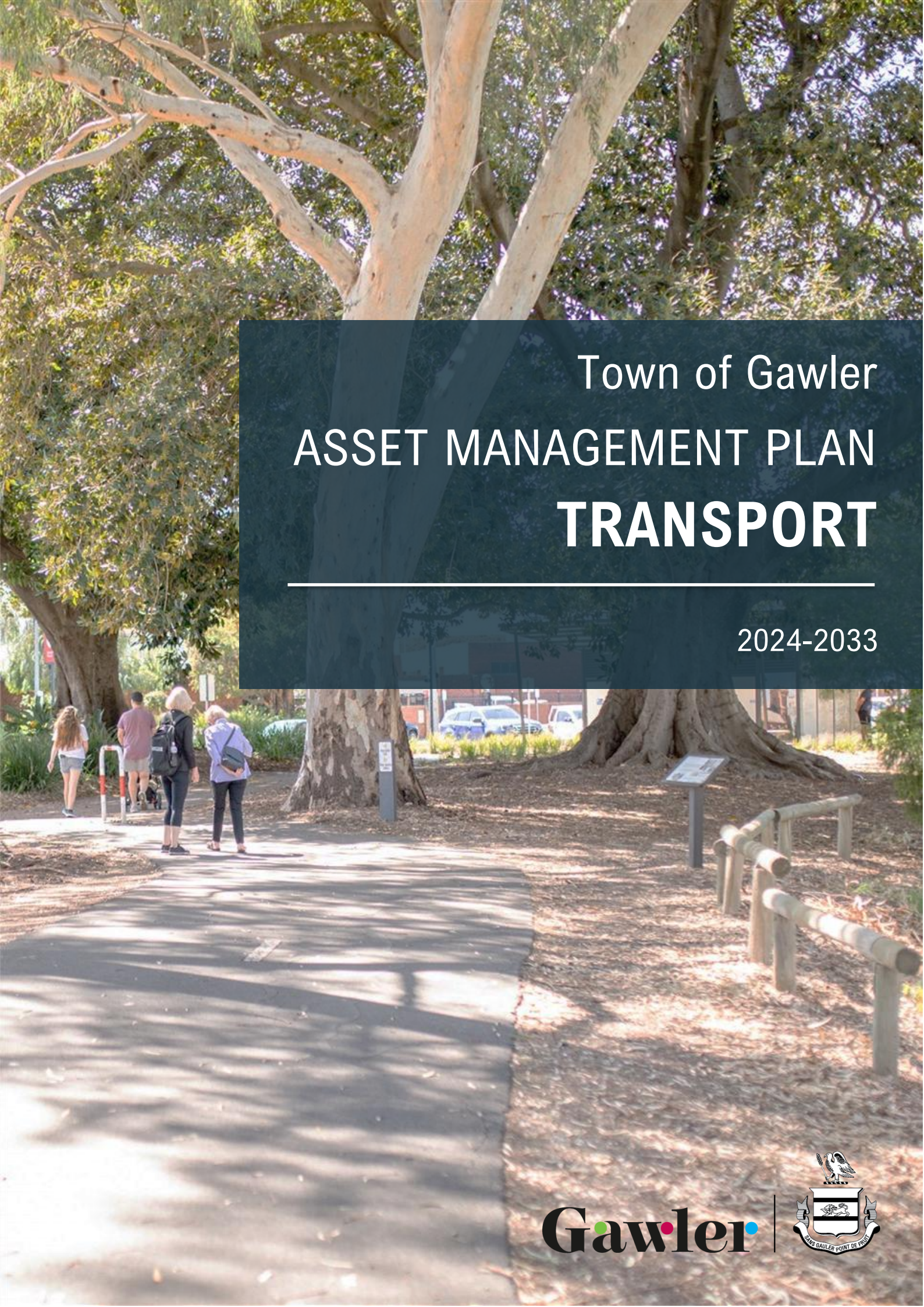




Town of Gawler ASSET MANAGEMENT PLAN TRANSPORT

2024-2033

Gawler



Document Control	Asset Management Plan - Transport
------------------	-----------------------------------

Document ID : CRXX/XXXXX

Rev No	Date	Revision Details	Author	Reviewer	Approver
V1	September 2024	Draft for comment	RT	WY	
V2	September 2024	Draft for Council adoption of release for community engagement	RT	WY	
V3	September 2024	Technical and formatting review prior to community engagement		WK/HE	
V4	October 2024	Final		HE/WK	

The structure and content of this template is aligned to the International Infrastructure Management Manual and the ISO 55000 and 31000 series of standards.

This Asset Management Plan has been developed using the IPWEA NAMS+ Asset Management Plan Template (V1.13).

© Copyright 2024 – All rights reserved

CONTENTS

1.0	EXECUTIVE SUMMARY	6
1.1	The Purpose of the Plan	6
1.2	Asset Description	6
1.3	Levels of Service.....	7
1.4	Future Demand	7
1.5	Lifecycle Management Plan	8
1.6	Financial Summary.....	8
1.7	Asset Management Planning Practices	10
1.8	Monitoring and Improvement Program.....	10
2.0	INTRODUCTION	11
2.1	Background	11
2.2	Goals and Objectives of Asset Ownership.....	13
3.0	LEVELS OF SERVICE	16
3.1	Customer Research and Expectations.....	16
3.2	Strategic and Corporate Goals	17
3.3	Legislative Requirements	18
3.4	Customer Values.....	19
3.5	Customer Levels of Service	20
3.6	Technical Levels of Service.....	22
4.0	FUTURE DEMAND	24
4.1	Demand Drivers	24
4.2	Demand Forecasts	25
4.3	Demand Impact and Demand Management Plan	25
4.4	Asset Programs to meet Demand	26

4.5	Climate Change Adaptation	26
5.0	LIFECYCLE MANAGEMENT PLAN	28
5.1	Background Data.....	28
5.2	Operations and Maintenance Plan.....	33
5.3	Asset hierarchy	34
5.4	Summary of forecast operations and maintenance costs	35
5.5	Renewal Plan.....	36
5.6	Summary of future renewal costs.....	37
5.7	Acquisition Plan.....	38
5.8	Summary of future asset acquisition costs.....	38
5.9	Disposal Plan	40
5.10	Summary of asset forecast costs	40
6.0	RISK MANAGEMENT PLANNING	41
6.1	Critical Assets	42
6.2	Risk Assessment.....	42
6.3	Infrastructure Resilience Approach	46
6.4	Service and Risk Trade-Offs.....	47
7.0	FINANCIAL SUMMARY	48
7.1	Financial Sustainability and Projections	48
7.2	Funding Strategy.....	49
7.3	Valuation Forecasts	50
7.4	Key Assumptions Made in Financial Forecasts	51
7.5	Forecast Reliability and Confidence.....	52
8.0	PLAN IMPROVEMENT AND MONITORING	53
8.1	Status of Asset Management Practices	53
8.2	Improvement Plan.....	54

8.3	Monitoring and Review Procedures	57
8.4	Performance Measures	57
9.0	REFERENCES	58
10.0	APPENDICES	59
	Appendix A - Acquisition Forecast	59
	Appendix B - Operation Forecast	60
	Appendix C - Maintenance Forecast.....	61
	Appendix D - Renewal Forecast Summary.....	62
	Appendix E - Disposal Summary.....	63
	Appendix F - Budget Summary by Lifecycle Activity.....	64
	Appendix G – Asset Management Process Flow Chart	65

1.0 EXECUTIVE SUMMARY

1.1 THE PURPOSE OF THE PLAN

Asset Management provides strategic guidance in the planning, acquisition, operation and maintenance, renewal and disposal of assets. An Asset Management Plan (AMP), provides detailed information regarding infrastructure assets, including the actions required to provide an agreed level of service, that is cost-effective and responsive to the associated risks outlined.

The AMP defines the services to be provided, how the services are provided, and what funds are required to provide the services over the 2024 – 2033 year planning period. The AMP is informed by the Council's Long-Term Infrastructure and Asset Management Plan (LTIAMP) and links to the Council's Long-Term Financial Plan (LTFP), which typically considers an aligned 10-year planning period.

The Town of Gawler AMPs are developed using NAMS+ financial modelling and reporting, as provided by the Institute of Public Works Engineering Australasia (IPWEA). This is the industry leading best practice for public work professionals across Australia.

This Transport Asset Management Plan (Transport AMP) encompasses transport assets under the care, control and ownership of the Town of Gawler (Council). It outlines the expenditure required in order to effectively manage network service levels into the future, to facilitate the safe movement of vehicles and pedestrians throughout the Council's transport network.

This Transport AMP meets the regulatory requirements of the Local Government Act 1999, aligns with and informs the LTFP and LTIAMP, and ultimately delivers on the goals and objectives identified in the Town of Gawler's Draft Community Plan 2035+.

1.2 ASSET DESCRIPTION

The Transport Assets network comprises of the following;

- Bridge and Culverts – 31 nos.
- Car Parks – 27 nos.
- Footpaths – 192 km
- Kerb and water tables -368 km
- Roundabouts – 26 nos.
- Sealed Roads – 198 km
- Unsealed Roads – 17 km

The above transport infrastructure assets have an aggregated replacement value cost of approximately \$358,566,849.

1.3 LEVELS OF SERVICE

The objective of asset management, is to provide the desired level of service in an optimised and cost-effective manner for the present and future community.

The Council's present funding levels, as presented in the LTFP, are sufficient to continue to provide existing services at current service levels, over the next 10-year period. This includes the renewal and maintenance of existing assets and contributed assets from new land developments. These current funding allocations, however, may be insufficient to provide substantial new and upgrade works and operations and maintenance works for new transport asset acquisitions.

The main service consequences of the LTFP and Planned Budget are:

- Delayed provision of new walking and cycling network infrastructure assets
- Inability to provide equity of service in some areas (e.g. footpaths)
- Postponed asset upgrades, resulting in decreased asset function and/or capacity
 - Potential increase in customer service levels, to respond to requests and/or complaints from the community
- Restriction of maintenance activities, practices and/or frequency, which may lower the asset's service level to the community

1.4 FUTURE DEMAND

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

- Accelerated population growth
- Actions on climate change
- Changing community needs and customer requests
- Changing demographics
- Changing land uses
- Implementation of Strategic Plans and Master Plans
- Legislative requirements
- Population density increase

Council's approach to meeting this demand, will balance the management of existing assets, with the renewal, upgrade and/or creation of new assets, to ensure an optimised and cost effective approach. Demand management practices may also include a combination of non-asset solutions, to assist in risk mitigation and management of potential failures. These non-asset solutions include:

- Continuously identifying and reflecting on current issues and opportunities
- Ensuring that the planning and design of new land developments, provides appropriate, fit-for-purpose transport assets
- Using appropriate asset renewal treatments in line with industry good practice
- Prioritising the upgrade of existing transport networks, over the creation of new assets

- Strategically planning and programming the construction of new assets on a priority basis (e.g. future demand, safety and risk management)
- Using appropriate asset renewal and maintenance treatments / procedures, in line with industry good practice

1.5 LIFECYCLE MANAGEMENT PLAN

1.5.1 WHAT DOES IT COST?

The forecast lifecycle costs necessary to provide the services covered by this Transport AMP, include the operation, maintenance, renewal, upgrade, acquisition, and disposal of assets.

Although an AMP may be prepared for a range of time periods, it typically informs the Council's LTFP period of 10 years. Therefore, the summary output from this Transport AMP is the forecast of a 10-year total outlay, which for the transport asset class is estimated as \$150,818,320 or \$15,081,833 on average per year.

1.6 FINANCIAL SUMMARY

1.6.1 WHAT WE WILL DO

The funding allocated in the Council's LTFP determines the level of service for Council's transport assets. The purpose of this Transport AMP, is to communicate the consequences that the LTFP funding allocations will have on the level of service provided, and to outline the associated risks that will need to be considered so that decision making is 'informed'.

In line with the Council's LTFP, the estimated available funding for the 10-year period is \$150,471,904, or \$15,047,190 on average per year. This estimate is 99.77% of the current cost required to sustain the existing level of service at the lowest lifecycle cost.

When considering the forecast lifecycle costs for asset management, this leaves a shortfall of approximately \$34,643 on average, per year. Refer to Figure 1, which shows current values in 2024.

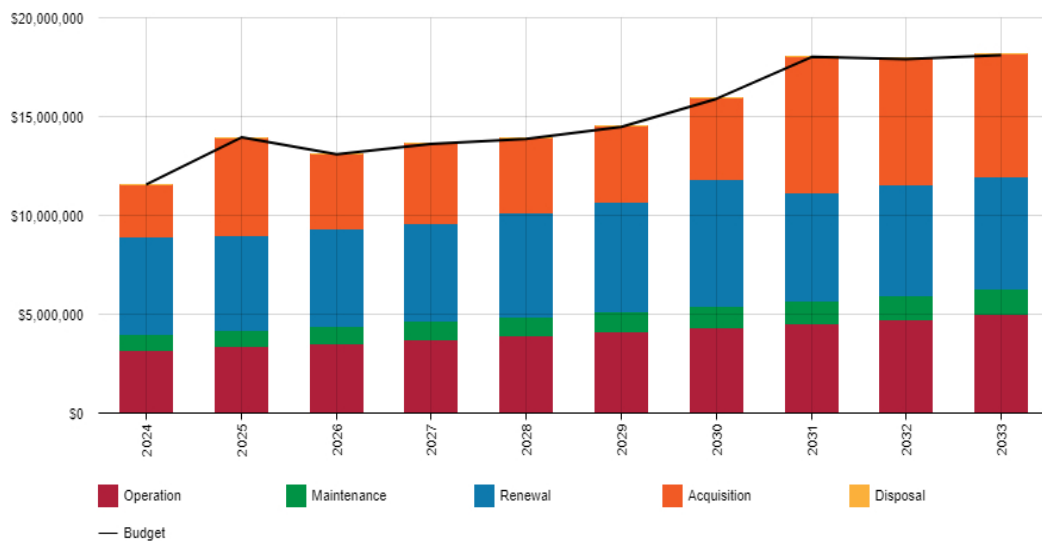


Figure 1: Forecast Lifecycle Costs and Planned Budgets

To meet the asset management service levels, which are set by Council's Annual Budgets, funding for transport assets will provide for:

- Operation, maintenance and renewal of existing transport assets
- Operation and maintenance of contributed transport assets from new land developments

It should be noted that the creation of new assets can result in increases to operations and maintenance costs. By comparison, it is anticipated that the increase in operations and maintenance costs for the renewal and/or upgrade of existing assets is low.

1.6.2 MANAGING THE RISKS

The budget allocations presented in the Council's LTFP, are considered to be sufficient in the management of risks associated with transport assets over the next 10-year period. The main risk consequences are noted as follows:

- Increased number of complaints from the community regarding maintenance and renewal of open space assets
- Delayed asset upgrades, resulting in reduced asset function and/or capacity
- Delayed creation of new transport assets, resulting in minor nuisance for the community
- Deferred implementation of strategic master plans and management plans
- Deferred maintenance and asset renewal works, in some areas
 - Political, reputational and/or legal risk to the Council, as associated with the consequences noted above

If the budget allocations in the Council's LTFP were to be reduced, then this would have a detrimental impact on the Council's ability to manage the aforementioned risks to within an

acceptable level. To mitigate this risk and ensure that transport assets are adequately managed within available funding, Council will endeavour to:

- Inspect critical assets frequently, including prioritising and repairing defects in accordance with inspection schedules to ensure they are safe for the community
- Reprioritise current asset renewal and new asset work programs
- Prioritise repairs and safety improvements identified by transport asset condition audits (e.g. bridge repairs)
- Adopt sustainable and cost-effective asset maintenance practices
- Assess asset requirements during Council's Annual Budget process, to ensure budget allocations are balanced between asset renewal, upgrade and new asset creation

1.7 ASSET MANAGEMENT PLANNING PRACTICES

The Council utilises a suite of innovative software systems to manage its assets. These include:

- Civica Authority (financial management, property and open space asset management)
- Content Manager (record management)
- Esri Suite (spatial and GIS data management)
- Microsoft Office 365 suite (procedures, reporting)
- Skytrust (safety and risk management)
- Tree Plotter (tree management)
- Uniqco (plant and equipment fleet management)

Assets requiring renewal are primarily identified from Council's Asset Register. The timing of asset renewals is calculated by adding the useful life of the asset, to the year of acquisition or year of last renewal of the asset. Alternatively, external condition modelling systems, such as visual and structural inspections, can be used by professionals with expert knowledge, to project renewal lifecycle costs and timelines. This alternative method was used to forecast the renewal costs for this Transport AMP.

1.8 MONITORING AND IMPROVEMENT PROGRAM

Council's AMPs are considered as live documents and where improvements to asset management practices are identified, these should be documented. The following items have been identified in the development of this Transport AMP, to support the continuous improvement of Council's asset management practices:

- Financial Statements and projections to be reviewed and revised based on cost updates after periodical asset financial valuation, in accordance with the Australian Accounting Standard 'AASB13 Fair Value', and 'AASB116 Property Plant and Equipment' 'Review and adopt an affordable Customer Level of Service
- Review and adopt an affordable Customer Level of Service
- Review and consistently manage the mapping of transport assets on the Council's GIS system, providing layer data updates, as required
 - Review asset renewal ranking criteria and new asset priority ranking criteria

- Review capital expenditure during preparation of the Council's annual budget, and amend the budget allocation to recognise any changes in service levels and/or resources required to manage Council's transport assets
- Review the Council's Demand Management Plan, Risk Management Plan and Infrastructure Resilience Approach
- Value assets annually with a book value adjustment (in line with appropriate local government and construction indices, supported by financial expert knowledge), in conjunction with a five yearly unit rate review, consistent with financial auditor requirements
- Schedule the Council's transport asset condition audits and subsequent updates of the Transport AMP, on a four-year cycle

2.0 INTRODUCTION

2.1 BACKGROUND

This Transport AMP communicates the requirements of Council, for the sustainable delivery of appropriate levels of service for asset management over the LTFP 10-year period. This includes requirements on the management of assets, compliance with regulatory obligations, and alignment with Council's adopted budget and resourcing allocations for the planned period.

This Transport AMP is to be read in conjunction with the Council's framework of strategic documents, including but not limited to the:

- Annual Business Plans 2024-2025
- Asset Capitalisation Policy
- Asset Management Policy
- Climate Emergency Action Plan (CEAP) 2022 - 2023
- Environmental Management Plan 2016
 - (Draft) Gawler Community Plan 2035+
 - Gawler Design Manual 2019
- Gawler East Traffic Interventions Assessment Report
 - Gawler Growth Framework 2046+
- Gawler Integrated Transport Strategy
 - Gawler Open Space Guideline 2019
 - Gawler River Open Space Strategy 2009
 - Gawler Urban Rivers Master Plan 2013
- Local Area Traffic Management Plans (Gawler South, Willaston)
 - (Adopted) Long Term Financial Plan (LTFP) 2021 – 2031
 - (Draft) Long Term Financial Plan (LTFP) 2024 – 2033
 - (Draft) Long Term Infrastructure and Asset Management Plan (LTIAMP) 2024-2033
 - Planning Development and Infrastructure Act 2016
 - Risk Management Policy and Framework
 - Walking and Cycling Plan 2018-2028

The Council's existing Transport AMP was adopted by Council in 2022, and requires updating within two years of each Council election, in accordance with the legislative requirements of the Local Government Act 1999.

The infrastructure assets covered by this Transport AMP are noted under **1.2 Asset Description** and outlined in detail under **5.1 Background Data** within this document. These infrastructure assets are used to provide vehicular, walking and cycling movement services.

The infrastructure assets included in this Transport AMP have a total replacement value of approximately \$358,565,849.

2.1.1 KEY STAKEHOLDERS

Key stakeholders involved in the preparation and implementation of this Transport AMP are shown in Table 1.

Table 1: Key Stakeholders of the Transport AMP

Key Stakeholder	Role in Asset Management Plan
Council Members	<ul style="list-style-type: none"> • Represent needs of community/shareholders, • Allocate resources to meet planning objectives in providing services while managing risks, • Ensure service provided by assets are sustainable, • Approval of the AMP
Council Executive Management	<ul style="list-style-type: none"> • Allocate required funds for the implementation of this AMP • Oversee implementation of infrastructure planning, delivery and maintenance.
Council Infrastructure Department	<ul style="list-style-type: none"> • Programming and implementing capital works and making application for funds to meet standards set and assist deliver key projects, within budget constraints.
Council Operations Department	<ul style="list-style-type: none"> • Programming and implementing maintenance work to meet standards set, within budget constraints.
Department for Infrastructure & Transport	<ul style="list-style-type: none"> • Interface agreement with the State Government for managing its road network under Operational Instruction 20.1 of <i>Highways Act 1926</i>
Developers	<ul style="list-style-type: none"> • Vesting of new transport assets in the Council.

Key Stakeholder	Role in Asset Management Plan
External Parties	<ul style="list-style-type: none"> Service level expectations by <ul style="list-style-type: none"> Community residents & businesses; Tourist and Visitors (as occasional users); Neighbouring Council's; Emergency services; Developers & Utility companies; Local Businesses and; Federal and State Government authorities & agencies (i.e. Environmental Protection Agency, Department for Environment and Water and others).

Our Council's organisational structure for infrastructure asset service delivery is shown in Figure 2.

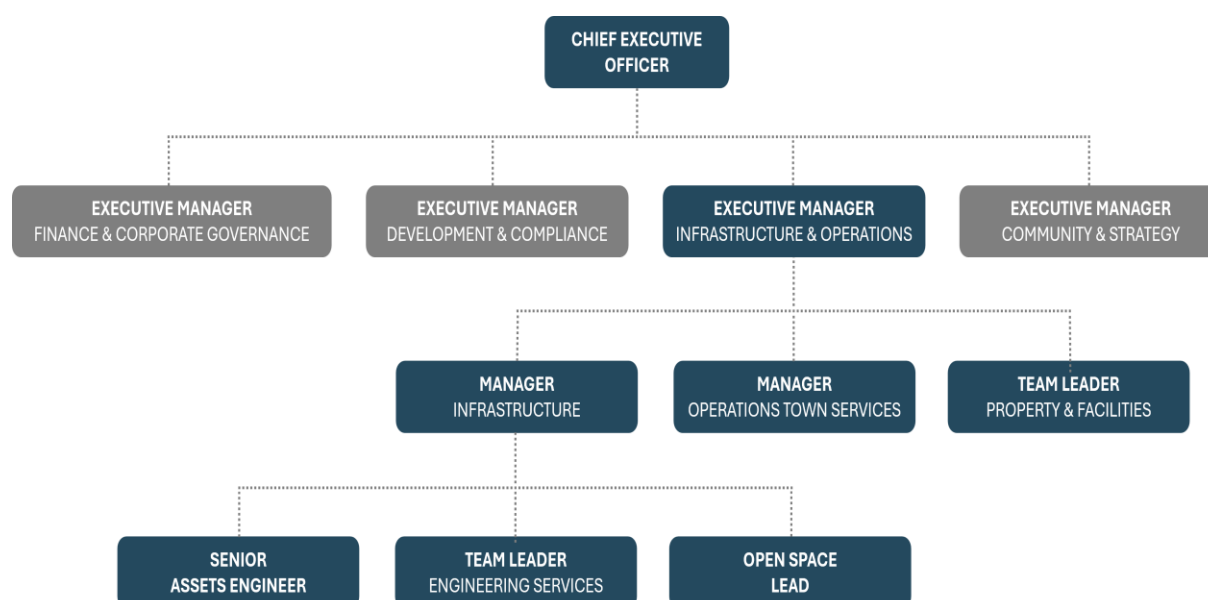


Figure 2: Organisation Structure

2.2 GOALS AND OBJECTIVES OF ASSET OWNERSHIP

Our goal for managing transport assets is to meet the defined level of service, as amended from time to time, in the most cost-effective manner for current and future communities. The key objectives for the Council's transport asset management are:

- Identifying, assessing and appropriately controlling risks
- Linking to the Council's LTFP which identifies required, affordable forecast costs and how it will be allocated

- Managing the impact of growth through demand management and infrastructure investment
- Providing a defined level of service and monitoring performance
 - Taking a lifecycle approach to developing cost-effective management strategies for the long-term, that meet the defined level of service

The key elements of the planning framework for open space assets are:

- Asset management planning practises (refer to **section 1.7**)
- Financial summary (refer to **section 1.6**)
- Future demand (refer to **section 1.4**)
- Lifecycle management (refer to **section 1.5**)
- Levels of service (refer to **section 1.3**)
- Monitoring and improvements (refer to **section 1.8**)
- Risk management (refer to **section 1.6.2**)

The benefits, fundamental principles and objectives of asset management are also referenced in the *International Infrastructure Management Manual 2015*¹ and *ISO 55000*²

Based on the aforementioned references, the industry standard road map for preparing an AMP is shown below in Figure 3.

¹ Based on IPWEA 2015 IIMM, Sec 2.1.3, p 2| 13

² ISO 55000 Overview, principles and terminology

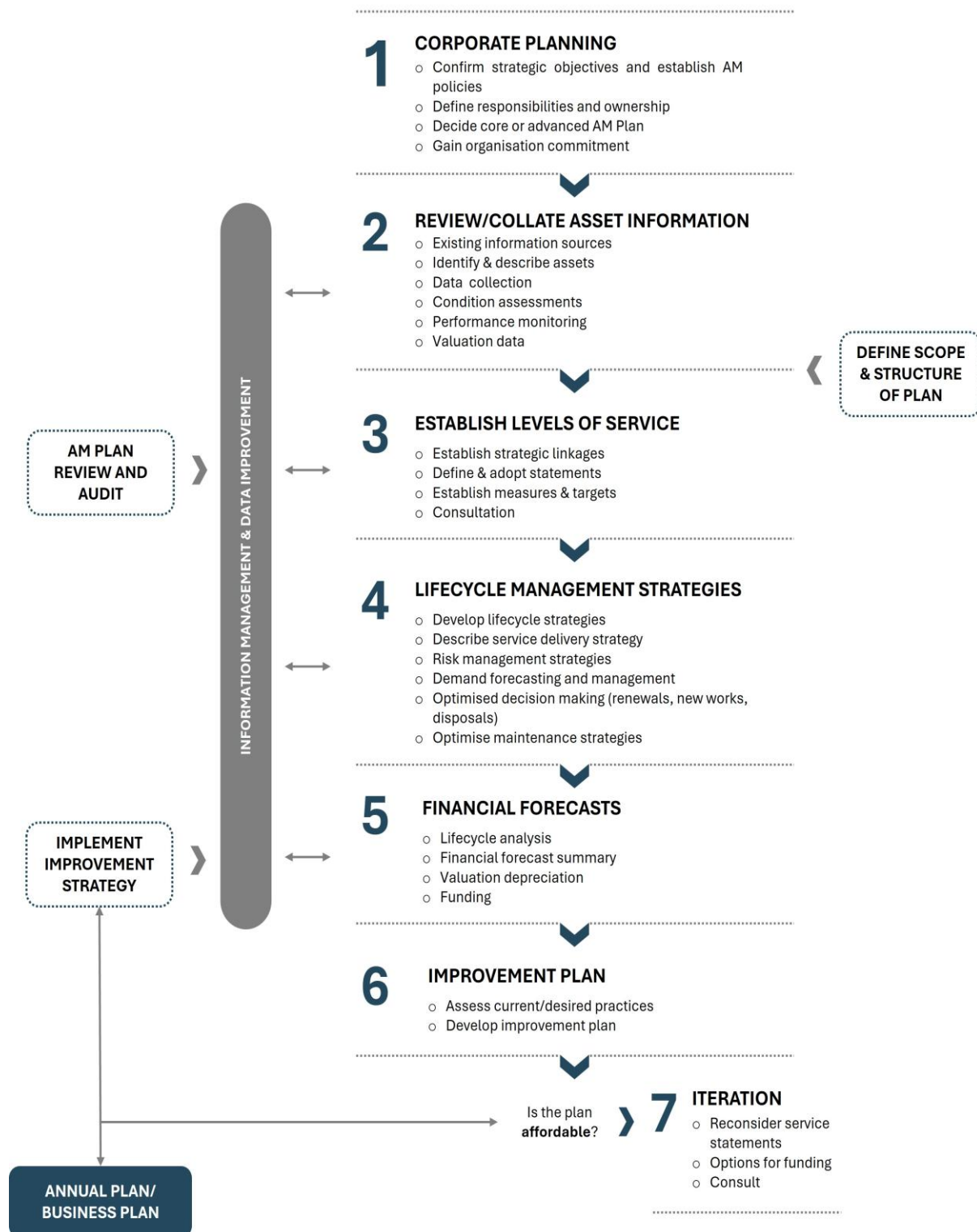


Figure 3: Road Map for preparing an Asset Management Plan (Source: IPWEA, 2006, IIMM, Fig 1.5.1, p 1.11)

3.0 LEVELS OF SERVICE

3.1 CUSTOMER RESEARCH AND EXPECTATIONS

This Transport AMP has been prepared to facilitate engagement prior to final adoption of the levels of service by Council. Future revisions of this Transport AMP will incorporate customer engagement on service levels and the associated costs of providing the services. This will assist the Council and stakeholders in matching the level of service required, including service risks and consequences, with the customer's ability and willingness to pay for the service.

The Council has no formal research on current customer expectations, with respect to transport asset management. However, it is noted that the previous Transport AMP had an extensive public engagement process, along with a customer satisfaction survey prepared by an external consultant. This was released for a period of three weeks, from 15 June 2022 to 6 July 2022, using the following marketing and communications:

- Letterbox drop
- Web page on the Council's "Your Voice Gawler" website
- Customer Service
- Telephone call
- E-mail

The responses received during this time were minimal and were unable to provide statistically reliable data for the interpretation of satisfaction levels.

This being said, the community level of service is the service received by the community in terms of safety and legislative compliance, quality, quantity, reliability, responsiveness, cost and efficiency. The Council collects data on community expectations and satisfaction from customer service records system and through community surveys. For the basis of this Transport AMP, customer requests received have been considered as an effective measure of customer expectations.

The Council will endeavour to develop improved engagement processes, to attract more responses during future revisions of this Transport AMP.

3.2 STRATEGIC AND CORPORATE GOALS

This Transport AMP is prepared under the direction of the Town of Gawler's corporate vision, mission, goals and objectives, as outlined in the Draft Community Plan 2035+.

Our vision is:

Town of Gawler is a liveable, cohesive, active, innovative and sustainable community.

Our mission is:

The Town of Gawler is dedicated to enhancing its liveable urban environment, capitalising on its natural beauty and strategic importance as a regional centre. We embrace an engaged local community and prioritise innovation and sustainability.

The vision and mission statement have been used to inform the Town of Gawler's strategic goals and objectives. Those relevant to this Transport AMP are summarised in **Error! Not a valid bookmark self-reference..**

Table 2: Goals and how these are addressed in this Plan

Goal	Objective	How Goal and Objectives are addressed in the AMP
A Uniquely Identifiable Township	1.1 Gawler remains unique and distinct from its neighbouring areas	Maintain historic and unique transport network assets for the appreciation of the community and visitors.
	1.3 Protect and promote Gawler's unique history	
Managed and Sustainable Growth	2.1 Physical and social infrastructure to service our growing population and economy	Prepare plans for demand management, programs for new and renewal of transport assets.
	2.2 Growth to be sustainable and respectful of cultural and built heritage	Maintain historic and unique transport network assets for the appreciation of the community and visitors.
	2.3 Manage growth through people movement and connection	Reduce risks from transport related hazards for the community.
		Align with outcomes of the Gawler Integrated Transport Strategy at a strategic level.
		Identify and implement local area traffic management plans at a local level.

Goal	Objective	How Goal and Objectives are addressed in the AMP
To Respect, Protect and Nurture the Environment	4.1 Create and maintain a healthy, natural environment	Balance service demand with sustainable and appropriate use of available resources, adapting circular economy, use of recycled materials.
	4.2 Support sustainable use of natural resources and minimise waste	
	4.3 Act on Climate Change	

3.3 LEGISLATIVE REQUIREMENTS

There are many legislative requirements relating to the management of assets. Legislative requirements that impact the delivery of the Transport Asset service are outlined in Table 3.

Table 3: Legislative Requirements

Legislation	Requirement
Australian Accounting Standards	Sets out the financial reporting standards, relating to, the revaluation and depreciation of infrastructure assets.
Local Government Act 1999	Sets out role, purpose, responsibilities and powers of local governments including the preparation of a long-term financial plan and long-term infrastructure and asset management plan supported by other asset management plans for sustainable service delivery.
Local Government (Financial Management and Rating) Amendment Act 2005	Impetus for the development of a Strategic Management Plan, comprising an (Infrastructure) Asset Management Plan and Long-term Financial Plan.
Environmental Protection Act SA 1993	An Act to provide for the protection of the environment, and for related purposes.
Planning, Development and Infrastructure Act 2016	An Act to provide for matters that are relevant to the use, development and management of land and buildings, including by providing a planning system to regulate development within the State, rules with respect to the design, construction and use of buildings, and other initiatives to facilitate the development of infrastructure, facilities and environments that will benefit the community.
Landscape SA Act 2019	Set the key framework for managing the state's land, water, pest plants and animals, and biodiversity across the state.

Legislation	Requirement
Highways Act 1926	Provides for the appointment of Commissioner of Highways, and to make further and better provision for the construction and maintenance of roads and works.
Road Traffic Act 1961	Have consideration of, adhere to and fulfil the requirements relating to road traffic; and other purposes.
Roads (Opening and Closing) Act 1991 & Regulations (2006)	Have consideration of, adhere to and fulfil the requirements for the opening and closing of roads.
Rail Safety National Law (South Australia)	Have consideration of, adhere to and fulfil the requirements for the management of interfaces between road and rail assets.
Disability Discrimination Act 1992 (DDA)	The responsibilities and powers of the Council in providing equitable access for persons with a disability.
Work Health and Safety Act (2012) & Work Health and Safety Regulations (2012)	The Act and Regulations' objectives include: to secure the health, safety and welfare of persons at work.

3.4 CUSTOMER VALUES

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

Table 4. Customer Values indicate:

- what aspects of the service is important to the customer
- whether they see value in what is currently provided

- the likely trend over time based on the current budget provision

Table 4: Customer Values

Customer Values	Customer Satisfaction Measure	Current Feedback	Expected Trend Based on Planned Budget
Easy Access	Customer Requests	Moderate number of complaints related to walking accessibility.	Expected to decrease over the 10-year planning period due to increased investment into the path network as part of this AMP.
Comfortable Travel	Customer Requests	Minimal number of complaints	Remain reasonably constant
Safe Environment	Customer Requests	Minimal number of complaints	Not anticipated to change

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?**Error! Reference source not found.**, under each of the service measure types (Condition, Function, and 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 5: Customer Level of Service Measures

Type of Measure	Level of Service	Performance Measure	Current Performance	Expected Trend Based on Planned Budget
Condition	Condition of Asset categories	Condition rating of the assets	Most Assets are in condition 3 (fair) or better	Likely to improve or remain consistent.
	Confidence levels		Medium Professional judgement supported by data sampling	Medium Professional judgement supported by data sampling
Function	Measure of whether the Asset is appropriate for its intended use.	The proportion of the assets (by quantity) that are “fit for purpose”	Most assets are fit for purpose, however there is an increasing proportion not meeting expectations due to age profile.	Anticipated to increase as with more assets created under new land developments & increased funding for capital works renewal, in addition to capital upgrade/replacement projects.
	Confidence levels		Medium Professional judgement supported by data sampling	Low Professional Judgement with no data evidence
Capacity	Whether the capacity of the Transport network assets is sufficient.	The proportion of not having assets which should be created	60% of the total requirement of footpaths	Anticipated to increase over the 10-year planning period.
	Confidence levels		Medium Professional judgement supported by data sampling	Medium Professional judgement supported by data sampling

3.6 TECHNICAL LEVELS OF SERVICE

To deliver the customer values, and impact the achieved Customer Levels of Service, operational or technical measures of performance are used. 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).
- **Operation** – the regular activities to provide services (e.g. opening hours, plant/equipment costs, utility costs, CCTV inspections, overheads etc.).
- **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. playspace equipment repairs, picnic table 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 management plans, implement and control technical service levels to influence the service outcomes.³

In line with the Council's LTFP, **Error! Not a valid bookmark self-reference.** shows the activities expected to be provided under the current 10-year planned budget allocation, and the forecast activity requirements being recommended in this Transport AMP.

Table 6: Technical Levels of Service

Lifecycle Activity	Purpose of Activity	Activity Measure	Current Performance*	Recommended Performance **
TECHNICAL LEVELS OF SERVICE				
Acquisition	Transport infrastructure meets demand and current standards that is commensurate to usage	Budget Allocation	Existing funding allocation constraints in the LTFP Regular defect inspections are undertaken with a detailed condition	As recommend in the LTIAMP, AMP and LTFP. Sufficient funding has been allocated in the LTFP to facilitate the performance outcome.

³ IPWEA, 2015, IIMM, p 2|28.

Lifecycle Activity	Purpose of Activity	Activity Measure	Current Performance*	Recommended Performance **
			audit undertaken every 4 years.	
	Expand walking and cycling facilities	Budget Allocation	Existing funding allocation constraints in the LTFP	As recommend in the LTIAMP, AMP and LTFP. Sufficient funding has been allocated in the LTFP to facilitate the performance outcome.
		Budget	\$4,665,100	\$4,665,100
Operation	Roads are safe for users' need	Condition and defect survey frequency	Regular defect inspections are undertaken with a detailed condition audit undertaken every 4 years.	Due to ageing frequent monitoring is required for some assets
	Streets are clean	Sweeping Frequency	CBD Central (Murray Street) – Three sweeps per week. CBD Outer (Town Centre Precinct) – Weekly sweep. Local Roads – Once every ten weeks. Heavy leaf-fall streets - Once every three weeks.	Service level review as part of Street sweeping contract procurement in 2025/26.
	Engineering Management	Expenditure	Annual Cost	Will increase as additional assets are constructed and require management
		Budget	\$4,007,352	\$4,035,066
Maintenance	Maintain sealed road infrastructure to achieve long service life	Maintenance and minor repair cost e.g. patch work, edge repairs	Annual Cost	Likely to increase due to additional assets being created and the ageing of existing assets
	Maintain unsealed roads to achieve long service life	Grading frequency	Planned frequency (generally 4 visitations)	Likely to stay as current
	Maintain bridge & culvert	Maintenance and minor repair cost e.g.	Currently reactive to limit of budget	Likely to increase due to additional assets being

Lifecycle Activity	Purpose of Activity	Activity Measure	Current Performance*	Recommended Performance **
	structures to achieve long life	cleaning and painting		created and the aging of existing assets
		Budget	\$1,001,838	\$1,008,767
Renewal	Sustain transport Infrastructure that meets users' need	Renewal as assessed in Condition Audit	Currently limited by budget	Significant renewal expenditure is required to address ageing road pavement and kerbing assets Sufficient funding has been allocated in the LTFP to facilitate the performance outcome.
		Budget	\$5,372,900	\$5,372,900
Disposal	Disposal of assets no longer in use	Identified assets and cost of disposals after investigations	Frequency or annual amount spent on Activity	Optimal frequency or annual amount spent on Activity
		Budget	\$0	\$0
			No planned asset disposals within the 10-year planning period.	

Note: * Current activities related to Planned Budget.

** Expected performance related to forecast lifecycle costs.

Funding for the operation and maintenance of new assets contributed from forecast new land developments, has been included in the LTFP. There is also an increase in asset operation and maintenance costs, relating to the Council's expected capital works for asset upgrades and new assets, over the next 10-year period.

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

4.0 FUTURE DEMAND

4.1 DEMAND DRIVERS

Drivers affecting demand include population change, regulations, changes in demographics, seasonal factors, vehicle ownership rates, consumer preferences and expectations,

technological changes, economic factors, agricultural practices, environmental awareness, and more. Refer to **Section 1.4** within this document.

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 **Error! Not a valid bookmark self-reference..** Demand for new services will be addressed through a combination of managing existing assets, upgrading existing assets and providing new assets for the community.

Demand management practices can also include non-asset solutions, insuring against risks and managing failures. Opportunities identified to date for demand management are shown in **Error! Not a valid bookmark self-reference..** Further opportunities will be developed in future revisions of this Transport AMP.

Table 7: Demand Management Plan

Demand driver	Current position	Projection	Impact on services	Demand Management Plan
Population growth	Increased from 23,034 in 2016 to 24,988 persons in 2021	1.7% averaged annual projected increase	Asset capacity & function issues. Demand for upgrades/ new assets is likely to increase	Combination of managing existing assets, upgrading existing assets and providing new assets funded by various parties
Demographic change	Slightly greater number of citizens aged between 0-19 and over 65 than South Australia. Under 20 (20.36%) 20 – 44 (29.92%) Over 45 (46.96%)	Further increase with population growth	Asset capacity & function issues. Demand for more pathways, pedestrian crossings, signage etc. for elderly people	Combination of managing existing assets, upgrading existing assets and providing new assets funded by various parties
Population density increase	Create smaller land allotments that have small private open spaces/ backyards	Increase urbanisation	Demand for walking and cycling networks	Combination of managing existing assets, upgrading existing assets and providing new assets funded by various parties
Change of land use	Urbanisation of rural living areas	Increase urbanisation	Demand for more transport infrastructure	Developers provide sustainable assets or contribute to upgrade

Demand driver	Current position	Projection	Impact on services	Demand Management Plan
			assets in new urban areas	existing assets to current standards
Legislative requirements	Assets do not meet with current DDA compliance & to current Australian Standards	New assets and asset renewals to meet DDA compliance and current Australian Standards	Liability & reputation damage to the Council	Combination of managing existing assets, upgrading existing assets and providing new assets funded by various parties
Action on climate change	Greenhouse gas emission due to traffic congestion, use of traditional materials and work practices	Use of recycled materials, low emission methods and alternative asset treatments	Asset capacity & function issues. Demand for capacity upgrades in existing systems and also new assets	Upgrading existing assets and providing new assets funded by various parties. Use of recycled materials and improved sustainable products
Environmental considerations	Environment pollution due to current practices. Scarcity of natural resources.	Need to control environment pollution. Adapt alternative asset treatments	Network upgrades at cost	Use of recycled materials and lower carbon footprint methods and products, circular economy.

4.4 ASSET PROGRAMS TO MEET DEMAND

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

Acquiring new assets will commit the Town of Gawler 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 Council's LTFP. Refer to **Section 5** within this document.

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 8.

Table 8: Managing the Impact of Climate Change on Assets and Services

Climate Change Description	Projected Change	Potential Impact on Assets and Services	Management
Extreme weather events	Increased frequency and duration of extreme heat events	Deterioration to assets resulting in changes to asset useful lives Soil movement impacting upon transport assets	Undertake inspections following extreme weather events and monitor Undertake regular maintenance Review of materials used in various transport assets that perform well in the heat.
Waste minimisation	Increased demand to use more recycled products	Unknown impacts particularly in reactive soils Overall useful life is still unknown	Trial alternative materials (e.g. crumb rubber, recycle glass) for pavement materials
Storm Intensity	More extreme weather events	Potentially more localised flooding on roads	Ensure stormwater drainage system upgrades and maintenance of drains is included in programs

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

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

Table 9 summarises some asset climate change resilience opportunities.

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

Table 9: Building Asset Resilience to Climate Change

New Asset Description	Climate Change impact These assets?	Build Resilience in New Works
Transport Network Assets to withstand impacts from climate change	Transport assets are at risk of damage due to excessive soil movements	<p>Require Water Sensitive Urban Design (WSUD) consideration in all new road upgrade works.</p> <p>Any new drainage works should allow for increased rainfall intensity</p> <p>Use of sustainable recycled materials and treatments.</p> <p>Promote and create greater tree canopy cover.</p>

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

5.0 LIFECYCLE MANAGEMENT PLAN

The Lifecycle Management Plan, details how the Town of Gawler plans to manage and operate its assets, at the agreed levels of service, while managing life cycle costs. Refer to **Section 3** within this document.

5.1 BACKGROUND DATA

5.1.1 PHYSICAL PARAMETERS

The assets covered by this Transport AMP are shown in Table 10.

These assets include:

- Bridge and culvert structures, including vehicular and pedestrian bridges and culverts
- Kerb, gutter and water tables (materials include concrete and slate)
- Pedestrian and shared paths (materials include concrete, paver, asphalt and rubble)
- Roundabouts
- Sealed, unsealed and formed roads

Table 10: Assets covered by this Plan

Asset Category	Dimension	Replacement Value
Road Surface-Sealed	198 km	\$ 40,609,604.64

Road Surface-Unsealed	17 km	\$ 2,774,692.42
Road Pavement Subbase		\$ 57,133,813.07
Road Pavement Base		\$ 83,564,424.59
Footpath	192 km	\$ 46,040,682.72
Bridges & Culverts	31 nos.	\$ 29,274,744.00
Roundabouts	26 nos.	\$ 2,802,029.00
Kerb & Gutter	368 km	\$ 96,365,858.85
TOTAL		\$358,565,849.29

The age profile of the assets included in this Transport AMP are shown in Figure 4.

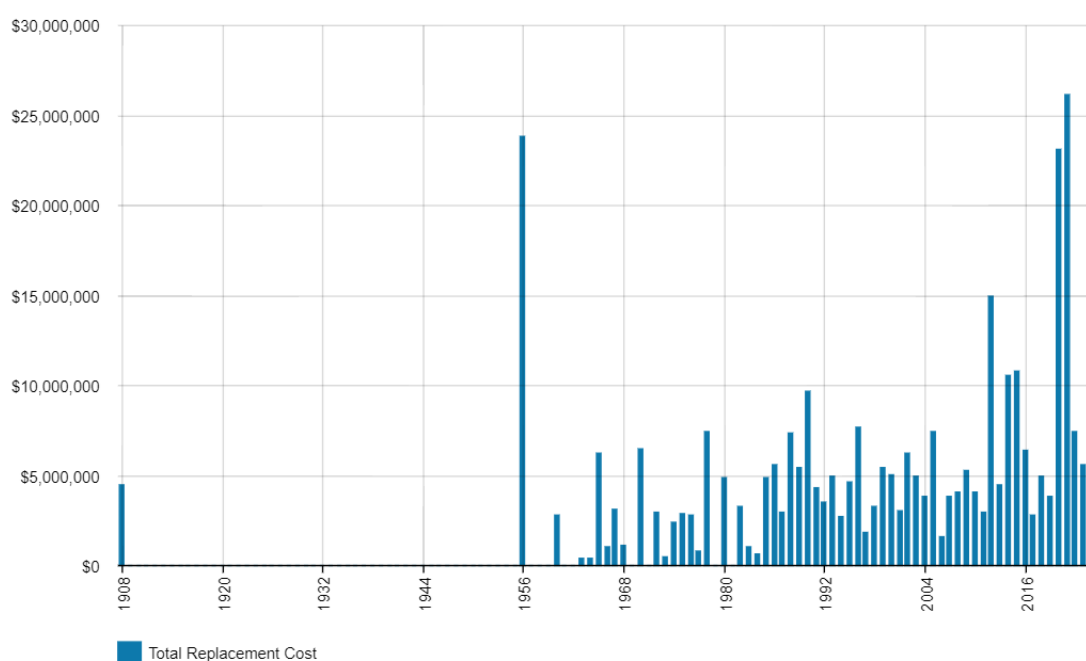


Figure 4: Asset Age Profile

All figure values are shown in current day (2024) dollars.

As identified in the previous Transport AMP (2022) there is a peak in 1956 comprised of assets constructed in the early part of the 1900s, which were subsequently formally recognised by approximation of the age of the constructed infrastructure. They are mainly road pavements, the Gawler Mill Inn Bridge and slate kerbing in Church Hill historic State heritage area. These assets will require appropriate funding for renewal in the future.

The recently completed bridge and culvert condition audit was comprehensive and the estimated age of assets reviewed, demonstrating that some bridge assets were constructed between 1908 and 1956. Some assets will need to be upgraded to overcome the capacity deficiencies associated with population growth in future years. Recent peaks shown in the graph represent

the new assets created under land developments in Gawler and the Gawler East Link Road / Schomburgk Drive project.

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 11.

Table 11: Known Service Performance Deficiencies

Location	Service Deficiency
Road Network	Some road widths are not adequate to have cycle lanes, parking facilities in urban area.
Footpath Network	Connectivity between different routes. Providing footpaths to meet requirements in the Council Footpath & Cycleways Policy and Walking and Cycling Plan 2018-2028. Identified path widths do not meet current DDA compliance and Australian Standards.
Bridges and Culverts	Width of the identified structures does not meet current standards. Identified structures do not comply to current standards.
Kerb and Water Table	Invert capacity and deformation of kerb channel.

The above service deficiencies were identified from inspections and assessments undertaken by a combination of both experienced Council staff and independent professional engineering consultants, for transport, bridge and culvert assets.

5.1.3 ASSET CONDITION

Condition is currently monitored for critical assets frequently and assessed for all assets periodically on a 4-5 yearly cycle. In 2023, a comprehensive asset condition assessment was undertaken for transport, bridge and culvert assets and subsequently, an asset valuation was completed. This asset audit data was used to inform this Transport AMP.

The asset condition assessments were completed in accordance with good industry practice by independent professional engineering consultants.

Different types of defects for each asset category were inspected, and then the overall asset physical condition was assigned a rating, based on the severity and extent of defects. The physical condition informed the remaining useful life of each asset.

At the end of the remaining useful life, the asset is planned for renewal in order for the asset to continue to provide its service level to the community. The condition index is validated in the

field, to match with the actual condition of the asset in the field. This is consistent with good industry practice. Based on the condition assessment undertaken, a 4-year transport assets renewal program with associated costings, is prepared with the exclusion of bridge and culvert assets. This is then included in the Council's LTFP.

It is anticipated that a review will be undertaken on software tools available, to provide more long-term scenario modelling to effectively provide more holistic 20-year asset management modelling. This will inform 10-year renewal programs, to allow for enhanced strategic asset management across asset classes.

Condition is measured using a 1 – 5 grading system⁵ as detailed in Table 12. It is important that a consistent approach is used in reporting asset performance, to support effective decision making. A finer grading system may be used at a more specific level, however, for reporting in this Transport AMP, results are translated to a 1 – 5 grading scale for ease of communication.

Table 12: Simplified 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 and the state of our assets is shown in Figure 5 and Figure 6, respectively. All figure values are shown in current day (2024) dollars.

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

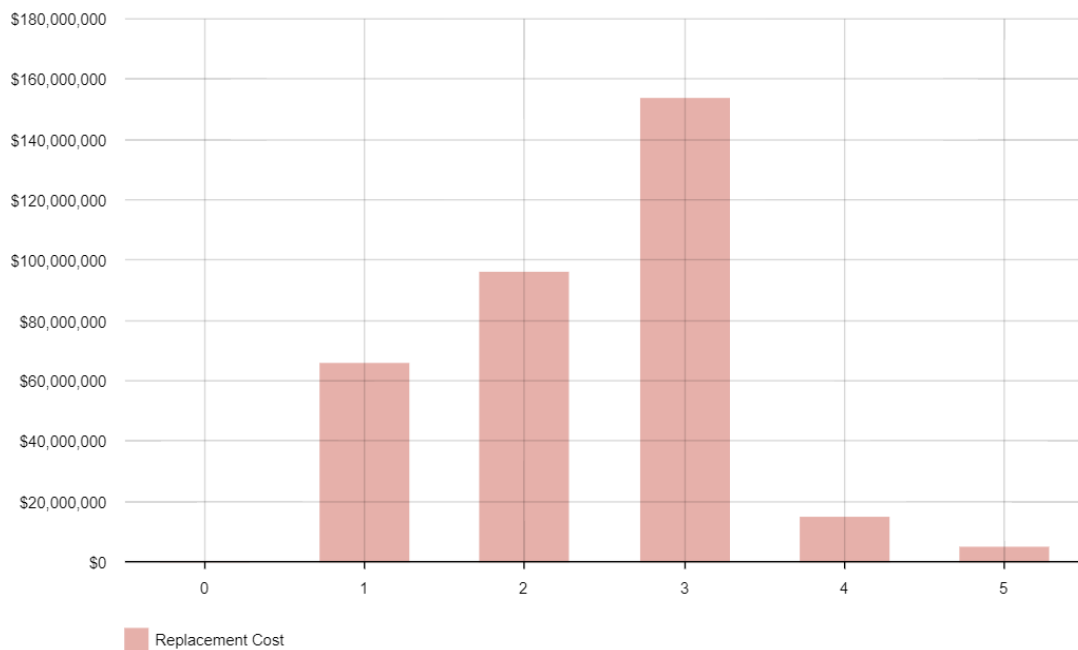


Figure 5: Asset Condition Profile

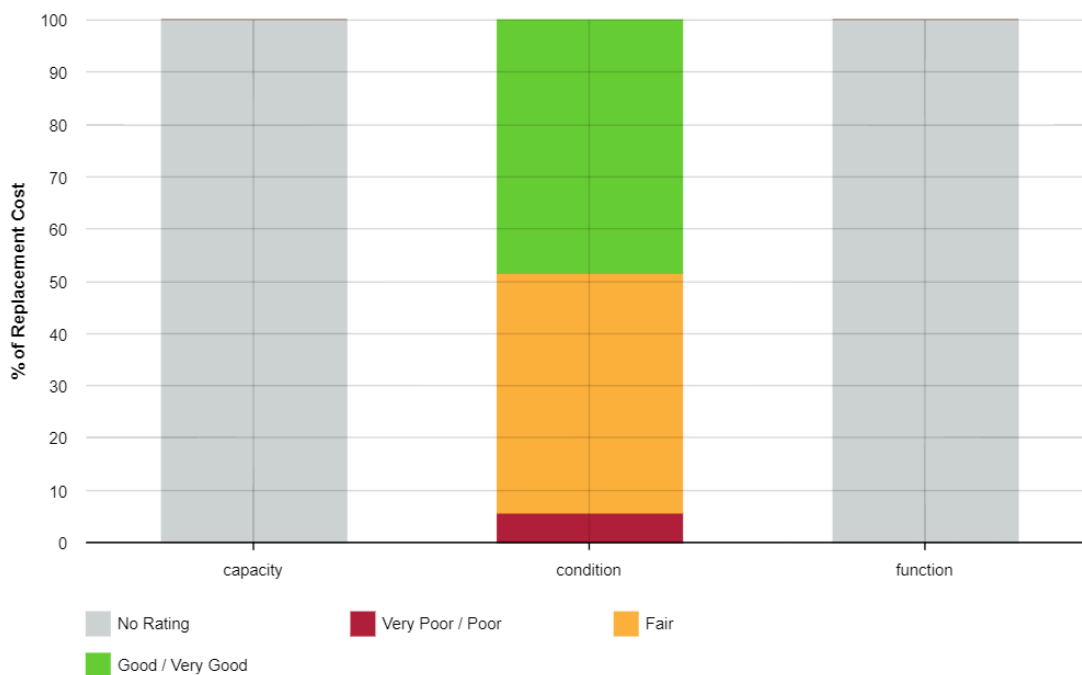


Figure 6: State of Assets Profile

The condition profile shows that the significant majority (~94.25%) of transport assets are in very good to fair condition (i.e. condition rating 1, 2 and 3), with only approximately 5.75% of assets in poor to very poor condition (i.e. condition rating 4 and 5).

Renewal planned in the next 10-year planning period has been identified as those assets within condition rating 4 and 5 (inclusive of an extent of some in condition rating 3).

This will include a combination of:

- Resurface sealed roads,
- Re-sheeting unsealed roads
- Renewal of footpaths, kerb and water table
- Repair works to Council's bridge and culvert structures, to maintain their structural integrity and service level to the community

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 (e.g. street lighting) costs.

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

The trend in maintenance budgets is shown in Table 13.

Table 13: Operations and Maintenance Budget Trends

Year	Operations and Maintenance Budget \$
2023/24	4,162,700
2024/25	\$ 3,982,535
2025/26	\$ 3,982,535

Operations and 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 Transport AMP, and service risks considered in the Infrastructure Risk Management Plan.

The transport assets condition assessment is scheduled on a four yearly cycle. Under condition assessment, asset defects are captured and identified for consideration of maintenance scheduling. Remedial actions are affected under planned maintenance programs, prepared on the basis of priority using the captured defects from condition assessments.

During asset creations and renewals, the Council implements a 360 degree approach, such that when a road is resealed, all the other assets on that road are inspected, and any defects are completed at the time of the road resealing. For example, defects such as:

- Cracks on footpaths
- Damaged stormwater pit lids

- Damaged kerb & gutter sections
- Damaged pedestrian crossing pram ramps
- Overgrown or damaged trees

The defects that are identified from routine asset inspections or customer requests, are rectified under reactive maintenance programs. Assessment and priority of reactive maintenance is undertaken by staff using corporate procedures, experience and judgement.

The Town of Gawler plans to operate and maintain its transport asset network, to achieve the following strategic objectives:

- Ensure all council owned infrastructure is managed and maintained in a sustainable manner, to provide a safe and quality experience for our community
- Ensure the transport asset network is maintained at a safe and functional standard, as set out in this Transport AMP
- Develop a safe and interconnected network of cycle/walking paths to key everyday destinations, such as schools, workplaces, shops, public open space, playspaces, sports and recreation facilities, and community services.

5.3 ASSET HIERARCHY

An asset hierarchy provides a framework for structuring data in an information system. This is used to assist in collecting data, reporting information and making decisions. The hierarchy includes the asset class and component, which is used for asset planning and financial reporting. It also includes the service level hierarchy, which is used for service planning and delivery.

The Council's transport asset service hierarchy is shown in Table 14.

Table 14: Asset Service Hierarchy

Service Hierarchy	Service Level Objective
Roads - Collector, Local & Access	Maintain 80% of roads in fair or better condition for user safety convenient and comfort
Roads – Urban & Rural	Maintain 80% of roads in fair or better condition for user safety convenient and comfort
Bridges – Vehicular and pedestrian	Maintain 80% of bridges in fair or better condition for user safety convenient and comfort
Footpaths – Town Centre, local roads & Off-road	Maintain 80% of footpaths in fair or better condition for user safety convenient and comfort
Kerb and Gutter	Maintain 80% of kerb and gutter in fair or better condition for user safety convenient and comfort

5.4 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 operations and maintenance costs are expected to decrease. Figure 7 shows the forecast operations and maintenance costs relative to the proposed operations and maintenance Planned Budget.

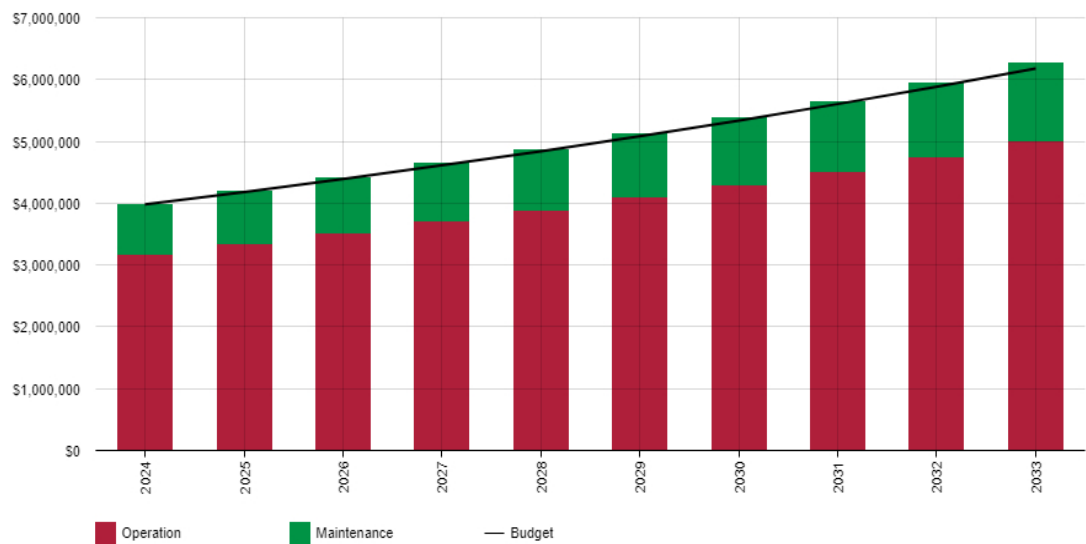


Figure 7: Operations and Maintenance Summary

All figure values are shown in current day (2024) dollars.

Figure 7 shows that the projected Operations and Maintenance (O&M) expenditure is relatively consistent over the 10-year planning period above the budget amount in the LTFP. The LTFP has accommodated the O&M cost estimates for future assets received from growth associated with land developments, over the next 10-year period.

However, due to identified assets acquisitions and upgrades under Council’s capital works program in LTIAMP, the O&M cost is increasing. This forecast asset O&M cost to new capital asset cost with the assumption that transport asset upgrade works do not increase O&M cost (e.g. upgrade road pavements) and increase O&M cost for only creation of new assets under capital works (e.g. footpaths and kerb & gutter).

The Council needs to consider allocating extra funding to cover the projected O&M expenditure and alternative options. This will help to minimise cost increase or maintain the O&M expenditure at current levels, by reducing the level of service and deferring acquisitions and upgrades identified in the LTIAMP. Estimated annual average increase is \$34,643 above the current allocation.

5.5 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)
- 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 15. Asset useful lives were last independently reviewed in July 2022 by an experienced consultant.⁶

Table 15: Useful Lives of Assets

Asset (Sub)Category	Useful life
Road Surface - Asphalt	25 years
Local Road Pavement Base	75 years
Local Road Pavement Subbase	150 years
Footpath - Concrete	70 years
Kerb and Gutter	80 years

The estimates for renewals in this Transport AMP were based on the alternate method.

5.5.1 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-tonne load limit), or
- the infrastructure is of sufficient quality to meet the service requirements (e.g. condition of a playspace).⁷

⁶ Asset Engineering, Gawler Useful Life Review Report Rev 2

⁷ IPWEA, 2015, IIMM, Sec 3.4.4, p 3|91.

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
- Have potential to reduce life cycle costs by replacement with a modern equivalent asset that would provide the equivalent service⁸

Asset renewal programs for each asset category has been prepared based on the physical condition of the assets. Future condition audits will consider asset's physical condition, risk associated with the asset and the criticality of the assets service when prioritising asset renewals for preparing renewal programs.

5.6 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 8. A detailed summary of the forecast renewal costs is shown in Appendix D.

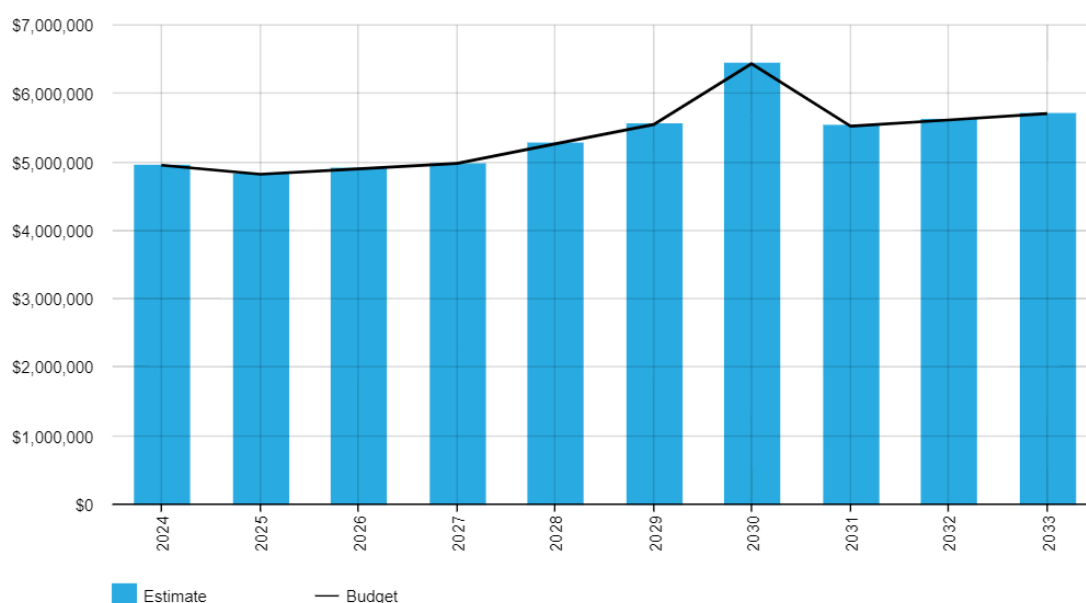


Figure 8: Forecast Renewal Costs

All figure values are shown in current day (2024) dollars.

Figure 8 shows the projected capital renewal expenditure over the 10 year planning period.

Asset renewal and replacement expenditure identified in the capital works program has been accommodated in the Council's LTFP. There are no unfunded asset renewal works in the

⁸ Based on IPWEA, 2015, IIMM, Sec 3.4.5, p 3|97.

Council's current LTFP. The peak in the graph in 2030 is due to the replacement of Goose Island pedestrian bridge at Julian Terrace.

Deferred renewal and replacement (i.e. those assets identified for renewal and/or replacement and not scheduled in capital works programs), will be included in the risk analysis section of the risk management plan.

5.7 ACQUISITION PLAN

Acquisition reflects 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 vested to the Town of Gawler (i.e. land development and infrastructure deeds)

5.7.1 SELECTION CRITERIA

Proposed upgrades of existing assets, and construction of new assets, are identified from various sources. These include customer requests, proposals identified by strategic plans, changes in legislation, and/or partnerships with others.

Any potential upgrades or new works are strategically reviewed, to verify that they are essential to the Council's needs. Analysis of proposed upgrades and new works includes the development of a preliminary renewal estimate, to ensure that the services are sustainable over the longer term. Verified proposals are then ranked by priority and by available funds, to inform the scheduling of future works programmes. This is undertaken when updating the LTIAMP and annual budget allocations, which is part of the Council's annual business planning process.

5.8 SUMMARY OF FUTURE ASSET ACQUISITION COSTS

Forecast acquisition asset costs are summarised in Figure 9 and shown relative to the proposed acquisition budget. The forecast acquisition capital works program is shown in Appendix A.

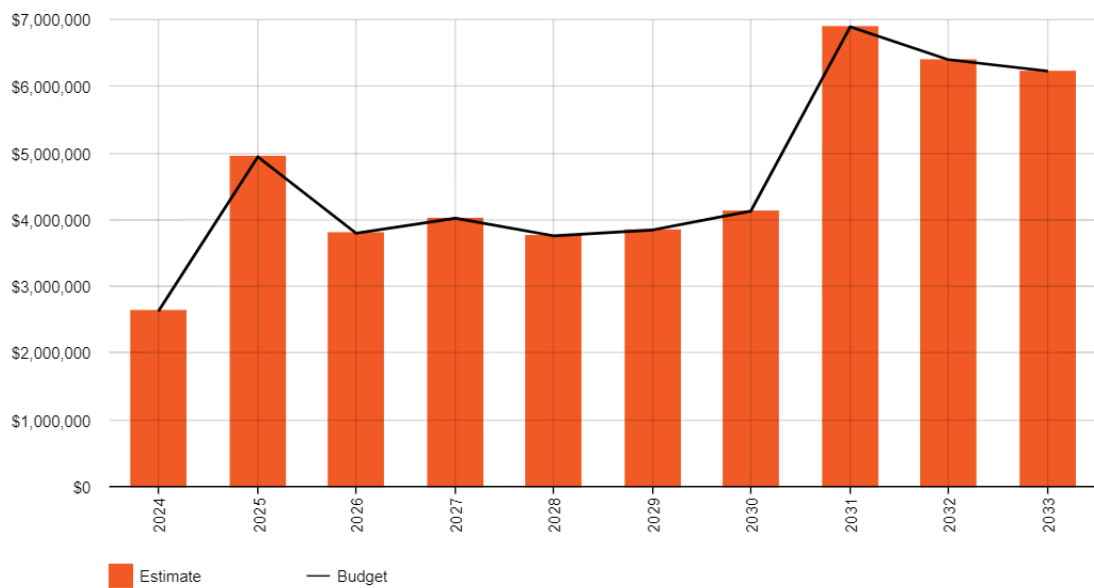


Figure 9: Acquisition (Constructed) Summary

All figure values are shown in current day (2024) dollars and exclude the cost of donated assets.

Demand for upgrades and new assets can increase due to population growth, service deficiencies and other environmental needs. Therefore, the Council may need to upgrade and create new assets to meet service demands, in addition to receiving contributed assets from new land developments and infrastructure deeds.

When the Council commits to new assets, they must be prepared to fund future operations, maintenance and renewal costs. They must also account for future depreciation when reviewing long term sustainability.

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, is shown in Figure 10.



Figure 10: Acquisition Summary

All figure values are shown in current day (2024) dollars.

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. Grant funding options should be explored for implementation of new and upgrade asset projects.

Currently, new assets are created as a result of the Council's upgrading or constructing new assets to manage growth and from contributed assets associated with land developments. Land development growth assets and donated assets are not accounted for in capital costs, however, O&M costs are accounted for. Growth assets are assumed to be associated with general population growth at 1.7%.

5.9 DISPOSAL PLAN

Disposal includes any activity associated with the disposal of a decommissioned asset including sale, demolition or relocation. As part of this Transport AMP, the Council has not identified any assets for disposal.

5.10 SUMMARY OF ASSET FORECAST COSTS

The financial projections from this asset plan are shown in Figure 11. These projections include forecast costs for acquisition, operations, 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.

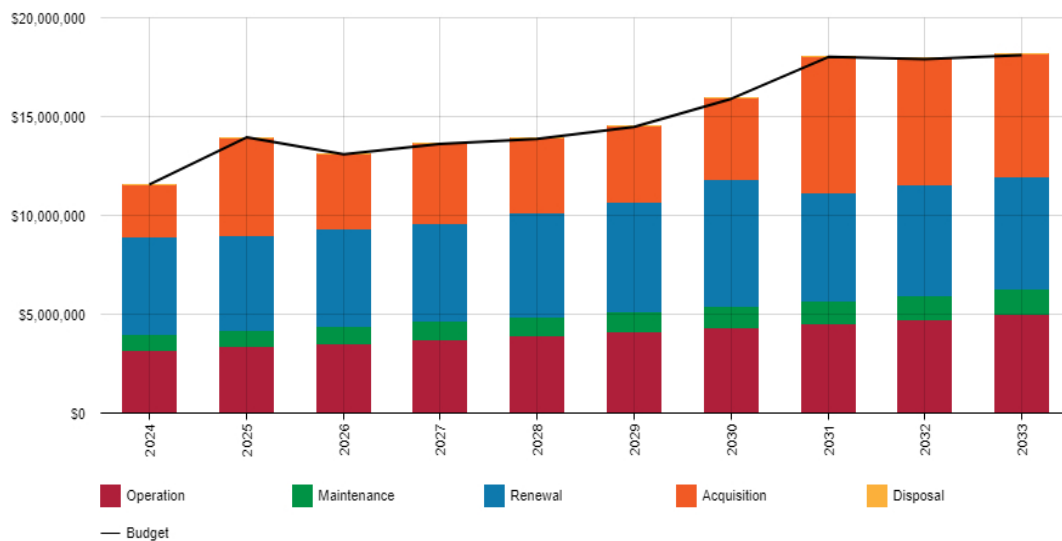


Figure 11: Lifecycle Summary

All figure values are shown in current day (2024) dollars.

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’*⁹. An assessment of risks¹⁰ associated with service delivery, will identify risks that will result in:

- Loss or reduction in service
- Personal injury
- Environmental impacts
- Financial shock
- Reputational impacts
- Other consequences

The risk assessment process identifies credible risks, the likelihood of the risk event occurring, and the consequences should the event occur.

⁹ ISO 31000:2009, p 2

¹⁰ Town of Gawler, Enterprise Risk Management Framework

The risk assessment should also include the development of a risk rating, evaluation of the risks and development of a risk treatment plan, for any 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
Bridge & culvert structure	Structure collapse/ damage at flooding	Closed to users
Sealed road network	Loss of sealed surface, pavement failures such as deep potholes and depressions	Reduction in vehicle travel speed
Unsealed road network	Loss of gravel pavement	No through access on some roads in the network
Footpath network	Structural defects/ failure	Loss of all-weather access on some roads in the network

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 based on the fundamentals of *International Standard ISO 31000:2018*, and aligns with the Council's Enterprise Risk Management Framework. Refer to Figure 12. It is both 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.

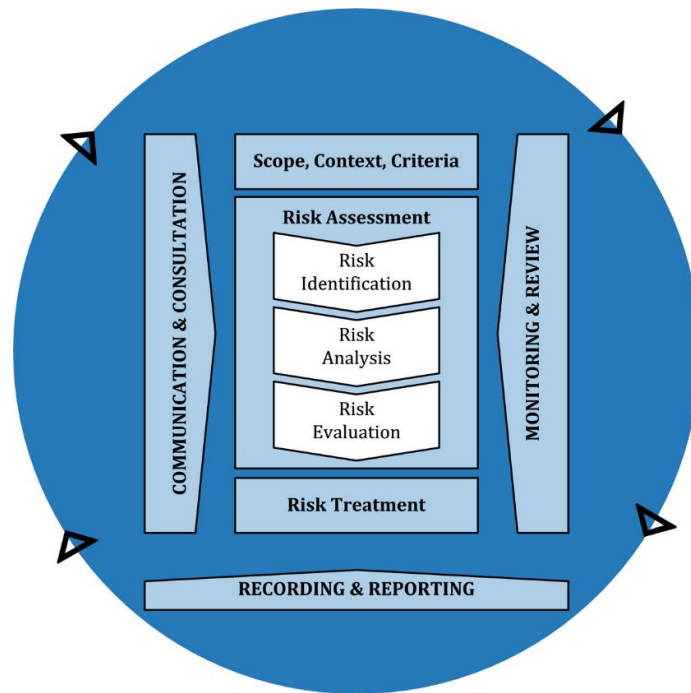


Figure 12: Risk Management Process – Abridged (Source: ISO 31000:2018, Figure 1, p9)

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.

Within Council’s Enterprise Risk Management Framework, risk appetite guides the organisation’s risk taking. It is an equally important element in the Council’s risk governance, as it informs the delivery of strategies, programs, projects and activities that support the Draft Community Plan 2035+. The Town of Gawler has exposure to eight (8) key risk types. These inform the risk appetite statements and levels, which are

1. Financial
2. Service Delivery
3. Cyber
4. Culture
5. Legal
6. Safety
7. Reputation and Image
8. Environment, Heritage and Sustainability.

An assessment of risks¹¹ associated with service delivery, will identify the risks that will result in loss or reduction in service, personal injury, environmental impacts, a ‘financial shock’, reputational impacts, or other consequences.

¹¹ Town of Gawler, Enterprise Risk Management Framework

Critical risks are those assessed with 'Very High' (requiring immediate corrective action) and 'High' (requiring corrective action) risk ratings, as identified in the Infrastructure Risk Management Plan.

The residual risk of implementing the selected treatment plan is shown in Table 16. It is essential that these critical risks and costs are reported to the Executive Management and Council, and subsequently captured in the Council's Strategic Risk Register which is to be developed under asset management improvement process.

Table 16: Risks and Treatment Plans

Service or Asset at Risk	What can Happen	Risk Rating (VH, H)	Risk Treatment Plan	Residual Risk *
Transport Assets	Lack of funding to operate, maintain and renew assets	VH	Asset data managed and maintained within an Asset Management System and fully utilised to perform analysis to assist in making informed decision and appropriate funding recognised in the LTFP e.g. determining optimum intervention levels, priorities etc. Implement the best cost effective and environmentally friendly options.	Low
Transport Assets	Inadequate asset management planning	H	Ensure essential information is captured in the Asset Management system (particularly, the correct unit rates, useful lives and condition information to determine appropriate lifecycle costs.)	Low

Service or Asset at Risk	What can Happen	Risk Rating (VH, H)	Risk Treatment Plan	Residual Risk *
Transport Assets	Underestimated or unknown condition and lifecycle performance resulting in structural failure	H	Undertake regular survey and condition audits at least once every four years. Review unit rates on a yearly basis Review useful lives on a more frequent basis.	Low
Transport Assets	Under design of an assets	H	Ensure all designs and construction complies with relevant standards and Council Requirements	Low
Transport Assets	Changing environmental conditions	H	Record and monitor assets that are impacted by environmental changes. Investigate using different materials and techniques to counter changes. Useful lives may be required to be shortened for assets in identified areas.	Low
	Maintenance level below technical level or standards	H	Ensure maintenance is carried out in accordance with Australian Standards and Council specifications	Low

* Note, the residual risk is the risk remaining after the risk treatment plan has been 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, so that we can provide continuity of service. This includes resilience recovery planning, financial capacity, climate change risk assessment and crisis leadership.

Our current measure of resilience is shown in Table 17, which includes the type of threats and hazards, and the current measures that the Council takes to ensure service delivery resilience.

Table 17: Resilience Assessment

Threat / Hazard	Assessment Method	Current Resilience Approach Measure
Local roads, Shared path along river corridor and footbridges would be damaged due to river flooding at a storm event exceeding 5% AEP storm events.	Temporary closure and implement Council’s Emergency Management Plan. Inspect, repair/ renew & reopen. Path and bridges would not be available for a prolonged period.	Medium
Assets’ structural failure	Temporary closure	Medium
Funding shortage	Reprioritise work or reduce services	High
Climate Change	Adopt a circular economy approach Trial alternative materials for resurfacing sealed roads Use recycled materials for re-sheeting unsealed roads. Support innovative sustainable products	Medium

6.4 SERVICE AND RISK TRADE-OFFS

The decisions made in adopting this Transport AMP, 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:

- Operations and maintenance activities beyond the Council's adopted service levels and frequencies
- Works that have not been included in the Council's LTFP and LTIAMP, unless reprioritising planned work (within the funding allocation) including contributions to Infrastructure Deeds

6.4.2 SERVICE TRADE-OFF

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

- Community expectation for new footpaths and facilities that have high levels of services are not met, resulting in an increase of customer requests and complaints
- General deterioration of assets
- Inadequate capacity of the walking path network to meet expanding needs
- Maintenance services and frequencies may be reduced or lowered in the long-term
- New assets may have lower service levels
- Pressure and overuse of existing assets

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:

- Community dissatisfaction with the Council, resulting in public criticism and mistrust
- Increase in future cost on asset renewal and maintenance
- Increase in the deterioration of transport assets and reduction in service levels
- Negative impact on the quality of life for residents, businesses, schools, visitors and general community with the Town of Gawler
- Ramification for public safety
- Reduced access to facilities (e.g. roads or car parks are not available for use after flood damage until repaired)

These actions and expenditures are considered and included in the Council's LTFP and forecast costs, and where developed, a separate Risk Management Plan.

7.0 FINANCIAL SUMMARY

This section contains the financial requirements resulting from the information presented in the previous sections of this Transport AMP. 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 Transport AMP service area. These two indicators are the:

- **Asset Renewal Funding Ratio** (proposed renewal budget for the next 10 years / proposed renewal costs for the next 10 years as shown in the Transport AMP), and
- **Lifecycle Funding Ratio** (proposed lifecycle budget for the next 10 years / proposed budget over 10 years as shown in the Transport AMP).

7.1.2 ASSET RENEWAL FUNDING RATIO

The **Asset Renewal Funding Ratio**¹² is 100%. This is an important indicator and illustrates that over the next 10 years, we can expect to have 100% of the funds required for the optimal renewal of assets. The forecast renewal works, along with the proposed renewal budget and the cumulative shortfall, is illustrated in Appendix D.

7.1.3 MEDIUM TERM – 10-YEAR FINANCIAL PLANNING PERIOD (LIFECYCLE FUNDING RATIO)

This Transport AMP identifies the forecast operations, maintenance and renewal costs required to provide an agreed level of service to the community over a 10-year period. This provides input into the Council's 10-year financial and funding plans, to enable the required services to be provided in a sustainable manner.

This forecast work can be compared to the Council's LTFP and proposed budget allocations for the planning period, to identify any funding shortfall. The forecast operations, maintenance and renewal costs over the 10-year planning period is \$10,416,733 average per year. The proposed (budget) operations, maintenance and renewal funding is \$10,382,090 on average per year, which results in a 10-year funding **shortfall of \$34,643 per year**. This indicates that 99.67% of the forecast costs needed to provide the services documented in this Transport AMP, are accommodated in the proposed budget. Note, these calculations exclude acquired assets from new land developments.

Providing sustainable services from infrastructure requires the management of service levels, risks, forecast outlays, financing and more, to achieve a financial indicator of approximately 1.0 for the first years of the Transport AMP, and ideally over the 10-year life of the Council's LTFP.

¹² AIFMM, 2015, Version 1.0, Financial Sustainability Indicator 3, Sec 2.6, p 9.

7.1.4 FORECAST COSTS (OUTLAYS) FOR THE LONG-TERM FINANCIAL PLAN

Table 18 shows the forecast costs (outlays) required for consideration in the Council's 10-year LTFP. 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 LTFP.

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 Transport AMP and/or financial projections in the LTFP. The Council will manage any 'gap' by developing this Transport AMP to provide guidance on future service levels and resources required to provide these services in consultation with the community.

Forecast costs are shown in current day (2024) dollar values.

Table 18: Forecast Costs (Outlays) for the Long-Term Financial Plan

Year	Acquisition	Operation	Maintenance	Renewal	Disposal	Total
2024	\$2,629,000	\$3,186,028	\$796,507	\$4,952,000	-	\$11,563,535
2025	\$4,944,000	\$3,350,301	\$837,575	\$4,820,000	-	\$13,951,876
2026	\$3,799,000	\$3,524,420	\$881,105	\$4,897,000	-	\$13,101,525
2027	\$4,021,000	\$3,706,015	\$926,504	\$4,977,000	-	\$13,630,519
2028	\$3,759,000	\$3,896,599	\$974,150	\$5,263,000	-	\$13,892,749
2029	\$3,847,000	\$4,096,223	\$1,024,056	\$5,547,000	-	\$14,514,279
2030	\$4,130,000	\$4,305,629	\$1,076,407	\$6,433,000	-	\$15,945,036
2031	\$6,893,000	\$4,525,457	\$1,131,364	\$5,522,000	-	\$18,071,821
2032	\$6,401,000	\$4,758,200	\$1,189,550	\$5,612,000	-	\$17,960,750
2033	\$6,228,000	\$5,001,788	\$1,250,447	\$5,706,000	-	\$18,186,235

7.2 FUNDING STRATEGY

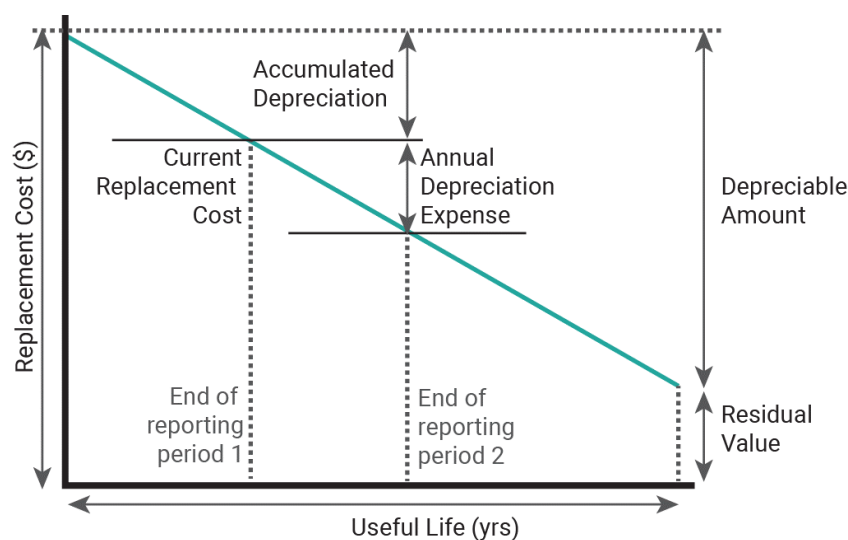
The proposed funding for assets is outlined in the Council's Annual Business Plan and Budget and the associated LTFP.

The financial strategy of the Council determines how funding will be provided, whereas this Transport AMP 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 Transport AMP is shown below. The assets are valued at fair value to replace service capacity.



Replacement Cost (Gross)	\$358,565,849
Depreciable Amount	\$358,565,849
Current Replacement Cost ¹³	\$236,228,517
Depreciation	\$5,185,057

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.

It is expected new assets from land developments will continue to be contributed to Council over the next 20-30 years, based on population growth associated with the Greater Adelaide Regional Plan and available residential land supply.

¹³ Also reported as Written Down Value, Carrying or Net Book Value.

7.4 KEY ASSUMPTIONS MADE IN FINANCIAL FORECASTS

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

Key assumptions made in this Transport AMP are:

Key Assumption	Description
Indexation Rates	The Local Government Price Index (LGPI) and other indexation factors relevant for each asset class are used to determine current cost.
Financial values	Current day dollars (2024)
Renewal Cost	Forecasts have been made by professional judgement.
O&M Cost forecast	The current operations and maintenance budgets have been used and only increased in the forecast relative to the acquisition of new assets.
Asset Growth	The relationship between development growth and associated increases in the asset stock.
Level of Service	Current infrastructure service levels will remain for the life of the Plan.
Funding	Indicated capital replacement/renewal funding is provided for within the Long-Term Financial Plan.
Useful Life	The average useful lives of the asset groups based on current local knowledge and experience and historical trends.

7.5 FORECAST RELIABILITY AND CONFIDENCE

The forecast costs, proposed budgets, and valuation projections in this Transport AMP 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 scale¹⁴ in accordance with Table 19.

Table 19: 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 $\pm 2\%$
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 $\pm 10\%$
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 $\pm 25\%$
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 $\pm 40\%$
E. Very Low	None or very little data held.

¹⁴ IPWEA, 2015, IIMM, Table 2.4.6, p 2|71.

The estimated confidence level for and reliability of data used in this Transport AMP is shown in Table 20.

Table 20: Data Confidence Assessment for Data used in AMP

Data	Confidence Assessment	Comment
Demand drivers	B	Professional Judgement
Growth projections	B	ABS 2021 Census for Gawler LGA
Acquisition forecast	B	LTFP and Gawler Growth Analysis
Operation forecast	B	Forecast and trend analysis from previous financial year budgets and Gawler Growth analysis
Maintenance forecast	B	Forecast and trend analysis from previous financial year budgets and Gawler Growth analysis
Renewal forecast		
- Asset values	B	Asset Register is updated annually
- Asset useful lives	B	Reviewed periodically external consultant/contractor
- Condition modelling	B	Reviewed periodically by external contractor/consultant (aligned with the four year rolling cycle with other asset classes)
Disposal forecast	E	Professional Judgement

The estimated confidence level for and reliability of data used in this Transport AMP is considered to be reliable.

8.0 PLAN IMPROVEMENT AND MONITORING

8.1 STATUS OF ASSET MANAGEMENT PRACTICES¹⁵

8.1.1 ACCOUNTING AND FINANCIAL DATA SOURCES

Council uses Civica Authority software as its corporate accounting/financial system. There is currently no automated integration between the Civica Authority software and the AssetMaster software used for asset management purposes.

¹⁵ ISO 55000 Refers to this as the Asset Management System

The Australian Accounting Standards Board AASB 116 and the Local Government (Financial Management) Regulations 2011, provide the statutory benchmark against which Council reports on asset accounting. The chart of account structure used within the general ledger (i.e. work orders), is designed to facilitate the ease of data extraction required for internal and statutory financial reporting. Currently the existing structure meets the Council's financial reporting needs (including those relating to asset accounting). This structure will be reviewed periodically to ensure that it appropriately meets the Council's future financial reporting needs.

The current capitalisation threshold for transport infrastructure assets is \$10,000 in accordance with the Council's Asset Capitalisation Policy. This threshold is reviewed on a three yearly basis.

8.1.2 ASSET MANAGEMENT DATA SOURCES

This Transport AMP also utilises asset management data. One of the Asset Management Information Systems: AssetMaster software is used by the Council for management of its infrastructure (transport and stormwater) asset data, ESRI ArcGIS Pro for asset mapping and Civica Authority for customer request management.

AssetMaster manages physical and financial asset data including the physical attributes, capital work activities carried out on assets, condition and valuation. AssetMaster provides reports on data that is required in order to plan renewal works programs, value assets and forecast depreciation.

When there is a change in asset information, the relevant data is updated into AssetMaster. When new assets are created, asset details are recorded periodically in AssetMaster. This ensures that at the end of financial year, all created assets are registered in AssetMaster for financial valuation.

Currently, Transport Assets are recorded in AssetMaster with the general process flow chart for asset management provided in Appendix G.

8.2 IMPROVEMENT PLAN

It is important that the Council recognises that areas of the Transport AMP and planning process, require future improvements to ensure effective asset management and informed decision making. These improvements are captured in the Improvement Plan shown in Table 8.2.

As noted previously, the Transport AMP is a living document and several assessments have been undertaken between the previous iteration of the Transport AMP, identifying potential improvements and recommendations relating to continuously improving asset management practices, which have emanated from the following assessments;

- Bentleys, 2021, 'Town of Gawler Asset Management Internal Audit Report'
- BRS, 2023, 'Town Services Review'
- Bentleys, 2024, 'Town of Gawler ESCOSA Readiness Assessment Gap Analysis Report'

Improvements and recommendations from these assessments, as they relate to Asset Management Practices, have been subsequently progressed over time (so far as was reasonably

practical within budget and resource constraints), with the residual recommendations being captured in the Improvement Plan presented in Table 21.

It should be noted that the timeline identified in the Improvement Plan has been defined as Year 1 to Year 4, to align with the lifespan of the Transport AMP. Given that the improvements will often require more than one resource, responsibilities and resource requirements have been identified at the Department level, rather than with individual Council staff.

Table 21: Improvement Plan

Task	Task	Responsibility	Resources Required	Timeline
1	Continue to implement findings from the respective Internal Audit reports and assessments (as identified in Section 8.2)	Infrastructure	Infrastructure, Finance and Procurement, Risk and WHS	Annually
2	Review and agree to an affordable Customer Level of Service as a part of community consultation of AMP (as identified in Section 3.5)	Infrastructure	Infrastructure, Operations	Year 1
3	Demand Management Plan Summary to be reviewed based on Land Development Register and update LTIAMP (as identified in Section 4.3)	Infrastructure	Infrastructure, Finance and Procurement	Annually
4	Review, calibrate and model forecasted growth and contributed assets (including anticipated timing) for consolidation in a multi-year Land Development Forecast Register	Infrastructure	Infrastructure, Finance and Procurement, Development and Compliance	Annually
5	Continuously update and review the Long Term Infrastructure and Asset Management Plan (LTIAMP) in preparation for each annual business plan	Infrastructure	Infrastructure, Finance and Procurement	Annually
6	Risk Assessment to be reviewed and Asset Risk Register to be developed (as identified in Section 6.2)	Infrastructure	Infrastructure, Finance and Procurement, Risk and WHS	Annually
7	Infrastructure Resilience Approach to be reviewed (as identified in Section 6.3)	Infrastructure	Infrastructure, Operations, Procurement, Governance	Year 2 and Year 4

Task	Task	Responsibility	Resources Required	Timeline
8	Review asset renewal ranking criteria and new asset priority ranking criteria	Infrastructure	Infrastructure, Operations, Procurement, Governance	Year 2 and Year 4
9	Review all existing policies relating to infrastructure asset management for aligning with best practice and current day standards	Infrastructure	Infrastructure, Operations, Procurement, Governance	Annually
10	Consider sealing unsealed roads in lieu of re-sheeting unsealed roads	Infrastructure	Infrastructure, Operations, Procurement	Annually
11	Undertake trial of various recycled materials and products	Infrastructure	Infrastructure, Operations, Procurement	Annually
12	Value assets annually with a book value adjustment and periodically with a unit rate review consistent with financial auditor requirements	Infrastructure	Infrastructure, Finance and Procurement	Annually
13	Financial Statements and projections to be revised based on asset cost updates after periodical asset financial valuation (as identified in Section 7.1)	Infrastructure, Finance and Procurement	Infrastructure, Finance and Procurement	Annually
14	Review capital expenditure during the Council annual budget preparation and amend to recognise any changes in service levels and/or resources available to provide those services	Infrastructure	Infrastructure, Operations	Annually
15	Review transport assets mapped on the corporate GIS system and update layer data where required	Infrastructure	Infrastructure	Annually
16	Schedule next transport assets condition audit based on a four-year cycle and subsequent update of the Transport AMP	Infrastructure	Infrastructure	Year 4

8.3 MONITORING AND REVIEW PROCEDURES

This Transport AMP 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.

This Transport AMP 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 Council's LTFP or will be incorporated into the Draft LTFP once completed.

This Transport AMP has a maximum life of four years and is due for complete revision and updating within two years of each Council election. This is in accordance with the legislative requirements of the Local Government Act 1999.

8.4 PERFORMANCE MEASURES

The effectiveness of this Transport AMP can be measured in the following ways:

- The Asset Renewal Funding Ratio achieving the LTFP target (this target is often between 90 – 100%)
- The degree to which the required forecast costs identified in this Transport AMP are incorporated into LTFP
- 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 Transport AMP
- The degree to which the existing and projected service levels and service consequences, risks and residual risks, are incorporated into the Council's Strategic Plans and associated documents

9.0 REFERENCES

- IPWEA, 2006, 'International Infrastructure Management Manual', Institute of Public Works Engineering Australasia, Sydney, www.ipwea.org/IIMM
- IPWEA, 2015, 3rd edn., 'International Infrastructure Management Manual', Institute of Public Works Engineering Australasia, Sydney, www.ipwea.org/IIMM
- IPWEA, 2008, 'NAMS.PLUS Asset Management', Institute of Public Works Engineering Australasia, Sydney, www.ipwea.org/namsplus.
- IPWEA, 2015, 2nd edn., 'Australian Infrastructure Financial Management Manual', Institute of Public Works Engineering Australasia, Sydney, www.ipwea.org/AIFMM.
- IPWEA, 2020 'International Infrastructure Financial Management Manual', Institute of Public Works Engineering Australasia, Sydney
- IPWEA, 2018, Practice Note 12.1, 'Climate Change Impacts on the Useful Life of Assets', Institute of Public Works Engineering Australasia, Sydney
- IPWEA, 2012, Practice Note 6 Long-Term Financial Planning, Institute of Public Works Engineering Australasia, Sydney, <https://www.ipwea.org/publications/ipweabookshop/practicenotes/pn6>
- IPWEA, 2014, Practice Note 8 – Levels of Service & Community Engagement, Institute of Public Works Engineering Australasia, Sydney, <https://www.ipwea.org/publications/ipweabookshop/practicenotes/pn8>
- ISO, 2014, ISO 55000:2014, Overview, principles and terminology
- ISO, 2018, ISO 31000:2018, Risk management – Guidelines
- Town of Gawler, 'Draft Community Plan 2035+'
- Town of Gawler, 'Annual Business Plan and Budget 2024-25'
- Town of Gawler, 'Draft Long Term Financial Plan 2024/25 – 2034/35'
- Town of Gawler, 'Draft Long-Term Infrastructure and Asset Management Plan 2024 – 2033'
- Bentleys, 2021, 'Town of Gawler Asset Management Internal Audit Report'
- BRS, 2023, 'Town Services Review'
- Bentleys, 2024, 'Town of Gawler ESCOSA Readiness Assessment Gap Analysis Report'

10.0 APPENDICES

APPENDIX A - ACQUISITION FORECAST

There are new and upgrade asset projects that have been forecasted during this Transport AMP period. These include road and bridge structure upgrades, bicycle and pedestrian paths, in addition to new assets received from land developments associated with growth. The delivery and timing of some new and upgrade works is based on the Gawler East Infrastructure Deed, Southern Urban Area Deed and external funding availability.

The acquisition summary shown below has been derived from the NAMS+ Output Summary for Acquisition.

Table A1 - Acquisition Forecast Summary

Year	Constructed	Donated	Growth
2024	\$2,629,000	-	\$3,585,659
2025	\$4,944,000	-	\$3,621,515
2026	\$3,799,000	-	\$3,657,730
2027	\$4,021,000	-	\$3,694,308
2028	\$3,759,000	-	\$3,731,251
2029	\$3,847,000	-	\$3,768,563
2030	\$4,130,000	-	\$3,806,249
2031	\$6,893,000	-	\$3,844,311
2032	\$6,401,000	-	\$3,882,754
2033	\$6,228,000	-	\$3,921,582

APPENDIX B - OPERATION FORECAST

Operation costs forecast analysis has been undertaken by Council (with due consideration of previous financial year(s) expenditure) with the operation summary shown below derived from the NAMS+ Output Summary for Operations.

Table B1 - Operation Forecast Summary

Year	Operation Forecast	Additional Operation Forecast	Total Operation Forecast
2024	\$3,186,028.00	\$4,972.00	\$3,186,028.00
2025	\$3,345,330.00	\$6,852.00	\$3,350,301.00
2026	\$3,512,596.00	\$5,965.00	\$3,524,420.00
2027	\$3,688,226.00	\$6,172.00	\$3,706,015.00
2028	\$3,872,637.00	\$5,992.00	\$3,896,599.00
2029	\$4,066,269.00	\$6,092.00	\$4,096,223.00
2030	\$4,269,583.00	\$6,349.00	\$4,305,629.00
2031	\$4,483,062.00	\$8,590.00	\$4,525,457.00
2032	\$4,707,215.00	\$8,227.00	\$4,758,200.00
2033	\$4,942,576.00	\$8,227.00	\$5,001,788.00

APPENDIX C - MAINTENANCE FORECAST

Maintenance costs forecast analysis has been undertaken by the Council (with due consideration of previous financial year(s) expenditure), with the maintenance summary shown below derived from the NAMS+ Output Summary for Maintenance.

Table C1 - Maintenance Forecast Summary

Year	Maintenance Forecast	Additional Maintenance Forecast	Total Maintenance Forecast
2024	\$796,507	\$1,243	\$796,507
2025	\$836,332	\$1,713	\$837,575
2026	\$878,149	\$1,491	\$881,105
2027	\$922,056	\$1,543	\$926,504
2028	\$968,159	\$1,498	\$974,150
2029	\$1,016,567	\$1,523	\$1,024,056
2030	\$1,067,396	\$1,587	\$1,076,407
2031	\$1,120,765	\$2,147	\$1,131,364
2032	\$1,176,804	\$2,057	\$1,189,550
2033	\$1,235,644	\$2,057	\$1,250,447

APPENDIX D - RENEWAL FORECAST SUMMARY

The renewal forecast summary has been prepared in consideration of risk management analysis and in accordance with the outcomes from the recently conducted Transport and Bridge Asset condition audits completed in 2023 and 2024, respectively.

Renewal forecast considers both the Transport and Bridge Asset classes and will include (but is not limited to) activities such as; road re-sealing, road re-sheeting, footpath renewal, kerb & water table renewal repairs and bridge structural repairs.

The renewal summary shown below has been derived from the NAMS+ Output Summary for Renewal.

Table D1 - Renewal Forecast Summary

Year	Renewal Forecast	Renewal Budget
2024	\$4,952,000	\$4,952,000
2025	\$4,820,000	\$4,820,000
2026	\$4,897,000	\$4,897,000
2027	\$4,977,000	\$4,977,000
2028	\$5,263,000	\$5,263,000
2029	\$5,547,000	\$5,547,000
2030	\$6,433,000	\$6,433,000
2031	\$5,522,000	\$5,522,000
2032	\$5,612,000	\$5,612,000
2033	\$5,706,000	\$5,706,000

APPENDIX E - DISPOSAL SUMMARY

The forecast summary shown below has been derived from the NAMS+ Output Summary for Disposal and as shown, there are no identified Transport and Bridge asset disposals.

Table E1 – Disposal Activity Summary

Year	Disposal Forecast	Disposal Budget
2024	-	-
2025	-	-
2026	-	-
2027	-	-
2028	-	-
2029	-	-
2030	-	-
2031	-	-
2032	-	-
2033	-	-

APPENDIX F - BUDGET SUMMARY BY LIFECYCLE ACTIVITY

The following budget summary is based on the Council's current Long Term Financial Plan. It is shown in current dollars. This information is the basis of the Planned Budget used in the Lifecycle Model for this Asset Management Plan.

Table F1 – Budget Summary by Lifecycle Activity

Year	Acquisition	Operation	Maintenance	Renewal	Disposal	Total
2024	\$2,629,000	\$3,186,028	\$796,507	\$4,952,000	-	\$11,563,535
2025	\$4,944,000	\$3,345,330	\$836,332	\$4,820,000	-	\$13,945,662
2026	\$3,799,000	\$3,512,596	\$878,149	\$4,897,000	-	\$13,086,745
2027	\$4,021,000	\$3,688,226	\$922,056	\$4,977,000	-	\$13,608,282
2028	\$3,759,000	\$3,872,637	\$968,159	\$5,263,000	-	\$13,862,796
2029	\$3,847,000	\$4,066,269	\$1,016,567	\$5,547,000	-	\$14,476,836
2030	\$4,130,000	\$4,269,583	\$1,067,396	\$6,433,000	-	\$15,899,978
2031	\$6,893,000	\$4,483,062	\$1,120,765	\$5,522,000	-	\$18,018,826
2032	\$6,401,000	\$4,707,215	\$1,176,804	\$5,612,000	-	\$17,897,018
2033	\$6,228,000	\$4,942,576	\$1,235,644	\$5,706,000	-	\$18,112,220

APPENDIX G – ASSET MANAGEMENT PROCESS FLOW CHART

