ASSET MANAGEMENT PLAN

Brighton Council
Transport Assets

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NAMS+ offers several Asset Management Plan templates.

The asset owner can choose the template that best suits their circumstances.

The structure and content of this template is aligned to the International Infrastructure Management Manual and the ISO 550xx and 31000 series of standards. In some instances, the asset owner may choose to reformat/restructure content or only use the Executive Summary. IPWEA takes no responsibility for the end product.

This Asset Management Plan should be prepared in line with the Strategic Asset Management Plan (also referred to as an AM Strategy) and AM Policy and used to inform the Long-Term Financial Plan.

DISCLAIMER: This template has been prepared for educational purposes as part of the Professional Certificate in Asset Management Planning course. The data and conclusions have not been reviewed for accuracy nor endorsed or adopted by the asset owner. DELETE if not applicable

Contents

1.0 EXECUTIVE SUMMARY

1.1 The Purpose of the Plan

This Asset Management Plan (AM Plan) details information about road assets with actions required to provide an agreed level of service in the most cost-effective manner while outlining associated risks. The plan defines the services to be provided, how the services are provided and what funds are required to provide over the 20 year planning period. The AM Plan will link to a Long-Term Financial Plan which typically considers a 10 year planning period.

1.2 Asset Description

This plan covers the infrastructure assets that provide transportation, connectivity and access services.

The transport asset category comprises:

- Road Surface
- Pavement Base
- Formation (Subbase)
- Main (carriageway)
- Bridge Sub-Structure
- Bridge Super Structure
- Kerbs
- Footpaths

The above infrastructure assets have replacement value estimated at $213,736,685.

1.3 Levels of Service

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

The main service consequences of the Planned Budget are:

- Some rural or low-traffic areas may remain reliant on unsealed roads, leading to minor accessibility issues or inconvenience, particularly during adverse weather.
- Delayed infrastructure replacement may reduce road quality in non-critical zones, but impacts will be minimised through targeted maintenance.
- Certain road safety and traffic management improvements may be deferred in low-priority areas.
- Lower-priority bridge renewals or upgrades may be postponed, potentially affecting serviceability during extreme weather events but not compromising critical connectivity.
- Weight restrictions may remain in place on older structures, requiring detours for heavy vehicles.
- DDA-compliant upgrades for bus stops, shelters, and interchanges will be prioritised by need, resulting in slower progress in low-use areas.
- Full network coverage of separated cycleways and high-standard footpaths will not be achievable within 10 years, particularly in lower-demand or constrained urban environments.
- Surface upgrades and connectivity improvements for existing pedestrian and cycling infrastructure may be prioritised for high-use areas only.
- Deployment of intelligent transport systems (ITS), real-time information displays, and smart mobility solutions may be limited to key corridors and high-volume nodes.

1.4 Future Demand

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

- Population growth
- Changing demographics
- Tourism
- Regulations, codes and best practices
- Climate change and resilience
- Technology and mobility trends

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

1.5 Lifecycle Management Plan

1.5.1 What does it Cost?

The forecast lifecycle costs necessary to provide the services covered by this AM Plan includes operation, maintenance, renewal, acquisition, and disposal of assets. Although the AM Plan may be prepared for a range of time periods, it typically informs a Long-Term Financial Planning period of 10 years. Therefore, a summary output from the AM Plan is the forecast of 10 year total outlays, which for the transport asset class is estimated as $28,968,064 or $2,896,806 on average per year.

1.6 Financial Summary

1.6.1 What we will do

Estimated available funding for the 10 year period is $38,955,820 or $3,895,582 on average per year as per the Long-Term Financial plan or Planned Budget. This is 119% of the cost to sustain the current level of service at the lowest lifecycle cost.

The infrastructure reality is that only what is funded in the long-term financial plan can be provided. The Informed decision making depends on the AM Plan emphasising the consequences of Planned Budgets on the service levels provided and risks.

On face value, the Planned Budget for transport asset class leaves a surplus of $647,111 on average per year of the forecast lifecycle costs required to provide services in the AM Plan compared with the Planned Budget currently included in the Long-Term Financial Plan. This is shown in the figure below.

However, this apparent surplus does not indicate excess funding. Operations, maintenance and upgrades are relatively stable and aligned to budget suggesting core services can be sustained under current settings. The issue is the renewal program, where needs are highly variable. While renewal funding is fixed, actual renewal demand fluctuates.

Critically, 2025 presents a renewal requirement of ~$8.0m, exceeding budget by >$6.1m. This spike reflects a backlog of assets at or beyond useful life—an immediate risk to service, safety and whole of life cost if not addressed. This creates a bow wave in Year 1 as backlog works are delivered; thereafter, renewals fluctuate naturally with asset age and condition (some years higher, some lower) as expected in a mature network. Accordingly, the near term “surplus” against average lifecycle need simply reflects front loading renewals to clear the backlog, not true excess funding. Once the bow wave subsides and network performance stabilises, Council will re-baseline budgets through the next AMP cycle to align with a sustainable long run cost to maintain service.

Caution is also warranted as the perception of underspend in some out years may be misleading due to data gaps. Current condition data is incomplete/variably accurate, and some renewal needs are likely under captured. As data quality improves—or unassessed assets deteriorate—those apparent surpluses may close.

Forecast Lifecycle Costs and Planned Budgets

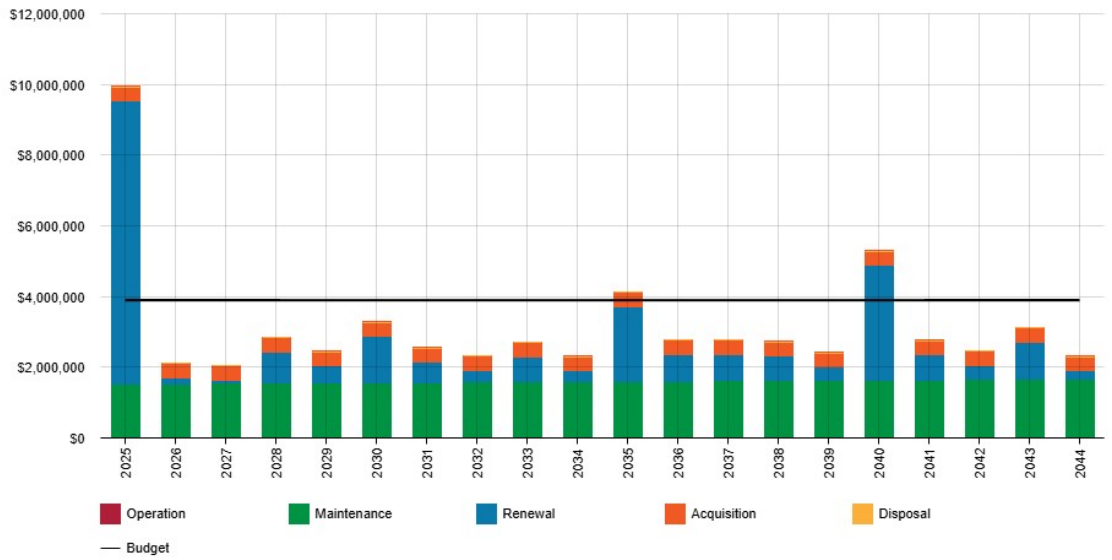


Figure Values are in current dollars.

We plan to provide road services for operation, maintenance, limited renewal and acquisition of road assets to meet service levels set by Brighton Council in annual budgets.

1.6.2 What we cannot do

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

- Seal all roads across the network, especially in low-traffic or rural areas where cost-benefit analysis does not justify immediate sealing.
- Replace or renew all aging infrastructure simultaneously, including roads, bridges, public transport stops, interchanges, and active transport (cycleways and footpaths) assets, due to limited resources and prioritisation needs.
- Upgrade all bridges to current-day flood resilience and load-bearing standards, particularly in remote or low-priority areas, where usage does not justify immediate investment.
- Implement advanced road safety and intelligent traffic management systems (e.g., dynamic signage, vehicle-to-infrastructure communication) across the network.
- Retrofit all public transport stops and interchanges to meet the latest Disability Discrimination Act (DDA) compliance standards immediately — upgrades will be prioritised based on need, risk, and available funding.
- Construct separated, high-quality cycleways and pedestrian paths along every road corridor, especially in constrained urban environments or low-use rural areas.
- Provide full network coverage for EV charging stations and alternative transport hubs within the next decade.
- Undertake large-scale climate resilience upgrades for all transport infrastructure assets — including raising flood-prone road sections, upgrading drainage for active transport routes, and fire-hardening critical transport links — immediately across the network.
- Deploy smart monitoring systems (e.g., IoT sensors, predictive maintenance technology) for all transport infrastructure assets due to cost and technological maturity constraints.

1.6.3 Managing the Risks

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

The main risk consequences are:

- Continued reliance on unsealed roads in low-traffic areas, leading to increased wear and higher ongoing maintenance, though unlikely to cause major disruptions.
- Aging pavement and sub-structures in lower-priority areas may require reactive maintenance, with limited impact on critical transport services.
- Deferred upgrades may expose older structures to increased flood or load risks, but mitigation will be managed through inspections and temporary restrictions.
- Reactive repairs may be necessary in the event of extreme weather events but will not compromise overall network resilience.
- Potential accessibility and amenity shortfalls where DDA upgrades are delayed, particularly impacting users with mobility challenges in less serviced areas.
- Safety risks associated with older or narrow shared paths, particularly for vulnerable users, may persist in non-critical areas.
- Gaps in connectivity may reduce network usability and uptake of active transport modes.
- Slower implementation of smart traffic management and monitoring systems may reduce network efficiency gains.

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

- Undertaking regular maintenance condition monitoring and audits
- Prioritisation of works
- Implementing smart traffic management systems

1.7 Asset Management Planning Practices

Key assumptions made in this AM Plan are:

- **Asset Useful Life** – assets have an assumed average useful life of approximately 30 years for pavement, 100 years for base and subbase and 70 years for the main (carriageway), which guides renewal and replacement planning. This estimation is based on historical data and standard industry expectations
- **Condition Deterioration Rates** – it is assumed that asset condition will deteriorate at a predictable rate based on typical usage patterns and environmental factors. This assumption supports forecasting for maintenance and renewal needs but may require adjustment if unexpected deterioration occurs.
- **Growth and Demand** – demand growth is projected to remain stable over the forecast period, with minimal increases in service requirements. This assumes population growth and service demand in the region will follow historical trends without significant surge
- **Funding Availability** – the forecasts assume consistent funding levels over the period, without any significant increases or reductions in budget allocations. This is based on current council funding trends and commitments, with no unexpected funding injections or cuts expected
- **Service Levels –** current service levels are assumed to remain consistent throughout the forecast period. No significant changes in service expectations or regulatory requirements are anticipated, which would otherwise impact operational and maintenance costs.
- **Asset Additions** – for new assets expected to be acquired, it is assumed that initial acquisition costs are covered, but ongoing operational and maintenance costs will need to be absorbed within existing budgets. This impacts long-term planning, as new assets will add to financial demands beyond the current budget forecast.

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

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

The Register Method was used to forecast the renewal lifecycle costs for this AM Plan.

This AM Plan is based on a medium level of confidence information.

1.8 Monitoring and Improvement Program

The next steps resulting from this AM Plan to improve asset management practices are:

- Develop a comprehensive asset condition assessment program for road infrastructure
- Implement a proactive maintenance schedule to reduce reactive repairs and extend road life
- Improve traffic and congestion data collection to enhance capacity planning and service levels.
- Update the long-term financial plan to reflect increased costs for road renewals and acquisition projects
- Develop a community engagement plan to gather feedback on road service levels and priorities.
- Incorporate climate resilience into road infrastructure planning to address extreme weather impacts.
- Establish a road asset renewal prioritisation framework to ensure timely renewal of critical roads.
- Implement a GIS-based asset management system to improve tracking of road assets and streamline decision-making.
- Conduct a skills audit to identify gaps in technical expertise related to asset management and road maintenance.
- Review and update the asset disposal plan to ensure obsolete road assets are decommissioned efficiently.

2.0 Introduction

2.1 Background

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

The AM Plan is to be read with the Brighton Council planning documents. This should include the Asset Management Policy and Asset Management Strategy, where developed, along with other key planning documents including:

- Strategic Plan 2023-2033
- Annual Plan 2024 - 25
- Financial Management Strategy & Long Termm Financial Plan 2022 - 2032
- Brighton Council 2050 Vision
- Brighton Council 10 Year Asset management Plan

The infrastructure assets covered by this AM Plan include a mix of bridges, footpaths, road pavements, base and subbase assets located across urban and rural areas in the Brighton municipality with key issues related to aging infrastructure, increasing maintenance demands and vulnerability to climate related impacts. For a detailed summary of the assets covered in this AM Plan refer to Table in Section 5.

These assets are used to provide transportation, connectivity and access services.

The infrastructure assets included in this plan have a total replacement value of insert $213,736,685.

Key stakeholders in the preparation and implementation of this AM Plan are shown in Table 2.1.

Table 2.1: Key Stakeholders in the AM Plan

Key Stakeholder	Role in Asset Management Plan
Mayor and Elected Members	■ Represent needs of community/shareholders, ■ Ensure service sustainable.
Chief Executive Officer	■ Allocate resources to meet planning objectives in providing services while managing risks, ■ Ensure service sustainability
Director Asset Services	■ Overall responsibility for Asset Services ■ Ensuring compliance with Strategic Plans and Objectives
Project Engineers/ Technical Officers/ Administrative Officers/ Council Works Crew	■ Capital works projects and contractor engagement ■ Report of any asset defects or deficiencies noted during inspections
Community (residents/ businesses/ property owners)	■ Provide feedback on level of service ■ Reporting of any defects or deficiencies through Council CSR system
Federal and State Government	■ Liaise for funding opportunities through various Government Agencies

Key Stakeholder	Role in Asset Management Plan
	■ Reporting body for any issues or services deficiencies for State Owned Roads

2.2 Goals and Objectives of Asset Ownership

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

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

Key elements of the planning framework are

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

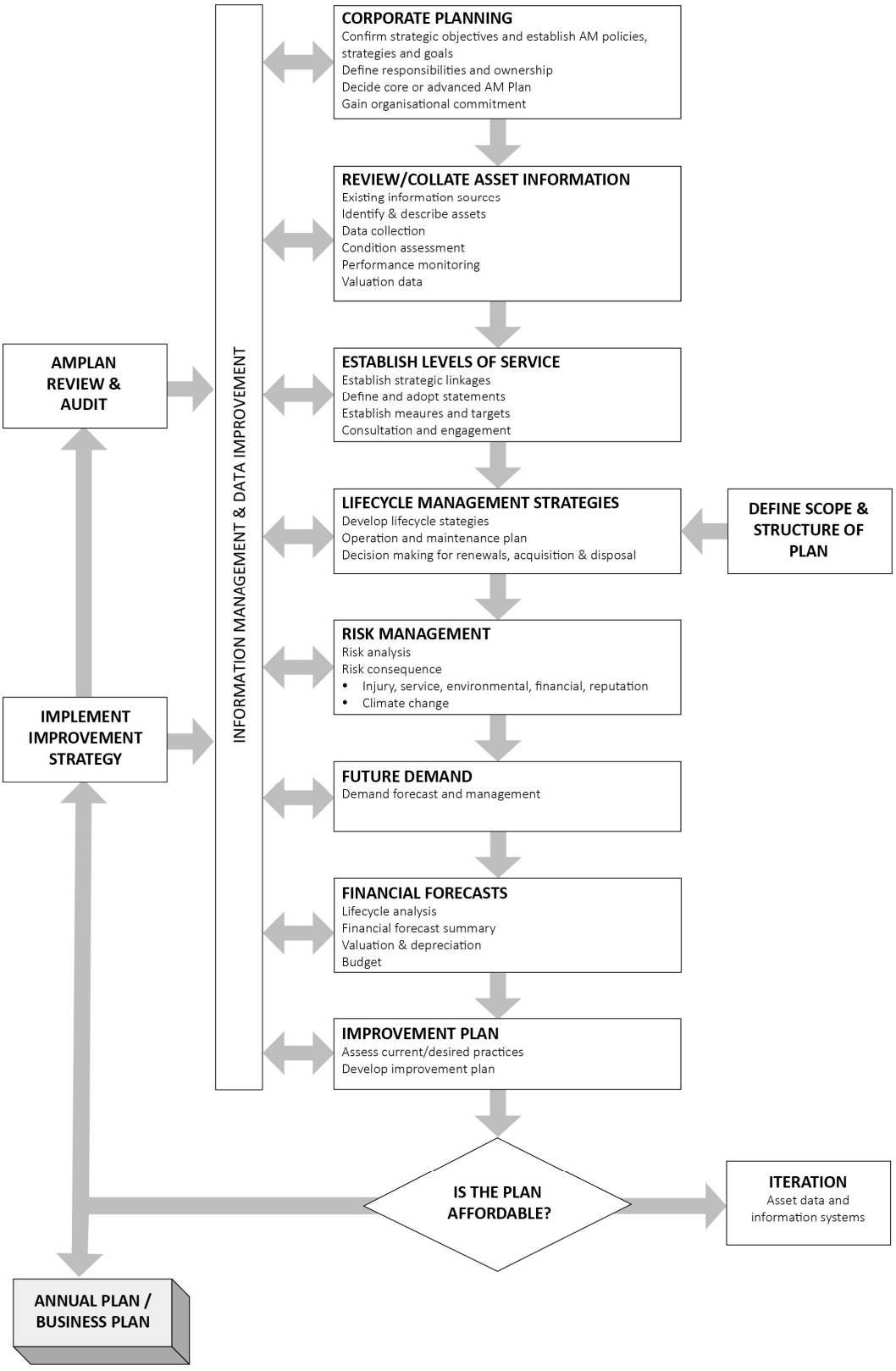
Other references to the benefits, fundamentals principles and objectives of asset management are:

- International Infrastructure Management Manual 2015 [1]
- ISO 55000[2]

A road map for preparing an AM Plan is shown below.

[1] Based on IPWEA 2015 IIMM, Sec 2.1.3, p 2| 13
[2] ISO 55000 Overview, principles and terminology

Road Map for preparing an Asset Management Plan
Source: IPWEA, 2006, IIMM, Fig 1.5.1, p 1.11



3.0 LEVELS OF SERVICE

3.1 Customer Research and Expectations

This AM Plan is prepared to facilitate consultation prior to adoption of levels of service by the Brighton Council. Future revisions of the AM Plan will incorporate customer consultation on service levels and costs of providing the service. This will assist the Brighton Council and stakeholders in matching the level of service required, service risks and consequences with the customer's ability and willingness to pay for the service.

We currently have historic understanding of customer expectations. Community satisfaction information has been used in developing the 10-year plan and in the allocation of resources in the budget.

3.2 Strategic and Corporate Goals

This AM Plan is prepared under the direction of the Brighton Council vision, mission, goals and objectives.

Strategic goals have been set by the Brighton Council. The relevant goals and objectives and how these are addressed in this AM Plan are summarised in Table 3.2.

Table 3.2: Goals and how these are addressed in this Plan

Goal	Objective	How Goal and Objectives are addressed in the AM Plan
A thriving place	■ Attracting economic development and job opportunities. ■ Enabling major infrastructure projects for a growing community. ■ Ensuring quality education and training to meet the needs of everyone. ■ Delivering connections across Brighton and beyond with good public transport and roads. ■ Offering a diverse mix of local places to shop, eat and socialise. ■ Encouraging the arts, culture and the creative industries.	■ Well maintained transport infrastructure enables smooth transportation for businesses, enhancing access to commercial centres and supporting job creation through improved connectivity and infrastructure reliability ■ Transport infrastructure maintenance ensures that existing infrastructure supports future projects by maintaining a foundation for upgrades, expansions and new developments ■ Maintaining transport infrastructure provides seamless connections from public transport systems, reducing travel times and improving access for all residents.
A proud community	■ Inspiring pride in where we live and who we are. ■ Building connections with communal events and spaces. ■ Fostering an inclusive approach which empowers all regardless of who you are and where you come from. ■ Valuing our Aboriginal culture as part of our	■ Ensuring transport infrastructure is safe and accessible enhances access to communal spaces, cultural hubs and public events making it easier for residents to participate in community activities ■ Maintenance strategies ensure that transport infrastructure are accessible to people of all abilities, creating inclusive environments where everyone can move around easily.

	learning, decision making and identity. ■ Supporting efforts to resolve our social and economic challenges. ■ Ensuring all voices are included and represented in shaping our future.	
A good life at every stage	■ Engaging young people in planning and decision making. ■ Facilitating local education and employment opportunities for young people. ■ Supporting opportunities for recreation and leisure for everyone at every stage of life. ■ Ensuring services and programs tailored for our young and our elderly residents. ■ Creating child friendly environments including parks and playgrounds. ■ Advocating for safe, affordable homes for first home buyers and those on low incomes.	■ Well maintained transport infrastructure provide access to parks playgrounds and recreational facilities, promoting leisure and well being for residents of all ages ■ Safe transport infrastructure enhance accessibility to child-friendly environments, ensuring families can easily reach parks and playgrounds.
A comfortable home	■ Ensuring safe, clean and tidy neighbourhoods. ■ Boosting community health and wellbeing. ■ Creating opportunities for residents to play a role in shaping Brighton. ■ Ensuring an abundance of trees and open spaces in the urban areas. ■ Maintaining a semi-rural feel with our mountain and river views and historical buildings. ■ Making it easy to get around with good, connected footpaths, trails and cycleways.	■ Regular maintenance of transport infrastructure reduces potholes, improves street cleanliness and minimises disruptions to local neighbourhoods, contributing to a better quality of life ■ Prioritising transport infrastructure maintenance promotes safe, interconnected walking, cycling and driving routes that enable residents to move easily within and beyond their neighbourhoods.

A caring council	■ Committing to fair rates while staying financially sustainable. ■ Remaining innovative and progressive. ■ Listening to our community and keeping people informed and engaged in planning and decision making. ■ Being an employer of choice with staff who are friendly, dynamic and helpful. ■ Matching infrastructure and services as our population grows. ■ Managing efficient and cost-effective regulation, design and planning for growth, affordability and amenity.	■ Proactive transport infrastructure maintenance helps extend the life of infrastructure, reducing long term costs and ensuring that the community's roads are prepared for future population growth without major overhauls ■ Continuous transport infrastructure maintenance and improvements ensure that road infrastructure is scalable and supports the growing needs of the population, avoiding bottlenecks and enhancing mobility.
A sustainable environment	■ Embracing best-practice environmentally sustainable initiatives. ■ Embedding climate change awareness into decision making. ■ Nurturing natural places for people and wildlife. ■ Reducing, reusing and recycling waste through integrated management. ■ Supporting locally grown fresh and healthy food. ■ Embracing sustainable travel options.	■ The use of sustainable materials and eco-friendly maintenance practices reduces the environmental impact of transport infrastructure repairs and upgrades, contributing to overall sustainability goals ■ Maintenance strategies take into account the effects of climate change ensuring that roads are resilient to extreme weather conditions and minimising disruptions caused by natural events ■ Well maintained transport infrastructure support alternative travel methods (such as cycling and public transport) by providing safe and reliable infrastructure for sustainable travel modes.

3.3 Legislative Requirements

There are many legislative requirements relating to the management of assets. Legislative requirements that impact the delivery of transport infrastructure asset service are outlined in Table 3.3.

Table 3.3: Legislative Requirements

Legislation	Requirement
Local Government Act 1993	Sets out role, purpose, responsibilities and powers of local governments including the preparation of a long term financial plan supported by asset management plans for sustainable service delivery

Roads & Jetties Act (1935)	Provides the framework for the management, construction, and maintenance of roads and jetties, assigning responsibilities to relevant authorities for infrastructure upkeep.
Traffic Act (1925)	Governs the control and regulation of road traffic, including speed limits, road use restrictions, and provisions for road safety measures.
Work Health and Safety Act 2012 & Regulations	Set out roles and responsibilities to secure the health, safety and welfare of persons at work.
AS/NZS 2890 Parking Facilities	Sets out parking requirements in various forms (Off-street parking, on-street parking, etc)
AS1428 Design for access and mobility	Reference for access requirements relating to transport(ie ramps, parking, pedestrian ways, etc)
Austroads Guide	Nationally adopted technical guidance on planning, design, and operation of roads, paths, and bridges.
Australian Bridge Design Standard – AS 5100	Provides requirements for the design, construction, and maintenance of bridges.
Australian Standard AS1700 Manual of Uniform Traffic Control Devices	Governs the consistent use of traffic signs, signals, and road markings to ensure safety and clarity.
National Construction Code	Sets out Technical requirements relating to building works
Tasmanian Planning Scheme	Regulate the location, type, and standards for new and upgraded transport infrastructure in line with broader land use and community goals.
Disability Discrimination Act 1993	Set outs requirements for equality of access to services and facilities
Development Act 1983	Sets out parameters for Developments, including what developments required Development Approval (Planning Consent/Building Rules Consent) and the process required to obtain such consents
Environmental Management and Pollution Control Act 1994 (Tas)	Ensures environmental protection in infrastructure works, especially those near waterways and sensitive land.
Urban Drainage Act 2013 (Tas)	Outlines responsibilities for managing urban stormwater systems including those integrated with road and footpath infrastructure.
Building Act 2016 (Tas)	Governs construction and modification of built infrastructure, including footbridges and shelters.

3.4 Customer Values

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

Customer Values indicate:

- what aspects of the service is important to the customer,
- whether they see value in what is currently provided and
- the likely trend over time based on the current budget provision

Table 3.4: Customer Values

Service Objective:			
Customer Values	**Customer Satisfaction Measure**	**Current Feedback**	**Expected Trend Based on Planned Budget**
Customers value well-maintained, safe roads with minimal disruption	Customer complaints, incident reports, crash statistics	Generally positive, though occasional complaints about potholes and crash risks exist	Slight decline expected; budget prioritises high-traffic routes, leaving rural roads vulnerable
Customers value roads free from potholes, cracks and bumps for a comfortable driving experience	Road condition inspections, maintenance requests	Mixed; urban roads in better condition than rural or low-traffic roads	Slight decline expected; reactive budget focusing on high-use areas
Customers value efficient road networks with minimal congestion and travel delays	Travel time surveys, congestion monitoring, traffic flow data	Increasing dissatisfaction due to congestion, particularly during peak periods	Likely to worsen slightly due to limited investment in new capacity or demand management measures
Customers expect safe, continuous, and accessible footpaths and pedestrian crossings	Customer complaints, condition audits, feedback from accessibility groups	Outer suburbs often lack continuous footpaths or safe crossings; safety concerns for people with mobility issues	Trend expected to stay the same; limited budget for new footpath infrastructure or upgrades
Customers value safe, structurally sound bridges that are accessible and reliable year-round	Bridge inspection reports, safety audits, customer feedback	Generally positive for major bridges; concerns raised about narrow or aging rural bridges	Condition may remain stable for priority bridges but deteriorate in minor structures due to limited renewal funding
Customers value consistent kerb and gutter infrastructure for proper drainage and safety	Stormwater incident reports, infrastructure audits	Positive in newer developments; complaints in older areas with poor kerb alignment or no kerbs	Likely to remain stable in urban areas, with rural/older areas experiencing stagnation due to funding constraints
Customers value safe and connected cycling infrastructure	Cyclist surveys, incident data, network coverage reviews	Feedback indicates network gaps, conflict with vehicles, and lack of protected bike lanes	Trend expected to stay the same due to limited dedicated funding for active transport improvements
Customers expect clear signage and wayfinding across all transport infrastructure	Signage audits, customer complaints	Mostly positive, though faded or confusing signage occasionally reported in rural and older suburbs	Stable or slight improvement; signage maintenance typically low-cost and included in routine budgets
Customers value integrated infrastructure that supports multimodal travel (walking, cycling, bus access)	Community surveys, project feedback, mode share data	Community calls for better integration between walking, cycling, and bus access (e.g., path connections to stops)	Likely to remain static; integration projects tend to be underfunded unless tied to major upgrades

3.5 Customer Levels of Service

The Customer Levels of Service are considered in terms of:

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

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

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

In Table 3.5 under each of the service measures types (Condition, Function, Capacity/Use) there is a summary of the performance measure being used, the current performance, and the expected performance based on the current budget allocation.

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

Table 3.5: Customer Level of Service Measures

Type of Measure	Level of Service	Performance Measure	Current Performance	Expected Trend Based on Planned Budget
Condition	Road condition and maintenance quality	Proportion of road network in good condition (based on inspections and pavement condition indices)	75% of urban roads are in good or fair condition, 30% of rural roads are in need of resurfacing or minor repairs	Expected to remain steady for urban roads; minor deterioration in rural roads due to limited funding for maintenance
	Bridge structural integrity	Percentage of bridges rated in good or fair condition from inspections	Most major bridges in acceptable condition; some rural bridges rated poor or needing strengthening	Condition expected to decline slightly without targeted funding for replacement/upgrades
	Footpath surface quality and continuity	Percentage of footpath network in acceptable condition and free of trip hazards	Inconsistent; newer areas generally good, but older suburbs and rural areas lack connectivity or have poor surfaces	Trend expected to remain static due to limited new footpath construction and reactive maintenance focus
	Kerb and gutter condition	Length of kerbing with adequate condition and function (e.g., drainage)	Positive in urban growth areas; older areas show deterioration and ponding issues	Minor decline in older suburbs due to limited proactive replacement programs
	Confidence levels		High for roads and bridges (supported by inspections); Medium for footpaths and kerbs	High: data supported by professional judgement and condition audits for key assets
Function	Suitability for current and projected traffic volumes	Percentage of roads with traffic volumes exceeding design capacity	~30% of main roads operating near/over capacity in peak periods	Worsening expected without major expansions or mode shift strategies
	Bridge load capacity and suitability for heavy vehicles	Percentage of bridges unable to carry legal heavy vehicle loads	A few older bridges have weight limits or detours for freight traffic	No improvement without dedicated renewal investment; risk to rural logistics
	Accessibility of pedestrian and active transport infrastructure	% of roads with compliant footpaths, ramps, and pedestrian crossings	Accessibility limited in many areas; non-compliant ramps and poor verge access in outer suburbs	Trend expected to remain flat due to low funding for accessibility upgrades
	Bicycle infrastructure availability	Length of separated or designated bike lanes across road network	Sparse and inconsistent across LGA; limited in older or rural areas	No significant improvement forecast without external funding or integrated planning
	Confidence levels		Medium for roads and bridges (based on regular data); Low for active transport (limited data, more reliance on judgement)	Medium

Capacity	Traffic congestion and usage levels	Average daily traffic counts and travel time reliability	Urban congestion increasing; rural areas vary	Expected to worsen without alternative transport or road widening programs
	Capacity of footpaths and shared paths during peak use	Peak hour foot traffic counts or observed crowding	Low crowding overall, but narrow paths in busy areas reduce walkability and comfort	Static; no significant investment forecast to widen or extend shared paths
	Bridge redundancy and network connectivity	Presence of alternative routes or detours for bridge closures	Limited redundancy in rural networks; closures disrupt access	No change expected unless strategic investment in alternative links is prioritised
	Confidence levels		Medium overall; good data for roads and traffic, limited data for shared path usage and pedestrian volumes	Medium

3.6 Technical Levels of Service

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

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

- **Acquisition** – the activities to provide a higher level of service (e.g. widening a road, sealing an unsealed road, replacing a pipeline with a larger size) or a new service that did not exist previously (e.g. a new library).
- **Maintenance** – the activities necessary to retain an asset as near as practicable to an appropriate service condition. Maintenance activities enable an asset to provide service for its planned life (e.g. road patching, unsealed road grading, building and structure repairs),
- **Renewal** – the activities that return the service capability of an asset up to that which it had originally provided (e.g. road resurfacing and pavement reconstruction, pipeline replacement and building component replacement),

Service and asset managers plan, implement and control technical service levels to influence the service outcomes.[3]

Table 3.6 shows the activities expected to be provided under the current 10 year Planned Budget allocation, and the Forecast activity requirements being recommended in this AM Plan.

Table 3.6: Technical Levels of Service

Lifecycle Activity	Purpose of Activity	Activity Measure	Current Performance*	Recommended Performance **
TECHNICAL LEVELS OF SERVICE				
Acquisition	To improve the road, bridge, footpath, and cycleway networks to accommodate growing demand, enhance safety,	Number of network improvements (e.g., road widening, sealing unsealed roads, new footpaths, cycleway	Limited by budget. Improvements mostly occur reactively, typically after complaints are received.	Proactively identify critical areas for improvement across all transport assets and address them before they become problematic.

[3] IPWEA, 2015, IIMM, p 2|28.

Lifecycle Activity	Purpose of Activity	Activity Measure	Current Performance*	Recommended Performance **
	or upgrade service levels	extensions, bridge upgrades)		
	To introduce new assets (e.g., roads, footpaths, cycleways, bridges, bus shelters) to improve connectivity and accessibility	Number of new transport assets established	Limited by budget. New assets are delivered reactively in response to development applications or community pressure.	Proactively assess travel patterns, accessibility gaps, and urban growth to guide the introduction of new transport assets.
		Budget	*$1,000,000 total for 10 years*	*Expand to $1,200,000 total for 10 years to account for other transport assets (footpaths, cycleways, bridges, PT shelters)*
Maintenance	To preserve all transport assets and extend their service life (roads, bridges, footpaths, cycleways, PT infrastructure)	Number of unplanned reactive repairs required due to insufficient maintenance	Road maintenance budget is insufficient, leading to reactive works; other assets have minimal dedicated maintenance programs.	Prioritise maintenance for high-use routes and public safety areas across all transport assets to reduce emergency repairs and improve lifecycle outcomes.
	To ensure the transport network (roads, footpaths, cycleways, public transport infrastructure) remains safe, reliable, and user-friendly	Frequency of inspections, response times to operational issues (e.g., pothole repairs, footpath trip hazards, bridge inspections, shelter maintenance)	Roads are reactive; other assets are only inspected when complaints are received.	Maintain current maintenance budget but increase proactive inspections across all transport assets to reduce reactive repairs.
	To ensure plant and equipment used in transport asset maintenance are reliable	Frequency of scheduled servicing, equipment downtime, response time for repairs	Equipment servicing meets standards with minimal downtime	Maintain current maintenance practices for plant/equipment, ensure consistent resourcing as transport asset base grows
		Budget	*$1,200,000 per year*	*$1,500,000 per year*
Renewal	To renew transport assets (roads, bridges, footpaths, cycleways, shelters) before end of life to	Replacement value of assets identified for renewal based on condition	Road renewal budget is aligned to lifecycle plans; limited dedicated funding for other assets like footpaths and PT infrastructure	Increase renewal funding to ensure non-road assets are renewed proactively based on condition and risk assessments

Lifecycle Activity	Purpose of Activity	Activity Measure	Current Performance*	Recommended Performance **
	avoid service disruption			
		Budget	*$18,000,000 total for 10 years*	*$20,000,000 total for 10 years*
Disposal	To retire obsolete or redundant transport assets (e.g., unused roads, unsafe bridges, redundant paths)	Number of transport assets decommissioned or converted to alternative uses	Minimal disposals, reactive only; footpath and cycleway rationalisation is ad-hoc	Maintain current approach
		Budget	*No disposals planned for 10 years*	*No disposals planned for 10 years*

Note: * Current activities related to Planned Budget.

** Expected performance related to forecast lifecycle costs.

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

4.0 FUTURE DEMAND

4.1 Demand Drivers

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

4.2 Demand Forecasts

The present position and projections for demand drivers that may impact future service delivery and use of assets have been identified and documented.

4.3 Demand Impact and Demand Management Plan

The impact of demand drivers that may affect future service delivery and use of assets are shown in Table 4.3.

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

Opportunities identified to date for demand management are shown in Table 4.3. Further opportunities will be developed in future revisions of this AM Plan.

Table 4.3: Demand Management Plan

Demand driver	Current position	Projection	Impact on services	Demand Management Plan
Population	Population growing at 1.57%	An increase in working-age population and urban infill	Increased demand for accessible footpaths, cycleways, safe crossings, and public transport infrastructure	Monitor growth trends and travel behaviour. Plan for capacity upgrades across all transport modes. Prioritise high-growth areas for active transport and public transport infrastructure improvements.
Changing Demographics	Mix of assets provide basic service levels, but many are not fully DDA compliant	Growing community expectations for inclusive and accessible infrastructure	Increased demand for DDA-compliant footpaths, shelters, crossings, and better-connected cycleways. Need for safer active transport routes for youth, elderly, and mobility-impaired users	Conduct targeted community engagement to understand needs. Develop a prioritised program to upgrade infrastructure to meet DDA and inclusive design standards. Seek funding partnerships for accessibility upgrades.
Tourism	Existing facilities (e.g., parking, signage, access roads) support current tourist activity	Anticipated growth in tourist numbers, particularly active and eco-tourism	Increased wear on roads, pressure on shared paths, cycleways, and access points. More demand for visitor facilities (e.g., bike parking, rest stops, etc)	Incorporate tourism growth into transport infrastructure planning. Upgrade shared-use paths, cycleways, and visitor access infrastructure. Collaborate with tourism bodies and leverage co-funding opportunities.
Regulations, Codes & Best Practice	Roads generally meet current standards. Footpaths,	Ongoing updates to DDA, Austroads,	Increased demand to retrofit or upgrade non-compliant assets (e.g., footpath	Maintain a rolling audit of compliance gaps. Prioritise retrofit projects in high-use and high-risk areas. Allocate

	cycleways, and public transport infrastructure are variably compliant	Active Transport Guidelines, and road safety standards	widths, kerb ramps, tactile indicators, safer cycling infrastructure)	dedicated funding and advocate for State/Federal support. Engage early with regulators to anticipate future requirements.
Climate Change & Resilience	Road assets considered in climate planning. Other transport assets (footpaths, bridges, PT shelters) less integrated in resilience strategies	Increased frequency of extreme weather events impacting all transport infrastructure	Greater need for flood-resilient bridges, storm-proof shelters, erosion-resistant paths and roads	Embed resilience criteria in all new transport infrastructure projects. Develop adaptation strategies for existing assets in vulnerable areas. Seek climate resilience grants to support upgrades.
Technology & Mobility Trends	Limited integration of smart transport technologies	Increased uptake of micro-mobility (e-scooters, e-bikes), EVs, and smart infrastructure expectations	Pressure on shared paths, need for charging stations, real-time transport info infrastructure (e.g., smart shelters)	Incorporate micro-mobility needs in path designs. Plan for EV infrastructure (charging points, smart parking). Pilot smart transport infrastructure where feasible.

4.4 Asset Programs to meet Demand

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

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

4.5 Climate Change Adaptation

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

How climate change impacts on assets will vary depending on the location and the type of services provided, as will the way in which we respond and manage those impacts.[4]

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

Risk and opportunities identified to date are shown in Table 4.5.1

Table 4.5.1 Managing the Impact of Climate Change on Assets and Services

Climate Change Description	Projected Change	Potential Impact on Assets and Services	Management
Increased frequency of extreme rainfall	Higher intensity and frequency of	Roads: Flooding, erosion, increased pothole formation. Footpaths &	Upgrade drainage systems. Design raised paths and cycleways in flood-prone

[4] IPWEA Practice Note 12.1 Climate Change Impacts on the Useful Life of Infrastructure

	storms and heavy rainfall events	Cycleways: Water pooling, scouring, undermining path foundations. Bridges: Increased scour risk at abutments and piers. Bus Shelters/Stops: Damage from flooding, debris blockage, inaccessibility.	areas. Use permeable paving where appropriate. Install scour protection for bridges. Improve shelter placement and drainage design.
Rising temperatures	More frequent heatwaves and increased average temperatures	Roads: Surface softening, rutting, cracking, asphalt deterioration. Footpaths & Cycleways: Surface cracking, thermal expansion. Bridges: Expansion joint stress, concrete spalling. Bus Shelters: Material fatigue (plastics, metals), reduced lifespan.	Use heat-resistant asphalt mixes. Select UV- and heat-tolerant materials for footpaths, shelters, and street furniture. Monitor bridge expansion joints and apply protective coatings. Provide shade structures where appropriate.
Increased frequency of drought	Prolonged dry spells and drought conditions	Roads: Pavement cracking, subsidence in clay-rich soils. Footpaths & Cycleways: Ground movement causing uneven surfaces. Bridges: Soil shrinkage affecting structural stability. Landscaping around transport assets suffers, reducing amenity.	Use flexible pavement materials. Stabilise subgrade soils. Regularly inspect and level footpaths. Monitor bridge foundations. Implement drought-resilient landscaping around transport assets.
Sea level rise & coastal inundation	Gradual sea level rise with more frequent storm surges	Roads & Bridges: Inundation, erosion, corrosion of coastal structures. Footpaths & Cycleways: Erosion of coastal paths, submersion risks. Bus Stops: Coastal stop accessibility compromised.	Conduct vulnerability assessments of coastal infrastructure. Design elevated or relocated paths and roadways. Use corrosion-resistant materials. Integrate natural buffers where possible.
Increased wind intensity	More frequent severe wind events	Bus Shelters: Structural damage, debris hazard. Street signage and lighting: Increased risk of pole failure. Bridges: Wind-induced stress on superstructures.	Design bus shelters to withstand higher wind loads. Regularly inspect and reinforce poles, signage, and lighting. Incorporate aerodynamic design considerations for bridges. Implement proactive tree and debris management programs.

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

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

Table 4.5.2 summarises some asset climate change resilience opportunities.

Table 4.5.2 Building Asset Resilience to Climate Change

New Asset Description	Climate Change impact These assets?	Build Resilience in New Works
Road Pavement	Increased risk of flooding disrupting essential services. Surface softening and cracking due to higher temperatures.	Design roads with improved drainage systems. Use permeable or water-resistant materials. Select asphalt mixes designed for higher temperatures.
Road Subbase	Water infiltration during heavy rains weakens subbase, leading to road deformation. Drought-induced soil shrinkage causes subsidence.	Improve drainage systems, use geosynthetics for subbase stabilisation. Design with higher load-bearing capacity and moisture-tolerant materials.
Road Base	Prolonged dry periods cause cracking, soil shrinkage, and subsidence. Flooding can wash out or degrade base layers.	Use cement-treated or stabilised base layers. Increase compaction standards. Reinforce with geogrids or other structural supports.
Footpaths & Shared Paths (Cycleways)	Water pooling, erosion, surface cracking from heat, and subsidence from soil shrinkage.	Install permeable paving where possible. Raise paths in flood-prone areas. Use flexible, heat-resistant materials. Improve subsoil drainage.
Bridges	Increased scouring at abutments/pile foundations from floodwaters. Heat-induced expansion stress. Corrosion from saltwater inundation (coastal).	Design for higher hydraulic loads. Install scour protection (rock armouring, gabions). Use corrosion-resistant materials. Design expansion joints for larger thermal movements.
Public Transport Stops (Bus Stops & Shelters)	Flooding limits access. Heat accelerates material degradation. High winds can damage structures.	Elevate stops in flood-prone areas. Use durable, UV- and heat-resistant materials (e.g., powder-coated metals, tempered glass). Design for higher wind loads. Ensure surrounding drainage prevents water pooling.
Street Furniture & Signage	Heat fatigue, wind damage, corrosion (coastal environments).	Select materials rated for high temperatures and UV exposure. Reinforce pole foundations. Use marine-grade stainless steel or powder coatings for corrosion resistance.
Drainage Infrastructure (Roadside Swales, Kerbs, Stormwater Pipes)	Increased rainfall intensity leading to overwhelmed systems, erosion, and blockages.	Upsize drainage capacity in line with future rainfall projections. Use sustainable urban drainage systems. Regular maintenance to manage debris and vegetation.

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

5.0 LIFECYCLE MANAGEMENT PLAN

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

5.1 Background Data

5.1.1 Physical parameters

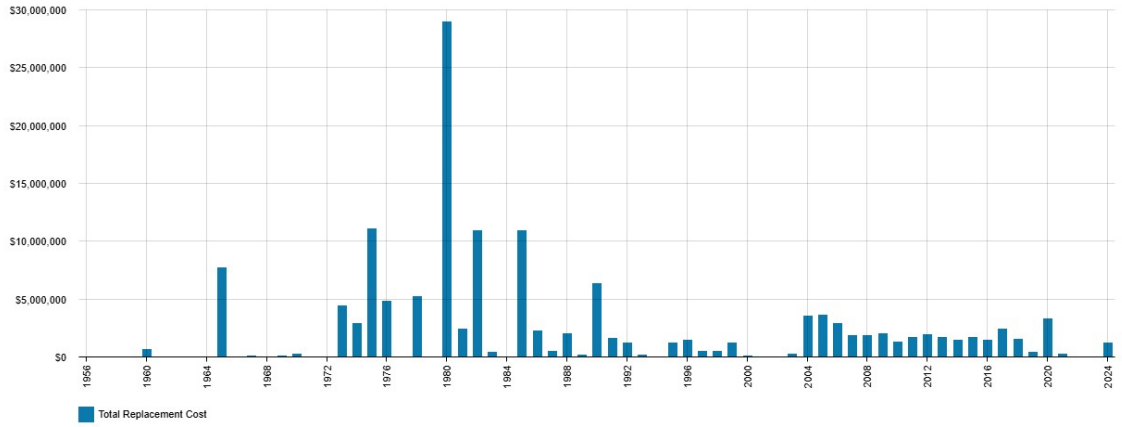
The assets covered by this AM Plan are shown in Table 5.1.1.

The age profile of the assets included in this AM Plan are shown in Figure 5.1.1.

Table 5.1.1: Assets covered by this Plan

Asset Category	Replacement Value
Roads	$84,180,927
Kerbs	$26,898,157
Footpaths	$25,758,420
Lighting	$3,255,719
Bridges	$9,012,609
TOTAL	**$149,105,834**

Figure 5.1.1: Asset Age Profile



All figure values are shown in current day dollars.

The age profile data reveals distinct waves of infrastructure investment, with notable peaks in asset creation during the 1960s, mid-1970s to early 1980s, and again from the early 2000s through to 2020. Significant spikes occurred in 1965, 1975, 1980, and 1982, indicating periods of major construction activity. The record-high value in 1980 suggests either a substantial infrastructure expansion or catch-up data entry.

Recent years also show strong and sustained investment, particularly from 2004 to 2018, with a major peak again in 2020. High values during this period—especially in 2004, 2005, 2006, 2008, 2012, 2017, and 2020—suggest consistent capital works and potentially improved data recording practices. The relatively high figure for 2024 may indicate early asset capitalisation or the ongoing rollout of new infrastructure.

Overall, a substantial portion of assets were established between the 1960s and 1980s, meaning many are now 40–60 years old and approaching or exceeding their expected useful lives. These assets will increasingly require renewal or significant maintenance. Simultaneously, the presence of a large number of younger assets, particularly from the last two decades, indicates continued investment and improvement in data capture. These newer assets are likely to remain low-maintenance in the near term but should be monitored as they age into mid-life.

5.1.2 Asset capacity and performance

Assets are generally provided to meet design standards where these are available. However, there is insufficient resources to address all known deficiencies. Locations where deficiencies in service performance are known are detailed in Table 5.1.2.

Table 5.1.2: Known Service Performance Deficiencies

Location	Service Deficiency
Augustus Street	Pavement base has weakened and requires rehabilitation to maintain structural integrity and extend the road's lifespan.
Back Tea Tree Road	Pavement base is deteriorating, requiring excavation and rebuilding to prevent further failure and support road safety.
Barkerville Road	Pavement base is compromised, requiring reconstruction to restore road stability and prevent future maintenance issues.
Barton Crescent	Numerous potholes have developed across the road surface, necessitating resurfacing to provide a safe and smooth driving experience.
Briggs Road	Pavement base has deteriorated, necessitating base reconstruction to ensure long-term durability and structural support.
Butler Street	Surface cracking has compromised the pavement integrity, requiring resurfacing to prevent water infiltration and further degradation.
Cheswick Crescent	Significant rutting has formed, affecting surface evenness and stability, indicating a need for resurfacing to improve driving comfort and safety.
Cheswick Crescent (Kerb)	Kerb is damaged and requires full replacement, along with installation of subsoil drainage to manage stormwater and preserve pavement integrity.
Church Road	Road surface requires new sealing to preserve existing pavement and extend service life.
Coomera Court	Pavement base is deteriorated and needs rebuilding to restore structural integrity and maintain usability.
Cove Hill Road	Road surface needs a new seal to protect underlying layers and extend the life of the asset.
Derwent Street	Pavement base is failing and requires reconstruction to prevent surface defects and support traffic loads.

Fouche Avenue	Pavement base is deteriorating and needs renewal to maintain road performance and avoid future failures.
Fergusson Road	Requires new seal to enhance surface quality and prevent water ingress into the pavement structure.
Gage Road	Pavement base has weakened and needs reconstruction to prevent structural collapse and maintain a serviceable road.
Glen Lea Road	Road is in critical condition with extensive structural damage, requiring full-depth reconstruction including formation, pavement base, and surface layers.
Jordan River Bridge (Elderslie Road)	Timber bridge structure is non-compliant and deteriorating; full bridge replacement is required to meet safety and regulatory standards.
Killarney Road	Pavement base is failing, requiring reconstruction to support road usage and increase longevity.
Munday Street	Pavement base deterioration requires excavation and renewal to maintain road safety and performance.
Nonoyne Road	Pavement base has degraded, needing restoration to provide structural strength and avoid failure.
Old Beach Road	Both pavement base and road surface are compromised, requiring full reconstruction to ensure stability and improve lifespan.
Plymouth Road	Pavement base has deteriorated, necessitating full reconstruction to restore functionality and prevent further degradation.
Possum Road	Road's pavement base is failing and requires rebuilding to ensure continued safe use.
Ravensbourne Intersection	Base failure at the intersection requires reconstruction to restore traffic safety and road integrity.
Rifle Range Road	Pavement base requires reconstruction to address current damage and ensure long-term road serviceability.
Rockvale Road	Pavement base has weakened and needs full-depth repairs to restore safety and usability.
Sailer Street	Pavement has reached end-of-life condition and requires full-depth reconstruction to restore road structure and functionality.
Sandstone Place	Road surface is worn and requires resurfacing to maintain drivability and protect underlying layers.
Scott Road	Road surface has deteriorated and requires resurfacing to provide a smoother and safer driving experience.

Station Street	Pavement base has failed and requires rehabilitation to prevent complete structural failure.

The above service deficiencies were identified from asset register data.

5.1.3 Asset condition

Condition is currently monitored through visual inspections undertaken every five years. These inspections assess surface integrity, signs of wear and tear, and potential structural issues such as cracking, potholing, and erosion.

Condition is measured using a 1 – 5 grading system[5] as detailed in Table 5.1.3. It is important that a consistent approach is used in reporting asset performance enabling effective decision support. A finer grading system may be used at a more specific level, however, for reporting in the AM plan results are translated to a 1 – 5 grading scale for ease of communication.

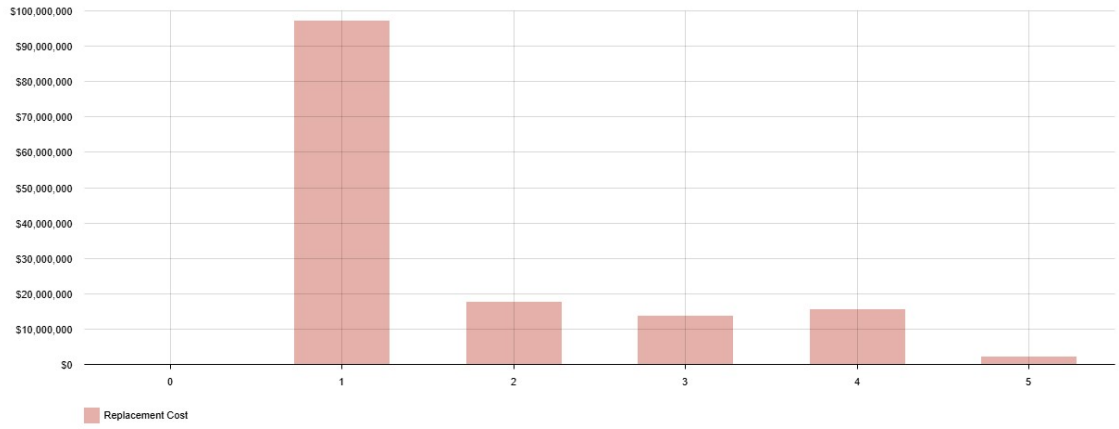
Table 5.1.3: Condition Grading System

Condition Grading	Description of Condition
1	**Very Good**: free of defects, only planned and/or routine maintenance required
2	**Good**: minor defects, increasing maintenance required plus planned maintenance
3	**Fair**: defects requiring regular and/or significant maintenance to reinstate service
4	**Poor**: significant defects, higher order cost intervention likely
5	**Very Poor**: physically unsound and/or beyond rehabilitation, immediate action required

The condition profile of our assets is shown in Figure 5.1.3.

Figure 5.1.3: Asset Condition Profile

Pl



All figure values are shown in current day dollars.

Based on the current asset condition data, the majority of asset value—approximately $96.99 million—is recorded as being in Condition 1, indicating these assets are in good condition and likely require minimal

[5] IPWEA, 2015, IIMM, Sec 2.5.4, p 2|80.

maintenance. However, this figure is likely not a true reflection of the asset base. It is more probable that many of these records lack recent or accurate condition assessments, and so default to Condition 1 in the absence of verified data. This presents a risk for forward works planning and highlights the need for improved condition inspections.

A further $17.46 million worth of assets are in Condition 2, suggesting they are also generally performing well but may require some minor maintenance to maintain current service levels.

As condition deteriorates, the associated replacement cost decreases:

- Condition 3: ~$13.78 million
- Condition 4: ~$15.50 million
- Condition 5: ~$2.11 million

Assets in Conditions 4 and 5 represent those in poor to very poor condition. While these assets make up a smaller portion of total replacement cost, they typically demand higher maintenance attention, present higher risk of failure, and are likely to be candidates for renewal in the near future.

5.2 Operations and Maintenance Plan

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

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

The trend in maintenance budgets are shown in Table 5.2.1.

Table 5.2.1: Maintenance Budget Trends

Year	Maintenance Budget $
2020 - 2021	$1,143,572
2021 - 2022	$1,154,960
2022 - 2023	$1,377,486
2023 - 2024	$1,219,701

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

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

Asset hierarchy

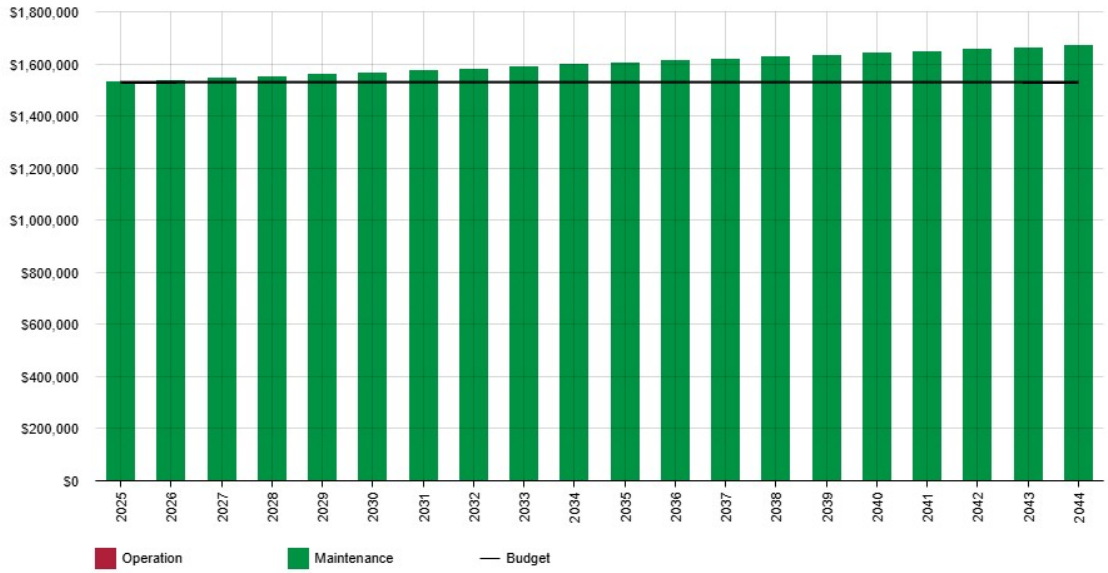
An asset hierarchy provides a framework for structuring data in an information system to assist in collection of data, reporting information and making decisions. The hierarchy is to be formally documented and will be provided in future revision of the AM plan.

Summary of forecast operations and maintenance costs

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 5.2 shows the forecast operations and maintenance costs relative to the proposed operations and maintenance Planned Budget.

Figure 5.2: Operations and Maintenance Summary



All figure values are shown in current day dollars.

The forecast for maintenance costs shows a steady upward trend over the period from 2025 to 2044. Maintenance costs start at $1,529,912 in 2025 and rise consistently to $1,668,963 by 2044. This incremental growth reflects expected factors such as aging infrastructure, rising service demands, and inflationary pressures over the 20-year horizon.

In contrast, the maintenance budget (black line) remains static at $1,529,912 across all forecasted years. This flat funding profile highlights the lack of indexed growth in the budget to match the increasing cost pressures over time.

While the total forecasted costs for maintenance remain within budget during the early years, they begin to approach and then exceed the budget threshold by the early-to-mid 2030s. By 2044, the estimated cost reaches approximately $1.67 million, resulting in a projected shortfall of over $140,000.

This growing gap between forecasted needs and available funding suggests that if the current budget remains unchanged, the council may face challenges in delivering its maintenance obligations. Potential consequences include reduced service levels, deferred maintenance works, increased risk of asset failure, and higher long-term costs due to reactive interventions. Addressing this imbalance will require proactive planning, including reviewing budget settings, exploring efficiency opportunities, and prioritising investments to ensure ongoing service delivery sustainability.

5.3 Renewal Plan

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

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

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

The typical useful lives of assets used to develop projected asset renewal forecasts are shown in Table 5.3. Asset useful lives are currently being validated. This AM Plan is based on useful life assumptions from the 2025 valuation.

Table 5.3: Useful Lives of Assets

Asset (Sub)Category	Useful life
Road Surface	40 Years
Pavement Base	100 Years
Formation (Subbase)	100 Years
Main (Carriageway)	70 Years
Bridge Sub Structure	80 Years
Bridge Super Structure	80 Years
Kerbs	50 Years
Pathways	40 Years

The estimates for renewals in this AM Plan were based on an Asset Register Method.

5.3.1 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 (e.g. replacing a bridge that has a 5 t load limit), or
- To ensure the infrastructure is of sufficient quality to meet the service requirements (e.g. condition of a playground).[6]

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.[7]

The ranking criteria used to determine priority of identified renewal proposals is detailed in Table 5.3.1.

[6] IPWEA, 2015, IIMM, Sec 3.4.4, p 3|91.
[7] Based on IPWEA, 2015, IIMM, Sec 3.4.5, p 3|97.

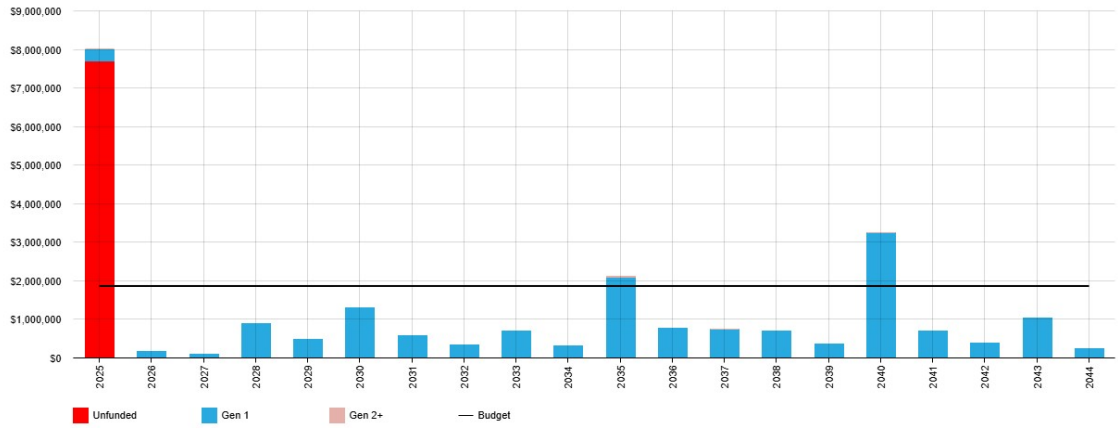
Table 5.3.1: Renewal Priority Ranking Criteria

Criteria	Weighting
Consequence of Failure - prioritises assets with a high impact on safety, service delivery or regulatory compliance if they fail	30%
Asset Usage and User Impact – considers the level of asset utilisation and potential service impact on users, especially if the asset is heavily used	25%
Operational and Maintenance Costs – focuses on assets with rising operational/ maintenance costs, indicating a high need for renewal to manage expenses	20%
Lifecycle Cost Reduction Potential – assets that can be renewed with modern equivalents that reduce overall life cycle costs and improve efficiency	15%
Asset Condition and Performance – considers the current condition and functional performance of the asset	10%
Total	**100%**

5.4 Summary of future renewal costs

Forecast renewal costs are projected to increase over time if the asset stock increases. The forecast costs associated with renewals are shown relative to the proposed renewal budget in Figure 5.4.1. A detailed summary of the forecast renewal costs is shown in Appendix D.

Figure 5.4.1: Forecast Renewal Costs



All figure values are shown in current day dollars.

The renewal budget is projected to remain steady at $1,865,670 annually from 2025 through to 2044. While this consistent allocation provides planning stability, the forecasted renewal demand varies significantly year to year, reflecting the uneven age profile of the asset base.

In 2025, there is a significant shortfall, with over $7.7 million in unfunded renewal works. These works represent assets that have already or are close to exceeding their useful life and should have been renewed prior to 2025. This backlog highlights the impact of historical underfunding or deferred renewals and presents a high-priority risk to future service levels if not addressed.

Forecasted renewal demand fluctuates in subsequent years, with notable peaks in 2030, 2035, and 2040—all years where projected renewal needs exceed $2 million, reflecting concentrated periods of past asset installation. These surges align with previously observed waves of capital investment and indicate clusters of infrastructure reaching end-of-life in groups.

While most years from 2026 onwards show no unfunded gap (i.e., forecasted renewals fall within the allocated budget), this assumes accurate asset condition and performance data and does not account for sudden failure or rapid deterioration.

5.5 Acquisition Plan

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

5.5.1 Selection criteria

Proposed acquisition of new assets, and upgrade of existing assets, are identified from various sources such as community requests, proposals identified by strategic plans or partnerships with others. Potential upgrade and new works should be reviewed to verify that they are essential to the Entities needs. Proposed upgrade and new work analysis should also include the development of a preliminary renewal estimate to ensure that the services are sustainable over the longer term. Verified proposals can then be ranked by priority and available funds and scheduled in future works programmes. The priority ranking criteria is detailed in Table 5.5.1.

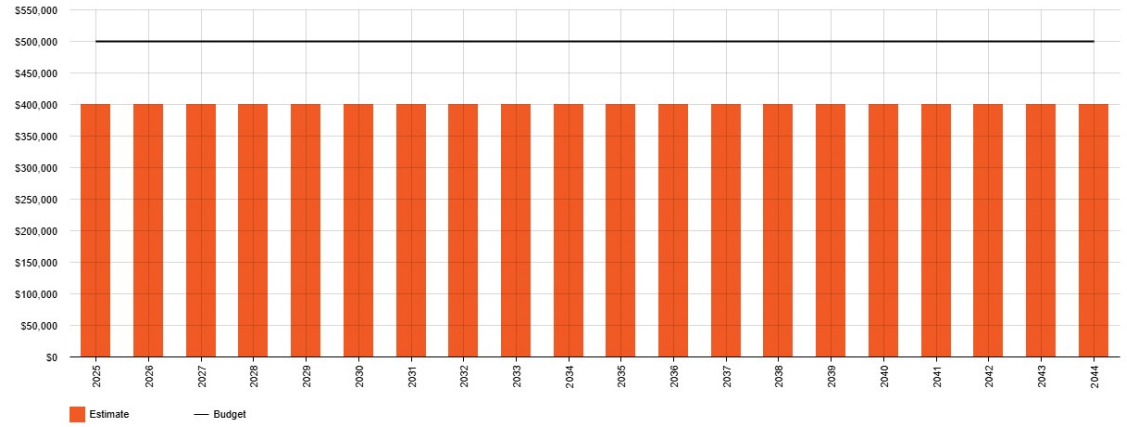
Table 5.5.1: Acquired Assets Priority Ranking Criteria

Criteria	Weighting
Alignment with Strategic Objectives – prioritises acquisitions that align closely with the organisations strategic goals and long term vision	30%
Community Demand or Social Benefit – considers assets that address high demand areas or provide significant benefits to the community	25%
Environmental Impact and Sustainability – values environmentally sustainable projects and those that reduce future environmental risks	20%
Cost Benefit Analysis and Funding Feasibility – ensures the project is financially viable and has a favourable cost benefit outcome	15%
Operational Efficiency or Improvement in Service Delivery – accounts for enhancements in operational efficiency or improved service quality	10%
Total	**100%**

Summary of future asset acquisition costs

Forecast acquisition asset costs are summarised / summarized in Figure 5.5.1 and shown relative to the proposed acquisition budget. The forecast acquisition capital works program is shown in Appendix A.

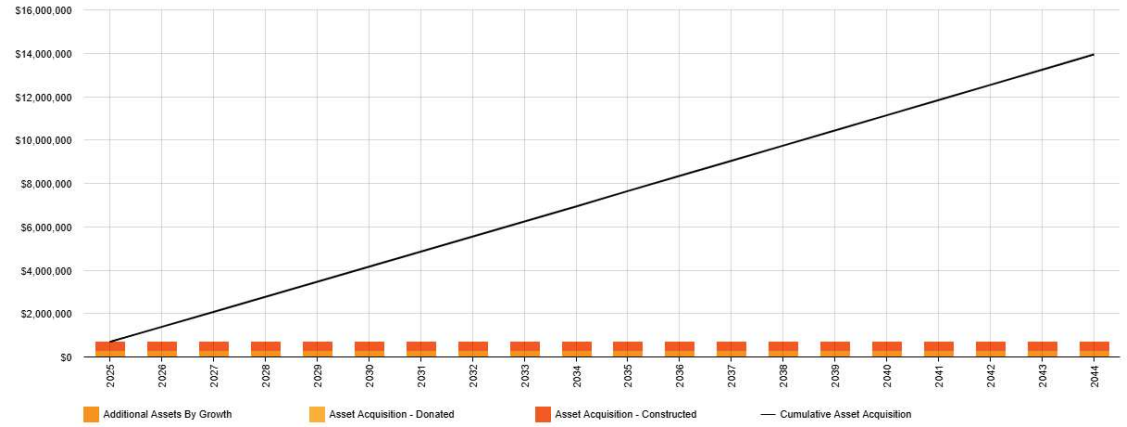
Figure 5.5.1: Acquisition (Constructed) Summary



All figure values are shown in current day dollars.

When an Entity commits to new assets, they must be prepared to fund future operations, maintenance and renewal costs. They must also account for future depreciation when reviewing long term sustainability. When reviewing the long-term impacts of asset acquisition, it is useful to consider the cumulative value of the acquired assets being taken on by the Entity. The cumulative value of all acquisition work, including assets that are constructed and contributed shown in Figure 5.5.2.

Figure 5.5.2: Acquisition Summary



All figure values are shown in current dollars.

Expenditure on new assets and services in the capital works program will continue to be incorporated into the long-term financial plan, provided it aligns with available funding levels.

From 2025 to 2044, the forecast acquisition cost is consistently estimated at $400,000 per year, while the annual budget allocation for acquisitions remains fixed at $500,000. This results in a $100,000 surplus each year, indicating that current acquisition plans are financially sustainable within the available funding envelope.

Unlike previous forecasts that indicated a widening gap between acquisition costs and budget, the current projection reflects a more conservative and controlled acquisition strategy. The consistent alignment between estimated costs and available budget reduces the risk of overcommitting resources and provides capacity for minor scope adjustments or unforeseen expenses.

While this balanced approach is financially prudent, it is important to recognise that any future increase in asset acquisition—whether driven by growth, community demand, or strategic priorities—will bring long-term obligations for operations, maintenance, and renewal. Therefore, maintaining alignment between acquisition

planning and lifecycle funding remains essential to ensure ongoing service sustainability and asset performance.

5.6 Disposal Plan

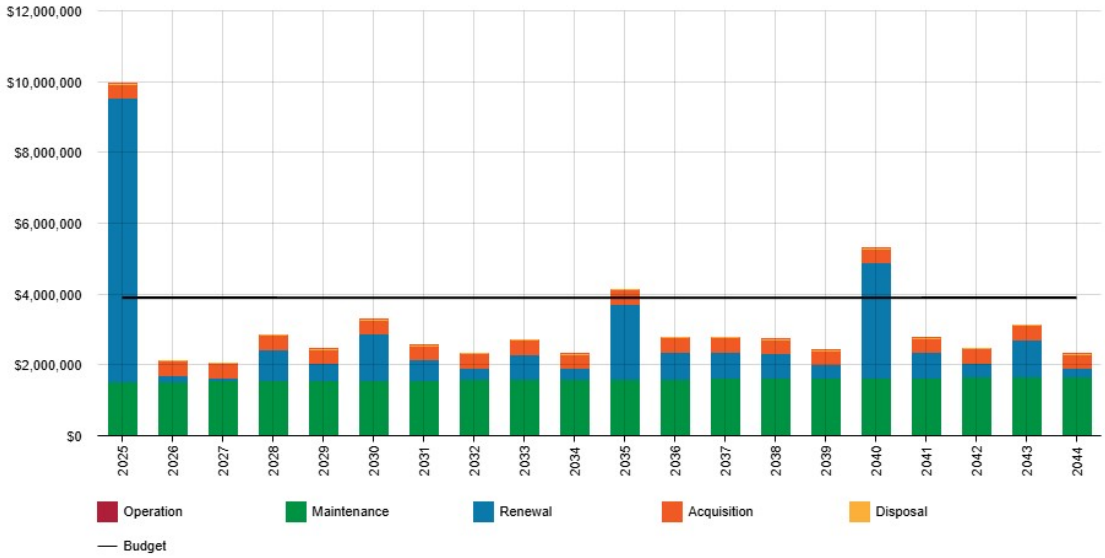
Disposal includes any activity associated with the disposal of a decommissioned asset including sale, demolition or relocation. There are currently no assets identified for possible decommissioning and disposal.

5.7 Summary of asset forecast costs

The financial projections from this asset plan are shown in Figure 5.7.1. These projections include forecast costs for acquisition, maintenance, renewal, and disposal. These forecast costs are shown relative to the proposed budget.

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

Figure 5.7.1: Lifecycle Summary



All figure values are shown in current day dollars.

The forecast costs for operations, maintenance, and capital upgrades remain relatively stable and are well-aligned with the proposed annual budget of $3.9 million from 2025 to 2044. Capital upgrade costs are fixed at $400,000 annually, while operations expenditure gradually increases from $305,982 in 2025 to $333,792 in 2044, and maintenance costs steadily rise from $1.22 million to $1.34 million over the same period. This trend reflects consistent planning assumptions and suggests that Council is positioned to sustain core services and planned improvements under existing funding arrangements.

However, the renewal profile reveals significant variability. While the annual renewal budget is fixed at $1,865,670, actual forecast renewal needs fluctuate considerably—from as low as $101,888 in 2027 to peaks of over $2.1 million in 2035 and $3.2 million in 2040.

The most critical shortfall occurs in 2025, with a renewal requirement of $8 million, exceeding the budget by more than $6.1 million. This sharp spike is attributable to assets that have already exceeded or are very close to exceeding their useful life, reflecting a backlog of deferred renewals. These assets present an immediate risk to service delivery, safety, and cost efficiency if not addressed promptly.

Although many subsequent years fall under budget—potentially suggesting some flexibility in those periods—this apparent underspend may be misleading. Council's current asset condition data lacks accuracy and completeness, and it's likely that some renewal needs are not being properly captured. Therefore, the perception of surplus capacity in certain years may not hold true once data quality improves or unassessed assets deteriorate.

The intermittent spikes in renewal demand, particularly in 2030, 2035, and 2040, indicate clusters of assets installed during the same periods approaching end-of-life simultaneously. These waves of required reinvestment are a legacy of past capital investment patterns and reinforce the need for better smoothing of renewal planning over time.

Furthermore, while the maintenance, and upgrade costs remain within budget, the growing asset base and new acquisitions will increase lifecycle cost obligations in future years. Each new asset introduces long-term funding responsibilities, including eventual renewal.

6.0 RISK MANAGEMENT PLANNING

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

Risk Management is defined in ISO 31000:2018 as: 'coordinated activities to direct and control with regard to risk'[8].

An assessment of risks[9] associated with service delivery will identify risks that will result in loss or reduction in service, personal injury, environmental impacts, a 'financial shock', reputational impacts, or other consequences. The risk assessment process identifies credible risks, the likelihood of the risk event occurring, and the consequences should the event occur. The risk assessment should also include the development of a risk rating, evaluation of the risks and development of a risk treatment plan for those risks that are deemed to be non-acceptable.

6.1 Critical Assets

Critical assets are defined as those which have a high consequence of failure causing significant loss or reduction of service. Critical assets have been identified and along with their typical failure mode, and the impact on service delivery, are summarised in Table 6.1. Failure modes may include physical failure, collapse or essential service interruption.

Table 6.1 Critical Assets

Critical Asset(s)	Failure Mode	Impact
Road Pavement	Cracking, potholes, surface wear	Significant safety risks, reduced speeds, increased vehicle wear, potential road closures
Road Subbase	Settlement; erosion; inadequate drainage	Comprised pavement support, increased surface cracking, accelerated pavement deformation
Road Base	Weakening, degradation, insufficient compaction	Reduced load-bearing capacity, increased pavement failures, higher maintenance costs
Footpaths & Shared Paths (Cycleways)	Surface cracking, uplift from tree roots, erosion, ponding water	Safety hazards for pedestrians and cyclists, increased risk of slips, trips, and falls, reduced accessibility, liability risks
Bridges & Culverts	Structural degradation, scour at foundations, corrosion, joint failures	Complete or partial closure, severed connectivity, major safety risks, costly emergency repairs, disruption to freight and emergency services
Public Transport Stops & Shelters	Structural damage (wind, impact), vandalism, material degradation (UV exposure)	Reduced accessibility for public transport users, safety hazards, negative user experience, increased maintenance costs
Drainage Infrastructure (Swales, Kerbs, Pipes)	Blockages, capacity exceedance, erosion, collapse	Localised flooding, accelerated road and path deterioration, safety hazards, service interruptions

[8] ISO 31000:2009, p 2

[9] REPLACE with Reference to the Corporate or Infrastructure Risk Management Plan as the footnote

Critical Asset(s)	Failure Mode	Impact
Lighting & Signage	Structural failure, corrosion, electrical faults, storm damage	Reduced visibility and safety (especially at night), navigation difficulties, increased risk of incidents and non-compliance

By identifying critical assets and failure modes an organisation can ensure that investigative activities, condition inspection programs, maintenance and capital expenditure plans are targeted at critical assets.

6.2 Risk Assessment

The risk management process used is shown in Figure 6.2 below.

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

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

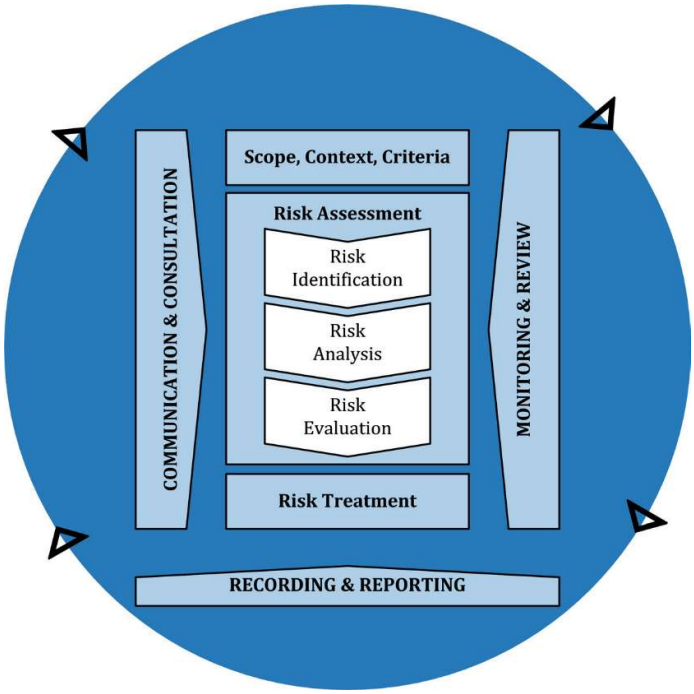


Fig 6.2 Risk Management Process – Abridged
Source: ISO 31000:2018, Figure 1, p9

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

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

Critical risks are those assessed with 'Very High' (requiring immediate corrective action) and 'High' (requiring corrective action) risk ratings identified in the Infrastructure Risk Management Plan. The residual risk and treatment costs of implementing the selected treatment plan is shown in Table 6.2. It is essential that these critical risks and costs are reported to management and the Brighton Council.

Table 6.2: Risks and Treatment Plans

Service or Asset at Risk	What can Happen	Risk Rating (VH, H)	Risk Treatment Plan	Residual Risk *	Treatment Costs
Road Pavement	Loss of connectivity due to pavement failure	VH	Regular maintenance, condition monitoring and early resurfacing	Medium	$500,000
Bridges & Culverts	Structural failure from flooding, scour, or age deterioration	VH	Regular structural inspections, targeted strengthening, scour protection works	Medium	$600,000
Footpaths & Cycleways	Increased trip hazards, safety incidents from surface defects or tree root uplift	H	Regular inspections, prioritised repairs, use of root barriers and flexible materials	Low	$150,000
Public Transport Stops & Shelters	Damage from vandalism, extreme weather, or vehicle impacts reducing accessibility	H	Routine inspections, vandal-proof materials, emergency repair response	Medium	$100,000
Drainage Infrastructure (Swales, Pipes, Kerbs)	Blockages or under-capacity leading to flooding and asset damage	VH	Scheduled cleaning, capacity upgrades in flood-prone areas, green infrastructure solutions	Medium	$200,000
Lighting & Signage	Reduced visibility, safety hazards due to outages or storm damage	H	Preventative maintenance programs, upgrade to solar/LED resilient systems	Low	$100,000
Compliance	Non-compliance with safety, accessibility (DDA), environmental, or technology standards	H	Regular audits, policy updates, design reviews for new projects	Low	$200,000

Staff Retention & Knowledge Management	Loss of skilled staff leading to repair delays and asset knowledge gaps	H	Succession planning, documented maintenance procedures, staff development programs	Medium	$50,000
Insufficient Funding for Asset Renewal	Inability to renew or replace critical infrastructure resulting in asset failures	VH	Long-term financial planning, asset prioritisation, explore grants and partnerships	Medium	$50,000
Traffic Management	Poor traffic flow, congestion, reduced public transport reliability, increased crashes	H	Implement smart traffic management systems and real-time data analysis	Low	$250,000
Climate Change Impacts	Increased wear, flood damage, heat stress, erosion affecting all transport assets	VH	Incorporate resilience measures in design, upgrade drainage, use durable materials, disaster response planning	Medium	$300,000

Note * The residual risk is the risk remaining after the selected risk treatment plan is implemented.

6.3 Infrastructure Resilience Approach

The resilience of our critical infrastructure is vital to the ongoing provision of services to customers. To adapt to changing conditions we need to understand our capacity to 'withstand a given level of stress or demand', and to respond to possible disruptions to ensure continuity of service.

Resilience recovery planning, financial capacity, climate change risk assessment and crisis leadership.

Our current measure of resilience is shown in Table 6.3 which includes the type of threats and hazards and the current measures that the organisation takes to ensure service delivery resilience.

Table 6.3: Resilience Assessment

Threat / Hazard	Assessment Method	Current Resilience Approach
Traffic Demand Growth	Traffic flow simulations and future demand modelling	Design roads to support anticipated traffic growth 20 years in the future
Extreme Weather	Climate change risk assessments, historical weather data analysis	Use fire-resistant materials, maintain firebreaks along roads, ensure evacuation routes, improve drainage systems

Threat / Hazard	Assessment Method	Current Resilience Approach
Aging Infrastructure	Structural health monitoring, asset condition assessments	Implement proactive renewal and maintenance plans
Insufficient Funding for Renewals	Budget forecasting, financial risk assessments	Long-term financial planning, seek alternative funding sources
Supply Chain Disruptions	Supplier risk assessments, inventory tracking	Maintain critical spare parts stockpiles, diversify suppliers
Staff Shortages	Workforce planning, capacity analysis	Cross training staff, succession planning, knowledge retention systems
Public Safety & Accessibility Compliance (DDA, WHS)	Compliance audits, community feedback, incident trend analysis	Ensure public transport stops, footpaths, crossings, and interchanges are progressively upgraded to meet DDA and WHS standards. Use universal design principles in new infrastructure. Engage with accessibility advocacy groups.

6.4 Service and Risk Trade-Offs

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

6.4.1 What we cannot do

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

- Seal all roads across the network, especially in low-traffic or rural areas where cost-benefit analysis does not justify immediate sealing.
- Replace or renew all aging infrastructure simultaneously, including roads, bridges, public transport stops, interchanges, and active transport (cycleways and footpaths) assets, due to limited resources and prioritisation needs.
- Upgrade all bridges to current-day flood resilience and load-bearing standards, particularly in remote or low-priority areas, where usage does not justify immediate investment.
- Implement advanced road safety and intelligent traffic management systems (e.g., dynamic signage, vehicle-to-infrastructure communication) across the network.
- Retrofit all public transport stops and interchanges to meet the latest Disability Discrimination Act (DDA) compliance standards immediately — upgrades will be prioritised based on need, risk, and available funding.
- Construct separated, high-quality cycleways and pedestrian paths along every road corridor, especially in constrained urban environments or low-use rural areas.
- Provide full network coverage for EV charging stations and alternative transport hubs within the next decade.
- Undertake large-scale climate resilience upgrades for all transport infrastructure assets — including raising flood-prone road sections, upgrading drainage for active transport routes, and fire-hardening critical transport links — immediately across the network.
- Deploy smart monitoring systems (e.g., IoT sensors, predictive maintenance technology) for all transport infrastructure assets due to cost and technological maturity constraints.

6.4.2 Service trade-off

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

- Some rural or low-traffic areas may remain reliant on unsealed roads, leading to minor accessibility issues or inconvenience, particularly during adverse weather.
- Delayed infrastructure replacement may reduce road quality in non-critical zones, but impacts will be minimised through targeted maintenance.
- Certain road safety and traffic management improvements may be deferred in low-priority areas.
- Lower-priority bridge renewals or upgrades may be postponed, potentially affecting serviceability during extreme weather events but not compromising critical connectivity.
- Weight restrictions may remain in place on older structures, requiring detours for heavy vehicles.
- DDA-compliant upgrades for bus stops, shelters, and interchanges will be prioritised by need, resulting in slower progress in low-use areas.
- Full network coverage of separated cycleways and high-standard footpaths will not be achievable within 10 years, particularly in lower-demand or constrained urban environments.
- Surface upgrades and connectivity improvements for existing pedestrian and cycling infrastructure may be prioritised for high-use areas only.
- Deployment of intelligent transport systems (ITS), real-time information displays, and smart mobility solutions may be limited to key corridors and high-volume nodes.

6.4.3 Risk trade-off

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

- Continued reliance on unsealed roads in low-traffic areas, leading to increased wear and higher ongoing maintenance, though unlikely to cause major disruptions.
- Aging pavement and sub-structures in lower-priority areas may require reactive maintenance, with limited impact on critical transport services.
- Deferred upgrades may expose older structures to increased flood or load risks, but mitigation will be managed through inspections and temporary restrictions.
- Reactive repairs may be necessary in the event of extreme weather events but will not compromise overall network resilience.
- Potential accessibility and amenity shortfalls where DDA upgrades are delayed, particularly impacting users with mobility challenges in less serviced areas.
- Safety risks associated with older or narrow shared paths, particularly for vulnerable users, may persist in non-critical areas.
- Gaps in connectivity may reduce network usability and uptake of active transport modes.
- Slower implementation of smart traffic management and monitoring systems may reduce network efficiency gains.

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

7.0 FINANCIAL SUMMARY

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

7.1 Financial Sustainability and Projections

7.1.1 Sustainability of service delivery

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

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

Asset Renewal Funding Ratio

Asset Renewal Funding Ratio[10] 145%

The Asset Renewal Funding Ratio is an important indicator and illustrates that over the next 10 years we expect to have 145% of the funds required for the optimal renewal of assets.

The forecast renewal work along with the proposed renewal budget, and the cumulative shortfall where one exists, is illustrated in Appendix D.

Lifecycle Funding Ratio – 10 year financial planning period

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

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

The forecast operations, maintenance and renewal costs over the 10 year planning period is $2,848,471 on average per year.

The proposed (budget) operations, maintenance and renewal funding is $3,395,582 on average per year giving a 10 year funding surplus of $547,111 per year. This indicates that 119% of the forecast costs needed to provide the services documented in this AM Plan are accommodated in the proposed budget. Note, these calculations exclude acquired assets.

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

7.1.2 Forecast Costs (outlays) for the long-term financial plan

Table 7.1.3 shows the forecast costs (outlays) required for consideration in the 10 year long-term financial plan.

Providing services in a financially sustainable manner requires a balance between the forecast outlays required to deliver the agreed service levels with the planned budget allocations in the long-term financial plan.

A gap between the forecast outlays and the amounts allocated in the financial plan indicates further work is required on reviewing service levels in the AM Plan and/or financial projections in the LTFP.

[10] AIFMM, 2015, Version 1.0, Financial Sustainability Indicator 3, Sec 2.6, p 9.

We will manage any 'gap' by developing this AM Plan to provide guidance on future service levels and resources required to provide these services in consultation with the community.

Forecast costs are shown in 2024 dollar values.

Table 7.1.2: Forecast Costs (Outlays) for the Long-Term Financial Plan

Year	Acquisition	Maintenance	Renewal	Disposal
2025	400,000	1,529,912	8,002,248	0
2026	400,000	1,537,175	177,882	0
2027	400,000	1,544,443	101,888	0
2028	400,000	1,551,718	887,381	0
2029	400,000	1,559,000	480,952	0
2030	400,000	1,566,287	1,298,003	0
2031	400,000	1,573,581	569,633	0
2032	400,000	1,580,880	330,395	0
2033	400,000	1,588,186	705,827	0
2034	400,000	1,595,498	303,821	0
2035	400,000	1,602,816	2,107,457	0
2036	400,000	1,610,141	764,916	0
2037	400,000	1,617,472	754,481	0
2038	400,000	1,624,808	687,771	0
2039	400,000	1,632,152	370,504	0
2040	400,000	1,639,502	3,242,058	0
2041	400,000	1,646,857	703,149	0
2042	400,000	1,654,220	394,309	0
2043	400,000	1,661,588	1,043,288	0
2044	400,000	1,668,963	232,059	0

7.2 Funding Strategy

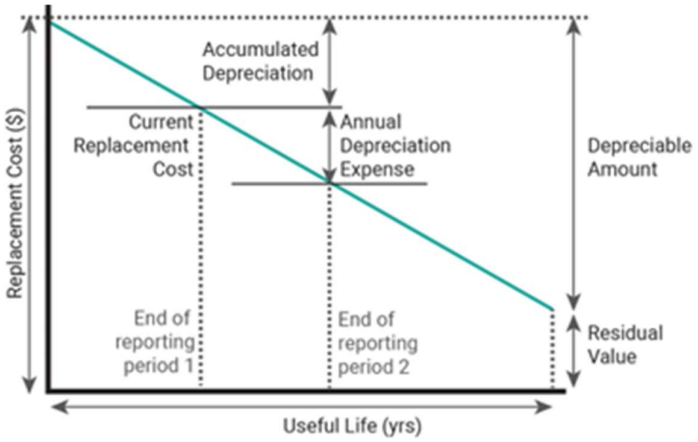
The proposed funding for assets is outlined in the Brighton Council's Budget and Long-Term financial plan.

The financial strategy of the entity determines how funding will be provided, whereas the AM Plan communicates how and when this will be spent, along with the service and risk consequences of various service alternatives.

7.3 Valuation Forecasts

7.3.1 Asset valuations

The best available estimate of the value of assets included in this AM Plan are shown below.



The assets are valued at fair value at cost to replace service capacity:

Replacement Cost (Gross)	$145,843,317
Depreciable Amount	$55,885,554
Current Replacement Cost[11]	$92,580,952
Annual Depreciation Expense	$29,447,066

7.3.2 Valuation forecast

Asset values are forecast to increase as additional assets are added to service.

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

7.4 Key Assumptions Made in Financial Forecasts

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

Key assumptions made in this AM Plan are:

- **Asset Useful Life** – assets have an assumed average useful life of approximately 100 years, which guides renewal and replacement planning. This estimation is based on historical data and standard industry expectations
- **Condition Deterioration Rates** – it is assumed that asset condition will deteriorate at a predictable rate based on typical usage patterns and environmental factors. This assumption supports forecasting for maintenance and renewal needs but may require adjustment if unexpected deterioration occurs.
- **Growth and Demand** – demand growth is projected to remain stable over the forecast period, with minimal increases in service requirements. This assumes population growth and service demand in the region will follow historical trends without significant surge
- **Funding Availability** – the forecasts assume consistent funding levels over the period, without any significant increases or reductions in budget allocations. This is based on current council funding trends and commitments, with no unexpected funding injections or cuts expected

[11] Also reported as Written Down Value, Carrying Amount or Net Book Value in some jurisdictions.

- **Service Levels –** current service levels are assumed to remain consistent throughout the forecast period. No significant changes in service expectations or regulatory requirements are anticipated, which would otherwise impact operational and maintenance costs.
- **Asset Additions** – for new assets expected to be acquired, it is assumed that initial acquisition costs are covered, but ongoing operational and maintenance costs will need to be absorbed within existing budgets. This impacts long-term planning, as new assets will add to financial demands beyond the current budget forecast.

7.5 Forecast Reliability and Confidence

The forecast costs, proposed budgets, and valuation projections in this AM Plan are based on the best available data. For effective asset and financial management, it is critical that the information is current and accurate. Data confidence is classified on a A - E level scale[12] in accordance with Table 7.5.1.

Table 7.5.1: Data Confidence Grading System

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

The estimated confidence level for and reliability of data used in this AM Plan is shown in Table 7.5.2.

Table 7.5.2: Data Confidence Assessment for Data used in AM Plan

[12] IPWEA, 2015, IIMM, Table 2.4.6, p 2|71.

Data	Confidence Assessment	Comment
Demand drivers	High	Demand drivers are based on historic trends
Growth projections	N/A	All figures are based on present day values
Acquisition forecast	Medium	Acquisition forecast based on historic trends
Operation forecast	Medium	Data requires validation and assessment for priority
Maintenance forecast	Medium	Data requires validation and assessment for priority
Renewal forecast - Asset values	High	Renewal forecast values are informed from current asset data
- Asset useful lives	Medium	There are some concerns around useful life of unsealed roads. These figures are to be validated
- Condition modelling	Medium	Data requires validation and assessment for priority
Disposal forecast	Medium	Useful lives impact accumulated depreciation and therefore may be under or overstated if useful lives are not reflective of actual asset performance.

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

8.0 PLAN IMPROVEMENT AND MONITORING

8.1 Status of Asset Management Practices[13]

8.1.1 Accounting and financial data sources

This AM Plan utilises accounting and financial data. The source of the data is the records maintained within Brightly Assetic.

8.1.2 Asset management data sources

This AM Plan also utilises asset management data. The source the data is the records maintained within Brightly Assetic.

8.2 Improvement Plan

It is important that an entity recognise areas of their AM Plan and planning process that require future improvements to ensure effective asset management and informed decision making. The improvement plan generated from this AM Plan is shown in Table 8.2.

Table 8.2: Improvement Plan

Task	Task	Responsibility	Resources Required	Timeline
1	Develop a comprehensive asset condition assessment program for all transport infrastructure (roads, bridges, footpaths, cycleways, public transport facilities, ferry terminals).	Asset Manager/ Maintenance Team	External consultants for condition surveys, data management software, and staff training.	Within 18 months
2	Implement proactive maintenance schedules for all transport assets to reduce reactive repairs and extend asset life.	Maintenance team	Additional budget for increased maintenance inspections, scheduling software, and contractor support.	Within 18 months
3	Improve traffic and congestion data collection to enhance capacity planning and service levels.	Operations Manager	Traffic monitoring equipment, data analysis tools, and consultant support for traffic modelling.	6-12 months
4	Update the long-term financial plan to reflect lifecycle costs for all transport infrastructure renewal and acquisition projects.	Finance Manager/ Asset Manager	Financial modelling software, external financial consultants, and coordination with engineering teams.	Within 6 months
5	Develop a community engagement plan to gather feedback on service levels and priorities across all transport modes (roads, PT, active transport).	Stakeholder Engagement Manager	Survey tools, public engagement platforms, and staffing for outreach activities.	3 – 6 months
6	Incorporate climate resilience measures into planning for roads, bridges, and public transport facilities.	Asset Manager/ Environmental Officer/ Risk Assessment Team	Climate risk assessment tools, collaboration with environmental consultants, and additional training for staff.	12-24 months

[13] ISO 55000 Refers to this as the Asset Management System

7	Establish an asset renewal prioritisation framework for critical transport assets (roads, bridges, PT facilities, active transport).	Asset Manager/ Engineering Team	Prioritisation tools, updated asset data, and collaboration with financial planning teams.	Within 12 months
8	Implement a GIS-based asset management system for all transport assets to enhance tracking and decision-making.	IT Department/ Asset Manager	GIS software, integration support, and staff training on the new system.	6 – 12 months
9	Conduct a skills audit to identify gaps in technical expertise across transport asset management (including PT infrastructure, bridges, paths).	P&C Manager/ Training Coordinator	External consultants, staff time for participation, and development of training programs.	6 – 9 months
10	Review and update the asset disposal and decommissioning plan for obsolete transport infrastructure assets.	Asset Manager/ Operations Team	Disposal plan documentation, consultant support for environmental impact assessments, and staff training.	12 – 18 months
11	Develop an accessibility improvement plan for public transport facilities, interchanges, and active transport networks to meet DDA compliance.	Asset Manager / Accessibility Team	Accessibility audits, infrastructure upgrade plans, funding applications.	12 – 24 months

8.3 Monitoring and Review Procedures

This AM Plan will be reviewed during the annual budget planning process and revised to show any material changes in service levels, risks, forecast costs and proposed budgets as a result of budget decisions.

The AM Plan will be reviewed and updated annually to ensure it represents the current service level, asset values, forecast operations, maintenance, renewals, acquisition and asset disposal costs and planned budgets. These forecast costs and proposed budget are incorporated into the Long-Term Financial Plan or will be incorporated into the Long-Term Financial Plan once completed.

The AM Plan has a maximum life of 4 years and is due for complete revision and updating within 2 years of each Council election.

8.4 Performance Measures

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

- The degree to which the required forecast costs identified in this AM Plan are incorporated into the long-term financial plan,
- The degree to which the 1-5 year detailed works programs, budgets, business plans and corporate structures consider the 'global' works program trends provided by the AM Plan,
- The degree to which the existing and projected service levels and service consequences, risks and residual risks are incorporated into the Strategic Planning documents and associated plans,
- The Asset Renewal Funding Ratio achieving the Organisational target (this target is often 90 – 100%).

9.0 REFERENCES

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- ISO, 2018, ISO 31000:2018, Risk management – Guidelines
- Strategic Plan 2023-2033
- Annual Plan 2024 - 25
- Financial Management Strategy & Long Termm Financial Plan 2022 - 2032
- Brighton Council 2050 Vision
- Brighton Council 10 Year Asset management Plan

10.0 APPENDICES

Appendix A Acquisition Forecast

Table A3 - Acquisition Forecast Summary

Year	Constructed	Donated
2024	400,000	291,687
2025	400,000	292,270
2026	400,000	292,855
2027	400,000	293,440
2028	400,000	294,027
2029	400,000	294,615
2030	400,000	295,204
2031	400,000	295,795
2032	400,000	296,386
2033	400,000	296,979
2034	400,000	297,573
2035	400,000	298,168
2036	400,000	298,765
2037	400,000	299,362
2038	400,000	299,961
2039	400,000	300,561
2040	400,000	301,162
2041	400,000	301,764
2042	400,000	302,368
2043	400,000	302,973

Appendix B Operation Forecast

N/A

Appendix C Maintenance Forecast

.

Table C2 - Maintenance Forecast Summary

Year	Maintenance Forecast	Maintenance Budget
2024	1,529,912	1,529,912
2025	1,537,175	1,529,912
2026	1,544,443	1,529,912
2027	1,551,718	1,529,912
2028	1,559,000	1,529,912
2029	1,566,287	1,529,912
2030	1,573,581	1,529,912
2031	1,580,880	1,529,912
2032	1,588,186	1,529,912
2033	1,595,498	1,529,912
2034	1,602,816	1,529,912
2035	1,610,141	1,529,912
2036	1,617,472	1,529,912
2037	1,624,808	1,529,912
2038	1,632,152	1,529,912
2039	1,639,502	1,529,912
2040	1,646,857	1,529,912
2041	1,654,220	1,529,912
2042	1,661,588	1,529,912
2043	1,668,963	1,529,912

Appendix D Renewal Forecast Summary

Table D3 - Renewal Forecast Summary

Year	Renewal Forecast	Renewal Budget
2024	8,002,248	1,865,670
2025	177,882	1,865,670
2026	101,888	1,865,670
2027	887,381	1,865,670
2028	480,952	1,865,670
2029	1,298,003	1,865,670
2030	569,633	1,865,670
2031	330,395	1,865,670
2032	705,827	1,865,670
2033	303,821	1,865,670
2034	2,107,457	1,865,670
2035	764,916	1,865,670
2036	754,481	1,865,670
2037	687,771	1,865,670
2038	370,504	1,865,670
2039	3,242,058	1,865,670
2040	703,149	1,865,670
2041	394,309	1,865,670
2042	1,043,288	1,865,670
2043	232,059	1,865,670
2024	8,002,248	1,865,670

Appendix E Disposal Summary

N/A

Appendix F Budget Summary by Lifecycle Activity

Table F1 – Budget Summary by Lifecycle Activity

Year	Acquisition	Maintenance	Renewal	Disposal	Total Budget
2024	400,000	1,529,912	8,002,248	0	3,895,582
2025	400,000	1,537,175	177,882	0	3,895,582
2026	400,000	1,544,443	101,888	0	3,895,582
2027	400,000	1,551,718	887,381	0	3,895,582
2028	400,000	1,559,000	480,952	0	3,895,582
2029	400,000	1,566,287	1,298,003	0	3,895,582
2030	400,000	1,573,581	569,633	0	3,895,582
2031	400,000	1,580,880	330,395	0	3,895,582
2032	400,000	1,588,186	705,827	0	3,895,582
2033	400,000	1,595,498	303,821	0	3,895,582
2034	400,000	1,602,816	2,107,457	0	3,895,582
2035	400,000	1,610,141	764,916	0	3,895,582
2036	400,000	1,617,472	754,481	0	3,895,582
2037	400,000	1,624,808	687,771	0	3,895,582
2038	400,000	1,632,152	370,504	0	3,895,582
2039	400,000	1,639,502	3,242,058	0	3,895,582
2040	400,000	1,646,857	703,149	0	3,895,582
2041	400,000	1,654,220	394,309	0	3,895,582
2042	400,000	1,661,588	1,043,288	0	3,895,582
2043	400,000	1,668,963	232,059	0	3,895,582