, broken and missing kerb can cause hazards and flooding.	M	Proactive maintenance inspections, prioritisation of maintenance requests.
Footpaths	Trip and Slip hazards, cracked paths, loose material and buildup of	H	Proactive maintenance inspections, prioritisation of maintenance requests.

	sand and debris, tree roots.		
Drainage Infrastructure	Failure or blockage causes road surface flooding and damage to property.	H	Routine inspections and maintenance, capital upgrades in high-risk areas.

Transport Network Physical Parameters

The following information is obtained from the City's asset management system.

Table 6: Transport Network Physical Parameters (30 June 2024)

Asset Type	Current Replacement Cost	Depreciated Replacement Cost (Written Down Cost)	Annual Depreciation
Roads			
Pavement	\$130,756,737	\$73,385,046	\$1,390,656
Seal	\$50,175,360	\$22,276,392	\$1,869,586
Kerbing	\$25,294,449	\$10,290,067	\$354,251
	\$206,226,546	\$105,951,506	\$3,614,493
Carparks			
Pavement	\$5,989,935	\$3,490,182	\$63,493
Seal	\$2,832,780	\$1,014,154	\$95,074
Kerbing	\$1,101,989	\$594,617	\$15,382
	\$9,924,724	\$5,098,953	\$173,949
Roads Total	\$216,151,270	\$111,050,459	\$3,788,442
Drainage			
Pits and Covers	\$15,682,272	\$9,525,361	\$112,699
Pipes	\$49,852,807	\$38,744,634	\$217,552
Headwalls	\$419,962	\$242,665	\$3,708
	\$65,955,040	\$48,512,660	\$333,959
Paths	\$51,980,161	\$35,861,181	\$673,605
Miscellaneous (Other Infrastructure)			
Street Furniture	\$1,224,252	\$547,435	\$130,984
Bus Shelters	\$2,053,388	\$865,081	\$73,314
Public Litter Bins	\$157,806	\$29,129	\$14,643
Street Lighting	\$2,288,077	\$985,326	\$162,134
Signage	\$2,432,700	\$963,967	\$162,077
Entry Statements	\$499,575	\$201,860	\$25,117
Guard Rails	\$230,200	\$110,715	\$8,689
Traffic management Devices	\$1,530,573	\$1,363,225	\$97,591
	\$10,416,570	\$5,066,737	\$674,548
Total	\$344,503,041	\$200,491,037	\$5,470,554
30 June 2023 Total	\$340,001,020	\$201,459,570	\$5,362,643

Transport Network Condition

Table 7 shows the condition rating for transport assets (rating 1-5 with 1 being very good and 5 being very poor) weighted by replacement cost. Condition is a visual condition rating.

Table 7: Road Network Condition

Asset Type	Current Replacement Cost	Very Good	Good	Fair	Poor	Very Poor
Roads						
Pavement	\$130,756,737	4%	96%	0%	0%	0%
Seal	\$50,175,360	30%	18%	23%	18%	11%
Kerbing	\$25,294,449	4%	11%	51%	32%	2%
Total	\$206,226,546	10%	67%	12%	8%	3%
30 June 2023 Total	\$203,141,892	8%	67%	13%	9%	3%
Carparks						
Pavement	\$5,989,935	2%	98%	0%	0%	0%
Seal	\$2,832,780	20%	25%	45%	8%	2%
Kerbing	\$1,101,989	6%	61%	30%	3%	0%
Total	\$9,924,724	3%	84%	12%	1%	0%
30 June 2023 Total	\$9,544,112	7%	73%	16%	3%	1%
Drainage						
Pits and Covers	\$15,682,272	5%	13%	77%	5%	0%
Pipes	\$49,852,807	3%	3%	93%	0%	0%
Headwalls	\$419,962	10%	26%	61%	3%	0%
Total	\$65,955,040	4%	6%	89%	1%	0%
30 June 2023 Total	\$65,864,938	4%	6%	89%	1%	0%
Paths	\$51,980,161	16%	13%	69%	2%	0%
Total	\$51,980,161	16%	13%	69%	2%	0%
30 June 2023 Total	\$51,671,012	16%	13%	69%	2%	0%
Miscellaneous (Other Infrastructure)						
Street Furniture	\$1,224,252	49%	28%	16%	7%	0%
Bus Shelters	\$2,053,388	42%	8%	39%	10%	1%
Public Litter Bins	\$157,806	15%	69%	5%	5%	6%
Lighting	\$2,288,077	36%	42%	21%	1%	0%
Signage	\$2,432,700	30%	28%	35%	6%	1%
Entry Statements	\$499,575	0%	0%	85%	8%	7%
Guard Rail	\$230,200	2%	0%	98%	0%	0%
Traffic Management Devices	\$1,530,573	100%	0%	0%	0%	0%
Total	\$10,416,570	44%	22%	28%	5%	1%
30 June 2023 Total	\$9,779,066	38%	25%	31%	5%	1%

Transport Network Data Confidence and Reliability

Table 8 details the reliability and confidence levels of the current asset data the City holds (1-5 with 1 being very good and 5 very poor). It is the City's intention to progress towards a position whereby data confidence levels for all areas are classified as either a 1 or 2.

Table 8: Transport Network Data Confidence Levels

Asset Type	Inventory	Condition	Valuation
Road seal	1	1	2
Road pavement	1	2	2
Road Kerbing	2	2	2
Carparks	2	2	2
Miscellaneous	3	3	3
Paths	2	2	2
Drainage	2	3	2
Weighted Average	2	2	2

Lifecycle Management Strategies

This section details all the strategies and practices that are currently employed to manage transport assets at the lowest lifecycle cost.

Operation and Maintenance (O&M) Strategy

The City seeks to progress to a point whereby it employs preventative maintenance strategies wherever possible, to maximise asset performance and minimise long term costs. Preventative maintenance strategies are based on technical service levels. Each asset group's strategy will be specifically designed for its own requirements.

Some of these activities include:

- Road surface repair
- Road sweeping
- Pathway maintenance program includes grinding and slab replacement to address risk of trip hazard.
- Drainage pit cleaning
- Sign replacement
- Carpark maintenance – signage and line marking
- Bus shelter maintenance
- Structural inspections of structures
- Maintain boat ramps and jetties

Operation and maintenance expenditure in 2023/24 financial year amounted to approximately \$9.2m compared to \$7.2m in 2022/23, as defined by operating expenditure on Transport Infrastructure and Operations Services.

Renewal Strategy

All transport assets are inspected periodically to determine their condition, on a 1 (very good) to 5 (very poor) scale for all transport assets. City staff consider condition 4 (poor) and 5 (very poor) assets to determine the timing, scope and budget of any future renewal projects. The

identified projects are scheduled within the 10-year FCWP in line with informing strategies and strive to balance cost, safety, reliability and functionality.

The purpose of the AMP is to ensure that these strategies are effective to manage the required renewals to maintain an agreed level of service.

Table 9: Transport Assets – useful life estimates

Asset Type	Useful life - Asset Renewal Triggers
Roads	
Pavement	99 years
Seal	15 years for Distributor A roads 20 years for Distributor B and Local Distributor roads 30 years for Local Access Roads
Kerbing	75 years
Carparks	
Pavement	99 years
Seal	30 years
Kerbing	75 years
Drainage	
Pits and Covers	80 years for brick pits 200 years for concrete pits 99 years for steel covers
Pipes	200 years for asbestos, earthenware, concrete, subsoil, unplasticised polyvinyl chloride (UPVC), high density polyethylene (HDPE) pipes 50 years for coiled pipes 30 years for other
Headwalls	99 years
Paths	30 years for asphalt path 75 years for brick, concrete, limestone, synthetic
Other Infrastructure	
Street Furniture	5-15 years
Bus Shelters	35-40 years
Public Litter Bins	10-15 years
Lighting	10 years for luminaires 20-50 years for poles
Signage	4-10 years for sign blades 25 years for sign poles
Entry Statements	30 years
Guard Rail	40 years

In line with the City's *Asset Management Policy (2024)*, when considering asset renewal, consideration should also be given to disposal, rationalisation and non-asset solutions to reduce the whole of life cost of providing the asset and the service.

Table 10: Transport Asset Renewal Programs

Asset Type	Renewal Strategy
Roads	The City's road surface preservation strategy is engineered to ensure that the road surface as well as the remaining pavement reaches its intended useful life.
Carparks	Annual programs for reseal of carparks also addresses the ACROD parking bay improvements and constructing additional paths to allow for access and inclusion requirements to facilities and other paths.
Drainage	Drainage lids/covers are replaced reactively. It is difficult to predict drainage renewal requirements without condition assessments. Risk approach to be considered based on criticality – i.e. downstream is more critical than upstream and possibly focus detail condition program in these high-risk areas.
Pathways	Damage and localised failure of pathways are managed under pathway maintenance, but once it is a significant section of path (to be defined) that require renewal due to its overall condition it will be identified in the renewal program. Pathways standards are being reviewed and will feed into future renewal program.
Street Furniture	Renewal criteria will include condition and functionality.
Bus Shelters	Bus shelters are provided in partnership with the Public Transport Authority (PTA). Any renewal of bus shelters is the responsibility of the City.
Public Litter Bins	Renewal criteria will include condition and functionality.
Street Lighting (City owned)	Consider non-asset strategies for replacing decorative assets in future so that they can be transferred to western power. In some instances residential lighting is upgraded for handover to Western Power.
Signage	The City manages a range of different signs, including road name signs, parking signs and tourist & business directional signs. Road warning signs, regulatory traffic signs and traffic light signals are managed by MRWA in partnership with the City. Some signage is replaced as part of regular maintenance and a formal signage renewal strategy needs to be agreed to.
Entry Statements	Renewal criteria will include condition and functionality.
Guard Rail	Renewal criteria will include condition and functionality.

Upgrade/New Strategy

The need for new and/or upgraded transport assets (i.e. to meet a service deficiency) are identified from a number of potential sources. Each potential project is investigated by City staff and where valid, often prioritised against similar projects. Approved projects are then listed onto a consolidated 10-year FCWP.

By considering upgrade and new projects together with renewal and disposal activities within an integrated asset management approach, appropriate consideration can be given to whole of life cost while prioritising renewal activities.

Table 11: Transport Upgrade/New Programs

Asset Type	Upgrade/New Strategy
Roads	Road upgrades are currently conducted through various programs with different objectives such as LCURS, Blackspot/RSA and upgrades to MRWA roads – these objectives need to be integrated through the development of an integrated transport plan or even a transport strategy that looks at all modes of transport – rail, road and paths as well as land use strategies at local and regional scale.
Carparks	Upgrades as per recommendations from other strategies such as the City’s Access and Inclusion Plan.
Drainage	<p>The drainage improvement program considers the following objectives:</p> <ul style="list-style-type: none"> Improving environmental sustainability by managing stormwater overland flow; and Mitigating potential flooding risk which looks at slow flowing drainage or low-lying areas. <p>These improvements address the effectiveness of the drainage system due to the impact of new developments, increased residential densities and climate change (more intense rainfall).</p>
Pathways	New and upgrade pathway projects are prioritised in consultation with the City’s Active Transport Committee. This will refine the criteria used to prioritise and program new and upgrade projects.
Street Furniture	Some upgrades are identified in an effort to implement the Town Centre Activation Plans (Bayswater, Maylands, Morley, Noranda).
Bus Shelters	Bus shelters are provided in partnership with the Public Transport Authority (PTA). If certain criteria are met the PTA may provide up to 50% funding.
Public Litter Bins	Currently this is done on a case-by-case basis.
Street Lighting (City owned)	Currently no strategy exists for the upgrade/new City owned decorative Streets lights. The City is systematically upgrading city owned Street Lights to use LED.
Signage	Currently no upgrade/new strategy exist and new signs and upgrade to signs are conducted on a case-by-case basis.
Entry Statements	Currently this is done on a case-by-case basis.
Guard Rail	New or upgraded guard rails will be installed as part of road safety investigations.

Disposal Strategy

The City rarely disposes of transport assets. Where a potential need is identified not to replace an asset, it is considered a true disposal. The Asset Management Policy (2024) not only prioritises renewal of assets but also identifies that consideration should be given to rationalisation or non-asset solutions when considering renewal of assets. Current information only supports age or condition-based considerations when assessing renewal. There are no documented criteria for considering the disposal of transport assets and they are currently

assessed on a case-by-case basis. All true disposals should be identified through the 10-year FCWP.

Table 12: Transport Disposal Program

Asset Type	Disposal Strategy
Roads	No current disposal strategy.
Carparks	No current disposal strategy.
Drainage	No current disposal strategy.
Pathways	No current disposal strategy.
Street Furniture	No current disposal strategy.
Bus Shelters	No current disposal strategy. Shelters that require renewal and do not meet the PTA criteria for part funding may be considered for disposal without replacement.
Public Litter Bins	No current disposal strategy.
Street Lighting (City owned)	No current strategy. However, when replacing decorative or non-compliant lighting consideration should be given to Western Power requirements in order to hand over assets to Western Power.
Signage	No current disposal strategy.
Entry Statements	No current disposal strategy.
Guard Rail	No current disposal strategy.

Financial

This section contains the financial requirements resulting from all the information presented in this Transport AMP.

Current operation & maintenance, renewal, upgrade and new expenditure

Table 13 provides a summary of all capital expenditure related to transport assets during the 2023/24 financial year.

Table 13: Transport Asset Capital Expenditure 2023/24 financial year

Asset Class	Total*
Roads (incl Carparks)	\$3,465,265
Drainage	\$90,102
Paths	\$309,149
Miscellaneous/Other Infrastructure	\$637,504
Transport Total	\$4,502,020
30 June 2023 Total	\$6,116,142

*Above total exclude works in progress.

Capital Expenditure Requirements

Projected Renewal Expenditure Required over the Long Term

The average long-term renewal requirement is calculated using the Current Replacement Cost (CRC) of an asset divided by the asset's Useful Life (UL). Over the entire asset class, this provides a good indicator on the level of investment required to maintain assets for future generations.

More refined estimates of the required renewal expenditure require data that is reliable in terms of inventory, valuation and condition.

As the City's asset management maturity, data reliability and systems improve, the reliability of these estimates will improve.

For purposes of this document, the annualised replacement cost will present the official indicators of required renewal expenditure as an annual average over the next 10 years.

This number excludes the impact of any growth of the portfolio due to new and upgrade projects over the long term.

All replacement costs are presented as they were in June 2024, and no consumer or construction price index (CPI) has been applied to adjust for inflation.

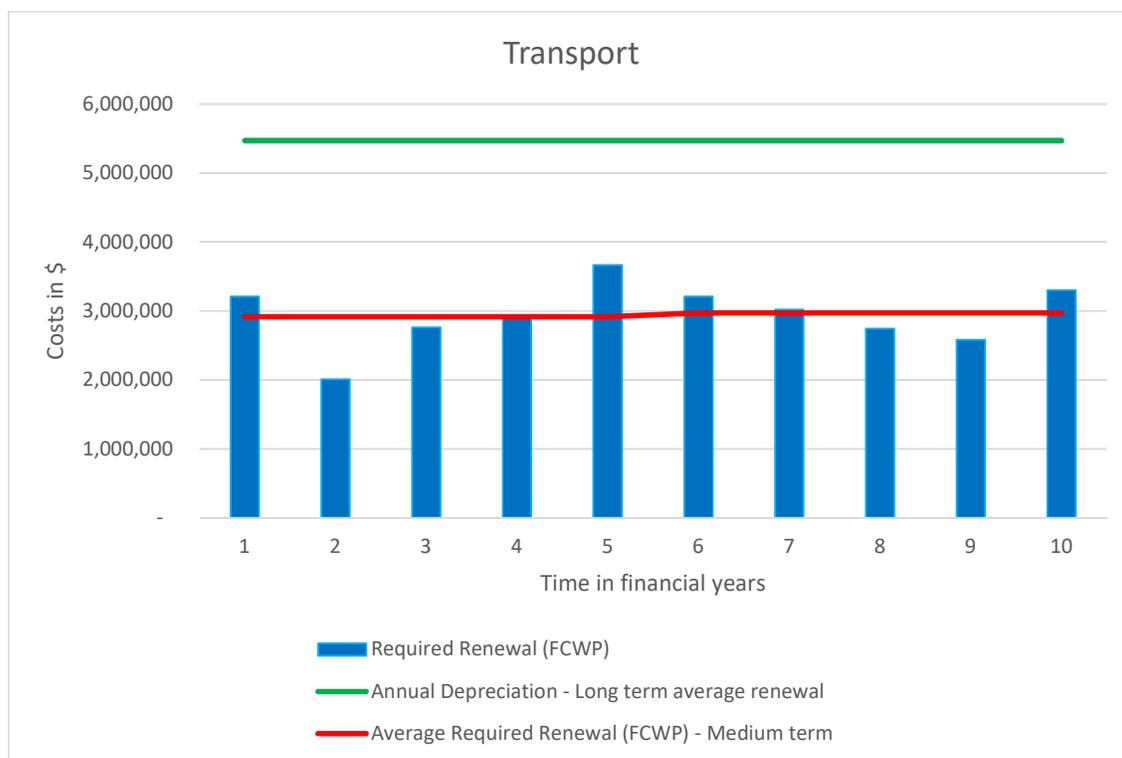
Tables 14A provides a summary of the projected renewal expenditure required over the long term as described above.

Table 14A: Transport Assets Required Renewal Expenditure – Long Term

Asset Type		Required Renewal Expenditure – Long Term
Roads	Pavement	\$1,390,656
	Seal	\$1,869,586
	Kerbing	\$354,251
		\$3,614,493
Carparks	Pavement	\$63,493
	Seal	\$95,074
	Kerbing	\$15,382
		\$173,949
Roads Total		\$3,788,442
Drainage	Pits and Covers	\$112,669
	Pipes	\$217,552
	Headwalls	\$3,708
		\$333,959
Paths Total		\$673,605
Other Infrastructure	Street Furniture	\$130,983
	Bus Shelters	\$73,314
	Public Litter Bins	\$14,643
	Street Lighting	\$162,134
	Signage	\$162,077
	Entry Statements	\$25,117
	Guard Rails	\$8,689
	Traffic Management Devices	\$97,591
Other Infrastructure Total		\$674,548
Total		\$5,470,554
30 June 2023 Total		\$5,362,643

Projected Required Renewal Expenditure – Long Term to Medium Term

The City conducted its project level renewal program, by programming specific asset renewals based on asset information and engineering considerations. The below illustrate how the project level required renewal fluctuates around the long-term average required renewal measured by annual depreciation.



Note: Drainage, Pathways and Miscellaneous items have very low spend required for the next 10 years.

Table 14B: Transport Assets Required Renewal Expenditure – Long Term to Medium Term

Asset Type	Required Renewal Expenditure – Long Term	Medium Term - 10 Year Average Annual Required FCWP	Short Term – 2025/26 Required Annual FCWP
Roads and Carparks	\$3,788,442	\$2,803,120	\$3,207,629
Drainage	\$333,959	\$140,076	\$0
Pathways	\$673,605	\$0	\$0
Other Transport	\$674,548	\$296,254	\$200,369
Total	\$5,470,554	\$3,239,451	\$3,407,998

Projected Upgrade and New Expenditure

The 10-year Forward Capital Works Program (FCWP) has identified upgrades and new projects that will impact the Transport asset portfolio.

Table 14C: Transport Assets New and Upgrade Expenditure – Long Term to Short Term

Asset Type	Medium Term – 10 Year Average Annual New/Upgrade FCWP	Short Term – 2025/26 Annual New/Upgrade FCWP
Roads and Carparks	\$563,898	\$2,610,980
Drainage	\$66,068	\$66,125
Pathways	\$760,598	\$1,328,213
Other Transport	\$197,605	\$248,753
Total	\$1,588,168	\$4,254,071

Planned Expenditure Requirements (renew, upgrade, new)

The Long-Term Financial Plan (LTFP) indicates to what extent the 10-year FCWP has been funded and what is planned to be delivered.

City of Bayswater LTFP 2024/25 – 2033/34 has funded 100% of 10-year FCWP 2024/25 – 2033/34.

Table 14D: Transport Assets Planned Expenditure – Long Term

Asset Type	10 Year Average Annual New/Upgrade LTFP	10 Year Average Annual Renew LTFP
Roads and Carparks	\$563,898	\$2,803,120
Drainage	\$66,068	\$140,076
Pathways	\$760,598	\$0
Other Transport	\$197,605	\$296,254
Total	\$1,588,168	\$3,239,451

For more detail on which project are planned to be funded see the City of Bayswater LTFP 2024/25 – 2033/34 on the City's website.

Plan Improvement and Monitoring

This section of the plan outlines the degree to which this AMP is an effective and integrated tool for asset management. It also details the future tasks required to improve its accuracy and robustness.

Performance Measures

The effectiveness of this asset management plan will be monitored by the performance of three statutory asset management ratios that the City reports on.

These KPIs are useful in determining:

- the current physical state of the asset portfolio,
- how sufficient past renewal expenditure was, and
- whether sufficient future renewal expenditure is being allowed for.

Asset Consumption Ratio (ACR)

The Asset Consumption Ratio is used to assess the extent to which the useful life of the assets has been consumed. The ACR provides insight into the age and condition of the City's assets, and assist to monitor asset aging, inform renewal planning and support long-term financial sustainability assessments.

$ACR = (\text{Depreciated Replacement Cost of Assets}) / (\text{Current Replacement Cost of Assets})$

The City has a target band of between 50% and 75% for this ratio.

Non-depreciating assets are excluded from this calculation.

Table 15: Transport Asset Consumption Ratio (30 June 2024)

Asset Type	Fair Value (Written Down Cost)	Current Replacement Cost	Asset Consumption Ratio
Roads			
Pavement	\$73,385,046	\$130,756,737	56%
Seal	\$22,276,392	\$50,175,360	44%
Kerbing	\$10,290,067	\$25,294,449	41%
	\$105,951,506	\$206,226,546	51%
Carparks			
Pavement	\$3,490,182	\$5,989,935	58%
Seal	\$1,014,154	\$2,832,800	36%
Kerbing	\$594,617	\$1,101,989	54%
	\$5,098,953	\$9,924,724	51%
Roads Total	\$111,050,459	\$216,151,270	52%
Drainage			
Pits and Covers	\$9,525,361	\$15,682,272	61%
Pipes	\$38,744,634	\$49,852,807	78%
Headwalls	\$242,665	\$419,962	58%
Drainage Total	\$48,512,660	\$65,955,040	74%
Paths Total	\$35,861,181	\$51,980,161	69%
Other Infrastructure			
Street Furniture	\$547,435	\$1,224,252	45%
Bus Shelters	\$865,081	\$2,053,388	42%
Public Litter Bins	\$29,129	\$157,806	18%
Street Lighting	\$985,326	\$2,288,077	43%
Signage	\$963,967	\$2,432,700	40%
Entry Statements	\$201,860	\$499,575	40%
Guard Rails	\$110,715	\$230,200	48%
Traffic Management Devices	\$1,363,225	\$1,530,573	89%
Other Infrastructure Total	\$5,066,737	\$10,416,570	49%
Transport Total	\$200,491,037	\$344,503,041	58%
30 June 2022 Total	\$201,459,570	\$340,001,020	59%

Conclusion:

Although there has been a slight decline in this ratio, this ratio is still within the target band of 50%-75%. The Road category is close to the bottom of the range and Other Infrastructure falls just short, indicating additional renewal may be required to maintain service levels.

Asset Sustainability Ratio (ASR)

The Asset Sustainability Ratio is used to assess whether the City is investing enough in its assets to maintain their current value over time. The ASR assists the City to evaluate the long-term sustainability of infrastructure, informs budgeting and investment decisions and communicates asset renewal needs to stakeholders.

$$\text{ASR} = (\text{Capital Expenditure on Asset renewal}) / (\text{Depreciation Expense})$$

The City has a target band of between 90% and 110% for this ratio.

For the below calculations Average Annual Renewal Expenditure are planned expenditure figures to project sustainability into the future. In future, actual expenditure will also be used to measure if planned renewal resulted in actual renewal.

Table 16: Transport Asset Sustainability Ratio

Asset Type	Average Annual Renewal Expenditure*	Annual Required Renewal	Asset Sustainability Ratio
Roads			
Pavement		\$1,390,656	
Seal		\$1,869,586	
Kerbing		\$354,251	
		\$3,614,493	
Carparks			
Pavement		\$63,493	
Seal		\$95,074	
Kerbing		\$15,382	
		\$173,949	
Roads Total	\$2,803,120	\$3,788,442	74%
Drainage			
Pits and Covers		\$112,669	
Pipes		\$217,552	
Headwalls		\$3,708	
Drainage Total	\$140,076	\$333,959	42%
Paths Total	\$0	\$673,605	0%
Other Infrastructure			
Street Furniture		\$130,983	
Bus Shelters		\$73,314	
Public Litter Bins		\$14,643	
Street Lighting		\$162,134	
Signage		\$162,077	
Entry Statements		\$25,117	
Guard Rails		\$8,689	
Traffic Management Devices		\$97,591	
Other Infrastructure Total	\$296,254	\$674,548	44%
Transport Total	\$3,239,451	\$5,470,554	59%

Conclusion:

Average ASR falls below the City's target range, additional renewal will be required in future years to maintain current service levels.

Asset Renewal Funding Ratio (ARFR)

The Asset Renewal Funding Ratio measures whether the City is planning and allocating sufficient funds to renew its assets at the rate they are wearing out. It helps determine if the current funding strategy is sustainable in the long term.

$$\text{ARFR} = (\text{Planned Capital Expenditure on Asset Renewal over a period}) / (\text{Required Capital Expenditure on Asset Renewal over the same period})$$

The City has a target band of between 95% and 105% for this ratio.

Currently the City is funding 100% of all required renewal. The City will ensure processes are refined to identify any gaps in funded and unfunded required renewal by supporting asset management improvements.

Table 17: Transport Asset Renewal Funding Ratio

Asset Class	NPV of LTFP Planned Renewal Expenditure over the next 10 years according to LTFP	NPV of AMP/FCWP Required Renewal Expenditure over the next 10 years	Asset Renewal Funding Ratio
Roads and Carparks	\$28,031,204	\$28,031,204	100%
Drainage	\$1,400,764	\$1,400,764	100%
Paths Total	\$0	\$0	100%
Other Infrastructure	\$2,962,543	\$2,962,543	100%
Transport Total	\$32,394,512	\$32,394,512	100%

Conclusion:

Renewal expenditure is fully funded, placing the City is within the target range of 95%-105%.

Improvement Plan

It is important to further develop the City's Asset Management Plans. This will ensure that the City's asset management continues to mature and can provide accurate data and information for effective decision-making to ensure that the City's infrastructure and assets are managed sustainably into the future.

The asset management improvement plan generated from this AMP is shown in Table 18.

Table 18: Transport AMP Improvement Plan

Task No	Task	Revised Timeline
1	Identify main risks for assets and asset management practices.	Completed
2	Improve inventory reliability. Review classification and definitions to form the basis of a review of the inventory. (Inventory improvement program).	Completed
3	Improve valuation reliability by reviewing replacement cost estimates and useful life triggers. (Inventory improvement program).	June 2027
4	Improve condition data reliability and review the renewal and other lifecycle strategies to align with current practices. (Condition assessment framework).	June 2027
5	Improve reporting on historic/actual renewal cost to allow for calculating the asset sustainability ratios. (Ongoing improvements are being made to refine actual expenditure reporting).	June 2026
6	Prepare 10-year Forward Capital Works Programs that feed into the Long-Term Financial Plan and allow for calculating asset renewal funding ratios.	Completed.
7	Clearly identify informing strategies that impact the management of assets and identify where strategies are lacking.	Completed