WARRNAMBOOL
CITY COUNCIL

PATHWAYS

Asset Management Plan
Warrnambool City Council

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1.0 EXECUTIVE SUMMARY

1.1 The Purpose of the Plan

This Asset Management Plan (AM Plan) details information about infrastructure 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 over a 10-year planning period. The AM Plan will link to the Long-Term Financial Plan.

1.2 Asset Description

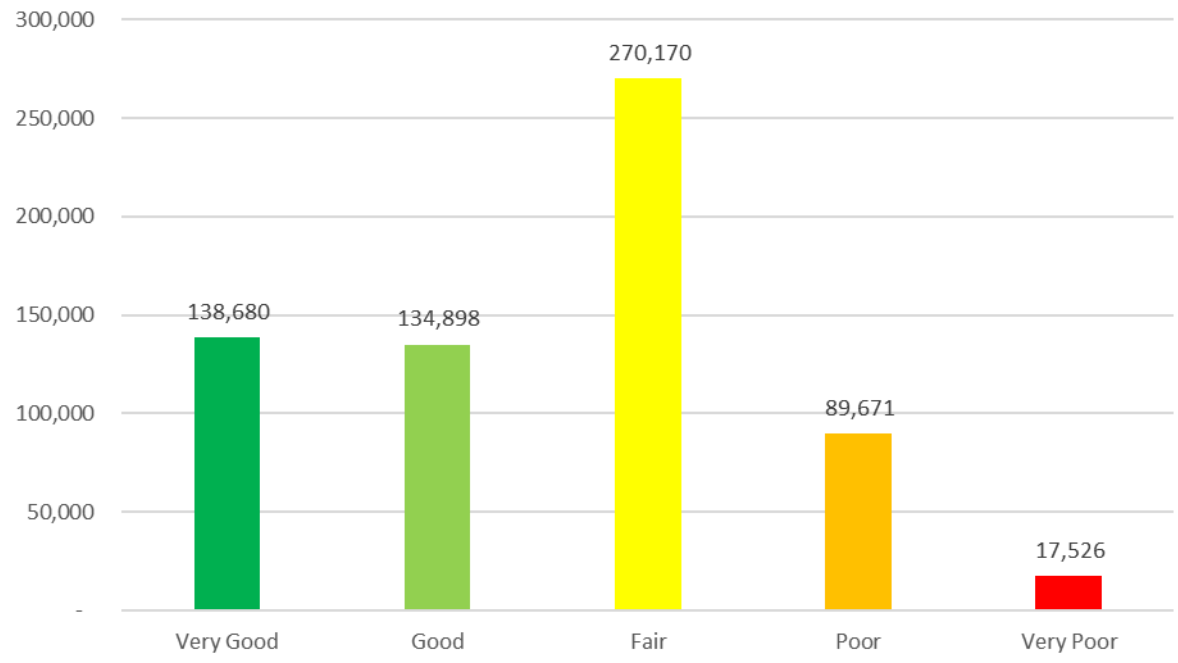
The pathways network which Council is responsible for measures approximately 382 km in total length and has a total replacement cost of $68.7 million.

The network comprises both sealed (i.e. asphalt, concrete, brick pavers, etc) and unsealed pathways (i.e. gravel). Council's pathway network has been developed over time to provide pedestrian access around the city.

Council's pathways contribute to the community through:

- Access and safe movement of people.
- Community linkages to shops, schools, neighbours, and friends.
- Recreation, health and fitness opportunities.
- Improvement to local amenity.

The following chart shows the current condition of Council's pathways.



According to analysis of Council's asset information, 84% of its pathways are in 'Fair' or better condition.

1.3 Levels of Service

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

While service standards are expected to remain within tolerable limits under the current funding regime, it will be important for Council to continue to regularly monitor the performance of the pathway network, including community satisfaction. Budget adjustments may need to be made to address possible trends in asset degradation, appetite for increased levels of service, or to manage risk appropriately.

This plan, and future revisions, will inform the long-term financial plan to fund the future renewal and upgrades necessary to meet future demand and levels of service.

1.4 Future Demand

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

- Population and demographic change.
- Ageing infrastructure.
- Increased awareness of the benefits of walking as an active transport option.
- City growth and development including increased housing density.

These factors will be considered when 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:

- Continuing to implement the recommendations and projects from Council's strategies and plans such as the Warrnambool Principal Pedestrian Network Report (PPN) and Sustainable Transport Strategy.
- Monitoring the performance and condition of pathways through ongoing inspection programs.
- Preparing long term asset maintenance and renewal programs according to priorities and funding availability.
- Ensuring design guidelines which consider future demand factors and good design principles.

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 Council's pathways is estimated to be $28.9 million or $2.9 million on average per year. This excludes contributed assets and works delivered through Council's Development Contributions Plan.

1.6 Financial Summary

1.6.1 What we will do

Estimated available funding for the 10-year period is $19.8 million or $1.98 million on average per year as per the Long-Term Financial plan or Planned Budget. This is 68% 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. This is shown in the following figure.

Forecast Lifecycle Costs and Planned Budgets

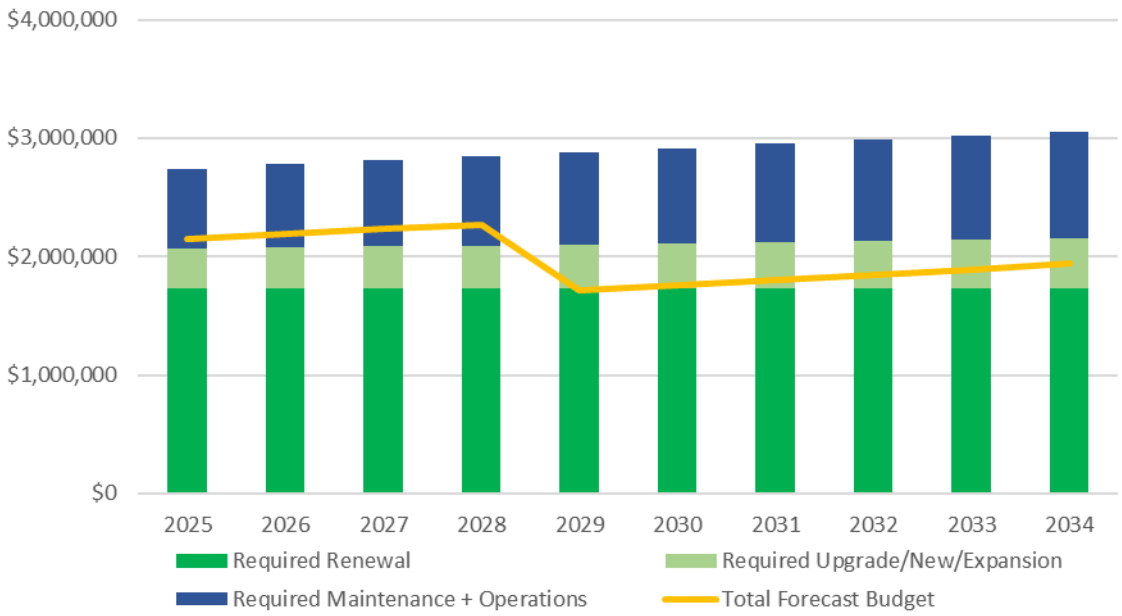


Figure Values are in current dollars.

The analysis completed for this Pathways Asset Management Plan indicates that there will be a funding shortfall over the next 10 years. As a result, Council will look to undertake more strategic work, including further inspections to understand the condition of the network, prior to making key decisions on future funding requirements.

We plan to provide the following related services:

- Continue to inspect and proactively maintain pathways to ensure they are safe and functional within the specified levels of service accepted by the community.
- Invest in the renewal, upgrade and provision of new pathways according to data driven priorities and annual budget allocations.
- Ensure pathways comply with any relevant statutory requirements and Australian Standards.
- Prioritise pathway works based on criticality and Council's Road Management Plan.

1.6.2 What we cannot do

We currently allocate sufficient funding to sustain these services at the desired standard but need to manage the expectation to provide all new services being sought. Works and services that may not be provided under present funding levels are:

- New pathways (missing links) identified in the Principal Pathway Network Report in a ten-year period
- Upgrade of existing pathway assets as identified by various strategic corporate documents relevant to pathway services

1.6.3 Managing the Risks

Our present funding levels are sufficient to continue to manage risks in the medium term.

The main risk consequences if Council was unable to maintain funding levels are:

- Reduction in pathway service levels due to the overall funding shortfall from rate capping.
- Inadequate management of unsafe assets causing either an increasing likelihood of unexpected maintenance expenditure or asset failure resulting in service disruptions.
- Renewal of assets prior to reaching their desired intervention level due to a decline in asset functionality or utilisation.

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

- Proactively inspecting our pathways and carrying out maintenance or other actions to ensure public safety is a priority.
- Continuing to implement the priorities from the Principal Pedestrian Network and monitoring its effectiveness.
- Incorporating design principles for pathways to ensure they are accessible to all.
- Implementing our strategies and frameworks to inform our pathway investment priorities.

1.7 Monitoring and Improvement Program

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

- Continue to collect and refine pathway asset data suitable to inform strategic and operational analysis and decisions.
- Review condition assessment methodology to potentially include measuring pathway condition at discrete intervals (e.g. 10 metres).
- Review long term renewal funding demands using information collected from the next pathway condition survey. Formulate a strategy to address funding needs and update this Asset Management Plan.
- Review methodology used by Conquest to calculate overall asset condition stored in the pathway's asset register.
- Review current asset handover processes to ensure complete asset data capture and accurate asset capitalisation following the completion of capital works.
- Review current surveillance activities of works carried out by third parties and contractors to ensure it meets quality standards.
- Initiate a resourcing strategy for Council's in-house concrete team to ensure that it has the right balance of numbers and skills of staff to complete necessary activities. This should include attraction and retention of staff.

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.

Warrnambool City Council ('Council') is responsible for managing 382 km of pathways. These pathways include roadside pathways, boardwalks and paths within reserves and other public open spaces. These assets have a collective replacement value of $68.7 million. For a detailed summary of the assets covered in this AM Plan refer to Table 5.1.1 in Section 5.

This network has been developed over time and contributes to the community through providing safe, comfortable and accessible linkages for people to local destinations (e.g. shops, schools). The integrated network also promotes walking as a sustainable transport option and facilitates access to recreation, health and fitness opportunities.

The management of pathways requires prudent coordination of technical and operational resources.

This AM Plan outlines how Council will plan, develop, and maintain its pathways and associated assets to meet its service needs in an affordable way. It should be read alongside other key planning documents including:

- Warrnambool 2040
- Council Plan
- Asset Management Policy
- Asset Management Strategy
- Sustainable Transport Strategy
- Warrnambool Principal Pedestrian Network Report
- Open Space Strategy
- Municipal Road Management Plan
- Warrnambool City Centre Revitalisation Structure Plan
- Various Growth Area Structure Plans

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
Councillors	Custodian of the asset, with Councillors representing the residents and setting strategic direction as per the Corporate and Operational Plans
Employees	Teams across Council who have strategic and operational lifecycle management responsibilities for the pathway network.
Pathway users	Community members who make use of the pathway network.
Business and Property Owners	Have a vested interest in the manner in which the pathway network is developed and managed.

Key Stakeholder	Role in Asset Management Plan
Contractors and other suppliers	To ensure provision of the required/agreed level of maintenance services for asset components.
Utility service providers	Agencies that manage utility services such as electricity, gas, water, sewerage, telecommunications within the road corridor.
Partners in other government departments	Periodic provision of advice, instruction, and support funding to assist with management of the local road system, including pathways.
Insurers	Insurance and risk management issues.

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 and affordable forecast costs and shows how funds 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 – periodic identification, assessment and treatment of risks associated with providing services
- Future demand – how this will impact on future service delivery and how this is to be met,
- Lifecycle management – how to manage 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:

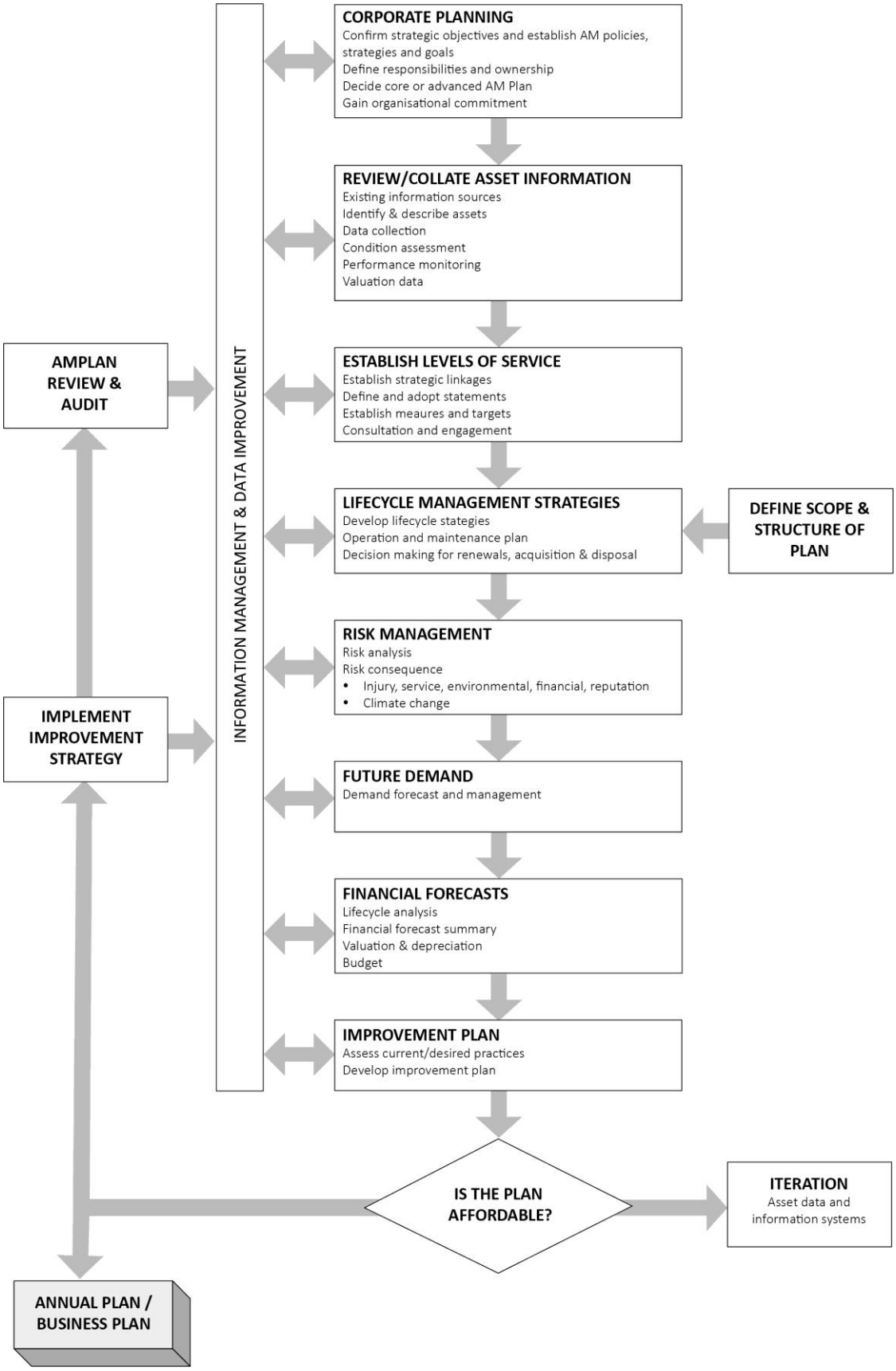
- International Infrastructure Management Manual 2015 [1]
- ISO 55000[2]

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 Council. Future revisions of the AM Plan will incorporate customer consultation on service levels and costs of providing the service. This will assist the 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.

Council participates in the annual Local Government Community Satisfaction Survey which is coordinated by the State Government on behalf of Victorian councils. This survey measures community views towards, and satisfaction with, the services delivered. The results from recent surveys are summarised in Table 3.1.

Table 3.1: Customer Satisfaction Survey Levels

Performance Measure	Warrnambool City Council		Regional Centres	Statewide Average
	2024	2023	2024	2024
Local streets and pathways	**56**	55	53	52

The overall performance index scores (100 represents excellent and 50 represents average performance) for pathway related services has shown a slight increase in satisfaction from the results in 2023, however, down on an index score of 62 in 2022.

The survey results identify that Council should focus on the condition of local streets and pathways. This area is low performing and has a moderate influence on the community's perception of Council's overall organisational performance.

3.2 Strategic and Corporate Goals

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

Our vision is:

A thriving city at the heart of coast and country.

Strategic goals have been set by 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	Actions
A Healthy Community	Council will improve the physical and social accessibility to community services, facilities, places and precincts	Where possible, and in accordance with current standards, deliver all-abilities access compliance as part of asset renewal projects.
A Strong Economy	Council will support initiatives that foster ongoing development and investment in the industries which underpin Warrnambool's economic strengths and comparative advantages.	Manage Development Plans and Developer Contributions Plans to meet infrastructure requirements of new areas

Goal	Objective	Actions
A Connected and Inclusive Place	Council will enhance Warrnambool's connectivity through the delivery of, or advocacy for, improvement to roads, public transport, pathways, trails and digital infrastructure.	Review Pathway Asset Management Plan and Warrnambool Principal Pedestrian Network Report to identify key gaps and opportunities for improvement.

3.3 Legislative Requirements

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

Table 3.3: Legislative Requirements

Legislation	Requirement
Local Government Act 2020	Sets out the role, purpose, responsibilities and powers of Council including the preparation of a long-term financial plan supported by asset management plans for sustainable service delivery.
Road Management Act 2004 and associated Regulations and Codes of Practice	Establishes a coordinated management system for public roads that promotes safe and efficient State and local road networks. This also includes the responsible use of road reserves for other legitimate purposes (e.g. provision of utility services). Defines the responsible authorities for all roads within the state. It makes Council the controlling authority for Public Local Roads, Boundary Roads, and parts of Declared Roads within the municipal area.
Transport Act 1983	Relates to the operation of the road network
Road Safety Act 1986	Safety requirements relating to the use and operation of the road network.
Road Safety Regulations 2009	Sets out regulations for implementing the Road Safety Act
Occupational Health and Safety Act 2004	Applicable to working within the road reserve.
Disability Act 2006	Establishes a framework for providing support and services to people with disabilities throughout Victoria. Relevant for pathways.
Warrnambool City Council Local Law Number 2 - Community Amenity Local Law	Controls for vegetation overhanging pathways and sets out landholder responsibilities in relation to keeping pathways clear of obstructions including goods, signs, tables, and chairs

3.4 Current and Target Levels of Service

Current and target levels of service and associated performance measures are outlined in Table 3.4.

These are based on current statutory obligations, organisational goals, current accepted industry standards, and the historic interpretation of customer expectations of service levels.

Several performance indicators have been identified that will be beneficial to measuring Council's overall delivery of pathway related services in the future.

Council will work to implement the tools and processes and gather data required to monitor and report on these indicators over the life of this Asset Management Plan.

Table 3.4: Customer Values

Customer Value	Customer Outcome	Performance Measure	Current Performance	Goal Over Next 4 Years
Quality	People are happy with the standard of roads and pathways.	Annual Customer Satisfaction Survey – Local Streets and Pathways.	56	Improve
	Pathways are well cared for.	Percentage of pathway assets in 'Fair' condition or better.	84%	Improve
		The number of square metres of pathway renewed annually.	Future measure	Future measure
Safety	Pathways are managed to make sure they are safe.	Percentage of 'Defect Inspections' completed on time annually per Council's Road Management Plan.	99%[3]	Maintain
		Percentage of defects responded to within nominated response times annually per Council's Road Management Plan.	87%[4]	Improve
		Number of customer requests received relating to Council's pathway network annually.	207[5]	Reduce
Accessibility	People are able to easily move around the city.	Length of constructed pathways in Council's Principal Pedestrian Network.	Future measure	Future measure

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 that changing circumstances such as technology and customer priorities will evolve and influence service provision and standards over time.

[3] Inspections completed within a 14-day window from due date
[4] Includes RMP hole or gap >40mm, defective with a step >30mm, missing or substantially damaged drainage lids, grates in pedestrian or traffic lanes.
[5] Rolling 3-year average 2022-24

4.0 FUTURE DEMAND

4.1 Demand Drivers

Drivers affecting demand include things such as population change, 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. 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 Drivers	Present Position	Projection	Impact	Management Plan
Population Change	Population growth is a key driver of demand for transport assets and infrastructure. Warrnambool City Estimated Resident Population for 2023 is 35,907.[6]	Council is planning for a population of 50,000 by 2040[7].	▪ Future population growth will generate additional demand for transport infrastructure, including pathways.	▪ Continue to implement the recommendations and projects from Council's strategies and plans such as the Warrnambool Principal Pedestrian Network Report and Sustainable Transport Strategy.
Demographic Change	The largest changes in the age structure between 2016 and 2021 were in the age groups: ▪ Young workers, (25 to 34) (+448 people) ▪ Empty nesters and retirees (60-69) (+494) ▪ Seniors (70 to 84) (+815)	It is expected that current demographic trends will continue in the future with general ageing of the population.	▪ Changes in the age characteristics and number of the City's residents will increase demand for accessible transport options. ▪ Accessibility to key precincts, facilities and activity areas will increasingly become a key focus.	▪ Functional criteria to be enhanced to assess quality of existing pathway network and provision. ▪ Upgrade and new assets designed and constructed to meet current standards. ▪ Universal design and inclusiveness principles included in the design and construction of transport infrastructure.
Increased health awareness	Residents are increasingly aware of the health benefits of walking or jogging	It is expected that current trends will continue.	Pedestrian facilities will need to be reviewed and enhanced so that a safe and continuous network of pathways are provided to support active transport and recreation.	▪ Continue to implement the recommendations and projects from Council's strategies and plans such as the Warrnambool Principal Pedestrian Network Report and Sustainable Transport Strategy.

[6] Source - https://profile.id.com.au/warrnambool
[7] Source - https://www.warrnambool.vic.gov.au/warrnambool-economic-data#Population%20Data

Demand Drivers	Present Position	Projection	Impact	Management Plan
Increasing Dwelling Density	The Warrnambool City-Wide Housing Strategy forecasts that housing densities should be expected to increase in many parts of Warrnambool.	Increased density is expected to continue across the city.	Areas of increased housing density can be expected to have increased volumes of use on the Councils road and pathway networks.	▪ Monitor population and pedestriancount data in developing areas alongside continuing to developworks programs with considerationof zonal requirements. ▪ Use the Housing Diversity Strategy(in development) to assist in the prioritisation and zoning of future pathways.
City Growth and Development	Growth precincts outlined in Council structure plans	Additional infrastructure required for new developments	New pathway assets will be acquired by way of developer contributions. This will result in a need to increase current maintenance budgets from existing levels to meet service objectives.	▪ The construction of and planning for growth area pathway and shared path infrastructure is managed through strategic and statutory planning process. ▪ Ensure that delivery teams are informed on handover, and requisite increases are made to annual maintenance budget allocations.
Ageing Infrastructure	A large proportion of Council's pathway network was developed and constructed many years ago.	Council has a legacy whereby pathway assets, based on their age profile, will require renewal or rehabilitation in the near term to maintain basic service levels.	Without adequate funding the declining condition of Council's pathways due to age will result in reduced levels of service and increased risk by putting pressure on the ability to meet RMP compliance requirements.	▪ Continue to monitor the performance and condition of pathways through ongoing inspection programs. ▪ Prepare long term asset maintenance and renewal programs according to priorities and funding availability.

Demand Drivers	Present Position	Projection	Impact	Management Plan
Changing Design Standards	Pathways provided, constructed, and maintained according to current standards.	Further improvements to design standards to accommodate accessibility and safety improvements.	▪ Potential for increased costs to meet more rigorous standards	▪ Ensure design guidelines which consider future demand factors and good design principles.
Climate Change	Australia's current climates are variable and prone to extremes - droughts, heatwaves, fires, intense rainfall, and floods. These extremes can have a significant impact on communities, natural environments, and regional economies.	Highly variable climate and increased frequency and intensity of extreme rainfall and storm events.	▪ Accelerated degradation of and reduced road and pathway life expectancy. ▪ Increased likelihood of natural disasters. ▪ Increased lifecycle costs.	▪ Make sure assets are planned and developed to incorporate climate resiliency and consider the potential impacts of future climate variability. ▪ Follow sustainable procurement practices while also considering supply chain impacts. ▪ Minimise waste from construction and renovation of assets through material reuse and recycling.
Council Financial Sustainability	Council is required to provide its projects, programs, and services within an environment of constrained revenue control resulting from rate capping.	Rate capping has the potential to affect effective asset management if sufficient funds are unable to be secured to manage existing assets to agreed levels of service or to provide new or upgraded transport assets desired by the community	Council will be faced with challenges with respect to the future provision of transport infrastructure, including: - Achieving equitable distribution of resources and the provision of transport networks and assets. - Making sure that the community receives maximum benefit from the investment in transport infrastructure.	▪ Prepare long term transport asset maintenance and renewal programs according to priorities and funding availability. ▪ Conduct level of service analysis across all transport asset types and review affordability and risks. ▪ Ensure that the Financial Plan and Asset Plan are integrated and reflect future asset whole of life costs and account for any expected climate change impacts.

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 5.6.

Warrnambool City Council is presently experiencing a period of rapid growth. Demand for provision of accessible and quality pathways will continue to be a significant challenge for Council. The new assets required to meet demand may be acquired, donated, or constructed by Council.

Council has many strategies and policies that provide the means to continually assess future needs and to identify opportunities to enhance or upgrade the pathway network to meet growth and changes in demand. This also includes Council's current Development Contributions Plan which is used as a mechanism to fund growth related projects.

Acquiring new assets will commit 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.[8]

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

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

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

Climate Change Indicator	Potential Impact on Assets and Services	Management Actions
Heatwaves	▪ Thermal expansion causing melting and cracking of materials used in roads and pathways.	▪ Use climate risk modelling to identify when and where road assets are most likely to be exposed to heat stress. ▪ Initiate increased inspection frequency of assets in high risk /use areas. ▪ Repair cracking and remediate assets to allow for more thermal expansion at identified stress points. ▪ Identifying and prioritise assets based on use hierarchy. ▪ Increase use of trees for shading along pathways/cycle paths/shared pathways.
Extreme rainfall	▪ Accelerated degradation of road infrastructure, reduced life expectancy, increased lifecycle costs and road safety being compromised. ▪ Scouring of road surface and road shoulder/verge, more potholes. ▪ Accelerated material degradation.	▪ Identify when and where assets are most likely to be exposed to increased frequency and intensity of riverine and pluvial flooding through asset risk modelling. ▪ Undertake flood mapping of road levels to identify hot spots that occur on key routes needed for deploying Municipal Emergency Management Plan. ▪ Reactive and proactive maintenance – to identify and initiate repairs where needed to maintain/improve asset integrity now. ▪ Plan for alternative routes and easy deployment of signage advising on safe routes or other safety measures (e.g. lower speed in conditions of flooding, flood water height, etc.), integrate planning to the Municipal Emergency Management Planning. ▪ Assess the condition of key road and pathway infrastructure, following a flooding or storm event and undertake any remedial works deemed necessary. ▪ Factor future flooding impacts into design and maintenance programs via Council flood mapping.
Drought	▪ Drier conditions resulting in cracking and deterioration.	▪ Plan for additional maintenance requirements and costs as a result of the impacts of drier conditions across network (increased degradation) and input forecasts into possible climate resilience fund. ▪ Increase use of native hardy trees for shading along pathways/cycle paths/shared pathways. Ensure species selection does not create a hazard for cyclists and pedestrians i.e., limp dropping)

Climate Change Indicator	Potential Impact on Assets and Services	Management Actions
Extreme wind	▪ Trees and debris falling on to pathways and road surfaces, blocking routes and causing injury or damage to vehicles.	▪ Identify when and where assets are most likely to be exposed to increased frequency and intensity of extreme wind through asset risk modelling. ▪ Where possible initiate ongoing management of vegetation to reduce risk of trees and debris impact through the identification of most appropriate species to reduce risk of dropping limbs and creating hazards for transport networks.
Higher Carbon Emissions	▪ Legislative need to reduce emissions.	▪ Use low embodied energy materials for road and footpath repairs. ▪ Adopt circular economy principles where appropriate, in the management and rehabilitation of road, bike-path and pathway related infrastructure. ▪ Continue to use renewable energy for all public lighting and purchase green power and other renewable energy sources for lighting.

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 Risk Event	Transport Asset Resilience Opportunities
Bike paths and shared paths	Reduced carbon emissions	▪ In accordance with the identified goals and targets in the Warrnambool Principal Pedestrian Network Report, establish more shared use paths for non-motorised local transportation to increase use of sustainable transport modes and minimise impact on environment. ▪ Adopt circular economy principles where appropriate, in the planning of bike path, shared paths and pathway related infrastructure and target net zero scope 3 emissions.
Public lighting	Reduced carbon emissions	▪ Only use either LED or solar LED public lighting and continue to purchase green power and other renewable energy sources for lighting.

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 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.

Council's pathways provide a connected and integrated network that allows for the safe movement of pedestrians, cyclists, and other users around the municipality.

In general, Council's pathway network comprises the following elements:

- Roadside pathways.
- Walking paths located in parks and reserves.
- Pedestrian structures including timber boardwalks.

Table 5.1.1: Assets covered by this Plan

Asset Type	Quantity	Unit	Replacement Cost ($)	Written Down Value ($)	Useful Life (Years)
Concrete	334,177	metres	59,037,903	38,245,056	50-80
Spray Seal	16,733	metres	1,746,265	549,321	20
Asphalt	1,512	metres	622,684	529,517	30
Gravel	21,365	metres	1,608,148	575,878	15
Other	8,536	metres	5,688,234	3,893,500	20-65
Total	**382,323**		**68,703,234**	**43,793,272**	

All figure values are shown in current day dollars.

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
Network connectivity	A complete pathway network has not been established in some areas with gaps in connectivity or pathways only being provided on one side of streets.
Network accessibility	Pram ramps that are non-compliant with DDA standards still exist across the Council area.
Quality control	Concrete pathways have had many different aggregate mixtures and minimal areas where reinforcement was included as part of construction. This can in some newer paths needing to be renewed before what would be expected of a 'normal' life expectancy. Even some of the 'new developments' gifted to Council have path defects identified that require replacement under RMP standards.

The above service deficiencies were identified by asset stakeholders

5.1.3 Asset condition

Council completes network wide condition assessments on a scheduled basis, typically every four years. The last audit of pathways was completed in 2022 with the use of all-terrain vehicles equipped with cameras. Condition data for pathways is recorded in Council's asset register and is used for maintenance, renewal modelling, capital works planning, and financial reporting.

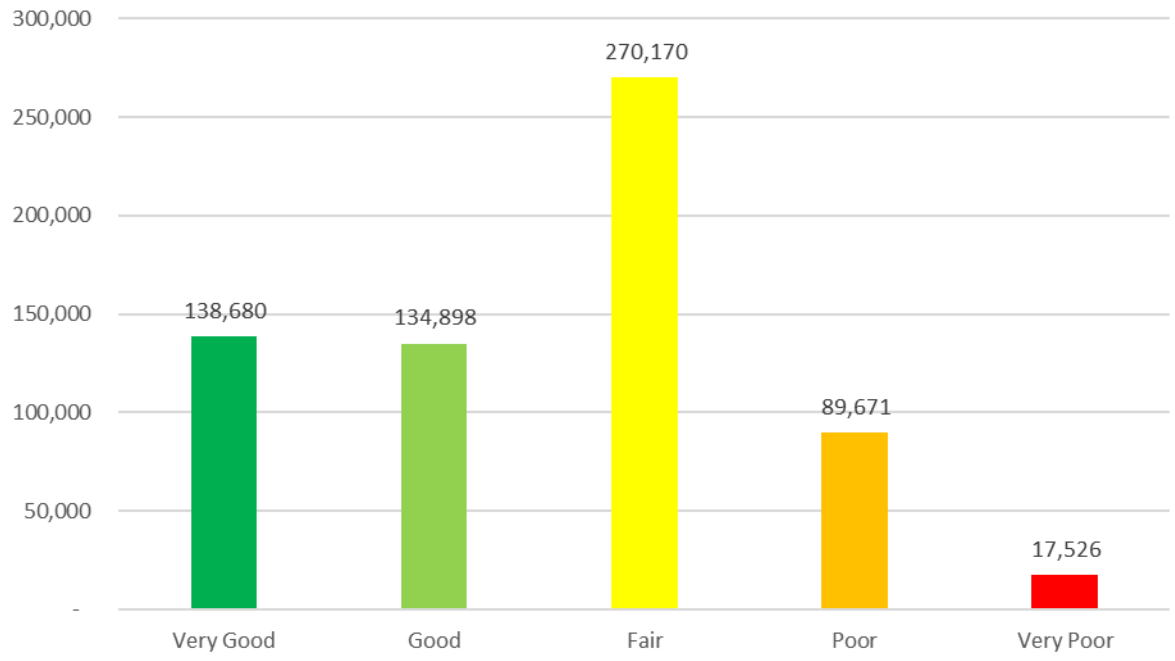
Condition is measured using a 1 – 5 grading system[9] as detailed in Table 5.1.3. It is important that a consistent approach is used in reporting asset performance enabling effective decision support. A finer grading system may be used at a more specific level, however, for reporting in the AM plan results are translated to a 1 – 5 grading scale for ease of communication.

Table 5.1.3: Condition Grading System

Score	Condition Rating	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 by Area



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

According to Council's current data, approximately 84% of Council's pathways are in 'Fair' condition or better. Pathways in 'Poor' or worse condition are prioritised for full or partial renewal in Council's ongoing Footpath Renewal Program as funding allows.

Pathways are inspected regularly, and defects are addressed in accordance with Council's Road Management Plan. The small percentage of pathway sections in poor condition will be programmed for renewal/replacement within Council's capital works programs as funding allows.

The condition of Council's pathways is recorded at overall segment level (e.g. from one intersecting road to another). To help plan renewal works, it is suggested that condition also be recorded and stored at more discrete intervals (e.g., every 10 metres). This type of information can be used by Council officers who are responsible for programming pathway replacement to better target areas of need and reduce the burden of conducting field inspections to confirm the scope of works.

The percentage of pathways in 'Very Good' condition is a function of Council's investment in asset renewal and network improvements and contributed pathway assets received from developers because of sub-divisions in growth areas.

5.2 Operations and Maintenance Plan

Operational activities can include service delivery items such as removal of debris, pathway sweeping and cleaning, and vegetation control. Operations also includes proactive and reactive inspections. These inspections are completed by Council Officers or specialist contractors in some cases. Operations activities do not improve the condition of assets.

Over time, minor defects can occur within the pathway network. Council addresses repairs and maintenance of these defects (e.g. surface irregularities such as displacements) in accordance with defined intervention levels and response times outlined in the Road Management Plan. The intervention levels define the point in time at which the asset is considered no longer functioning at an acceptable service level. Maintenance is scheduled once the asset has reached this point to coincide with nominated response times.

Response time defines the time frame within which the community can expect remediation of the defect. Council's intervention levels and response times for pathway assets is documented in Council's Road Management Plan.

Council's Road Management Plan is a key technical document that sets clear standards and its commitment to managing local roads and pathways. The Plan identifies responsibilities, maintenance standards and inspection regimes for all road assets within Council's control.

Pathway maintenance and renewal works are undertaken by a combination of Council's own labour resources and external contractors. The current profile of Council's concreting team is ageing, and succession planning and a recruitment strategy is required to attract new staff to complete labour-intensive tasks.

Further to this, the scale of Council's own resources for this type of work also needs review so that emphasis can be placed on the in-house concrete team completing as much renewal and maintenance work to better control standards of work. This is a challenge as the current team resources find it difficult to complete additional works other than addressing pathway defects that are identified and require response.

5.2.1 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 includes the asset class and component used for asset planning and financial reporting and service level hierarchy used for service planning and delivery.

The service hierarchy is shown is Table 5.2.1.

Table 5.2.1: Asset Service Hierarchy

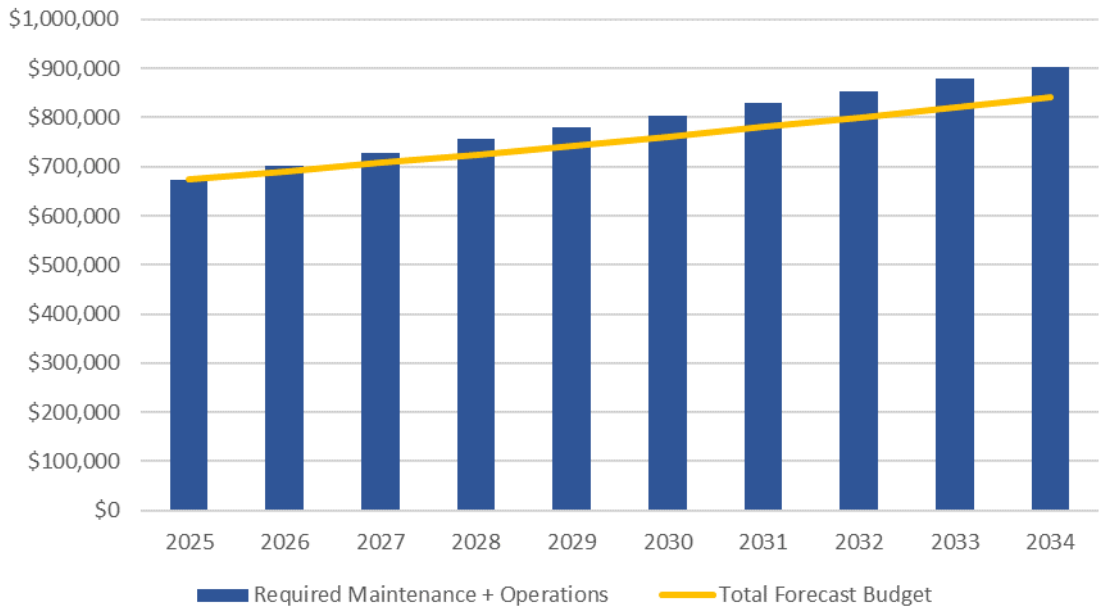
Classification	Importance	Functional Definition
Category 1	Higher	CBD and those pathways within the vicinity of schools, hospitals, and aged care facilities.
Category 2		Selected medium use pathways in prominent areas other than described above.
Category 3	Lower	Pathways in residential, commercial, and industrial areas other than as described above.

5.3 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 5.3 shows the forecast operations and maintenance costs relative to the proposed operations and maintenance Planned Budget.

Figure 5.3: Operations and Maintenance Summary



All figure values are shown in current day dollars.

The increase in maintenance and operations requirements is indicative of the increasing asset base resulting from development growth and Council's current strategy to enhance the connectivity of its pathway network through the construction of new and upgraded pathways.

While it is predicted that Council will have a small shortfall in maintenance funding, the investment trend follows the forecast expenditure requirement over the next 10 years.

Council should monitor future maintenance and operations allocations to ensure that they are sufficient to meet current service levels which achieve compliance with Council's Road Management Plan.

5.4 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 that need replacing are identified through analysis of asset information, site knowledge, inspections, and community feedback.

Pathway renewal and replacement strategies are based on the most current asset condition available at the time of developing Council's forward works programs.

5.4.1 Renewal ranking criteria

Asset renewal is typically undertaken to either:

- Ensure the reliability of the existing infrastructure to deliver the service it was constructed to facilitate, or
- To ensure the infrastructure is of sufficient quality to meet the service requirements.[10]

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.[11]

The ranking criteria used to determine priority of identified renewal proposals is detailed in Table 5.4.1.

Table 5.4.1: Renewal Priority Ranking Criteria

Criteria	Weighting
Condition	50%
Location (i.e. functional hierarchy)	50%

Council's Infrastructure renewal demand forecasts are developed using predictive modelling. These forecasts are annually reviewed and updated as new information (e.g. condition assessments) becomes available.

These forecasts and the underlying assumptions are further reviewed to factor in specific projects and any upgrade projects that include a renewal component to provide the best available guide to renewal requirements.

The process used for formulation of the schedule of pathway renewal works submitted for budget consideration is as follows:

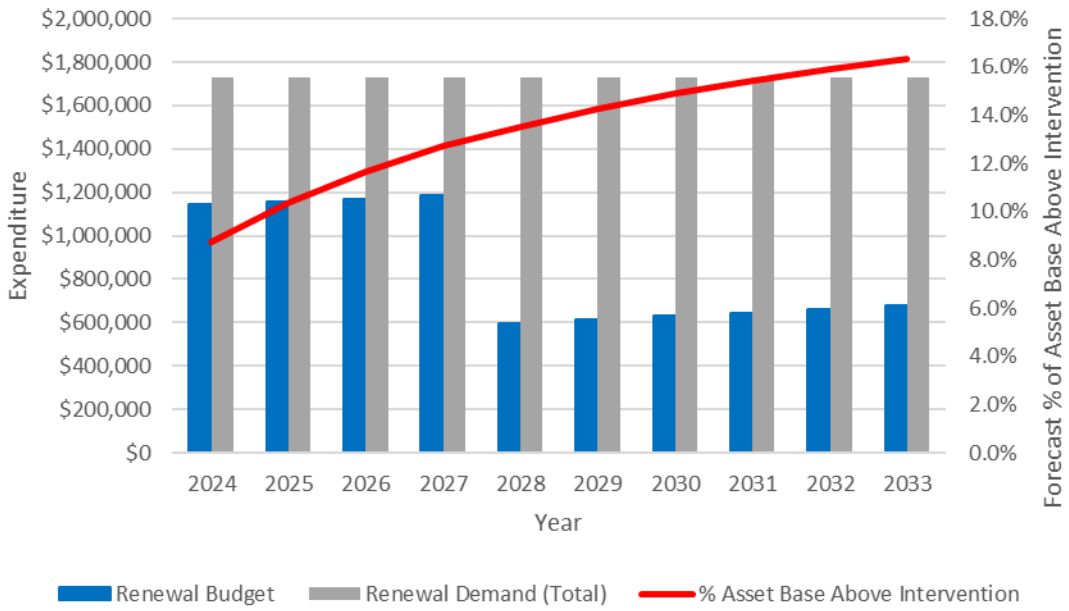
[10] IPWEA, 2015, IIMM, Sec 3.4.4, p 3|91.
[11] Based on IPWEA, 2015, IIMM, Sec 3.4.5, p 3|97.

- Condition information from Council's asset management information system is used to prepare a preliminary priority listing of pathways that may require renewal.
- This list is forwarded to the Project Management Office to validate the priority list by field inspection and to define the scope of work required to match available budgets. This includes consideration of additional areas that may not have been highlighted
- The final schedule of works forms the annual pathway renewal program.

5.5 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 5.5.

Figure 5.5: Forecast Renewal Costs



All figure values are shown in current day dollars.

The forecast of Council's long term asset renewal liabilities indicates that it is projected to under fund the replacement of its pathways over the long term.

Over the next 10 years, the predicted average annual renewal demand for Council's pathways is approximately $1.73 million. According to Council's current long term capital works program, it is projected to allocate $848K on average per year for the renewal of these assets. This indicates that there is an average renewal funding gap of approximately $883K per annum.

The above expenditure forecasts include an allocation of $600K annually over the next 4 years for the renewal of pathways in CBD areas. This investment is important for uplifting the condition of pathways that is representative of a standard suitable for high profile and high use areas.

It will be important that Council considers increasing the funding amounts which are allocated to the renewal of its pathways. Alongside this, Council will need to continue to regularly conduct maintenance and condition inspections of its pathways to make sure that available funding is directed to areas of priority.

5.6 Acquisition Plan

Acquisition 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 acquired from land developments and constructed by private developers who then gift these assets to Council.

5.6.1 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.

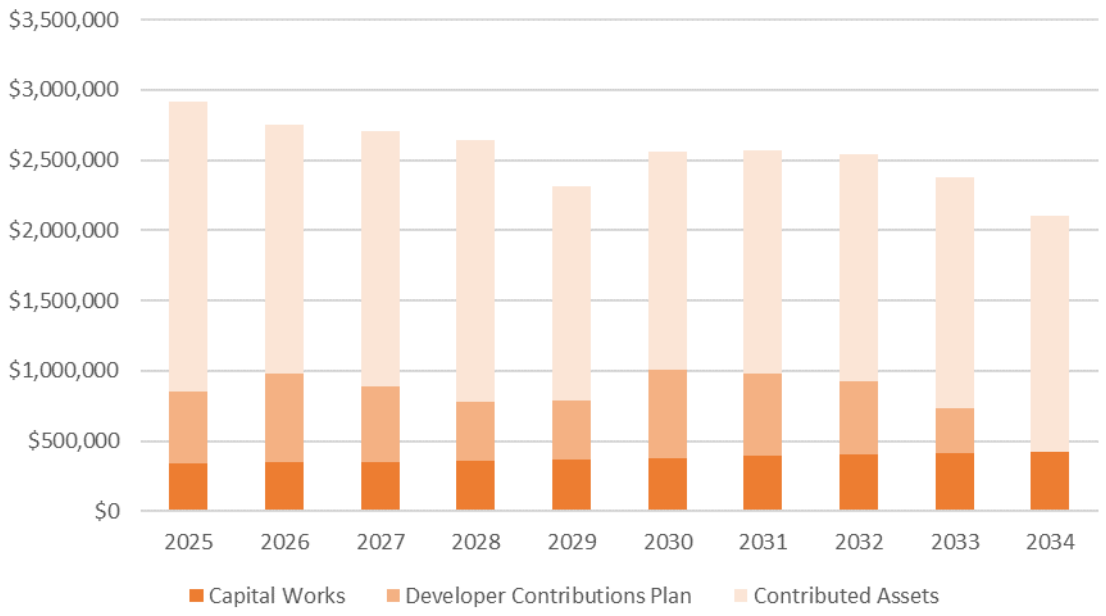
The main strategy used to inform improvements across Council's pathway network is via the Principal Pedestrian Network Report (PPN) which will be reviewed on a scheduled basis. The PPN is a strategic network of pedestrian routes to promote walking for transport. The aim is to provide routes within the PPN with the highest level of priority for pedestrians and having characteristics such as generous paths, shade and weather protection, seating, and priority over other transport modes at intersections.

Candidate projects are ranked utilising Council's capital works evaluation processes and scheduled in future works programs depending on available funding.

5.7 Summary of future asset acquisition costs

Forecast acquisition asset costs are summarised in Figure 5.7 and shown relative to the proposed acquisition budget.

Figure 5.7: Acquisition Summary



All figure values are shown in current day dollars.

Funding of new and upgrade works fall into the following categories depending upon the extent and type of works:

- Council funded.
- Externally funded.
- Contributed assets resulting from property development.
- Works funded through Council's Development Contributions Plan (DCP). This can be DCP Reserves or works in kind. In some cases, a cash contribution from Council is also required.

Expenditure on new assets and services in the capital works program will be accommodated in the long-term financial plan, but only to the extent that there is available funding. When Council commits to new assets, it 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.

5.8 Disposal Plan

Disposal includes any activity associated with the disposal of a decommissioned asset including sale, demolition or relocation. Pathway assets are rarely, if ever, disposed.

Council currently has no immediate or current strategic direction to retire or dispose of any assets related of the local pathway network.

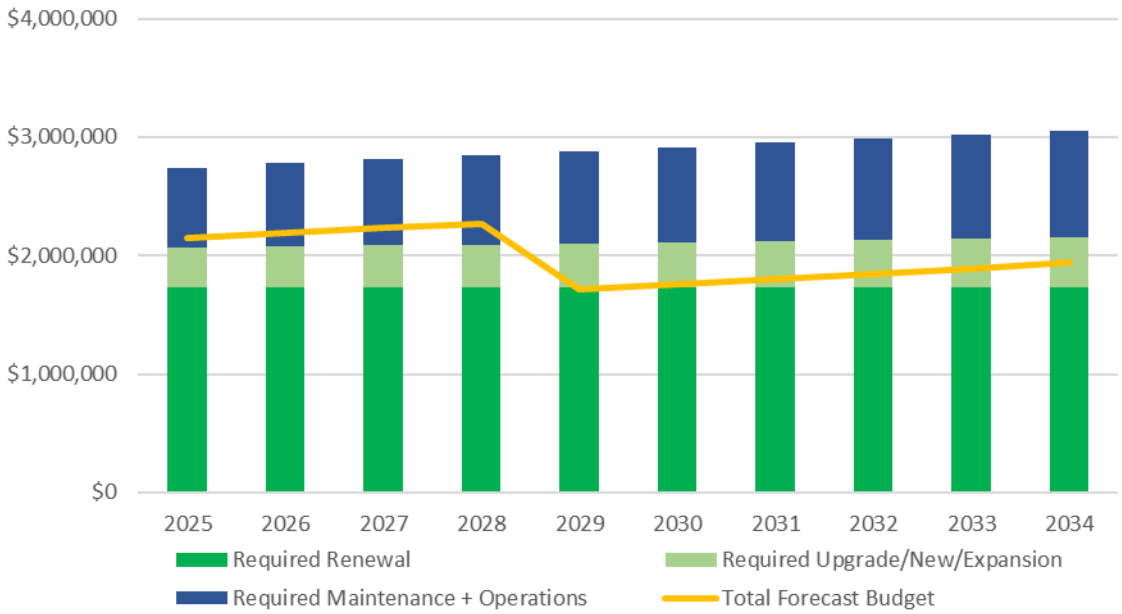
In practice, decisions may be made to decommission lengths of pathways in cases where they no longer meet Council's service standards and there is little evidence of ongoing use by the public.

5.9 Summary of asset forecast costs

The financial projections from this Asset Management Plan are shown in Figure 5.9. These projections include forecast costs for acquisition, operation, 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 5.9: Lifecycle Summary



All figure values are shown in current day dollars.

The analysis completed for this Pathways Asset Management Plan indicates that there will be a funding shortfall over the next 10 years. As a result, Council will look to undertake more strategic work, including further inspections to understand the condition of the network, prior to making key decisions on future funding requirements.

Council's funding plan for pathways will be continually reviewed as new information becomes available on growth, demand, service levels, and asset performance. Updates to future funding needs will inform Council's financial planning instruments and updates of this Asset Management Plan.

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'[12].

An assessment of risks[13] 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 or a reduction in service.

Council uses its functional hierarchy to guide planning and activities for pathways, where higher class paths are prioritised over lower class pathways.

This enables Council to allocate its finite resources through targeted maintenance efforts which then informs Council's capital expenditure plans.

Higher quality standards and quicker response times are given to assets of higher importance. Such prioritisation is an essential part of managing risk and providing the expected levels of service.

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.

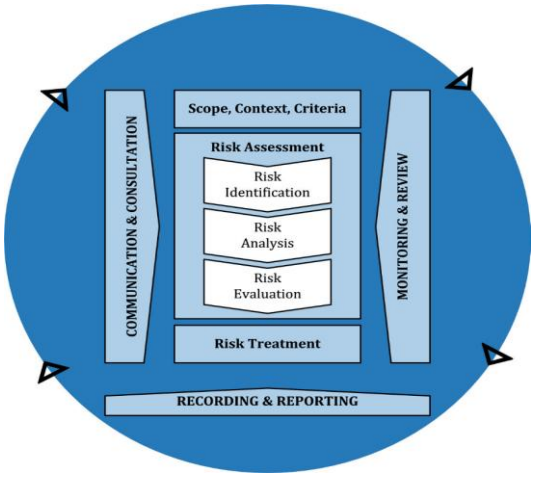


Fig 6.2 Risk Management Process – Abridged
Source: ISO 31000:2018, Figure 1, p9

[12] ISO 31000:2009, p 2
[13] REPLACE with Reference to the Corporate or Infrastructure Risk Management Plan as the footnote

An assessment of risks associated with service delivery from infrastructure assets identifies the most critical risks. The risk assessment process also helps Council to identify and assess credible risks, assign a risk rating, and develop risk mitigation plans for non-acceptable risks.

An assessment of risks associated with service delivery has identified risks that will result in public disruption, personal injury, a 'financial shock' or reputational impacts. These risks are presented in Appendix A. The residual risk of implementing the selected treatment plan/control is also shown. Note that 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.

We do not currently measure our resilience in service delivery. Measures of resilience will be developed in future updates of this AM Plan.

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:

- Provide a fully compliant road infrastructure network to meet the safety, functionality and capacity requirements of the Infrastructure Design Manual standards.
- We cannot expand the current pathway network without consideration of lifecycle cost and financial sustainability
- Address and mitigate all impacts of climate change on pathways

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:

- Delayed renewal and replacement of existing road infrastructure assets
- Reduced pathway quality from deferred maintenance and renewal activities
- Reduced safety to users of pathways
- Increased maintenance costs due to unfunded preventative practices
- Deferred delivery of new and upgraded road infrastructure

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:

- Failure to comply with Council's Road Management Plan and exposure to public liability claims.
- Risk of causing harm to pedestrians from poor quality pathways (e.g. trip and falls, etc.).
- Lack of connectivity and accessibility across pathway network.

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[14]: **49%**

The Asset Renewal Funding Ratio is an important indicator and illustrates that over the next 10 years Council expects to have **49%** of the funds required for the optimal renewal of assets.

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 $2.52 million on average per year.

The proposed (budget) operations, maintenance and renewal funding is $1.6 million on average per year. This indicates that 0.64 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

Appendix C shows the proposed 10-year funding plan for Council's pathways to inform the long-term financial plan.

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

7.2 Funding Strategy

The proposed funding for assets is outlined in Council's annual budget and Long-Term financial plan.

Council's financial strategy determines how funding will be provided, whereas the Asset Management Plan communicates how and when this will be spent, along with the service and risk consequences of various service alternatives.

7.2.1 Funding Sources

Funding for assets is provided from Council's annual budget and Financial Plan. The financial strategy determines how funding will be provided, whereas the Asset Management Plan communicates how and when this will be spent, along with the service and risk consequences of differing options.

Council uses several different funding sources to maintain, renew and improve its pathways. These are:

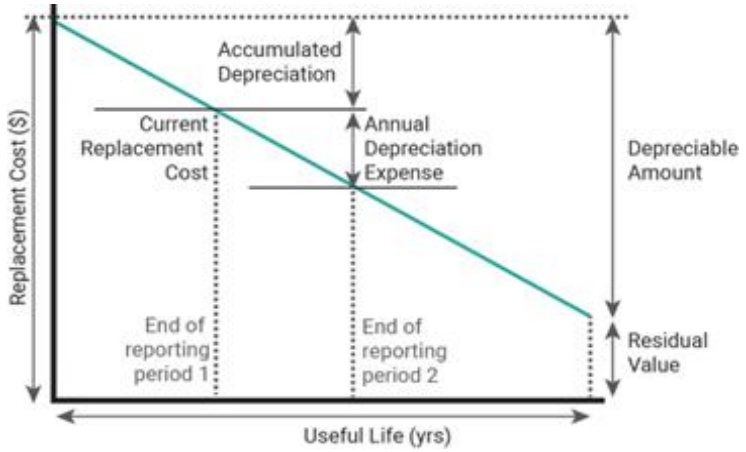
Table 7.2.1: Funding Sources

Activity	Funding Source
Maintenance and Operations	▪ Council's own source funds.
Renewal	▪ Council's own source funds.
Capital Improvement (i.e., new, upgrade, and expansion	▪ Council's own source funds. ▪ Council's available cash reserves. ▪ External grant opportunities. ▪ Special Charge Schemes. ▪ Developer contributions and donated assets.

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.



Assets are valued at fair value at cost to replace service capacity:

Replacement Cost (Gross)	$ 68,703,234
Depreciable Amount	$ 68,703,234
Depreciated Replacement Cost[15]	$ 43,793,272
Annual Depreciation Expense	$ 1,996,369

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

7.3.2 Valuation forecast

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

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:

- All expenditure is stated in dollar values as of 1 July 2024 with no allowance made for inflation over the 10-year planning period.
- Operations and maintenance expenditure are based on the current 2024/25 budget allocations and includes forecast annual increases for materials and services and employee costs (2.5 per cent annually).
- Annual network growth resulting from contributed assets from developers is estimated to be:

2026	2027	2028	2029	2030	2031	2032	2033	2034
3.0%	2.5%	2.5%	2.5%	2.0%	2.0%	2.0%	2.0%	2.0%

- Staffing needs are resourced adequately.
- Capital expenditure forecasts are taken from Council's Long Term Capital Works Program.
- The forecast renewal costs made in this Asset Management Plan are based on the asset data register as of 1 July 2024.
- Useful lives used for renewal analysis are as indicated in Council's asset register.
- Renewal intervention condition for all assets included in the calculation of future renewal demand is '4 – Poor'.
- Pathway assets will remain in Council ownership throughout the period covered by this Asset Management Plan unless specifically detailed otherwise.
- Standards, Acts and Regulations concerning pathways will remain essentially the same over the period covered by this Asset Management Plan.

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 an A - E level scale[16] in accordance with Table 7.5.1.

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

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

Data	Confidence Assessment	Comment
Levels of Service and Performance Measures	C	Some levels of service documented in Council's Road Management Plan and Council Plan. Additional work required to validate performance measures and targets with the community.
Demand forecast analysis and projections	B	The work that has been done to prepare Council's Principal Pedestrian Network considers future growth and network needs.
Performance data (asset degradation)	C	Further analysis of historical condition information needed to establish actual degradation patterns.
Condition data	B	Last condition audit of pathways completed in 2022, however some records do not have condition assigned.
Asset inventory data	B	Pathways asset register should be reviewed to make sure that information is consistent including asset descriptions.
Risk management	A	High percentage of inspections and defects responded to annually per Council's Road Management Plan captured in asset information system. Customer requests related to pathways clearly categorised.
Long Term Financial Plan	C	Integration between financial outputs from Asset Management Plans and the Financial Plan needs strengthening.

The estimated confidence level for and reliability of data used in this AM Plan is considered to be C - Medium. The implementation of improvement actions identified in Section 8 will result in increased levels of confidence in future revisions of this Asset Management Plan.

8.0 PLAN IMPROVEMENT AND MONITORING

8.1 Status of Asset Management Practices[17]

8.1.1 Accounting and financial data sources

This AM Plan utilises accounting and financial data. The source of the data is Council's Asset Management Information System, Conquest.

8.1.2 Asset management data sources

This AM Plan also utilises asset management data. The source of the data is Council's Asset Management Information System, Conquest.

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	Continue to collect and refine pathway asset data suitable to inform strategic and operational analysis and decisions.	Strategic Asset Management	Internal/External	Ongoing
2	Review condition assessment methodology to potentially include measuring pathway condition at discrete intervals (e.g. 10 metres).	Strategic Asset Management	Internal	2025/26
3	Review methodology used by Conquest to calculate overall asset condition (stored as Condition Point in asset register).	Strategic Asset Management	Internal	2024/25
4	Review long term renewal funding demands using information collected from the next pathway condition survey. Formulate a strategy to address funding needs and update this Asset Management Plan.	Strategic Asset Management	Internal	2024/25
5	Review current asset handover processes to ensure complete asset data capture and accurate asset capitalisation following the completion of capital works.	Strategic Asset Management	Internal	2024/25
6	Review current surveillance activities of works carried out by third parties and contractors meets quality standards.	Strategic Asset Management Project Management Office Municipal Operations	Internal	2025/26

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

Task	Task	Responsibility	Resources Required	Timeline
7	Initiate a resourcing strategy for Council's in-house concrete team to ensure that it has the right balance of numbers and skills of staff to complete necessary activities. This should include attraction and retention of staff.	Municipal Operations	Internal	2025/26

8.3 Monitoring and Review Procedures

This Asset Management Plan has a long-term vision with a 4-year focus. It is a living document which is relevant and integral to daily asset management activity. This Plan will be formally reviewed and updated in the year following Council general elections, in line with s92.4 of the Local Government Act 2020.

Intermediate reviews and amendments may be made should there be any material changes to Council financial policy, levels of service, or to accommodate any resource needs from relevant strategies.

8.4 Performance Measures

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

- The degree to which the required cash flows identified in this asset management plan are incorporated into Council's long-term financial planning process and works planning.
- The performance against the measures assigned to levels of service.
- The Asset Renewal Funding Ratio achieving the Council's target of between 90-110%.
- The progress of implementing the actions identified in the improvement plan.

9.0 REFERENCES

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- Warrnambool 2040 (Community Vision)
- Council Plan
- Long Term Financial Plan
- Asset Management Policy
- Asset Management Strategy

10.0 APPENDICES

Appendix A - Pathway Risk Register

RISK IDENTIFICATION			RISK ASSESSMENT				Effect. of Current Controls	Further Action if Required
Risk Event	Cause	Possible Impact	Current controls	Likelihood	Consequence	Level of Risk (current controls)		
Risk of pedestrians tripping and falling with potential for serious injury.	Failure to manage and maintain pathway assets to meet appropriate levels and service and meet future needs.	Safety	Regular inspections of pathways to identify hazards and condition issues. Defects above intervention standards rectified in accordance with RMP, others as per available budget	Unlikely	Major	Medium	Fully Effective	
Risk of injury due to vegetation overhanging pathway	Street trees and vegetation from private property overgrown across pathways. Misuse of, or inattention during, the use of pathways.	Safety	Regular inspections of pathways to identify hazards and condition issues. Defects above intervention standards rectified in accordance with RMP, others as per available budget Local laws notice procedure to manage control private vegetation	Unlikely	Moderate	Medium	Fully Effective	
Pathway inspections and maintenance not in compliance with Council's Road Management Plan.	Standards documented in Road Management Plan not complied with (e.g. inspections and response times).	Compliance / Regulatory	Implementation of Road Management Plan monitoring and performance reporting	Unlikely	Moderate	Medium	Fully Effective	
Pathway asset lives not being maximised.	Due to lack of renewal and maintenance funding.	Financial	Annual funding allocations made to the maintenance and renewal of pathways Asset Management Plan prepared identifying long	Possible	Major	High	Partially Effective	Update knowledge of pathway condition and review long term renewal demands.

RISK IDENTIFICATION			RISK ASSESSMENT				Effect. of Current Controls	Further Action if Required
Risk Event	Cause	Possible Impact	Current controls	Likelihood	Consequence	Level of Risk (current controls)		
			term funding needs. Adopted Financial Plan					Prepare strategy to address funding needs
Decline in condition and reduced effective life of pathways.	Damage caused by third parties such as utilities or builders.	Reputation	Works on Roads Permit system and reinstatement standards to ensure that restoration works are completed to an acceptable standard.	Unlikely	Major	Medium	Fully Effective	
Injury to users of shared paths.	Conflict between pedestrian and bicycle users on shared paths	Safety	Regular inspections of pathways to identify hazards and condition issues. Design standards appropriate for level of use. Regulatory and/or safety signs to control use.	Unlikely	Major	Medium	Fully Effective	
Risk of conflict between pedestrians and vehicular traffic.	Pedestrians using road due to lack of pathways.	Safety	Construction of pathways in locations where they are required according to Principal Pedestrian Network and available budgets.	Unlikely	Major	Medium	Fully Effective	

Appendix B – Proposed 10 Year Expenditure Plan

Project	Exp. Category	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34
		Year1	Year2	Year3	Year4	Year5	Year6	Year7	Year8	Year9	Year10
Capital											
Pathway Replacement Works	Renewal	542,725	556,293	570,200	584,455	599,067	614,044	629,395	645,129	661,258	677,789
Pathway Construction Program	New	336,790	345,210	353,840	362,686	371,753	381,047	390,573	400,337	410,346	420,605
CBD Pathway Works	Renewal	600,000	600,000	600,000	600,000	-	-	-	-	-	-
Total CAPEX		**1,479,515**	**1,501,503**	**1,524,040**	**1,547,141**	**970,820**	**995,091**	**1,019,968**	**1,045,466**	**1,071,604**	**1,098,394**
Recurrent											
Operations	OPEX	306,000	313,650	321,491	329,529	337,767	346,211	354,866	363,738	372,831	382,152
Maintenance	OPEX	367,000	376,175	385,579	395,219	405,099	415,227	425,607	436,248	447,154	458,333
Total OPEX		**673,000**	**689,825**	**707,071**	**724,747**	**742,866**	**761,438**	**780,474**	**799,986**	**819,985**	**840,485**
Total Expenditure		**2,152,515**	**2,191,328**	**2,231,111**	**2,271,888**	**1,713,686**	**1,756,529**	**1,800,442**	**1,845,452**	**1,891,589**	**1,938,879**