



TEMORA SHIRE COUNCIL

Asset Management Plan

Including:
General Statements
Road
Sewerage Treatment and Effluent Reuse
Aerodrome
Operational & Community Land & Public Buildings
Bridges & Stormwater Management
Plant Replacement



April 2011

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TEMORA SHIRE COUNCIL



INFRASTRUCTURE AND ASSET MANAGEMENT PLAN

GENERAL STATEMENTS

PART 1

Version 1
May 2011


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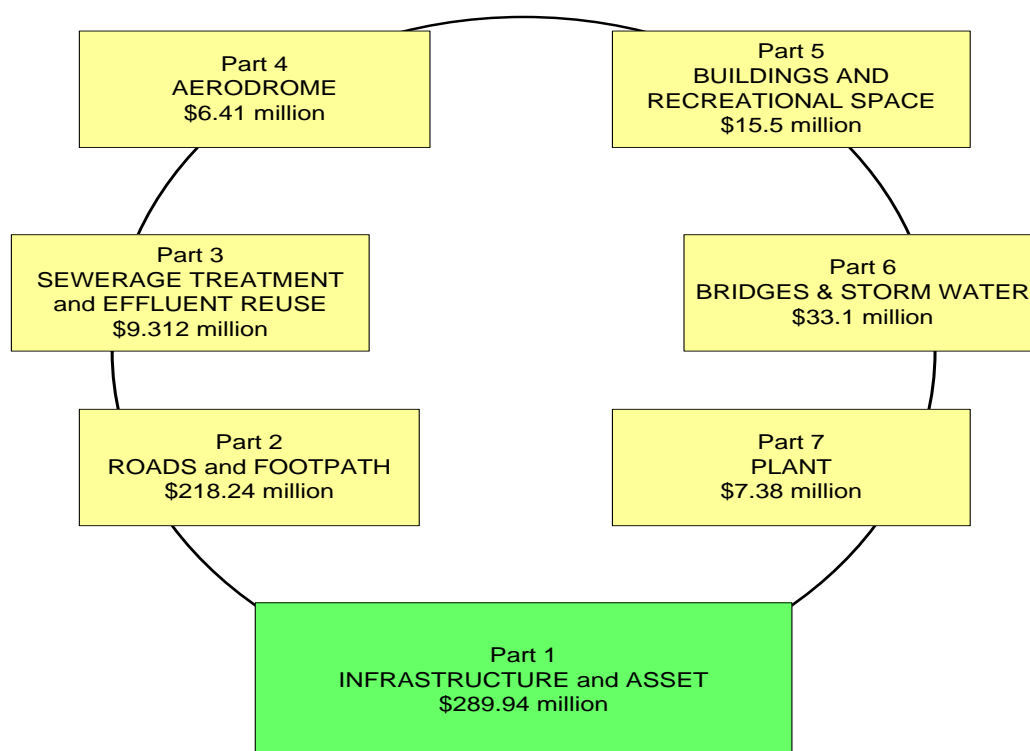
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1. EXECUTIVE SUMMARY

1.1 Infrastructure and Asset Management Plan

Council provides and maintains a wide range of infrastructure assets with a total replacement cost of \$289.94million. An infrastructure Asset Management Plan, covering six asset classes, has been developed for assets such as, roads and footpaths, Sewerage treatment and effluent, aerodrome, operational and community land and buildings, stormwater and plant.



Part 2 to 7 needs to be read in conjunction with Part 1, General Statement

1.2 Lifestyle Costs & Expenditure Summary

There are two key indicators of the cost in providing a service, lifecycle costs and maintenance/renewal expenditure.

Lifecycle Costs

The average annual cost over the lifecycle of the asset is:

Asset Category	Annual Cost	Planned Annual Expenditure Year 1, \$,000
Roads and Footpaths	\$3,946,301	\$3,193817
Sewerage and Effluent	\$148,360	\$525,545
Aerodrome	\$259,631	\$160,107
Operational, Community Land and Buildings	\$333,154	\$1,534519
Stormwater	\$2,871693	\$46,702
Plant	\$1,509,484	\$1,074406

Total Maintenance and renewal Expenditure

The expenditure required to deliver the services in the period 2011 to 2021 is:

Asset Category	Total Maintenance & Renewal Expenditure in 10-years \$M	Average Maintenance and Renewal Expenditure per annum , \$M	Planned Expenditure Year 1, \$M
Roads and Footpaths	\$38.3	\$3.83	\$3.10
Sewerage and Effluent	\$6.9	\$0.69	\$0.54
Aerodrome	\$2.2	\$0.22	\$0.1
Operational, Community Land and Buildings	\$9.5	\$0.95	\$0.54
Stormwater	\$1.6	\$0.16	\$0.10
Plant	\$11.7	\$1.17	\$1.12
PLAN TOTAL	\$70.20	\$7.02	\$5.50

Projected Costs and Planned Expenditure

Projected Costs (represented by “depreciation”) are the amounts required to maintain and renew assets to provide the present level of service. **Planned Expenditure** is the amount that can be realistically accommodated in Council’s budget and long-term financial plan to maintain and renew those assets

Year End June 30	Asset Category											
	Roads & Footpaths \$,000		Sewerage & Effluent \$,000		Aerodrome \$,000		Operational, Community Land & Buildings \$,000		Stormwater & Bridges \$,000		Plant \$,000	
	Projected	Planned	Projected	Planned	Projected	Planned	Projected	Planned	Projected	Planned	Projected	Planned
2011	3,131	3,194	123.0	195	128.9	79.1	231	1,009	143	96.7	599.6	1,038
2012	3,131	3,346	125.0	220	129.0	229.9	240	1,097	144	108.1	617.6	1,043
2013	3,131	3,499	125.0	207	129.8	100.4	251	1,071	144	109.6	636.1	1,368
2014	3,131	3,502	127.4	215	130.1	86.9	287	1,133	145	225.4	655.2	858
2015	3,131	3,753	126.8	213	130.5	106.6	266	1,154	147	229.6	674.8	847
2016	3,131	3,780	132.1	223	133.3	135.3	267	1,165	147	123.9	695.1	2,026
2017	3,131	3,537	139.8	208	137.2	190.8	272	1,446	149	125.4	715.9	1,212
2018	3,131	3,517	144.4	235	139.6	136.1	352	1,428	150	131.8	737.5	1,340
2019	3,131	3,813	148.4	259	139.6	101.8	365	1,479	151	133.3	782.4	531
2020	3,131	3,869	150.2	255	139.6	105.0	366	1,313	151	324.7	805.8	291
2021	3,131	3,852	154.5	246	139.6	108.4	371	1,321	154	326.6	0	0
2022	3,131	4,020	155.2	231	139.6	111.9	372	1,353	157	137.6	0	0
2023	3,131	4,170	158.7	241	143.7	319.4	373	1,384	157	139.1	0	0
2024	3,131	4,257	159.3	271	143.7	162.7	373	1,415	158	140.5	0	0
2025	3,131	4,343	163.6	272	143.7	123.0	378	1,447	159	142.0	0	0
2026	3,131	4,447	164.9	262	143.7	324.6	380	1,491	160	143.4	0	0
2027	3,131	4,554	169.1	282	143.7	130.9	380	1,509	160	144.9	0	0
2028	3,131	4,692	174.3	292	143.7	135.1	380	1,540	161	146.3	0	0
2029	3,131	4,836	175.1	294	143.7	139.5	379	1,572	162	147.8	0	0
2030	3,131	4,444	175.1	294	143.7	143.9	379	1,603	163	149.2	0	0
			0	0	0	0	0	0	0	0		
Average	3,131	3,782.14	142.47	234.05	131.73	141.49	317.24	1,282.38	145.81	153.61	692.0	1055.4

Disparity between Projected Costs and Planned Expenditure on Renewal

Across all six asset categories, the disparity (difference between planned expenditure and projected costs) are shown in Table 6.1

1.3 General Planning Objectives

Council plans to operate and maintain its infrastructure and assets to achieve the following strategic objectives:

- Ensure that assets are maintained at a safe and functional standard.
- Meet or exceed community expectations and achieve social justice for all.
- Cater for future growth, demographic changes and community needs

1.4 Key Assumptions and Data Limitation

Limitations on data quality and current analysis tools, applied over the diversity of assets in these Asset Management Plans, have constrained the Plan's outcomes.

Asset Type	Assumptions/ Limitations	Reference Part/Section
General	<ul style="list-style-type: none"> ○ Improvement Plan to address IAMP shortcomings. ○ Specific community Levels of Service to be further refined ○ Impacts of the economic downturn on growth predictions. ○ Simplistic and restrictive financial analysis available from on-line templates. ○ Detailed assessment of risks awaiting production of the Risk Management Plan. 	1 / 2.4 1 / 3.1 1 / 4.1 1 / 4.4.1 1 / 5.2
Roads	<ul style="list-style-type: none"> ○ Future reactive, planned and cyclic maintenance based on past performance, more refinement required 	2 / 5.3.1
Sewerage Treatment & Effluent Reuse	<ul style="list-style-type: none"> ○ Construction of sewer scheme to Arianah Park has been noted in the plan, but no date set. Sewer scheme dependent of completion of feasibility study and estimates. ○ Renewals of sewer mains to be determined after investigation with CCTV, which at present not planned until 2017/18 	3 / 5.1.2 3 / Appendix D
Aerodrome		
Operational & Community Land & Public Buildings		
Bridges & Stormwater Management		
Plant		

1.5 Performance Measures

The three significant measures of Council's performance are:

Quality

The assets will be maintained in a usable condition. Defects found or reported that are outside our service standard will be repaired. Defect prioritisation and response times will be detailed in Council's Maintenance Response Levels of Service.

Function

Council's intent is that appropriate assets are maintained in partnership with other levels of government and stakeholders to ensure they meet current and future needs.

Safety

Assets will be maintained at a safe level and associated signage and equipment will be provided as needed. Council inspects all assets regularly and prioritises the repair of defects in accordance with our inspection schedule to ensure they are safe.

The main functional consequences of failure to deliver the desired outcomes are:

Asset Maintenance - Increase in user and owner costs.

Level of Service Increase in litigation.

1.6 Integrated Asset Management Plan Implementation Program

Following completion of the 'core' Integrated Asset Management Plan, the following actions are proposed:

Approval

Council endorsement of the draft. Asset Management Plans

Community consultation and Plan review.

Council adoption of the Asset Management Plans.

Implementation

Training in new Asset Management Plan processes for asset custodians and Managers.

Commencement of ongoing improvement to the plans.

Data Refinement and Improvement

Proposed Improvement Plan actions and timelines are indicated in the table overleaf.

Review

Annual review of Asset Management Plan financial data at stage of annual budget formulation.

Periodic revision of IAMP.

Task	2011							
	May	June	July	August	Sept	October	Nov	December
Consider the desirability of limiting the IAMP time framework to 10 years, to coincide with the LTFP								
Twenty-year Upgrade / Expansion Program – develop program, with emphasis on the 2011 to 2021 period								
Footpaths and Cycleways – re-rate footpaths, review footpath hierarchy, add Open Space and footpath cycleway assets								
Twenty-year Renewal Program – develop program, with emphasis on the first 10 years of the reporting period								
Twenty-year Upgrade / Expansion Program – develop program, with emphasis on the 2011 to 2021 period								
Twenty-year Upgrade / Expansion Program – develop program, with emphasis on the 2011 to 2021 period								
Twenty-year Upgrade / Expansion Program – develop program, with emphasis on the 2011 to 2021 period								
Twenty-year Upgrade / Expansion Program – develop program, with emphasis on the 2011 to 2021 period								
Document level of service and maintenance management plan								
Twenty-year program – refine program with emphasis on first 10 years								
Valuations of unit costs – review rates on “Brownfield’s” basis								
Population projections – review projections based on latest available data								
Refine reporting to differentiate between operations and maintenance expenditure								
Refine plan for all Operational Land, including valuation, maintenance and capital renewal								

Task	2011							
	May	June	July	August	Sept	October	Nov	December
Building Safety – investigate upgrades to improve user safety and levels of service especially for buildings such as Public Toilets								
Split Recreational land and operational land into two separate management plans								

2. INTRODUCTION

2.1 Background

This Integrated Asset Management Plan has been prepared to demonstrate responsive management of assets (and services provided from assets), compliance with regulatory requirements, and to describe funding to provide the required levels of service, projected over a 20-year reporting period. It is to be read with the following associated planning documents:

- Corporate Plan – Articulates the long-term strategic direction of Council.
- Long-term Financial Plan – Outlines all aspects of the key financial strategic objectives and commitments.
- Funding Policy – Describes how future expenditure needs will be funded.
- Annual Plan – Detailed action plan on projects and finances for each particular year. The works identified in the Asset Management Plan form the basis on which future annual plans are prepared.
- Contracts – The service levels, strategies and information requirements contained in the Asset Management Plan are translated into field staff work instructions, contract specifications and reporting requirements.
- By-Laws, Standards and Policies – Tools to assist in the management of, and to support, strategies.
- Business Plans – Levels of service, processes and budgets defined in the Asset Management Plan are incorporated into business plans as activity budgets, management strategies and performance measures.
- Resource Management plan – Details the resource requirements to deliver the Asset Management Plan.

Asset categories and classes are quantified in the relevant Part for each asset category. Table 2.1 provides an overview

Table 2.1. Assets covered by this Plan

Asset category	Asset Type	Unit	Quantity
Roads	Regional Roads	km	92.3
	Local Roads	km	1238
	Footpaths	km	16
	Kerb and Gutter	km	93
Sewerage Treatment and Effluent Reuse	Gravity sewer mains	km	45
	Rising sewer mains	km	0.4
	Sewer Pump Stations	No.	3
	Sewer Property Connections	No.	2029
	Sewer Manholes	No.	514
	Sewerage Treatment Works	No.	1
	Effluent Storage Dams	No.	4
	Effluent Pumping Stations	No.	4
	Effluent Delivery Lines	km	89
	Telemetry System	No.	1
Aerodrome	Weather Stations	No.	1
	Runways	No	3
	Taxiways	No.	8
	GA Apron	No.	1

Asset category	Asset Type	Unit	Quantity
	Open Unlined Drain	km	0.9
	Piped Stormwater Drain	km	1
	Perimeter Fencing	km	10
Operational and Community Land and Public Buildings	Parks and Gardens	No.	20
	Sporting Fields	No.	10
	Public Buildings	No.	18
	Operational Land	No	5
Bridges and Stormwater	Stormwater Pipes	No.	668
	Box Culverts	No.	65
	Open Channel Drain	km	2
	Causeways	No.	144
	Gross Pollutant Traps	No.	1
	Siltation Dams	No,	2
	Bridges	No.	6
Plant	Cars	No.	
	Light Utilities	No.	
	Small Trucks	No.	
	12 Tonne Tippers 7 Trailers	No.	
	Graders	No.	3
	Tractors	No.	3
	Water Carts	No.	4
	Miscellaneous Equipment e.g. chainsaws	Various	

Key stakeholders in the preparation and implementation of the IAMP are:

- Federal and State Governments and Agencies Funding assistance and standards development.
- Elected members Community representation and administration.
- Community End-user involvement.
- Visitors End-user involvement.
- Utilities / Developers Providers of services and infrastructure facilities.
- Employees / Volunteers Operational and administration providers.
- Contractors / Suppliers Suppliers of goods and services.
- Insurers Remedy providers.

2.2 Goals and objectives of Asset Management.

Council exists to provide services to its community. Many of these services are provided by infrastructure assets. Council has acquired infrastructure assets by 'purchase', by contract, construction by Council staff and by donation of assets constructed by developers and others.

Council's goal in managing infrastructure assets is to meet the required levels of service in the most cost effective manner for present and future consumers. The key elements of infrastructure asset management are:

- taking a lifecycle approach;

- developing cost-effective management strategies for the long term;
- providing defined levels of service and monitoring performance;
- understanding and meeting the demands of growth through demand management and infrastructure investment;
- managing risks associated with asset failures;
- sustainably using physical resources; and
- continuously improving asset management practices.

The Integrated Asset Management Plan has been prepared under the direction of Council's vision, mission, goals and objectives.

Council's vision is:

To sustain and grow the Temora Shire as a rural community of choice for current and future residents, being united in our heritage yet open to growth and diversity

To celebrate our past achievements in sport, culture and enterprise whilst maintaining our commitment to the future in providing a safe, happy and healthy environment for all

Success through determination and inspiration

Council's mission is:

To achieve the best possible outcomes for our community

2.2.1 Relevant Strategic Plan Goals, Strategies and Planning Principles

The goals, outcomes and strategies from Council's Community Strategic Plan (ref. 18) relevant to all asset categories are shown in Table 2.2.

Goal	Outcome	Strategy
Progressive leadership, good governance, efficient and effective service	Effective strategic management planning and performance management	Develop, implement and maintain Council's Risk Management Plan, policies and procedures
	Skilled, committed and professional staff in a safe and supportive environment	Ensure safe work practices through compliance with Occupational, Health and Safety and Risk Management policies and procedures
	Financial sustainability and accountable performance management	Provide financial services to support Council's operations and to meet sustainable planning, reporting and accountability requirements
	Leading edge information and communications service that support efficient operations and service delivery	Provide an efficient, accurate, secure and user friendly record keeping system

2.3 Plan Framework

Key elements of the plan are

- **Levels of service** – specifies the services and levels of service to be provided by Council.
- **Future demand** – how this will impact on future service delivery and how this is to be met.
- **Life cycle management** – how Council will manage its existing and future assets to provide the required services
- **Financial summary** – what funds are required to provide the required services.
- **Asset management practices**
- **Monitoring** – how the plan will be monitored to ensure it is meeting Council's objectives.
- **Asset management improvement plan** – program of activities to enhance the asset management process.

2.4 Core and Advanced Asset Management

This Integrated Management Plan is prepared as a 'core' document in accordance with the International Infrastructure Management Manual (ref. 14). It meets minimum legislative and organisational requirements for sustainable service delivery and long term financial planning and reporting. Core asset management is a 'top down' approach where analysis is applied at the 'system' or 'network' level.

In some instances, available data on asset attributes and service levels, documented risks, valuations, detailed works programs and the like, are incomplete. A vital ingredient of the Asset Management Plan is the Improvement Plan (Section 8). Incorporation of the task outcomes into revisions of the Asset Plan will lead to refinements and improved accuracy in the data and the Plan with which asset custodians can be confident in their primary role as managers of the assets.

Future revisions of this asset management plan will move towards 'advanced' asset management using a 'bottom up' approach for gathering asset information for individual assets to support the optimisation of activities and programs to meet agreed service levels

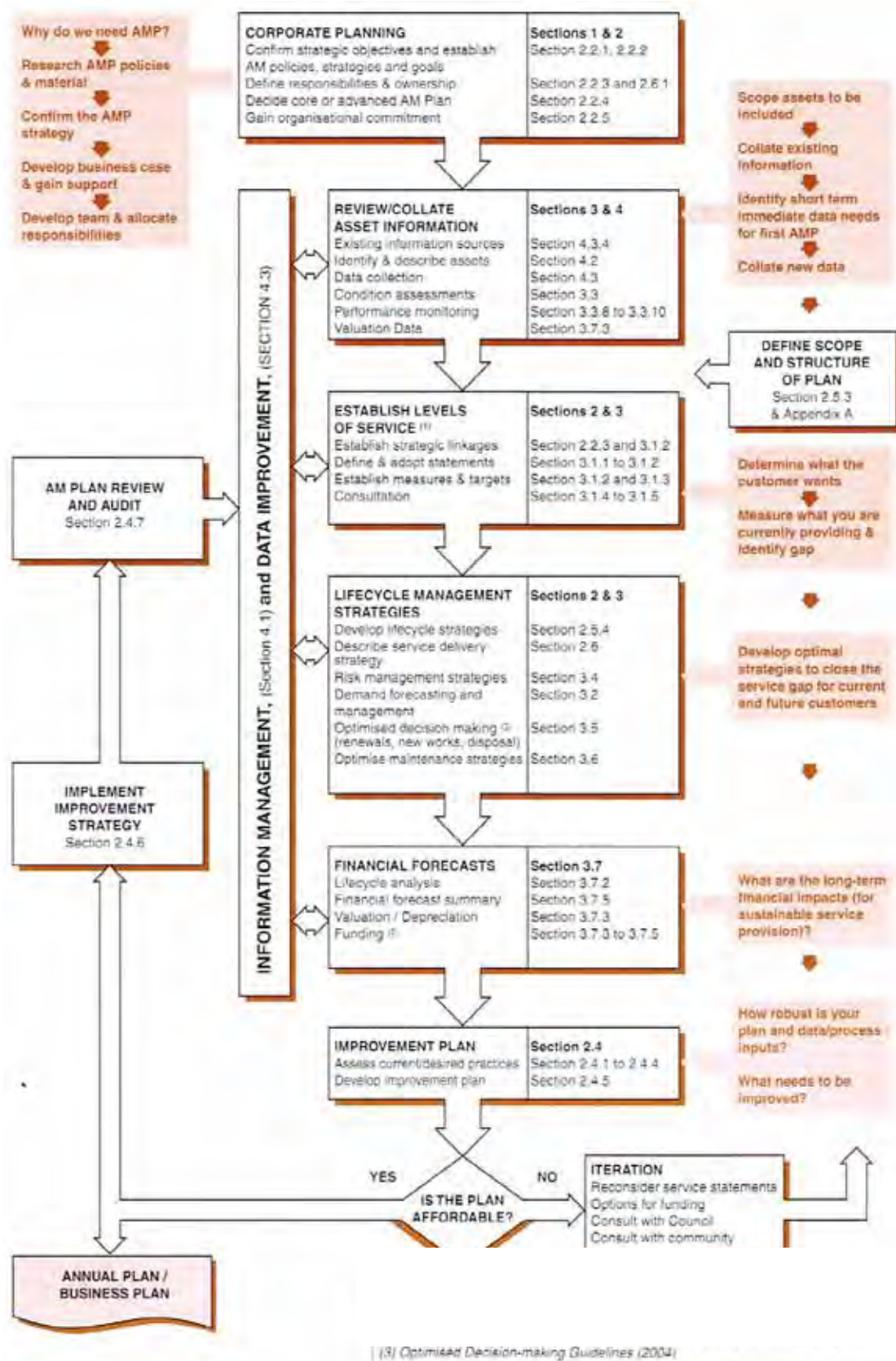


Fig 2.1 Road Map for Preparing an Asset Management Plan
Source: IIMM Fig 1.5.1, p1.111

3. LEVELS OF SERVICE

3.1 Customer Research and Expectations

Council participates in a Performance Measure Customer Satisfaction survey every four years in August prior to the Council election. This survey is distributed to all residents, requesting their level of satisfaction with Council's services. The most recent customer satisfaction survey was held in 2008 and the results as they relate to the asset Management Plans are reported in each section.

3.2 Legislative Requirements

Council has to meet many legislative requirements including Australian and State legislation and State regulations. These include:

Table 3.1. Legislative Requirements

Legislation	Requirement
National Asset Management Framework Legislation 2010	Focuses on long term financial sustainability and provides a mandate to have long term strategy, financial statements and annual reporting mechanisms. AM plans are likely to be audited.
DLG Integrated Planning NSW	Key requirement is to integrated community plans with operational and delivery plans.
Local Government Act 1993	Sets out role, purpose, responsibilities and powers of local governments including the preparation of a long term financial plan supported by asset management plans for sustainable service delivery.
Roads Transport (Safety and Traffic Management) Act 1993	Facilitates the adoption of nationally consistent road rules in NSW, the Australian Road Rules. It also makes provision for safety and traffic management on roads and road related areas including alcohol and other drug use, speeding and other dangerous driving, traffic control devices and vehicle safety accidents
Occupational Health and Safety Act 2000	Aims to secure the health, safety and welfare of people at work. It lays down general requirements which must be met at places of work in New South Wales. The provisions of the Act cover every place of work in New South Wales. The Act covers self employed people as well as employees, employers, students, contractors and other visitors.
Occupational Health and Safety Regulation 2001	Regulations on the control and management of risk in the work place.
The Protection of the Environment Operations Act 1997 (POEO Act)	Is the key piece of environment protection legislation administered by Department of the Environment and Climate Change (DECC). The POEO Act enables the Government to set out explicit protection of the environment policies (PEPs) and adopt more innovative approaches to reducing pollution.
Disability Discrimination Act	Sets out the responsibilities of Council and staff in dealing with access and use of public infrastructure.

Table 3.3. Legislative Requirements

Standards and Specifications	Requirements
Australian Accounting Standards.	<p>Sets out the financial reporting standards relating to infrastructure assets. Standards of particular relevance to Infrastructure Assets include:</p> <ul style="list-style-type: none"> • AASB116 Property, Plant & Equipment — prescribes requirements for recognition and depreciation of property, plant and equipment assets • AASB136 Impairment of Assets — aims to ensure that assets are carried at amounts that are not in excess of their recoverable amounts • AASB1021 Depreciation of Non-Current Assets — specifies how depreciation is to be calculated • AAS1001 Accounting Policies — specifies the policies that Council is to have for recognition of assets and depreciation • AASB1041 Accounting for the reduction of Non-Current Assets — specifies the frequency and basis of calculating depreciation and revaluation basis used for assets • AAS1015 Accounting for acquisition of assets — method of allocating the value to new assets on acquisition
Temora Shire Road Hierarchy Policy	Sets out the criteria for maintenance , capital renewal and capital upgrade for the road network
Temora Shire Footpath Hierarchy Policy	Sets out the priority for maintaining and upgrading of footpaths
Austroads Guides, Commentaries and Reports	Austroads works with local government to improve Australia's roads and transport systems, recognising the value and importance of developing the local road component of the national road network.
Australian Standards	<p>Including:</p> <ul style="list-style-type: none"> • Australian Standard 1742.3-1996 — Manual of uniform traffic control devices - Traffic control devices for works on roads • Guide to Traffic Engineering Practice (part 14 Bicycles) • Manual of Uniform Traffic Control Devices — Part 3 - Traffic Control Devices for Works on Roads • Integrated Asset Management Guidelines for Road Networks APR202: 2002 Austroads • AS/NZS 4360:2004 Risk Management • HB 4360:2004 Risk Management Guidelines — Companion to AS/NZS 4360:2004

3.3 Current Levels of Service

Council has defined a two tier level of service.

- Community Levels of Service relates to how the community receives the service in terms of safety, quality, quantity, reliability, responsiveness, cost/efficiency and legislative compliance.
- Technical measures of performance - supporting the community service levels and are developed to ensure that the minimum community levels of service are met.

3.4 Desired Levels of Service

At present, indications of desired levels of service obtained from various sources including the Customer Satisfaction survey, residents' feedback to Councillors and staff, service requests and correspondence. Council has quantified desired levels of service when formulating its Policies.

4. FUTURE DEMAND

4.1 Demand Forecast

Factors affecting demand include population change, changes in demographics, seasonal factors, vehicle ownership, consumer preferences and expectations, economic factors, agricultural practices, environmental awareness, etc.

Demand factor trends and impacts on service delivery are have been adopted as shown in Table 4.1.

Table 4.1. Demand Factors, Projections and Impact on Services

Demand factor	Present position	Projection	Impact on services
Population	<p>5,914 (2006 census). The population increased by 1.05% between the 2001 and 2006 censuses.</p> <p>57.1% of the population live in the urban area, 36.8% in the rural area and 6.1% in the surrounding villages</p>	<p>Temora's population is expected to grow over the next 10 years</p> <p>Future growth is likely to occur as a result of Council initiatives such as the airpark estate, Continued attraction to rural lifestyle</p>	<p>Some impact as road congestion increases</p> <p>Parking issues in the CBD</p>
Demographics	<p>Increase in ageing population 65+ represents 16.8% of the population and has increased by 3.3% since 1981.</p> <p>Whereas the overall population is static to a 0.27% increase</p>	<p>Temora TAFE and Charles Sturt University at Wagga will play a vital role in retaining and/or attracting young people to Temora.</p> <p>The number of aged over 65 will continue to increase. This is consistent with the national trend towards an ageing population and longer life expectancy</p>	<p>Increase in demand for safe multi-use footpaths linking CBD and other infrastructure</p> <p>Increased demand for accessibility for mobility impaired.</p>

4.2 Changes in Technology

Technology changes are forecast to affect the delivery of services covered by this plan. Technological changes, more particularly those related to climate change, energy consumption patterns and water usage, are forecast to have some effect on service delivery.

Specific changes are outlined in the asset category relevant Part.

4.3 Demand Management Plan

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

Specific changes are outlined in the asset category relevant Part.

4.4 New Assets from Growth

Refer to asset category and relevant Section.

5. LIFECYCLE MANAGEMENT PLAN

The lifecycle management plan details how Council plans to manage and operate the assets at the agreed levels of service while optimising life cycle costs.

5.1 Background Data

All infrastructure assets, which are the responsibility of Council, are being managed with a long-term view and a whole-of-life approach. That is to say, the assets are managed from installation, through various maintenance phases until renewal, disposal or upgrade is required.

This section reviews the processes required for the effective management, maintenance, renewal and upgrade of assets.

The lifecycle management plans outline for each asset class:

- The objectives for the asset class.
- Supporting data, including:
 - key lifecycle management issues;
 - physical parameters and values;
 - asset capacity / performance;
 - asset condition; and
 - historical expenditure.
- The management strategies to achieve the levels of service in the following work categories:
 - operations and maintenance;
 - renewals; and
 - new works.

Council as asset owner is committed to maintaining its assets to ensure stakeholders' desired levels of service are maintained at sustainable levels commensurate with affordable expectations. To meet this requirement, Council seeks to match funding levels, condition and community expectations.

Some of the key lifecycle issues are:

- There is a notable forward investment required for the upgrading of existing facilities, in line with Draft Master Plan (ref. 10).
- There has not been a significant shortfall in expenditure in the previous decade. Provisions have been made to deal with demand for cyclical maintenance within the next 10 to 20 years.
- Development in formerly semi-urban areas is leading to increasing usage and demand which will prove to be beyond the pavement strengths and carriageway widths of existing roads and potentially overload stormwater and wastewater management systems.
- The research work on predictive modelling of deterioration needs to be continued, to enable understanding of asset component lives and justify planned increases in rehabilitation / expansion expenditure.

5.1.1 Physical Parameters

Refer to asset category and relevant Section.

5.1.2 Asset Capacity and Performance

Council's services are generally provided to meet design standards where these are available. Service deficiencies were identified from the results of condition rating surveys undertaken and through staff inspections.

Refer asset type in relevant Section

Condition Rating Methods

The condition rating methods adopted varies across the asset types. For roads and road-related assets, attributes and rating scales developed by the Roads and Traffic Authority, NSW and modified in-house, are used. Buildings and (some) 'Structures' valuations were rated by an external party in conformance with AAS27 (ref. 2).

Bridges and major culverts were rated in house by using scales developed by the Roads and Traffic Authority. Other asset types are yet to have rating methodologies developed. It is proposed to document all procedures in later versions of Part 1 of the Integrated Asset Management Plan. The systematic approach is in line with procedures outlined in IIMM (ref. 14).

Council's preferred practice is to re-rate assets every 3-5 years to ensure that those assets nearing the end of their life are not allowed to deteriorate beyond the intervention point at which relatively low-cost rehabilitation can be undertaken.

With each subsequent survey, a better picture of asset conditions will be developed.

5.1.3 Asset condition

Profiles of network condition, remaining useful life and asset age are illustrated for the asset category in the relevant Section.

5.1.4 Asset valuations

The financial reporting ratios as at 30th June 2010 covered by this asset management plan are summarised below in Table 5.1.

Table 5.1 Current Asset Values

Asset category	Financial Reporting Ratios		
	Asset Consumption Rate ⁽¹⁾ %	Asset Renewal Rate %	Asset Upgrade / Expansion Rate %
Roads	2.9	1.4	1.5
Sewerage Treatment and Effluent Reuse	3.9	TBD	34.1 ⁽³⁾
Aerodrome	0.6	0.3	1.5
Buildings	TBD	0.1	TBD
Recreational Space	0.4	0.1	1.0
Bridges and Stormwater	1.7	1.8	0
Plant	0.2	0.12	0

Note 1 As depreciation is linked to asset useful life, an approximate indicator of consumption rate can be determined by examining the asset consumption rate. If, for example, this rate is 2% then the assets are assumed to have a useful life of 50 years.

Note 2 Ratios are irrelevant for this asset category at present. Refer discussion in the Asset Management Plan Part 6, Section 1.3

Note 3 Asset Upgrade for Effluent reuse only, sewer system to be determined.

Refer to detailed financial reporting in each relevant asset category.

5.2 Risk Management Plan

The risk assessment process identifies credible risks, the likelihood of the risk event occurring, the consequences should the event occur. Future plans will use these factors to develop risk ratings, and develop a risk management plan for non-acceptable risks.

Critical risks are those assessed as:

- O Very High (VH)- requiring immediate corrective action, and;
- O High (H) – requiring prioritised corrective action.

Refer to critical risks in each relevant Part.

5.3 Routine Maintenance Plan

Maintenance includes reactive, planned and cyclic maintenance work activities.

Historic maintenance expenditure patterns across each asset category are shown in the relevant Section.

Note that amounts shown have been extracted from Council's Annual Budget for each year and are stated in that year's dollars then index by 3%. Thus, the maintenance expenditures show a progressive increase although probably not in line with construction inflation

Refer to maintenance expenditure patterns in each relevant Section

Deferred maintenance, i.e. works that are identified for maintenance and unable to be funded, are to be included in the risk assessment process in the infrastructure risk management plan.

Maintenance is funded from Council's operating budget and grants where available. This is further discussed in Section 6 of each Section.

5.3.1 Standards and Specifications

Maintenance work is carried out in accordance with the Standards and Specifications, outlined in each relevant Section and in Council's Long Term Financial Plan.

5.4 Renewal/Replacement Plan

Assets requiring renewal are identified from estimates of remaining life obtained from the asset register. Proposals are inspected to verify the accuracy of the remaining life estimate and to develop a preliminary renewal estimate. Verified proposals are ranked by priority and available funds and scheduled in future works programs.

Renewal will be undertaken using 'low-cost' renewal methods where practicable. The aim of these treatments is to restore the service potential or future economic benefits of the asset by renewing the assets at a cost less than replacement cost.

Renewals will be funded from Council's Capital Works Program and grants where available. This is discussed in Section 6 of this plan.

5.4.1 Renewal plan

Council's maintenance and renewal works are carried out to the relevant standards and are set out in Section 5 of each Asset Management Plan

Deferred renewal, i.e. those assets identified for renewal and not scheduled for renewal in capital works programs are to be included in the risk assessment process in the risk management plan.

Renewals are to be funded from Council's capital works program and grants where available. This is further discussed in Section 6.2.

5.5 Creation/Acquisition/Upgrade Plan

New works are those works that create a new asset that did not previously exist, or works which upgrade or improve an existing asset beyond its existing capacity. They may result from growth, social or environmental needs. Assets may also be acquired at no cost to the Council from land development.

These assets from growth are considered in Section 4.4.

5.5.1 Standards and specifications

Standards and specifications for new assets and for upgrade/expansion of existing assets are the same as those for maintenance and renewal see Section 5 of each Asset Management Plan

5.6 Disposal Plan

There are no plans to dispose of any Council assets.

6. FINANCIAL SUMMARY

This section contains the financial requirements results from all the information presented in the Sections of this asset management plans.

The financial projections will be improved as further information becomes available on desired levels of service, current and projected future asset performance and grant funding.

6.1 Financial Statements and Projections

There are two key indicators for financial sustainability that have been considered in the analysis of the services provided by this asset category:

- Long-term lifecycle costs, to 2030.
- Medium-term costs over the 10 year period of Council's financial Plan.

The ratio of lifecycle costs to lifecycle expenditure gives an indicator of sustainability of service provision. Lifecycle expenditure includes maintenance plus renewal expenditure. Lifecycle expenditure will vary depending on the timing of asset renewals.

The disparity between lifecycle costs and lifecycle expenditure gives an indication as to whether Council is over-servicing or under-servicing the community. Where lifecycle costs exceed expenditure, i.e. where there is a negative disparity or 'shortfall' (the most common scenario), then asset consumption is outpacing asset renewal. In the reverse case (expenditure greater than costs and a positive disparity or 'surplus' exists), consumers are receiving a higher level of service. The absence of a disparity (costs equal expenditure) indicates that the community is paying their share of the assets they consume each year.

Table 6.1 indicates the overall position on funding across the medium-term and long-term timelines. It can be seen that at the end of years 10 and 20 there are a \$1.1 million 'surplus' at 2018 and a \$4.8 million 'shortfall' at 2030. Ideally, at the end of the LTFP in 2021, there should be a zero balance and more work will be done on refining estimates of expenditure to achieve this goal. It must be stressed that these projections are based on the current understanding of asset management needs over the next 20 years. Note that negative disparity values are shortfalls.

Table 6.1 Disparity between Projected Costs and Planned Expenditure

Activity	Asset Category						
	Roads & Footpaths	Sewerage Treatment and Effluent	Aerodrome	Parks & Sporting Fields	Operational Land & Buildings	Bridges and stormwater Management	Plant
	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)
2011	167	-95	2	0	TBD	0	109
2012	272	-75	260	0		0	78
2013	-169	-71	-20	0		0	123
2014	200	-103	-858	0		0	44
2015	129	-48	-839	0		0	135
2016	115	-51	-227	0		0	291
2017	118	-27	-288	0		0	-98
2018	-15	-48	-375	0		0	-218

Activity	Asset Category						
	Roads & Footpaths	Sewerage Treatment and Effluent	Aerodrome	Parks & Sporting Fields	Operational Land & Buildings	Bridges and stormwater Management	Plant
2019	261	-104	-375	0		0	-234
2020	88	-46	-346	0		0	-76
2021	-12		-354	0		0	91
2022	-54		-160	0		0	TBD
2023	-78		-192	0		0	
2024	-224		-33	0		0	
2025	-232		10	0		0	
2026	-232		-189	0		0	
2027	-270		7	0		0	
2028	-340		6	0		0	
2029	-604		4	0		0	
2030	-199		3	0		0	

Prima facie, there are some disturbingly large disparities indicated. Some of these can be explained as follows:

- The roads and footpaths data are severely skewed by an abnormally high demand in the renewal of unsealed (sheeted) roads, for which further work is required on condition rating and intervention methodologies.
- Also Council expenditure on Roads is in excess of the depreciation, but has to account for the depreciation even though the roads infrastructure is improving. Depreciation on roads is a straight line depreciation to a zero value whereas a seal for example will still have a residual value even if the anticipated renewal life is passed.
- A large number of buildings in the asset register fall due for (theoretical) replacement from 2029, and some have already passed their life expectancy date, many of these are buildings on Council land under the care and control of community bodies. Hence their day-to-day maintenance and renewal are not automatically the concern of Council. despite maintenance and renewal expenditure allowances being incorporated into the Plan.
- The ongoing zero disparity in recreational open space assets occur as a result of the majority of allocated maintenance funds being spent are matched by Council

The purpose of this Integrated Asset Management Plan is to identify levels of service that the community needs and can afford and to develop the necessary financial plans to provide the service in a sustainable manner. The Asset Management Plan identifies estimated maintenance and capital expenditures required to provide an agreed level of service to the community in a sustainable manner over a 20 year period. These are then inputted into the 10-year. This may be compared to existing 10-year management plans that Council developed in 2008, but is more detailed.

The projected asset renewals are compared to the planned renewal expenditure in the capital works program and renewal expenditure in year 1 of the planning period.

6.2 Funding Strategy

Refer to individual Sections

6.3 Valuation Forecasts

Refer to individual Sections

Fig 6.5 **Projected Depreciation Expense**
Fig 6.6 **Projected Depreciated Replacement Cost**

6.4 Key Assumptions made in Financial Forecasts

Key assumptions made in presenting the information contained in the Asset Management Plan and in preparing forecasts of required operating and capital expenditure and asset values, depreciation expenses and carrying amount estimates, are detailed below. They are presented to enable readers to gain an understanding of the levels of confidence in the data behind the financial forecasts.

Key assumptions:

- Average useful lives and average remaining lives of the asset classes are based on current local knowledge and experience, historical trends and accepted industry practice. These need to be reviewed and the accuracy improved, based on regular re-assessment of asset deterioration.
- Reviews of the effective useful lives of assets and population / demographic changes have the potential for greatest variance in future cost predictions.
- Changes in development needs associated with the rate and location of growth and changes in the desired level of service and service standards from those identified in the Asset Management Plan, will both impact on future funding.

Accuracy of future financial forecasts may be improved in future revisions of the Plan by the following actions:

- Implementation of a Job Costing system to incorporate continuously current unit rate data.
- More refined condition rating data with more history for reference.
- Greater degree of componentisation in the rating process.
- Development of better degradation models through national research and development programs.
- Development of better financial models through collaborative processes.
- Implementation of an asset information system.

Specific annual maintenance and renewal cost trends are detailed for each asset category in the relevant Sections.

7. ASSET MANAGEMENT PRACTICES

7.1 Accounting/Financial Systems

Accounting Standards applicable to the Asset Plan include:

- AAS27 (ref. 2);
- AASB116 (ref. 4); and
- AASB1031 (ref. 3).

The present Maintenance / Capital threshold (materiality limit) is \$5,000. This policy is under review to better reflect materiality limits for differing asset categories and classes.

Recommended changes resulting from this Asset Management Plan are as follows:

- 1 Implementation of a Job Costing system to enable determination of actual costs of work based upon field measurements of quantities and times.
2. Upgrades to condition rating systems for asset types and components to improve the monitoring and reporting capabilities.
3. Inform Council of long-term financial plans through regular reviews.
4. Implementation of new asset information software and systems.

7.2 Asset Management Systems

Council's adopted Asset Management System is "AIM" (Asset and Infrastructure Management) a component of CIVICA's "Authority System, however MS Excel spreadsheets for valuation and condition rating were used extensively in this plan

7.3 Information Flow Requirements and Processes

The key information flows *into* this asset management plan are:

- The asset register data on size, age, value, remaining life of the network;
- The unit rates for categories of work/material;
- The adopted service levels;
- Projections of various factors affecting future demand for services;
- Correlations between maintenance and renewal, including decay models;
- Data on new assets acquired by council.

The key information flowing from the Asset Management Plan are:

- Tentative works program and trends,
- Resulting budget, valuation and depreciation projections and
- Useful life analysis

7.4 Standards and Guidelines

Refer to individual sections

8. PLAN IMPROVEMENT AND MONITORING

8.1 Performance Measures

The effectiveness of the asset management plan can be measured in the following ways:

- The degree to which the required cashflows identified in this asset management plan are incorporated into council's long term financial plan and Strategic Management Plan;
- The degree to which 1-5 year detailed works programs, budgets, business plans and organisational structures take into account the 'global' works program trends provided by the asset management plan;

8.2 Improvement Plan

The asset management improvement plan generated from this asset management plan is shown in Table 8.21

Table 8.1 Improvement Plan

Task No	Task	Responsibility	Resources Required	Timeline
1.	Valuation Unit Costs – review unit rates, derivations on a greenfield basis	DE	Staff	May 2011
2.	Asset Information System – implement software package, providing asset deterioration and other tools	DAF	Staff	Jul 2011
3.	Risk Management – Refine, expand and document the risk management plan	DE	Staff	Jul 2011
4.	Job costing system – develop system, incorporating current unit rates	DAF/DE	Staff	Dec 2011
5.	Document mythology and procedures for asset useful lives, unit rates, condition rating and scoring and depreciation calculations.	DE	Staff	June 2010
6.	Population predictions – review projects based on latest available Census	DE	Staff	May 2011
7.	Community Consultation – undertake targeted engagement with the community to resolve acceptable and achievable levels of service	GM	Staff	Aug 2012
8.	Condition Rating – refine data collected and analysis processes, including greater levels of componentisation and achievable levels of service	DE	Staff	Dec 2011
9.	Consider limiting the AMP time framework to 10 years, to coincide with the Long term financial plan	DAF/DE	Staff	May 2011

8.3 Monitoring and Review Procedures

This asset management plan will be reviewed during annual budget preparation and amended to recognise any changes in service levels and/or resources available to provide those services as a result of the budget decision process.

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

9 REFERENCES

1. Council 2010/11 Annual Management Plan and Budget.
2. AS27, Financial Reporting by Local Government Australian Accounting Standards, June 1996
3. AASB1031, Materiality, Australian Accounting Standard Board July 2004
4. AASB116 Property, Plant and Equipment, Australian Accounting Standards Board July 2007
5. Temora Shire Council Asset Valuation 2010
6. Temora Shire Road Hierarchy Policy 2007
7. Temora Shire Footpath Hierarchy 2004
8. International Infrastructure Management Manual, Institute of Public Works Engineering Australia, Sydney 2006 www.ipwea.org.au
9. Statistical snapshot Temora Shire ABS 2006 Census data

APPENDICES

Appendix A Abbreviations

Appendix B Glossary

Appendix C 10 Year Maintenance and Capital Works Program

Appendix D Maintenance response Levels of Service

Appendix E Expenditure and Income Comparison

Appendix A ABBREVIATIONS

AAAC	Average annual asset consumption
AMP	Asset management plan
ARI	Average recurrence interval
BOD	Biochemical (biological) oxygen demand
CRC	Current replacement cost
CWMS	Community wastewater management systems
DA	Depreciable amount
DoH	Department of Health
EF	Earthworks/formation
IRMP	Infrastructure risk management plan
LCC	Life Cycle cost
LCE	Life cycle expenditure
MMS	Maintenance management system
PCI	Pavement condition index
RV	Residual value
SS	Suspended solids
vph	Vehicles per hour
GM	General Manager
DAF	Director of Administration and Finance
DE	Director of Engineering

Appendix B GLOSSARY

Annual service cost (ASC)

An estimate of the cost that would be tendered, per annum, if tenders were called for the supply of a service to a performance specification for a fixed term. The Annual Service Cost includes operating, maintenance, depreciation, finance/ opportunity and disposal costs, less revenue.

Asset class

Grouping of assets of a similar nature and use in an entity's operations (AASB 166.37).

Asset condition assessment

The process of continuous or periodic inspection, assessment, measurement and interpretation of the resultant data to indicate the condition of a specific asset so as to determine the need for some preventative or remedial action.

Asset management

The combination of management, financial, economic, engineering and other practices applied to physical assets with the objective of providing the required level of service in the most cost effective manner.

Assets

Future economic benefits controlled by the entity as a result of past transactions or other past events (AAS27.12).

Property, plant and equipment including infrastructure and other assets (such as furniture and fittings) with benefits expected to last more than 12 month.

Average annual asset consumption (AAAC)*

The amount of a local government's asset base consumed during a year. This may be calculated by dividing the Depreciable Amount (DA) by the Useful Life and totalled for each and every asset OR by dividing the Fair Value (Depreciated Replacement Cost) by the Remaining Life and totalled for each and every asset in an asset category or class.

Brownfield asset values**

Asset (re)valuation values based on the cost to replace the asset including demolition and restoration costs.

Capital expansion expenditure

Expenditure that extends an existing asset, at the same standard as is currently enjoyed by residents, to a new group of users. It is discretionary expenditure, which increases future operating, and maintenance costs, because it increases council's asset base, but may be associated with additional revenue from the new user group, eg. extending a drainage or road network, the provision of an oval or park in a new suburb for new residents.

Capital expenditure

Relatively large (material) expenditure, which has benefits, expected to last for more than 12 months. Capital expenditure includes renewal, expansion and upgrade. Where capital projects involve a combination of renewal, expansion and/or upgrade expenditures, the total project cost needs to be allocated accordingly.

Capital funding

Funding to pay for capital expenditure.

Capital grants

Monies received generally tied to the specific projects for which they are granted, which are often upgrade and/or expansion or new investment proposals.

Capital investment expenditure

See capital expenditure definition

Capital new expenditure

Expenditure which creates a new asset providing a new service to the community that did not exist beforehand. As it increases service potential it may impact revenue and will increase future operating and maintenance expenditure.

Capital renewal expenditure

Expenditure on an existing asset, which returns the service potential or the life of the asset up to that which it had originally. It is periodically required expenditure, relatively large (material) in value compared with the value of the components or sub-components of the asset being renewed. As it reinstates existing service potential, it has no impact on revenue, but may reduce future operating and maintenance expenditure if completed at the optimum time, eg. resurfacing or resheeting a material part of a road network, replacing a material section of a drainage network with pipes of the same capacity, resurfacing an oval. Where capital projects involve a combination of renewal, expansion and/or upgrade expenditures, the total project cost needs to be allocated accordingly.

Capital upgrade expenditure

Expenditure, which enhances an existing asset to provide a higher level of service or expenditure that will increase the life of the asset beyond that which it had originally. Upgrade expenditure is discretionary and often does not result in additional revenue unless direct user charges apply. It will increase operating and maintenance expenditure in the future because of the increase in the council's asset base, eg. widening the sealed area of an existing road, replacing drainage pipes with pipes of a greater capacity, enlarging a grandstand at a sporting facility. Where capital projects involve a combination of renewal, expansion and/or upgrade expenditures, the total project cost needs to be allocated accordingly.

Carrying amount

The amount at which an asset is recognised after deducting any accumulated depreciation / amortisation and accumulated impairment losses thereon.

Class of assets

See asset class definition

Component

An individual part of an asset which contributes to the composition of the whole and can be separated from or attached to an asset or a system.

Cost of an asset

The amount of cash or cash equivalents paid or the fair value of the consideration given to acquire an asset at the time of its acquisition or construction, plus any costs necessary to place the asset into service. This includes one-off design and project management costs.

Current replacement cost (CRC)

The cost the entity would incur to acquire the asset on the reporting date. The cost is measured by reference to the lowest cost at which the gross future economic benefits could be obtained in the normal course of business or the minimum it would cost, to replace the existing asset with a technologically modern equivalent new asset (not a second hand one) with the same economic benefits (gross service potential) allowing for any differences in the quantity and quality of output and in operating costs.

Current replacement cost "As New" (CRC)

The current cost of replacing the original service potential of an existing asset, with a similar modern equivalent asset, i.e. the total cost of replacing an existing asset with an as NEW or similar asset expressed in current dollar values.

Cyclic Maintenance**

Replacement of higher value components/sub-components of assets that is undertaken on a regular cycle including repainting, building roof replacement, cycle, replacement of air conditioning equipment, etc. This work generally falls below the capital/maintenance threshold and needs to be identified in a specific maintenance budget allocation.

Depreciable amount

The cost of an asset, or other amount substituted for its cost, less its residual value (AASB 116.6)

Depreciated replacement cost (DRC)

The current replacement cost (CRC) of an asset less, where applicable, accumulated depreciation calculated on the basis of such cost to reflect the already consumed or expired future economic benefits of the asset

Depreciation / amortisation

The systematic allocation of the depreciable amount (service potential) of an asset over its useful life.

Economic life

See useful life definition.

Expenditure

The spending of money on goods and services. Expenditure includes recurrent and capital.

Fair value

The amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties, in an arms length transaction.

Greenfield asset values **

Asset (re)valuation values based on the cost to initially acquire the asset.

Heritage asset

An asset with historic, artistic, scientific, technological, geographical or environmental qualities that is held and maintained principally for its contribution to knowledge and culture and this purpose is central to the objectives of the entity holding it.

Impairment Loss

The amount by which the carrying amount of an asset exceeds its recoverable amount.

Infrastructure assets

Physical assets of the entity or of another entity that contribute to meeting the public's need for access to major economic and social facilities and services, eg. roads, drainage, footpaths and cycleways. These are typically large, interconnected networks or portfolios of composite assets. The components of these assets may be separately maintained, renewed or replaced individually so that the required level and standard of service from the network of assets is continuously sustained. Generally the components and hence the assets have long lives. They are fixed in place and are often have no market value.

Investment property

Property held to earn rentals or for capital appreciation or both, rather than for:

- (a) use in the production or supply of goods or services or for administrative purposes; or
- (b) sale in the ordinary course of business (AASB 140.5)

Level of service

The defined service quality for a particular service against which service performance may be measured. Service levels usually relate to quality, quantity, reliability, responsiveness, environmental, acceptability and cost).

Life Cycle Cost **

The life cycle cost (LCC) is average cost to provide the service over the longest asset life cycle. It comprises annual maintenance and asset consumption expense, represented by depreciation expense. The Life Cycle Cost does not indicate the funds required to provide the service in a particular year.

Life Cycle Expenditure **

The Life Cycle Expenditure (LCE) is the actual or planned annual maintenance and capital renewal expenditure incurred in providing the service in a particular year. Life Cycle Expenditure may be compared to Life Cycle Expenditure to give an initial indicator of life cycle sustainability.

Loans / borrowings

Loans result in funds being received which are then repaid over a period of time with interest (an additional cost). Their primary benefit is in 'spreading the burden' of capital expenditure over time. Although loans enable works to be completed sooner, they are only ultimately cost effective where the capital works funded (generally renewals) result in operating and maintenance cost savings, which are greater than the cost of the loan (interest and charges).

Maintenance and renewal gap

Difference between estimated budgets and projected expenditures for maintenance and renewal of assets, totalled over a defined time (eg 5, 10 and 15 years).

Maintenance and renewal sustainability index

Ratio of estimated budget to projected expenditure for maintenance and renewal of assets over a defined time (eg 5, 10 and 15 years).

Maintenance expenditure

Recurrent expenditure, which is periodically or regularly required as part of the anticipated schedule of works required to ensure that the asset achieves its useful life and provides the required level of service. It is expenditure, which was anticipated in determining the asset's useful life.

Materiality

An item is material if its omission or misstatement could influence the economic decisions of users taken on the basis of the financial report. Materiality depends on the size and nature of the omission or misstatement judged in the surrounding circumstances.

Modern equivalent asset.

A structure similar to an existing structure and having the equivalent productive capacity, which could be built using modern materials, techniques and design. Replacement cost is the basis used to estimate the cost of constructing a modern equivalent asset.

Non-revenue generating investments

Investments for the provision of goods and services to sustain or improve services to the community that are not expected to generate any savings or revenue to the Council, eg. parks and playgrounds, footpaths, roads and bridges, libraries, etc.

Operating expenditure

Recurrent expenditure, which is continuously required excluding maintenance and depreciation, eg power, fuel, staff, plant equipment, on-costs and overheads.

Pavement management system

A systematic process for measuring and predicting the condition of road pavements and wearing surfaces over time and recommending corrective actions.

Planned Maintenance**

Repair work that is identified and managed through a maintenance management system (MMS). MMS activities include inspection, assessing the condition against failure/breakdown criteria/experience, prioritising scheduling, actioning the work and reporting what was done to develop a maintenance history and improve maintenance and service delivery performance.

PMS Score

A measure of condition of a road segment determined from a Pavement Management System.

Rate of annual asset consumption*

A measure of average annual consumption of assets (AAAC) expressed as a percentage of the depreciable amount (AAAC/DA). Depreciation may be used for AAAC.

Rate of annual asset renewal*

A measure of the rate at which assets are being renewed per annum expressed as a percentage of depreciable amount (capital renewal expenditure/DA).

Rate of annual asset upgrade*

A measure of the rate at which assets are being upgraded and expanded per annum expressed as a percentage of depreciable amount (capital upgrade/expansion expenditure/DA).

Reactive maintenance

Unplanned repair work that carried out in response to service requests and management/supervisory directions.

Recoverable amount

The higher of an asset's fair value, less costs to sell and its value in use.

Recurrent expenditure

Relatively small (immaterial) expenditure or that which has benefits expected to last less than 12 months. Recurrent expenditure includes operating and maintenance expenditure.

Recurrent funding

Funding to pay for recurrent expenditure.

Rehabilitation

See capital renewal expenditure definition above.

Remaining life

The time remaining until an asset ceases to provide the required service level or economic usefulness. Age plus remaining life is economic life.

Renewal

See capital renewal expenditure definition above.

Residual value

The net amount which an entity expects to obtain for an asset at the end of its useful life after deducting the expected costs of disposal.

Revenue generating investments

Investments for the provision of goods and services to sustain or improve services to the community that are expected to generate some savings or revenue to offset operating costs, eg public halls and theatres, childcare centres, sporting and recreation facilities, tourist information centres, etc.

Risk management

The application of a formal process to the range of possible values relating to key factors associated with a risk in order to determine the resultant ranges of outcomes and their probability of occurrence.

Section or segment

A self-contained part or piece of an infrastructure asset.

Service potential

The capacity to provide goods and services in accordance with the entity's objectives, whether those objectives are the generation of net cash inflows or the provision of goods and services of a particular volume and quantity to the beneficiaries thereof.

Service potential remaining*

A measure of the remaining life of assets expressed as a percentage of economic life. It is also a measure of the percentage of the asset's potential to provide services that is still available for use in providing services (DRC/DA).

Strategic Management Plan (SA)**

Documents Council objectives for a specified period (3-5 yrs), the principle activities to achieve the objectives, the means by which that will be carried out, estimated income and expenditure, measures to assess performance and how rating policy relates to the Council's objectives and activities.

Sub-component

Smaller individual parts that make up a component part.

Useful life

Either:

- (a) the period over which an asset is expected to be available for use by an entity, or
- (b) the number of production or similar units expected to be obtained from the asset by the entity.

It is estimated or expected time between placing the asset into service and removing it from service, or the estimated period of time over which the future economic benefits embodied in a depreciable asset, are expected to be consumed by the council. It is the same as the economic life.

Value in Use

The present value of estimated future cash flows expected to arise from the continuing use of an asset and from its disposal at the end of its useful life. It is deemed to be depreciated replacement cost (DRC) for those assets whose future economic benefits are not primarily dependent on the asset's ability to generate new cash flows, where if deprived of the asset its future economic benefits would be replaced.

TEMORA SHIRE COUNCIL



ROAD

ASSET MANAGEMENT PLAN

PART 2




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1. EXECUTIVE SUMMARY

What Council Provides

Council provides a road network in partnership with the Roads and Traffic Authority (RTA) to ensure that Temora has an extensive transport network that is an accessible, safe and efficient for motorists, cyclists and pedestrians.

Within Temora Shire, the road assets are summarised below:

Class 0 – State Roads Council has the responsibility for the area outside the trafficable lanes within the urban areas. Parking lanes are included in Class 6 roads

Class 1 – Regional Roads

Class 2 – Rural Local Rural Sealed Upgrade

Class 3 – Rural Local Roads Sealed Maintain

Class 4 – Rural Local Roads Unsealed Upgrade

Class 5 – Rural Local Roads Unsealed Maintained

Class 6 – Urban Local Roads Maintained and

Class 7 – Urban Local Roads Upgrade

What does it Cost?

There are two key indicators of cost to provide the Road Asset service.

- ✓ The life cycle cost being the average cost over the life cycle of the asset, and
- ✓ The total maintenance and capital renewal expenditure required to deliver existing service levels in the next 10 years covered by Council's long term financial plan.

The life cycle cost to provide the road network service is estimated at \$3.45 million per annum averaged over a 10-year period. Council's planned life cycle expenditure for year 1 of the asset management plan is \$3.45 million which gives a life cycle sustainability index of 1.002 .

The total maintenance and capital renewal expenditure required to provide the road infrastructure service in the next 10 years is estimated at \$34.45 million. This is an average of \$3.45 million per annum.

Plans for the Future

Council plans to operate and maintain the local and regional road network to achieve the following strategic objectives.

- ✓ Ensure the local and regional road network is maintained at a safe and functional standard as set out in this asset management plan.
- ✓ Ensure that capital renewal funding for reseals and resheets are maintained
- ✓ Ensure that capital upgrade funding is available as per Council's Road Hierarchy Policy
- ✓ Improve roads, cycleways and footpaths
- ✓ Efficient use of Council Resources.

Modelling in this report assumes the road network is growing at a rate of 0.3 % per annum (based on historical growth statistics and the impact of growth of neighbouring shires and the airpark estate). While increased population will result in an increase in general rates income collected it will also result in higher traffic volumes which will result in reduced pavement lives and the possibility of increased level of service demands

Lifecycle Management

The model for management of road pavements relates particularly to the maintenance and renewal stages of asset life. Early in the life of an asset, its condition deteriorates slowly and maintenance is generally not required. This is often referred to the “**Do Nothing**” phase of an asset’s life. As the asset ages, it moves into what is known as the “**Maintain**” phase. Maintenance activities will need to be performed to minimise continued deterioration. As the asset moves towards the end of its life, activities are undertaken that restore the asset to a condition close to that of the original. This is referred to as the “**Renewal**” phase.

The importance of the time for intervention for renewal is paramount. If renewal activities are not undertaken in a timely manner, the condition of the asset will deteriorate rapidly to failure, and the cost of reconstruction may be many times that of renewal activities.

Financial Summary

A ten year analysis of existing pavement conditions and costs has been undertaken to determine funding implications for the asset condition of the road network. Annual adjustment for increases in the cost of road construction materials and services would need to be made to accurately represent long-term results.

Modelling indicates that an annual renewal allocation of \$3.45 million is sufficient to keep the road network in the current overall condition. An annual allocation of 3.45 million for renewals in including normal maintenance is funded by Council to maintain the current overall condition in the road network over the next 10-year period.

Measuring our Performance

An asset management plan is a dynamic document, reflecting and responding to changes over time. Monitoring of this roads asset management plan is required to:

- ✓ Ensure compliance with the proposed improvement program milestones.
- ✓ Ensure compliance with adopted standards and procedures for condition and performance.

A full review of this asset management plan should be undertaken every three to five years to document progress and set out proposals for the next five years. The recommendations below summarise the Improvement Program contained in Section 8 of this document.

Recommendations

This actions resulting from this asset management plan are:

- ✓ Obtain Council approval of this asset management plan.
- ✓ Confirm desired levels of service by establishing current performance and setting performance targets. Have these levels of service adopted by Council.
- ✓ Review the level of service for routine maintenance response times.
- ✓ Further Investigate and improve estimates of growth in modelling.
- ✓ Expand the asset groups covered by this plan to include all council transport assets (bridges and all road drainage assets).
- ✓ Systematically separate capital upgrade expenditure from capital renewal expenditure and capital new expenditure.

-
- ✓ Improve the delineation between planned, cyclic and reactive maintenance.
 - ✓ Develop data collection models to ensure repeatability and ongoing improvement of condition data collection and modelling processes.
 - ✓ Assess the structure and resources within council, to ensure that the asset management plan can be implemented.

2. INTRODUCTION

2.1 Background

The fundamental purpose of this Road Asset Management Plan (RAMP) is to improve Council's long-term strategic management of its road assets in order to cater for the community's desired levels of service in the future. This will be undertaken in accordance with Council's key strategic documents and demonstrates reasonable management in the context of Council's available financial and human resources.

The RAMP achieves this by setting standards, service levels and programmes that Council will develop and deliver. The standards and service levels have been set in accordance with user needs, regulations, industry practice and legislative codes of practice.

The asset management plan is to be read with the following associated planning documents:

- ✓ Road Hierarchy Policy
- ✓ DLG Integrated Planning Mandates 2009
- ✓ Temora Shire Council Management Plan 2011/12 – 2015
- ✓ Temora Shire Council Community Strategic Plan 2011— 2020
- ✓ Temora Shire Council 2007 Resident Satisfaction Survey Result

This RAMP covers the following infrastructure assets which are summarised in Table 2.1

- ✓ Regional Roads MR241 (Young Road) and MR398 (Mary Gilmore Way)
- ✓ Local Sealed Roads
- ✓ Local Unsealed Roads
- ✓ Footpaths
- ✓ Kerb and Gutter

Table 2.1. Assets covered by this Plan

Asset category	Length km	Replacement Value (\$M)
Regional Road MR241	30.39	\$5.598
Regional Road MR398	61.90	\$9.082
Class 2 Rural Sealed Upgrade	268.41	\$42,098
Class 3 Rural Sealed Maintained		
Class 4 Rural Unsealed Upgrade	783.45	\$132.950
Class 5 Rural Unsealed maintained		
Class 6 Urban Sealed Maintained	77.7	\$13.207
Class 7 Urban Unsealed Upgrade	14.95	\$4.377
Footpath	15.99	\$2.057
Kerb and Gutter	92.45	\$9.173
TOTAL		\$218.242

2.2 Asset management Framework Applicable to RAMP

2.2.1 National Framework for Local Government Financial Sustainability

In March 2007 the Local Government and Planning Ministers' Council (LGPMC) agreed to a nationally consistent approach to asset planning and management, financial planning and reporting and assessing financial sustainability. Each State Minister endorsed the National Frameworks for Financial Sustainability in Local Government for implementation in the context of their relationships with their local government sectors.

The National Frameworks consist of three main components as follows:

1. Asset Planning and Management

This framework consists of seven elements which each State and Territory is expected to adopt as follows:

- ✓ Development of an **asset management policy** - Each state/territory is expected to develop an asset management policy, which provides high-level guidance to assist councils in developing their own asset management policy.
- ✓ Strategy and Planning — Councils should be provided with guidance from the State on developing an **asset management strategy**, which is designed to support and implement its asset management policy;
- ✓ **Governance and Management Arrangements** — Councils should be encouraged to apply and effect good governance and management arrangements which link asset management to service delivery and include assigning roles and responsibility for asset management between the CEO, the Council and senior managers;
- ✓ **Defining Levels of Service** — mechanisms should be established that include community consultation to define the levels of service councils are expected to provide from their asset base;
- ✓ **Data and Systems** — a framework for collection of asset management data should be established;
- ✓ **Skills and Processes** — the asset management framework should contain a continuous improvement program;
- ✓ Evaluation — the asset management framework should contain a **mechanism to measure its effectiveness**.

2. Financial Planning and Reporting

Focuses on local government's financial management at both the strategic and operational levels. The framework requires the preparation of:

- ✓ A long term strategic plan which includes a financial component, demonstrating how the outcomes of the plan will be funded.
- ✓ An annual budget format comparable with the audited financial statements, linked to strategic objectives, which at a minimum should include:
 - § Estimates of revenue and expenditure
 - § An explanation of how revenue will be applied
 - § An explanation of the financial performance and position of the council.
- ✓ Annual financial statements and annual report, which should include:

- § A report on council's operations during the financial year
- § An explanation to the community on variations between the budget and the actual results and how this may impact on the strategic plan
- § Audited financial statements for the financial year (prepared and audited in accordance with Australian Accounting and Auditing Standards).

3. Criteria for Assessing Financial Sustainability.

The National Frameworks define a council's long-term financial performance and position as sustainable when planned long term services and infrastructure standards are met without unplanned increases in rates and charges, or disruptive cuts to services.

The frameworks provide a range of financial sustainability indicators. However, they stress that the usefulness of indicators is not in the numbers themselves but the analysis of what is driving the indicator.

2.2.2 The NSW Department of Local Government - DIG Model

The DLG framework is to reshape the existing framework in some way to strengthen strategic focus, streamline the planning and reporting processes and encourage integration between the various council's strategic documents/plans. The proposed model is designed as a continuous framework, rather than a static planning model.

The recommendations provided through this Plan are essentially equipping Council to take a strategic approach to comply with this framework.

It is designed to allow councils more autonomy in responding to their community's various needs, and encourages elected representatives to play a leading role in developing long term plans.



Source – NSW Department of Local Government – Asset Management Planning for NSW Local Government – page 15
Fig 2.1 NSW LG DIG Model

Why mandate strategic planning?

This model includes a mandatory requirement for a long-term asset management plans. One of the recurrent themes emerging from the review is that councils need to develop a stronger strategic focus.

How is planning and reporting integrated?

The diagram below shows how the objectives from the Community Strategic Plan may be cascaded through the system.



For example, a council's Community Strategic Plan might identify the objective of "A safe and healthy community" and nominate key strategies for achieving this. These strategies might include a wide variety of approaches, such as ensuring quality water supply and safe operation of sewerage services, ensuring efficient collection of domestic and commercial waste, promoting health education programs, lobbying for more aged care services in the area, developing crime prevention strategies for the community, and improving road safety.

These intentions would be translated into the Delivery Program in the following way, for example:

Plan:

Improving road safety Delivery Methods:

- ✓ Undertake a review of the condition of all roads in council's area.
- ✓ Update Councils Road Hierarchy Policy.
- ✓ Identify funding options for roads management.
- ✓ Identify key community concerns with road safety.
- ✓ Develop programs to address key road safety issues.

The Operational Plan would then focus on what council would do towards achieving each of these goals in the coming year. For example:

Develop road safety programs: Actions for 2011-21

- ✓ Optimised reseal and resheeting programs.
- ✓ Maintain the agreement for a shared Road Safety Officer's with neighbouring Councils.
- ✓ Explore joint project options with other agencies, including RTA & Police.

In this way, the objectives of the Community Strategic Plan are cascaded down through Council's planning framework, so that general directions and objectives for the community are translated into plans, then into programs and finally, individual actions.

The Integrated Planning and Reporting project aims to improve Councils' capacity for long-term planning and should help to identify resourcing needs earlier in the planning cycle. The requirement to consider resourcing over the 10-year period of the plan will help Councils to take a wider view of their needs, considering not only finances, but also human resources and asset requirements. They will be able to identify the additional resources that could be raised through borrowings, rate variations or grants and will be in a better position to take maximum advantage of funding opportunities, resource sharing options and strategic alliances.

2.3 Key stakeholders

The key stakeholders are internal custodians as well as external individuals, companies, service authorities, government authorities and community groups who have a vested interest in management of roads. The following groups have been identified as key stakeholders in the management and use of the road network and road related assets:

Elected Members	Endorsement of the asset management policy, strategy and plans. Set high level direction through the development of asset management principles in the Community Strategic Plan.
Senior Management	Endorse the development of asset management plans and provide the resources required to complete this task. Set high level priorities for asset management development in Council and raise the awareness of this function among Council staff and contractors. Support the implementation of actions resulting from this plan and prepared to make changes to a better way of managing assets and delivering services. Support for an asset management driven budget and Long Term Financial Plan (LTFP).
Corporate Services	Consolidating the asset register and ensuring the asset valuations are accurate. Development of supporting policies such as capitalisation and depreciation. Preparation of asset sustainability and financial reports incorporating asset depreciation in compliance with current Australian accounting standards. Asset Management and GIS support and admin.
Field Services Staff	Provide local knowledge level detail on all road assets. They verify the size, location and condition of assets. They can describe the maintenance standards deployed and Council's ability to meet technical and customer levels of service.

External Users	Tourists and Visitors (as occasional users); Tourists and Visitors (as occasional users); Neighbouring Council's; Road Users; Emergency services; Developers & Utility companies; Local Businesses and; Federal and State Government authorities & agencies such as RTA, local law enforcement and land use/development planning.
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2.4 Goals and Objectives of Asset Management

The Council exists to provide services to its community. Some of these services are provided by infrastructure assets. Council has acquired infrastructure assets by 'purchase', through construction by council staff and by donation of assets constructed by developers and others to meet increased levels of service.

Council's goal in managing infrastructure assets is to meet the required level of service in the most cost effective manner for present and future consumers. The key elements of infrastructure asset management are:

- ✓ **Taking a life cycle approach,**
 - § Have precise knowledge of what Council owns or has responsibility for or is legal liable for;
 - § Record and extract information on these assets in a register, down to an acceptable level which can be maintained and updated easily;
 - § Report on our annual depreciations and asset consumption at an asset component level;
 - § Develop cost-effective management strategies for the long term,
- ✓ **Developing cost-effective management strategies for the long term,**
 - § Understand the long term (10-20 years) funding needs of our road network to meet our strategic expectations in both capital and maintenance expenditure;
- ✓ **Providing a defined level of service and monitoring performance,**
 - § Measure and monitor the condition, performance, utilisation and costs of assets down to the managed component level and aggregate this data up to give outputs of cost and performance at the master level;
 - § Understand and record the current levels of service in terms of responsiveness and performance;
 - § Understand the likely future levels of service required based on population growth, demographic changes and community expectations;
- ✓ **Understanding and meeting the demands of growth** through demand management and infrastructure investment,
- ✓ **Managing risks** associated with asset failures,
- ✓ **Sustainable** use of physical resources,
- ✓ **Continuous improvement** in asset management practices.¹
 - § Have uniform processes across our whole organisation for the evaluation of any investment in:
 - (a) Renewal, upgrades and expansions of existing assets;
 - (b) Creation of new assets;
 - (c) Maintenance of existing assets; and
 - (d) Operational expenditure to deliver services.

¹ IIMM 2006 Sec 1.1.3, p 1.3

This asset management plan is prepared under the direction of Council's vision, mission, goals and objectives.

Council's vision is:

To sustain and grow the Temora Shire as a rural community of choice for current and future residents, being united in our heritage yet open to growth and diversity

To celebrate our past achievements in sport, culture and enterprise whilst maintaining our commitment to the future in providing a safe, happy and healthy environment for all

Success through determination and inspiration

Council's mission is:

To achieve the best possible outcomes for our community

Council Values relevant to this asset management plan are:

- ✓ **Community:**
In partnership with the community, respond to needs and aspirations in a caring, fair and accountable manner through the provision of quality services.
- ✓ **Governments:**
We encourage an open, productive relationship with all spheres of government and other organisations in the best interests of our community.
- ✓ **Customers and Suppliers:**
Conduct our business with integrity and respect, ensuring consistency and accountability in all our dealings.
- ✓ **Environment**
Conserve, enhance and develop our environment in an equitable and sustainable manner, acting as custodians for future generations.

2.5 Plan Framework

Key elements of the plan are

- ✓ **Levels of service** – specifies the services and levels of service to be provided by council.
- ✓ **Future demand** – how this will impact on future service delivery and how this is to be met.
- ✓ Life cycle management – how Council will manage its existing and future assets to provide the required services
- ✓ **Financial summary** – what funds are required to provide the required services.
- ✓ **Asset management practices**
- ✓ **Monitoring** – how the plan will be monitored to ensure it is meeting Council's objectives.
- ✓ **Asset management improvement plan**

A road map for preparing an asset management plan is shown below.

2.6 Core and Advanced Asset Management

This roads asset management plan is prepared as a 'core' asset management plan in accordance with the International Infrastructure Management Manual. It is prepared to meet minimum legislative and organisational requirements for sustainable service delivery and long term financial planning and reporting. Core asset management is a 'top down' approach where analysis is applied at the 'system' or 'network' level.

Future revisions of this asset management plan will move towards 'advanced' asset management using a 'bottom up' approach for gathering asset information for individual assets to support the optimisation of activities and programs to meet agreed service levels.

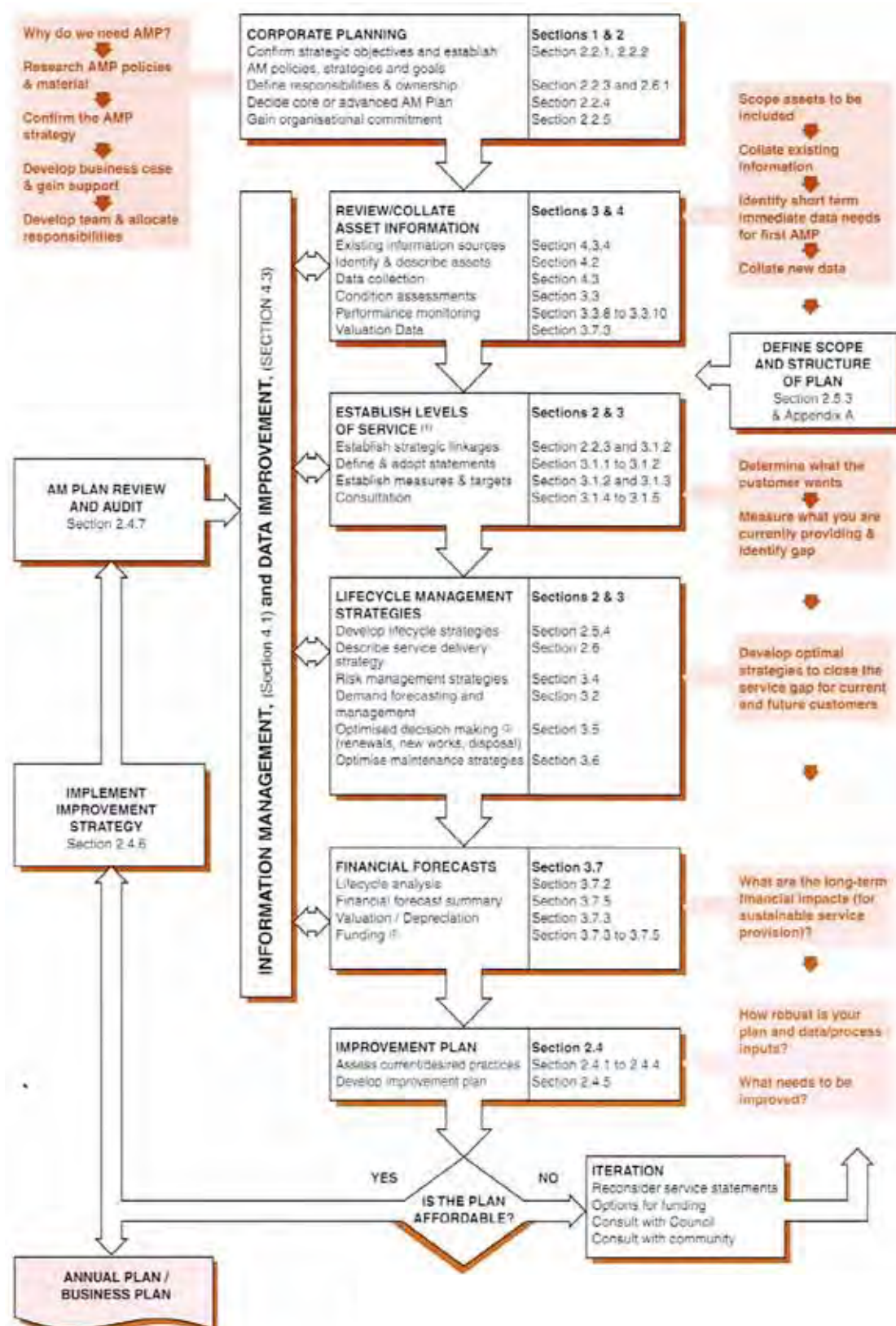


Fig 2.2 Road Map for Preparing an Asset Management Plan
Source: IIMM Fig 1.5.1, p1.111

3. LEVELS OF SERVICE

Levels of Service relate to outcomes the customer receives in terms of quality, quantity, responsiveness and performance as provided by the asset. To achieve and sustain acceptable standards of service for Council's road asset network requires an annual commitment of funds. These funds provide for regular and responsive maintenance and for timely renewal or replacement of the asset. The provision of adequate financial resources ensures that the road network is appropriately managed and preserved. Financial provisions below requirements impacts directly on community development and if prolonged, results in substantial needs for "catch up" expenditure imposed on ratepayers in the future. Additionally, deferred renewal results in increased and escalating reactive maintenance as aged assets deteriorate at increasing rates.

In developing the levels of service as documented in this RAMP, Council has given due regard to the strategic goals and objectives in the 2011-2015 Strategic Plan which sets out the strategic direction of Council to implement its Management Plan over the following four years. Council has also given due regard to Legislative requirements and Australian Standards and stakeholder expectations in the form of customer research and expectation surveys.

The levels of service documented in this RAMP therefore reflect the best assumptions of current levels of service provided by Council, for the benefit of the community, in the context of Council's financial and human resources.

Councils current Level of Service are set out in Appendix D of this Asset Management Plan.

3.1 Customer Research and Expectations

Council participates in a Performance Measure Customer Satisfaction survey every four years in August prior to the Council election. This survey is distributed to all residents, requesting their level of satisfaction with Council's services. The most recent customer satisfaction survey (2008) reported satisfaction levels for the following road related services

Table 3.1. Community Satisfaction Survey Levels

Performance Measure	Satisfaction Level (1 to 5)				
	Very Satisfied	Fairly Satisfied	Satisfied	Somewhat satisfied	Not satisfied
Bus Shelters			3.83		
Car Parking			2.80		
Drainage			3.29		
Footpaths			2.76		
Road Network		3.45			
Street Lighting			2.83		
Street Signage		3.64			
Street Trees			3.23		
Street Cleaning		3.60			

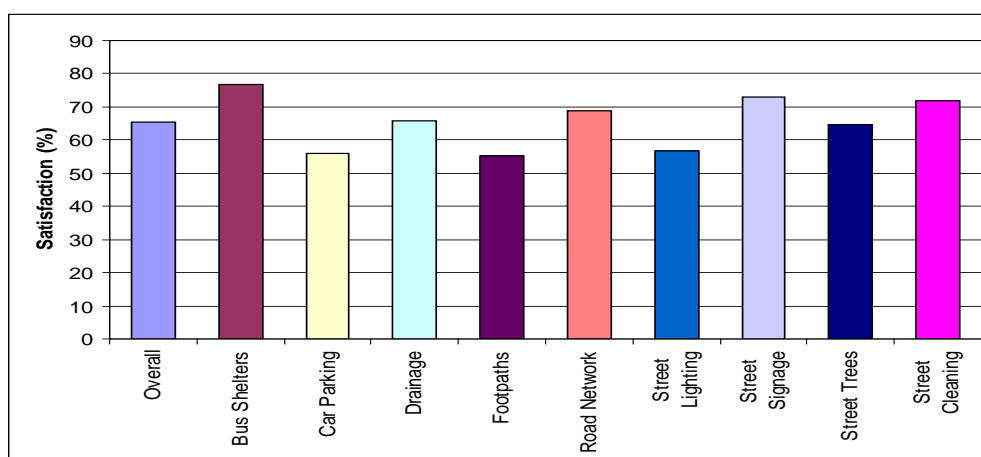


Figure 3.1 Satisfaction Survey for road related infrastructure

The results of the 2008 survey indicate that the overall level of satisfaction with Council for road related infrastructure is good (65.4%). The strategic area of council where respondents are least satisfied was footpaths (55.2%). Refer to Table 3.1 and Figure 3.1.

Council uses this information in developing the Strategic Management and Social Plans and in allocation of resources in the budget.

3.2 Legislative Requirements

Council has to meet many legislative requirements including Australian and State legislation and State regulations. These include:

Table 3.2. Legislative Requirements

Legislation	Requirement
National Asset Management Framework Legislation 2010	Focuses on long term financial sustainability and provides a mandate to have long term strategy, financial statements and annual reporting mechanisms. AM plans are likely to be audited.
DLG Integrated Planning NSW	Key requirement is to integrated community plans with operational and delivery plans.
Local Government Act 1993	Sets out role, purpose, responsibilities and powers of local governments including the preparation of a long term financial plan supported by asset management plans for sustainable service delivery.
Roads Transport (Safety and Traffic Management) Act 1993	Facilitates the adoption of nationally consistent road rules in NSW, the Australian Road Rules. It also makes provision for safety and traffic management on roads and road related areas including alcohol and other drug use, speeding and other dangerous driving, traffic control devices and vehicle safety accidents
Occupational Health and Safety Act 2000	Aims to secure the health, safety and welfare of people at work. It lays down general requirements which must be met at places of work in New South Wales. The provisions of the Act cover every place of work in New South Wales. The Act covers self employed people as well as employees, employers, students, contractors and other visitors.
Occupational Health and Safety Regulation 2001	Regulations on the control and management of risk in the work place.
The Protection of the Environment Operations Act 1997 (POEO Act)	Is the key piece of environment protection legislation administered by Department of the Environment and Climate Change (DECC). The POEO Act enables the Government to set out explicit protection of the environment policies (PEPs) and adopt more innovative approaches to reducing pollution.
Disability Discrimination Act	Sets out the responsibilities of Council and staff in dealing with access and use of public infrastructure.

Table 3.3. Legislative Requirements

Standards and Specifications	Requirements
Australian Accounting Standards.	<p>Sets out the financial reporting standards relating to infrastructure assets. Standards of particular relevance to Infrastructure Assets include:</p> <ul style="list-style-type: none"> • AASB116 Property, Plant & Equipment — prescribes requirements for recognition and depreciation of property, plant and equipment assets • AASB136 Impairment of Assets — aims to ensure that assets are carried at amounts that are not in excess of their recoverable amounts • AASB1021 Depreciation of Non-Current Assets — specifies how depreciation is to be calculated • AAS1001 Accounting Policies — specifies the policies that Council is to have for recognition of assets and depreciation • AASB1041 Accounting for the reduction of Non-Current Assets — specifies the frequency and basis of calculating depreciation and revaluation basis used for assets • AAS1015 Accounting for acquisition of assets — method of allocating the value to new assets on acquisition
Temora Shire Road Hierarchy Policy	Sets out the criteria for maintenance , capital renewal and capital upgrade for the road network
Temora Shire Footpath Hierarchy Policy	Sets out the priority for maintaining and upgrading of footpaths
Austroads Guides, Commentaries and Reports	Austroads works with local government to improve Australia's roads and transport systems, recognising the value and importance of developing the local road component of the national road network.
Australian Standards	<p>Including:</p> <ul style="list-style-type: none"> • Australian Standard 1742.3-1996 — Manual of uniform traffic control devices - Traffic control devices for works on roads • Guide to Traffic Engineering Practice (part 14 Bicycles) • Manual of Uniform Traffic Control Devices — Part 3 - Traffic Control Devices for Works on Roads • Integrated Asset Management Guidelines for Road Networks APR202: 2002 Austroads • AS/NZS 4360:2004 Risk Management • HB 4360:2004 Risk Management Guidelines — Companion to AS/NZS 4360:2004

3.3 Current Levels of Service

Council has defined a two tier level of service.

Community Levels of Service relates to how the community receives the service in terms of safety, quality, quantity, reliability, responsiveness, cost/efficiency and legislative compliance.

Supporting the community service levels are operational or technical measures of performance developed to ensure that the minimum community levels of service are met. These technical measures relate to service criteria such as:

Service Criteria	Technical measures may relate to
Quality	Smoothness of roads
Customer satisfaction	Area of parks per resident
Accessibility	Distance from a dwelling to a sealed road
Safety	Number of injury/accidents
Risk	Capital renewal undertaken when required

Council's current service levels are summarised in Table 3.3 and detailed in Appendix D

Table 3.3. Current Service Levels

Regional Roads and Local Rural Roads

Key Performance Measure	Level of Service	Performance Measure Process	Performance Target	Current Performance
COMMUNITY LEVELS OF SERVICE				
Quality	Well maintained and suitable road network	Customer requests	< 200 per annum	100 per year
Customer satisfaction	Meets road user requirements for: - road width - accessibility - use of traffic control devices	Customer service requests	> 50% customer satisfaction	69.0% (satisfaction survey 2008)
Accessible	Provide a fully accessible network	Customer service requests	100% compliance	100% compliance except when a road or bridge is closed for maintenance, upgrading, renewal of public event, then appropriate notification will be given to users, through advertisement as per Council policy
Safety	Provide safe network	Accident reports Customer service requests	< 5 per annum	2 per year
TECHNICAL LEVELS OF SERVICE				
Condition	Maintain seal - optimal maintenance	% of length resealed each year	10% of length resealed per annum	10.5% sealed per annum
		Average age of seals	10 years	9.5 years (2008)
		Condition rating	< 5% < condition 4	TBC
	Maintain pavement integrity	Potholes repaired before diameter is excessive	< 150 mm	90% compliance
Function	Road width meets Road Hierarchy Policy width	Annual compliance inspection	80% of length meets desired width of 8.0 metres	100% (2008)
Cost Effectiveness	Maintain roads by proactive repairs	% of maintenance completed	70% proactive work value	TBC
Risk	Sealed road network condition is maintained at optimum threshold		No more than 5% of the sealed road to be in condition 5 in any given year	1% of network in condition 5

Local Sealed Urban Roads

Key Performance Measure	Level of Service	Performance Measure Process	Performance Target	Current Performance
COMMUNITY LEVELS OF SERVICE				
Quality	Rideability	Customer service requests relating to Rideability	< 5 per annum	1 per year
Function	Meets road user requirements for: <ul style="list-style-type: none"> - road width - accessibility - use of traffic control devices 	Customer service requests	< 5 per annum	1 per year
Safety	Reduced hazards Increased safety	Accident reports Customer service requests	< 5 per annum	5 per year
TECHNICAL LEVELS OF SERVICE				
Condition	Maintain seal - optimal maintenance	% of length resealed each year	10% of length resealed per annum	10 5% sealed per annum
		Average age of seals	10 years	9.5 years (2008)
		Condition rating	< 5% < condition 4	
	Maintain pavement integrity	Potholes repaired before diameter is excessive	< 150 mm	90% compliance
Function	Road width meets desired width	Annual compliance inspection	80% of length meets desired width of 8.0 metres	100% (2008)
Cost Effectiveness	Maintain roads by proactive repairs	% of maintenance completed	70% proactive work value	

Footpaths

Key Performance Measure	Level of Service	Performance Measure Process	Performance Target	Current Performance
COMMUNITY LEVELS OF SERVICE				
Quality	Rideability	Customer service requests relating to Rideability	< 5 per annum	1 per year
Function	Meets road user requirements for: <ul style="list-style-type: none"> - road width - accessibility - use of traffic control devices 	Customer service requests	< 5 per annum	1 per year
Safety	Reduced hazards Increased safety	Accident reports Customer service requests	< 5 per annum	5 per year
TECHNICAL LEVELS OF SERVICE				
Condition	Maintain seal - optimal maintenance	% of length resealed each year	10% of length resealed per annum	10 5% sealed per annum
		Average age of seals	10 years	9.5 years (2008)
		Condition rating	< 5% < condition 4	
	Maintain pavement integrity	Potholes repaired before diameter is excessive	< 150 mm	90% compliance
Function	Road width meets desired width	Annual compliance inspection	80% of length meets desired width of 8.0 metres	100% (2008)
Cost Effectiveness	Maintain roads by proactive repairs	% of maintenance completed	70% proactive work value	

Kerb and Gutter

Key Performance Measure	Level of Service	Performance Measure Process	Performance Target	Current Performance
COMMUNITY LEVELS OF SERVICE				
Quality	Rideability	Customer service requests relating to Rideability	< 5 per annum	1 per year
Function	Meets road user requirements for: - road width - accessibility - use of traffic control devices	Customer service requests	< 5 per annum	1 per year
Safety	Reduced hazards Increased safety	Accident reports Customer service requests	< 5 per annum	5 per year
TECHNICAL LEVELS OF SERVICE				
Condition	Maintain seal - optimal maintenance	% of length resealed each year	10% of length resealed per annum	10 5% sealed per annum
		Average age of seals	10 years	9.5 years (2008)
		Condition rating	< 5% < condition 4	
	Maintain pavement integrity	Potholes repaired before diameter is excessive	< 150 mm	90% compliance
Function	Road width meets desired width	Annual compliance inspection	80% of length meets desired width of 8.0 metres	100% (2008)
Cost Effectiveness	Maintain roads by proactive repairs	% of maintenance completed	70% proactive work value	

3.4 Desired Levels of Service

At present, indications of desired levels of service obtained from various sources including the Customer Satisfaction survey, residents' feedback to Councillors and staff, service requests and correspondence. Council has quantified desired levels of service when formulating the Roads Hierarchy 2007 Policy. This policy determines the road hierarchy and the maintenance requirements for each road plus when an unsealed roads will be upgraded to a sealed standard.

It is understood that residents on an unsealed road wish their road be sealed, but the policy takes into account the traffic volume and the traffic classification on individual roads, plus Councils ability to maintain sealed roads in the future.

4. FUTURE DEMAND

4.1 Demand Forecast

Council's fundamental role is to provide services to the community and its road assets are a means to support this. Consequently, future demand for road assets are tied to the demand for Council's services and this is a more complex consideration than population growth alone. Issues such as changing demands from the transport industry for heavier mass allowances, closure of rail lines, and changing community expectations of service levels, all affect the need for transportation assets.

Road asset management plans are critically driven by the needs of the services to be delivered and therefore meaningful transportation asset strategies cannot be developed in isolation or in absence of comprehensive service strategies. Maintaining Council's road assets without adequate regard for service needs may result in a well-maintained portfolio of assets, but it may also result in an asset portfolio which does not meet the needs of staff that provide services to the community.

Factors affecting demand include population change, changes in demographics, seasonal factors, vehicle ownership, consumer preferences and expectations, economic factors, agricultural practices, environmental awareness, etc. Demand factor trends and impacts on service delivery are summarised in Table 4.1.

Table 4.1. Demand Factors, Projections and Impact on Services

Demand factor	Present position	Projection	Impact on services
Population	5,914 (2006 census). The population increased by 1.05% between the 2001 and 2006 censuses. 57.1% of the population live in the urban area, 36.8% in the rural area and 6.1% in the surrounding villages	Temora's population is expected to grow over the next 10 years Future growth is likely to occur as a result of Council initiatives such as the airpark estate, Continued attraction to rural lifestyle	Some impact as road congestion increases Parking issues in the CBD
Demographics	Increase in ageing population 65+ represents 16.8% of the population and has increased by 3.3% since 1981. Whereas the overall population is static to a 0.27% increase	Temora TAFE and Charles Sturt University at Wagga will play a vital role in retaining and/or attracting young people to Temora. The number of aged over 65 will continue to increase. This is consistent with the national trend towards an ageing population and longer life expectancy	Increase in demand for safe multi-use footpaths linking CBD and other infrastructure Increased demand for accessibility for mobility impaired.

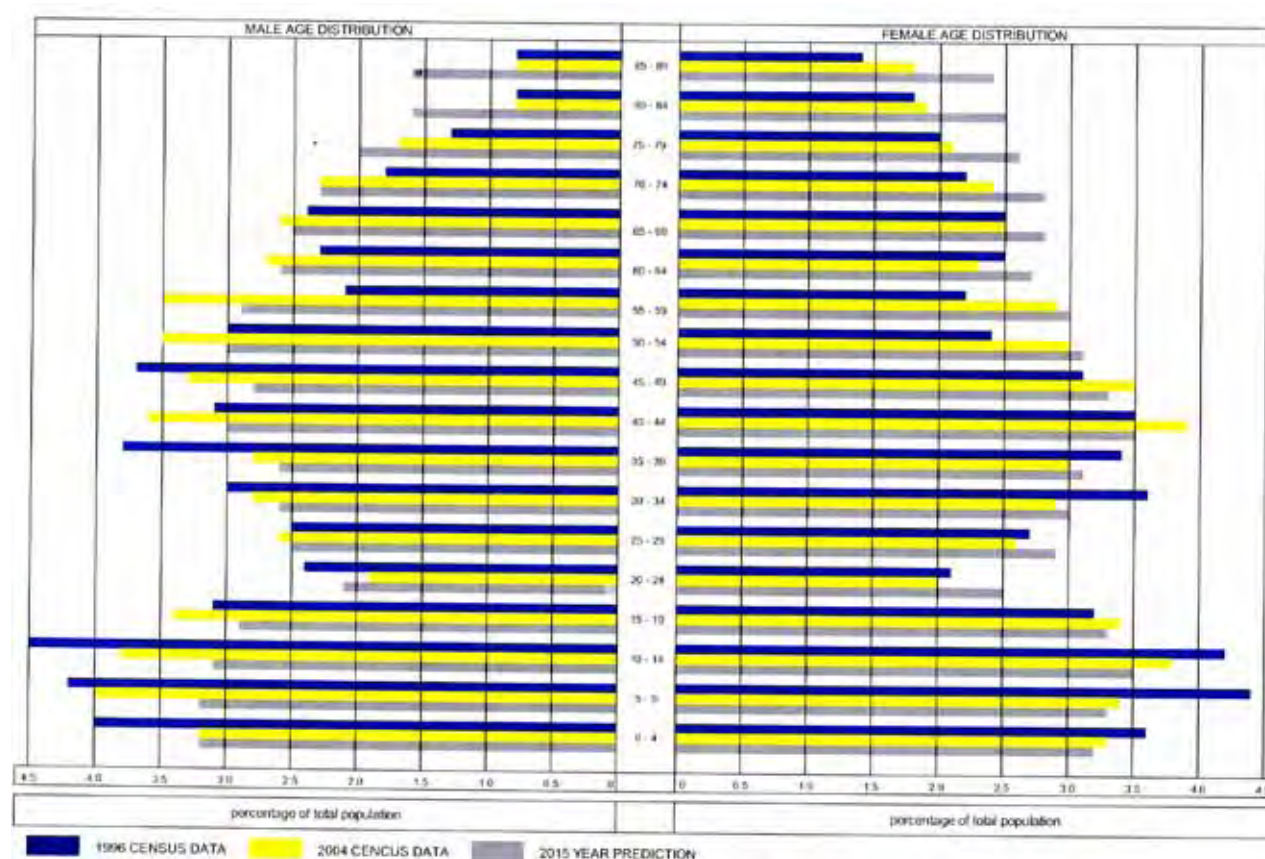


Figure 4.1 1996 and 2004 LGA Population by Age and Sex

4.2 Changes in Technology

Technology changes are forecast to affect the delivery of services covered by this plan in the following areas.

Table 4.2. Changes in Technology and Forecast effect on Service Delivery

Technology Change	Effect on Service Delivery
Increased tonnage allowed on Semi-trailers and B-doubles	Increased maintenance costs due to impact from increased weight.
Closure of country rail system	Increased heavy vehicles to transport primary production.
Introduction of new machinery	Reduced costs, increased productivity \$ OH&S
Road and renewal treatments	Increased residual life and decreased lifecycle costs
Improvements in road design and pavement materials	Increased resheet/ seal life
Asset data capture by video inspection and the transformation onto Councils GIS	Spatial location and condition of assets able to be verified from GIS reducing the need for reactive inspections

4.3 Demand Management Plan

Demand for new services will be managed through a combination of managing existing assets, upgrading of existing assets and providing new assets to meet demand and demand management. Demand management is defined here as the management of road assets by the manipulation of demand for road services and practices including non-asset solutions, insuring against risks and managing failures.

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

Table 4.3. Demand Management Plan Summary

Service Activity	Demand Management Plan
Community Engagement	Engage with the community to identify justifiable community needs from other expectations and consider only community needs consistent with Council's policies
Customer Requests	Analyse customer requests to optimise the use and performance of existing road services and look for non-asset based solutions to meet demand for services
Traffic load and volume control	Improved road and pavement performance through road mass restrictions and reducing traffic volumes
Explanatory marketing and education campaigns	Help modify community behaviour through explanatory marketing and education campaigns

4.4 New Assets from Growth

The new assets required to meet growth will be acquired from land developments and constructed by Council. Acquiring these new assets will commit Council to fund ongoing operations and maintenance costs for the period that the service provided from the new asset is required. Given the long term life-cycle of road assets, the impact of this growth (future renewal costs) is only likely to be material after ten years. For the purpose of considering this core asset management plan the impacts of these future costs are not considered to be highly significant and are excluded in developing forecasts of future operating and maintenance costs.

Future versions of this asset management plan will consider the impacts of growth in greater detail. This activity has been included as a priority in the improvement plan. The valuation models in the financial summary section of this report use a rate of growth of 0.25%

5. LIFECYCLE MANAGEMENT PLAN

The lifecycle management plan details how Council plans to manage and operate the assets at the agreed levels of service (defined in section 3) while optimising life cycle costs. To undertake life cycle asset management, means considering all management options and strategies as part of the asset lifecycle, from planning to disposal. The objective of managing the assets in this manner is to look at long- term cost impacts (or savings) when making asset management decisions. Fig 5.1 below provides a graphical representation of the asset lifecycle including each of the stages an asset passes through during its life.

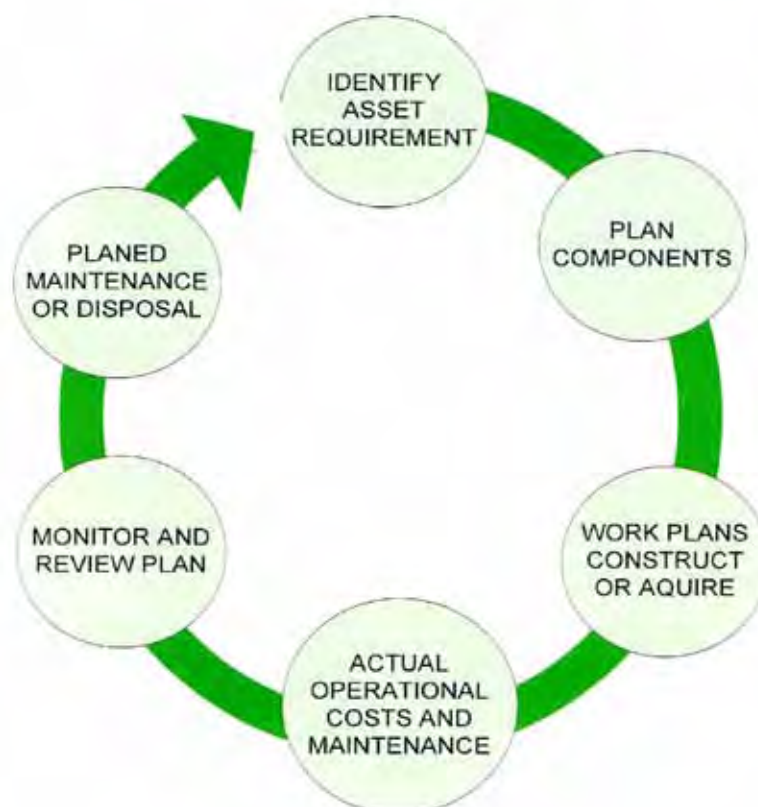


Figure 5.1 Asset Lifecycle

A model for the lifecycle for sealed road pavements is presented later in this section. The model relates particularly to the maintenance and renewal stages of asset life (refer to figure 5.2.)

In the “**Do Nothing**” phase, the asset deteriorates slowly and maintenance is generally not required. In the “**Maintain**” phase, these activities will need to be performed to minimise continued deterioration. In the “**Rehabilitate**” or “**Renewal**” stage, activities are undertaken that restore the asset to a condition close to that of the original.

The importance of the time for intervention for renewal is paramount. If renewal activities are not undertaken in a timely manner, the condition of the asset will deteriorate rapidly to failure, and the cost of reconstruction may be many times that of the renewal cost.

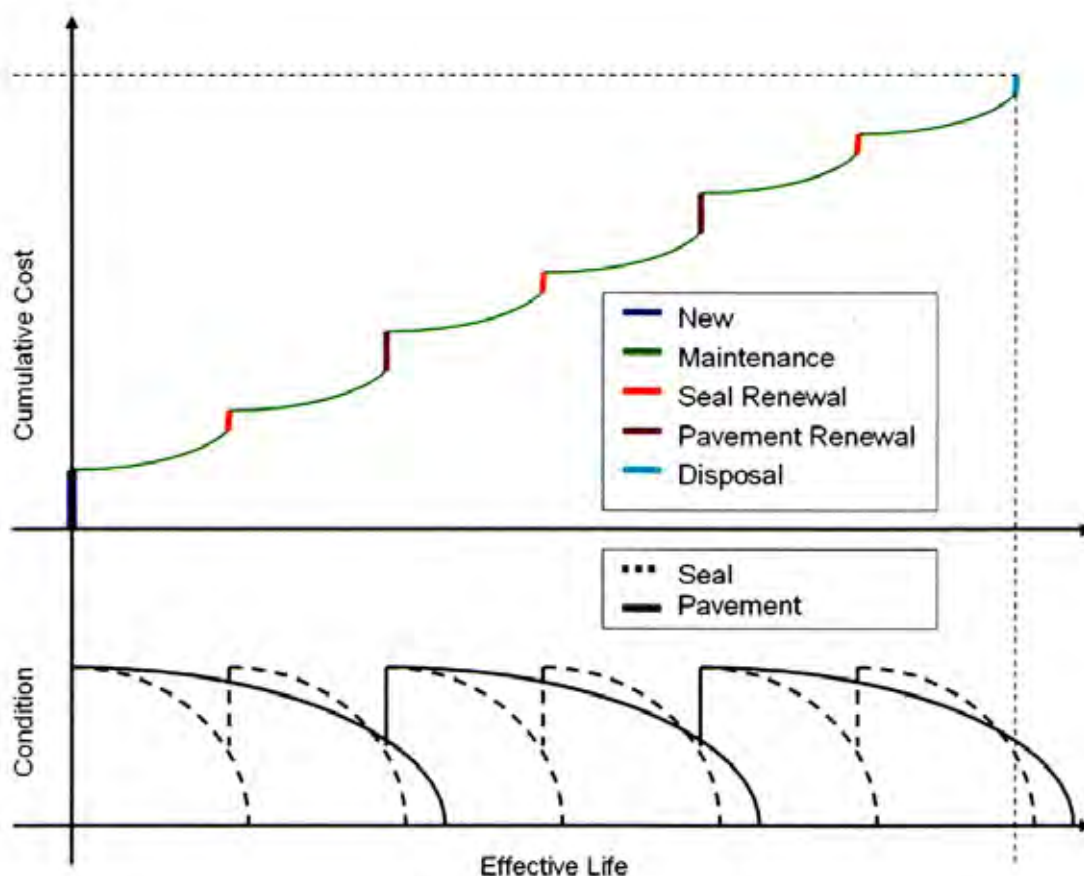


Figure 5.2 Sealed Road Pavement Lifecycle

5.1 Background Data

5.1.1 Physical parameters

The assets covered by this asset management plan are shown below. It should be noted that these statistics do not include the State Road travel lanes, which are not the financial responsibility of Council, but do include the parking lanes within the CBD. The parking lanes have been included in the condition assessment and valuation. The characterises are given in Tables 5.1., 5..2 and 5..3

Table 5.1 Characteristics of Road Inventory

Asset	Description
Sealed Roads	Urban (Class 6) and rural roads (Class 2 and 3) with a bitumen surface typically spray sealed or asphalt
Unsealed Roads	Mostly rural (Class 4 and 5) formed and surfaced with imported granular material. Some Urban (Class 7) do exist. Roads that have been constructed by property owners are not included in this report.
Footpaths and shared paths	Paths to cater for pedestrians and cycle movements within road reserves
Kerb and gutter	Typically constructed of concrete on the edge of sealed roads to formalise the traffic corridor and convey surface stormwater to the drainage network.

Table 5.2 Physical Quantity of Road Assets

Road Type	Road Length (km)	Surface Area (m ²)
Regional Road MR241	30.39 km	280,754
Regional Road MR398	61.90 km	453,777
Local Rural Sealed Road – Class 2	58.57 km	341,080
Local Rural Sealed Road – Class 3	209.86 km	1,241,546
Local Rural Unsealed – Class 4	No Class 4 roads at present	N/A
Local Rural Unsealed – Class 5	783.45 km	6,163,300
Local Urban Sealed – Class 6	77.70 km	810,245
Local Urban Unsealed – Class 7	14.95 km	268

Table 5.3 Physical Quantity of Footpath Asset

footpath Type	Length (km)	Surface Area (m ²)
Concrete	23.3	10,502
Pavers	0.3	322
Asphalt	10.5	10,502
Unformed	233.6	256,906

Table 5.4 Physical Quantity of Kerb & Gutter Asset

Kerb Type	Length (km)
Concrete Standard	80.5
Roll Over	3.2
Unlined Drain	16
Brick	1.8

Temora Shire Council has a mix of sealed and unsealed roads with most villages having sealed travel lanes and unsealed shoulders. The unsealed road network is predominantly in the rural areas and extends to the boundaries of the Council.

The most predominant sealed surface type is spray seal which is 30.4% off the total road network. The figures below detail the various types of road and footpath surfaces and kerb types in the Temora LGA.

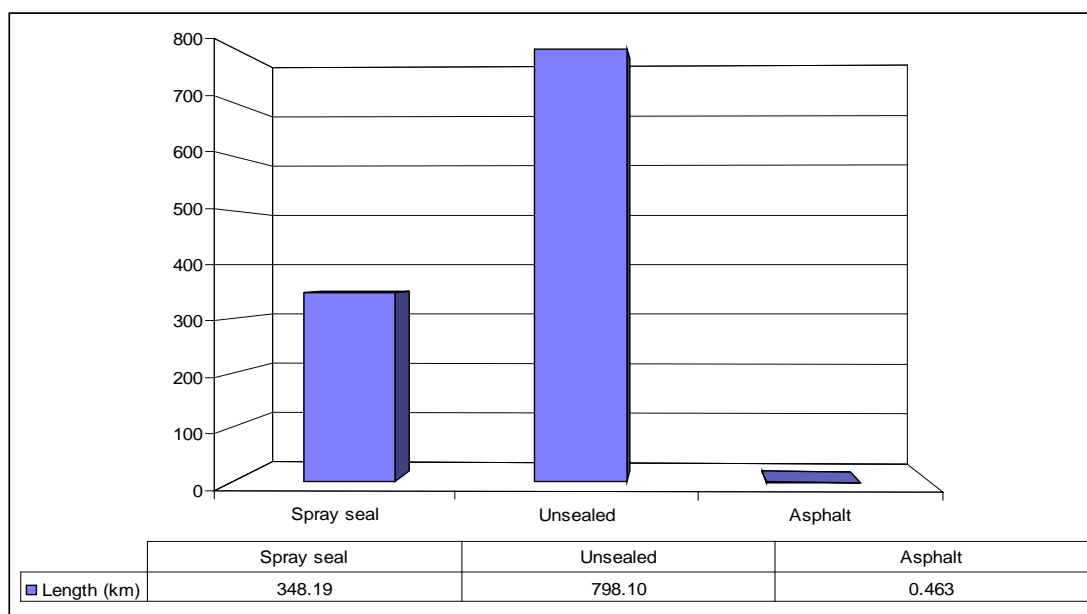


Figure 5.3 Road Surface Type

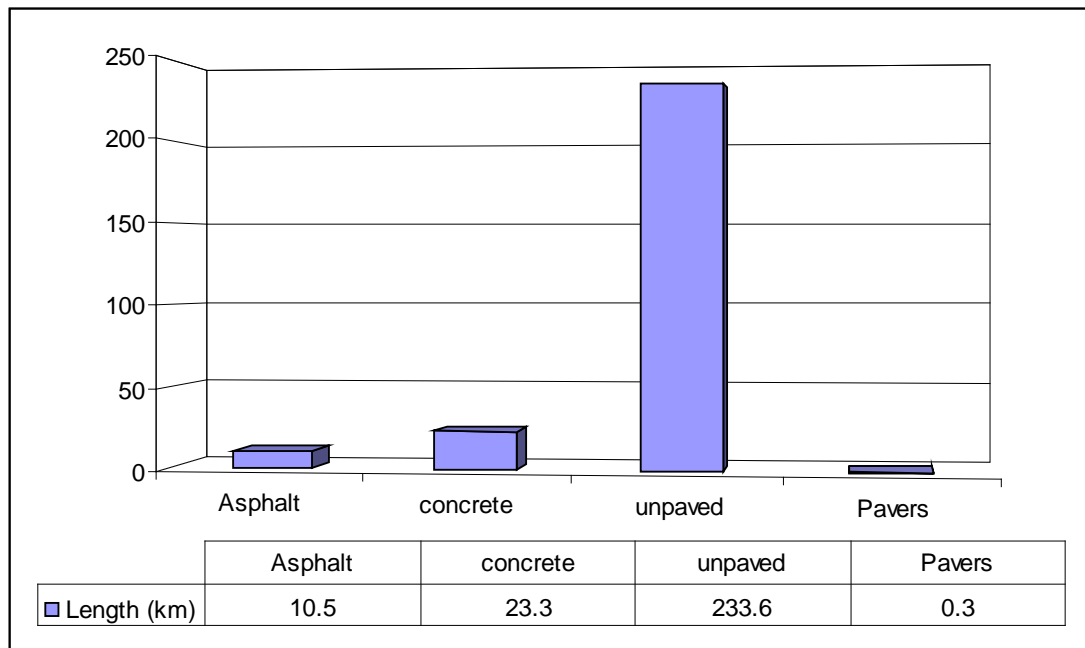


Figure 5.4 Footpath Type

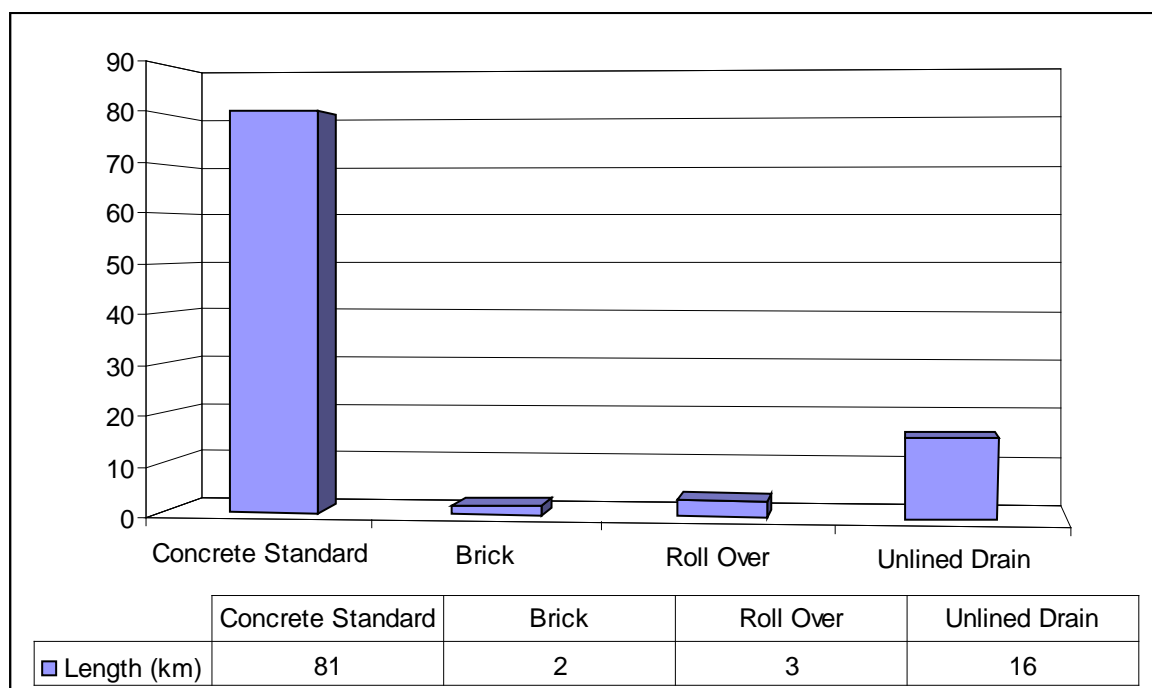


Figure 5.5 Kerb and Gutter Type

5.1.2 Asset Capacity and Performance

Council's services are generally provided to meet design standards where these are available. Locations where deficiencies in service performance are known are detailed in Table 5.5.

Table 5.5 Known Service Performance Deficiencies

Location	Service Deficiency
Road Resealing	Resealing is being maintained as per Road Hierarchy Policy at 10 - 12 years for Regional Roads and 12 – 15 years for local roads. There may however be some local roads that exceed this limit that need to be identified
Pavement Resheeting	Resheeting of unsealed local roads are being maintained as per Road Hierarchy Policy at 15 years, there may be low trafficked local roads that have exceeded this criteria
Heavy Vehicle Bypass for Hoskins Street	Diversion of Hoskins Street commercial traffic is required
Kerb and Gutter	Kerb and guttering in urban areas still consists of 16% unformed drains and 1.8% brick, which do not meet the required level of service.
Footpaths	Both asphaltic concrete and paved footpaths are not providing a satisfactory level of surface and require upgrading to concrete. 87% of footpaths are unformed and require upgrading.

The above service deficiencies were identified from the results of inspections undertaken in the preparation of this plan

5.1.3 Asset condition

A simple number rating system has been adopted for this plan to describe asset condition. Condition is measured using a 1 to 5 rating system as described below:

Table 5.6. Roads, Footpath, Kerb and Gutter Condition Rating Description

Condition Index	Rating Scale	Condition Description
1	Excellent	Providing a very high level of service
2	Good	Good condition with no indication of any major failures and providing a good level of service.
3	Fair	Aged and in fair condition providing an adequate level of service. No signs of immediate obsolescence.
4	Poor	Will need to renew, upgrade or dispose of in the future and is included in the five year Capital Works Program
5	Very Poor	Below an acceptable level of service. Requires renewal/upgrade immediately within the following year or so.

Frequency of Assessment: Every 3 – 4 years

Rating Criteria

Condition assessment is undertaken for the following criteria.

- ✓ **Cracking** Crocodile and linear related to pavement and surface fatigue
- ✓ **Pavement defects:** related to pavement deformities in localised areas such as shape loss and subgrade movements, local rutting, shoving and deformities.
- ✓ **Ravelling:** related to asphalt age/fretting and fatigue.

- ✓ **Local Surface defects:** Related to minor surface deformities and groups of potholes, delaminating.
- ✓ **Stripping:** Loss of stone from spray seal surface.
- ✓ **Flushing:** Excess bitumen pumping on surface of spray seals.
- ✓ **Kerb and gutter:** alignment, distortion, cracking, shape loss, and gutter deficiencies.
- ✓ **Footpath: cracking,** height differences, distortion and tree root defects and structural failures,



Typical surface defects



Typical stripping



Typical local defects



Typical road cracking



Typical pavement defects



Typical rutting

Figure 5.6 Pavement Failure Types

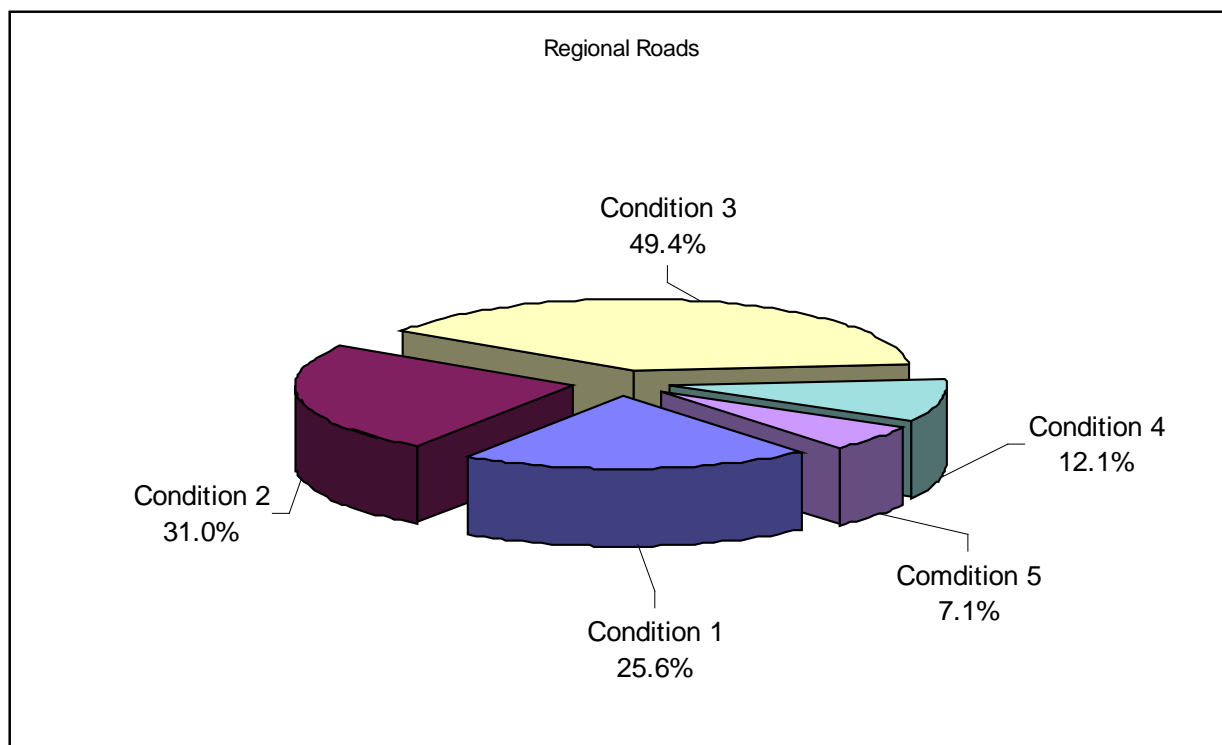


Figure 5.7 Regional Roads Pavement Condition Assessment

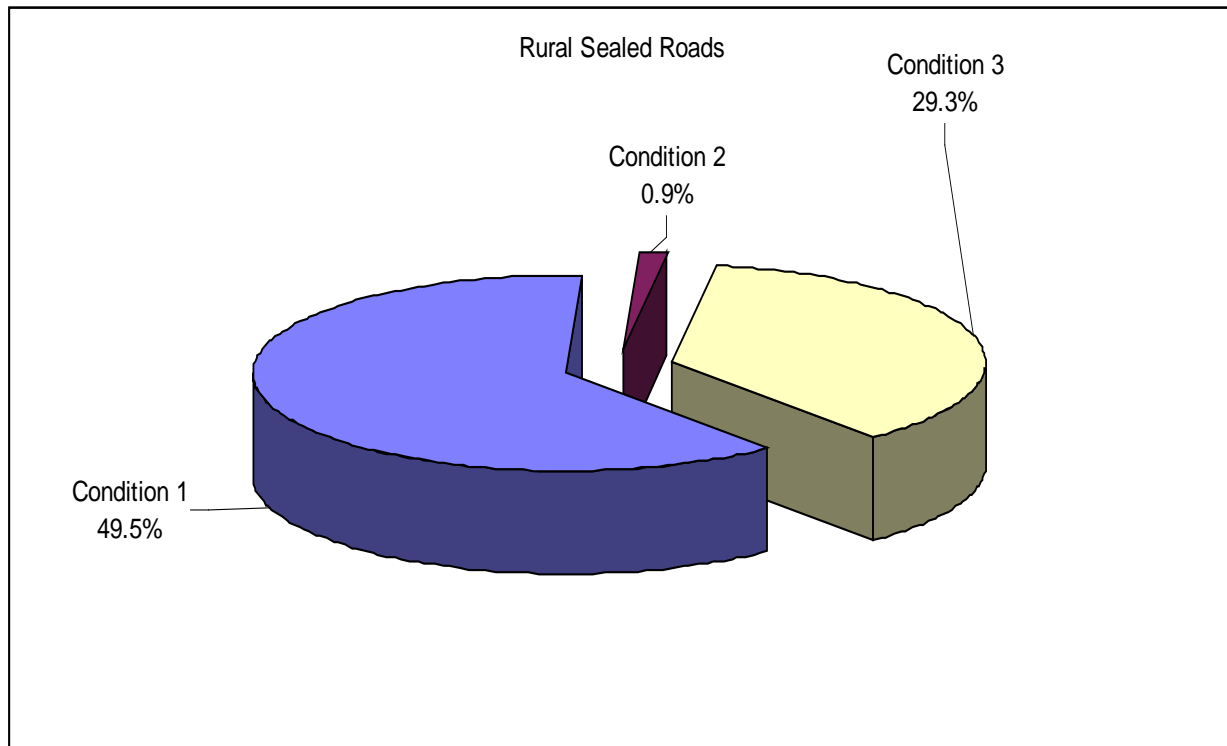


Figure 5.8 Local Sealed Rural Roads Pavement Condition Assessment

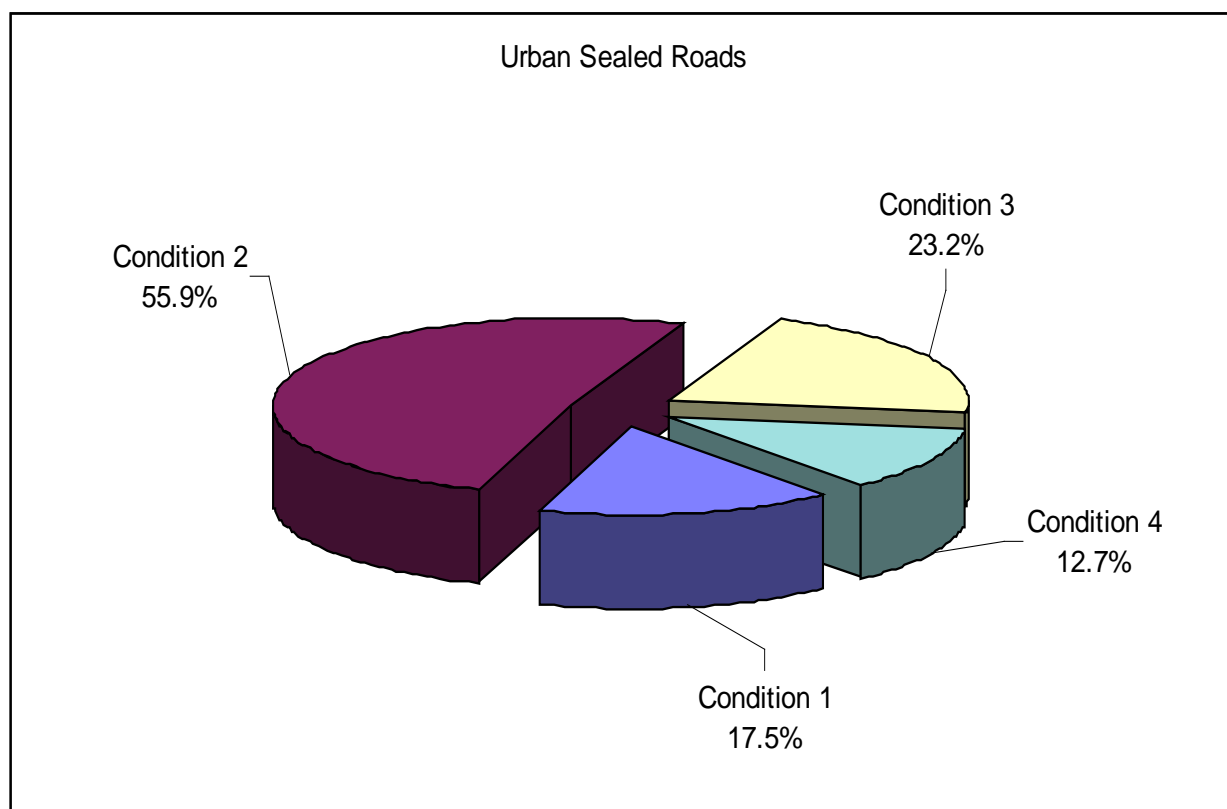


Figure 5.8 Urban Sealed Roads Pavement Condition Assessment

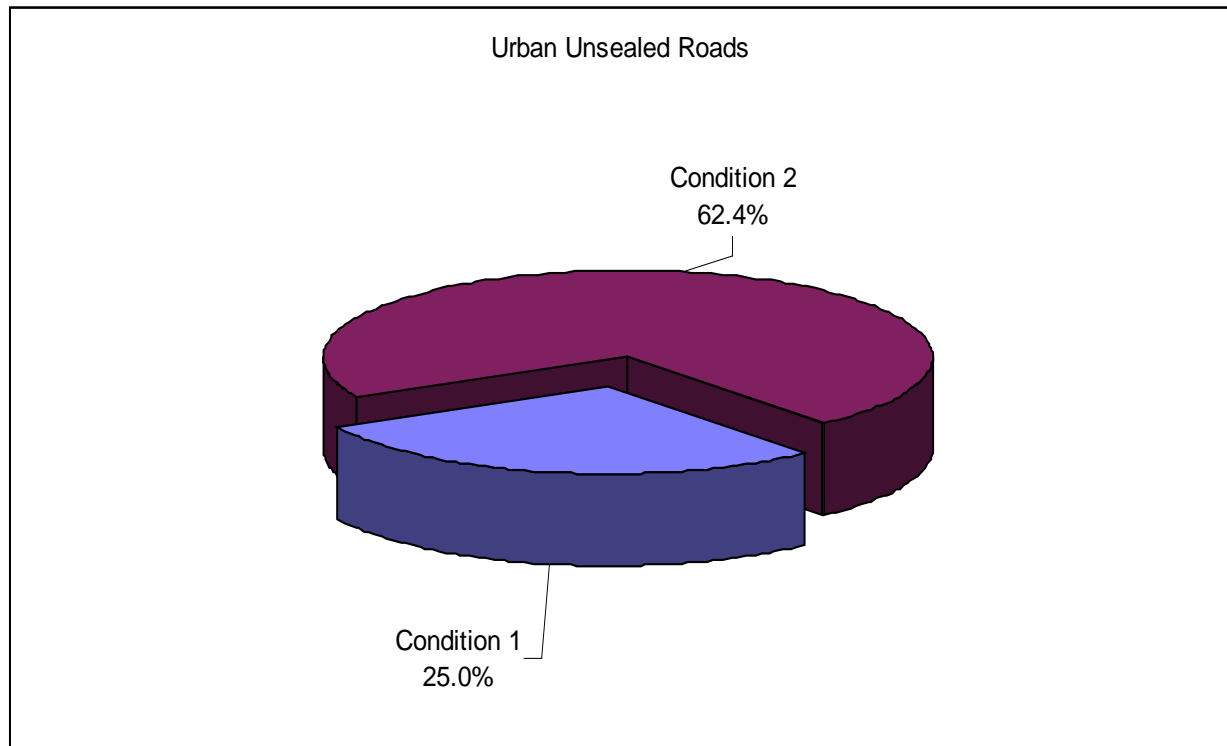


Figure 5.10 Urban Unsealed Roads Pavement Condition Assessment

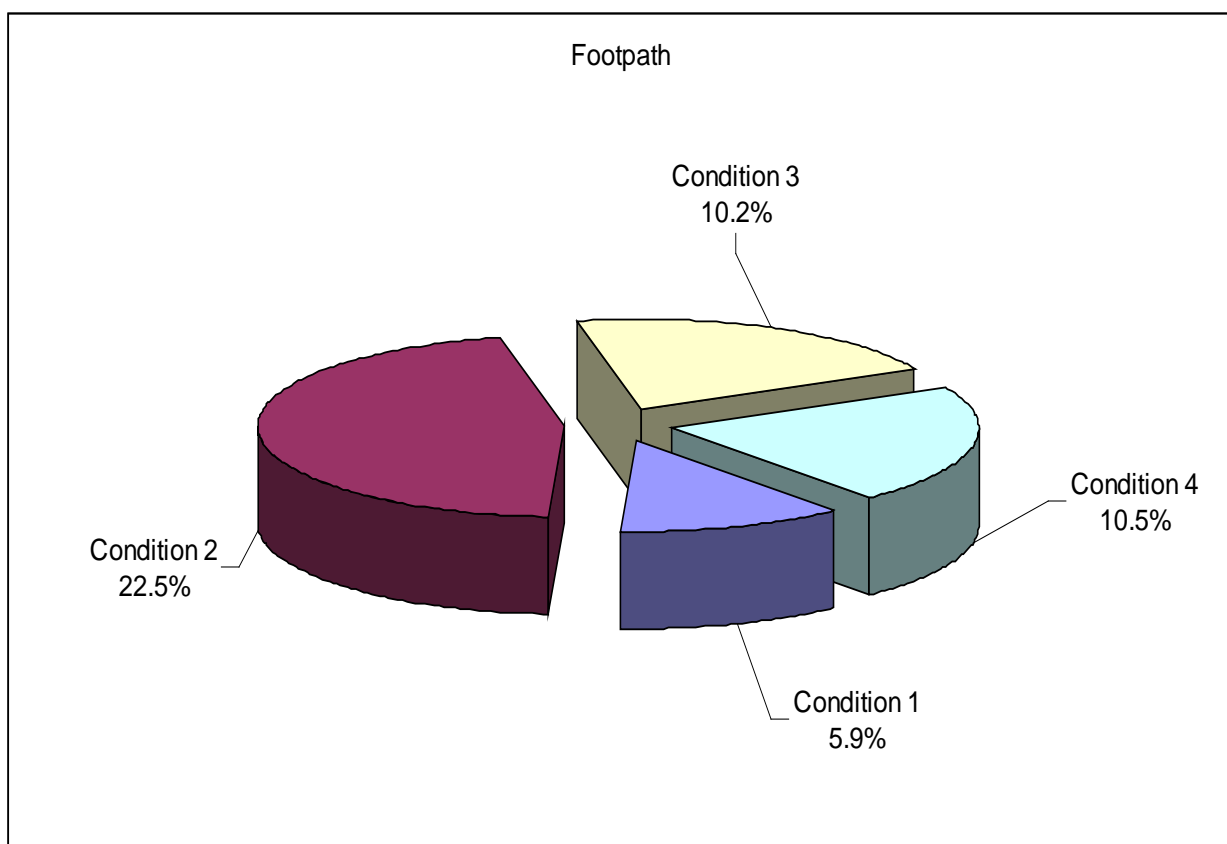


Figure 5.11 Paved Footpath Condition Assessment

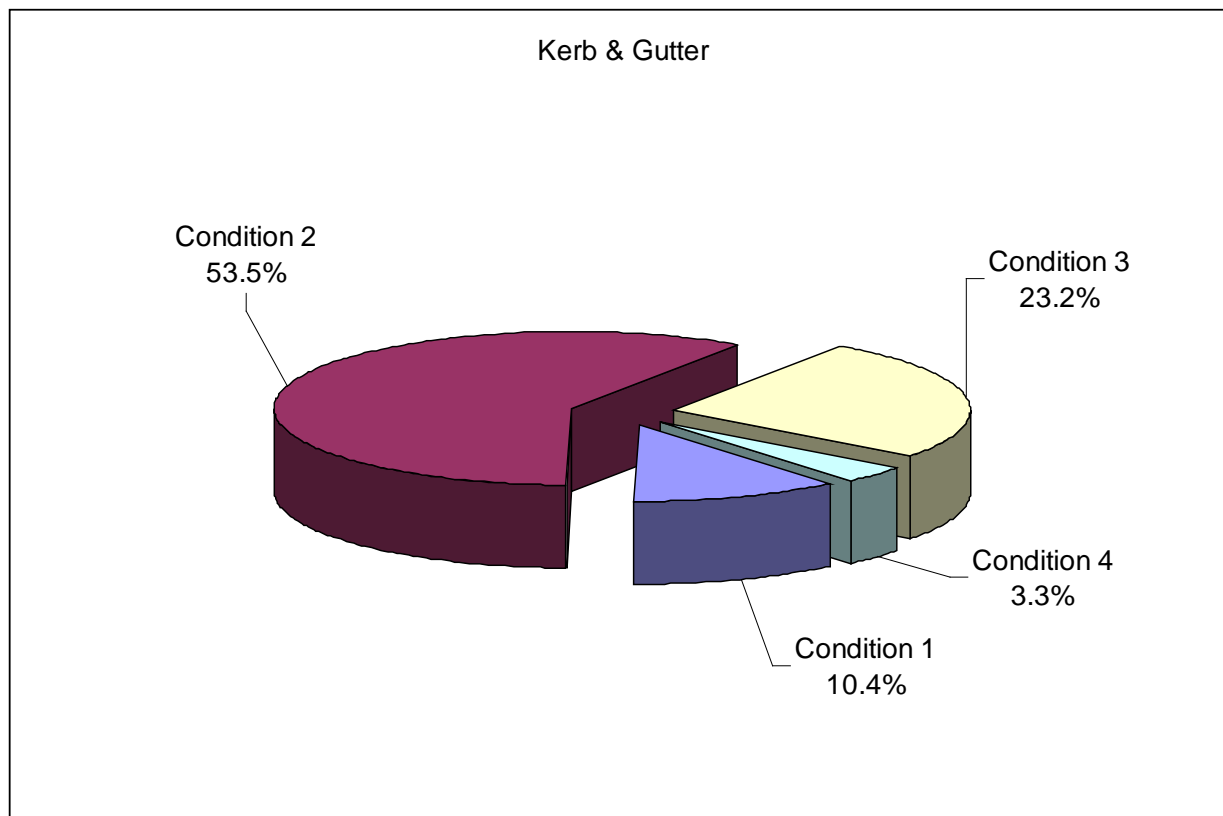


Figure 5.12 Kerb and Gutter Condition Assessment

5.1.4 Asset valuations

The value of assets as at 30th June 2010 covered by this asset management plan is summarised below. Assets were last revalued at 30th June 2010 and were valued at greenfield rates. Table 5.7 lists current asset values

Table 5.7 Current Asset Values

Asset category	Replacement Value (\$M)	Annual Depreciation (\$M)	Accumulated Depreciation (\$M)	Written Down Value (\$M)
Regional Road MR241	\$5.598	0.187	1.120	4.178
Regional Road MR398	\$9.082	0.196	2.081	7.000
Class 2 Rural Sealed Upgrade	\$8.993	0.119	1.403	5.332
Class 3 Rural Sealed Maintained	33.105	0.469	10.293	14.089
Class 4 Rural Unsealed Upgrade	0	0	0	0
Class 5 Rural Unsealed maintained	\$132,949	1.553	44.708	49.590
Class 6 Urban Sealed Maintained	\$13.909	0.335	9.192	4.717
Class 7 Urban Unsealed Upgrade	\$4.280	0.043	2.022	2.259
Footpath	\$2.075	0.045	0.866	1.203
Kerb and Gutter	\$9.173	0.184	4.319	4.846
TOTAL	\$133,035.	3.131	76.004	93.214

Council's sustainability reporting reports the rate of annual asset consumption and compares this to asset renewal and asset upgrade and expansion.

Asset Consumption	0.70
Asset renewal	1.05
Annual Upgrade/expansion	9.00

5.2 Risk Management Plan

An assessment of risks associated with service delivery from infrastructure assets has identified critical risks to Council. The risk assessment process identifies credible risks, the likelihood of the risk event occurring, the consequences should the event occur, develops a risk rating, evaluates the risk and develops a risk treatment plan for non-acceptable risks.

Critical risks, being those assessed as 'Very High' - requiring immediate corrective action and 'High' – requiring prioritised corrective action identified in the infrastructure risk management plan are summarised in Table 5.8

Table 5.8 Critical Risks and Treatment Plans

Asset at Risk	What can Happen	Risk Rating (VH, H)	Risk Treatment Plan
Sealed Road Surfaces	Seal defects resulting in pavement failures	H	Monitor seal condition and reseal prior to normal intervention if required
Sealed Road Surfaces	Seal defects resulting in unsafe road conditions	H	Monitor seal condition and reseal prior to normal intervention if required
Sealed Road Surfaces	Premature failure due to lack of maintenance and patching	H	Increase maintenance inspections and repairs
Road Surface	Seal wear or binder bleeding can result in vehicle instability in high speed rural areas	H	Monitor seal conditions remedial action required prior to normal intervention level
Earthworks and Road Pavement	Erosion during flooding events	H	Regular inspections and maintenance of bridges, culverts and headwalls
Road Seal and Pavements	Damage due to excessive loading	H	Restrictions on vehicles axle loads, speed limits and control traffic flow
Footpaths	Trip hazards resulting in litigation claims	H	Increase inspection frequency for major footpaths and increase maintenance to repair hazards.
Cycleways	Environmental cracking in asphalt can become severe enough to affect cyclist safety	H	Inspect off road paths regularly and crack seal or repair as required
Kerb and Gutter	Damage due to tree roots	H	New plantings to have root barrier installed, with existing trees cut problem root or remove tree if required

5.3 Routine Maintenance Plan

Routine maintenance is the regular on-going work that is necessary to keep assets operating, including instances where portions of the asset fail and need immediate repair to make the asset operational again.

Routine maintenance work includes:

- ✓ Street sweeping
- ✓ Vegetation control on road verges
- ✓ Seal maintenance (pothole patching)

5.3.1 Maintenance and improvement plan

Maintenance includes reactive, planned and cyclic maintenance work activities.

Reactive maintenance is unplanned repair work carried out in response to service requests and management/supervisory directions. Assessment and prioritisation of reactive maintenance is undertaken by Council staff using experience and judgement. **Reactive** maintenance work is has been determined as being typically 30% of total maintenance expenditure.

Planned improvement is repair work that is identified and managed through a maintenance management system (MMS). MMS activities include inspection, assessing the condition against failure/breakdown, experience, prioritising, scheduling, actioning the work and reporting what was done to develop a maintenance history and improve maintenance and service delivery performance. Planned maintenance work is approximately 72.65% of total expenditure on roads.

Cyclic maintenance is replacement of higher value components/sub-components of assets that are undertaken on a regular cycle including repainting of road markings, grading and gravelling roads, etc.

Expenditure trends are shown in Table 5.9

Table 5.9. Expenditure Trends

Year	Expenditure Dollars		
	Reactive	Planned	Cyclic
2005/06	\$103,514	\$718,651	\$9,557
2006/07	\$68,874	\$1244,874	\$45,483
2007/08	\$78,590	\$816,985	\$196129
2008/09	\$616,751	\$4,336.08	\$2,002,118

Year	Expenditure as % of Total		
	Reactive	Planned	Cyclic
2005/06	11.4	79.4	9.1
2006/07	5.1	91.5	3.3
2007/08	7.2	74.8	18.0
2008/09	4.9	89.1	6.0
Average	7.2	83.6	9.1

Expenditure levels are considered to be adequate to meet required service levels. Future revision of this asset management plan will look at maintenance expenditures compared to the level of service.

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

5.3.2 Standards and specifications

Maintenance work is carried out in accordance with the following Standards and Specifications.

- ✓ ARRB Sealed Local Roads Manual
- ✓ AS2734 Guide to Good Asphalt Practice
- ✓ ARRB Unsealed Road Manual
- ✓ Temora Shire Council Road Hierarchy Policy
- ✓ Temora Shire Footpath Hierarchy Plan

5.3.3 Summary of future maintenance expenditures

Future maintenance expenditure is forecast to trend in line with the value of the asset stock as shown in Fig 5.3.1 to 5.34. Note that all costs are shown in current 2010/11 dollar values.

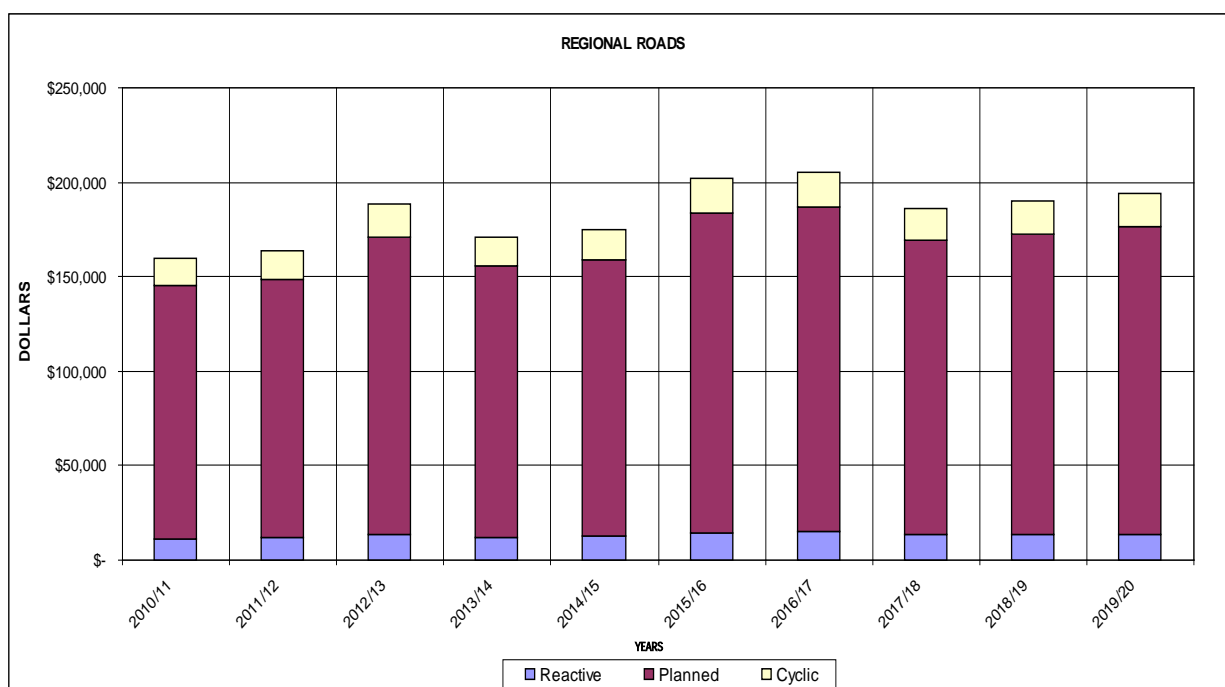


Fig 5.13 Predicted Expenditure on Regional Roads

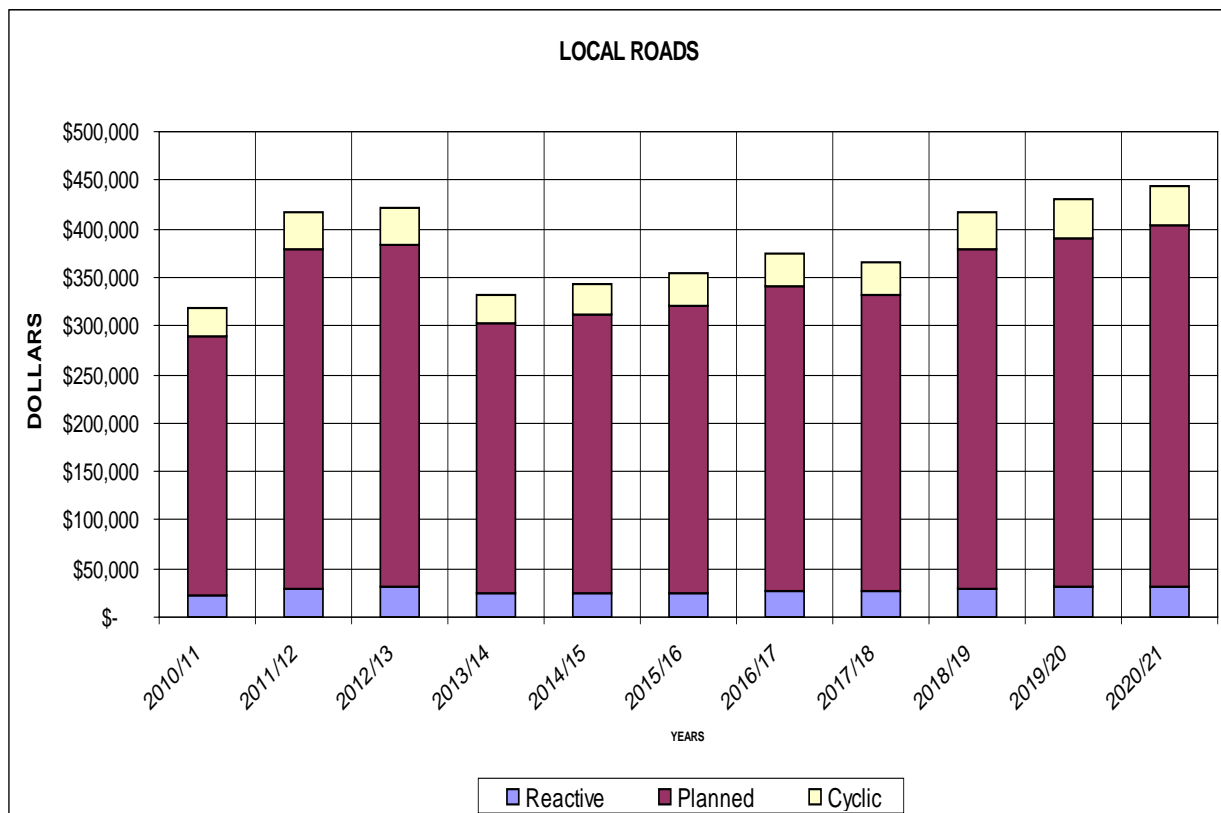


Fig 5.14 *Predicted Expenditure on Local Roads*

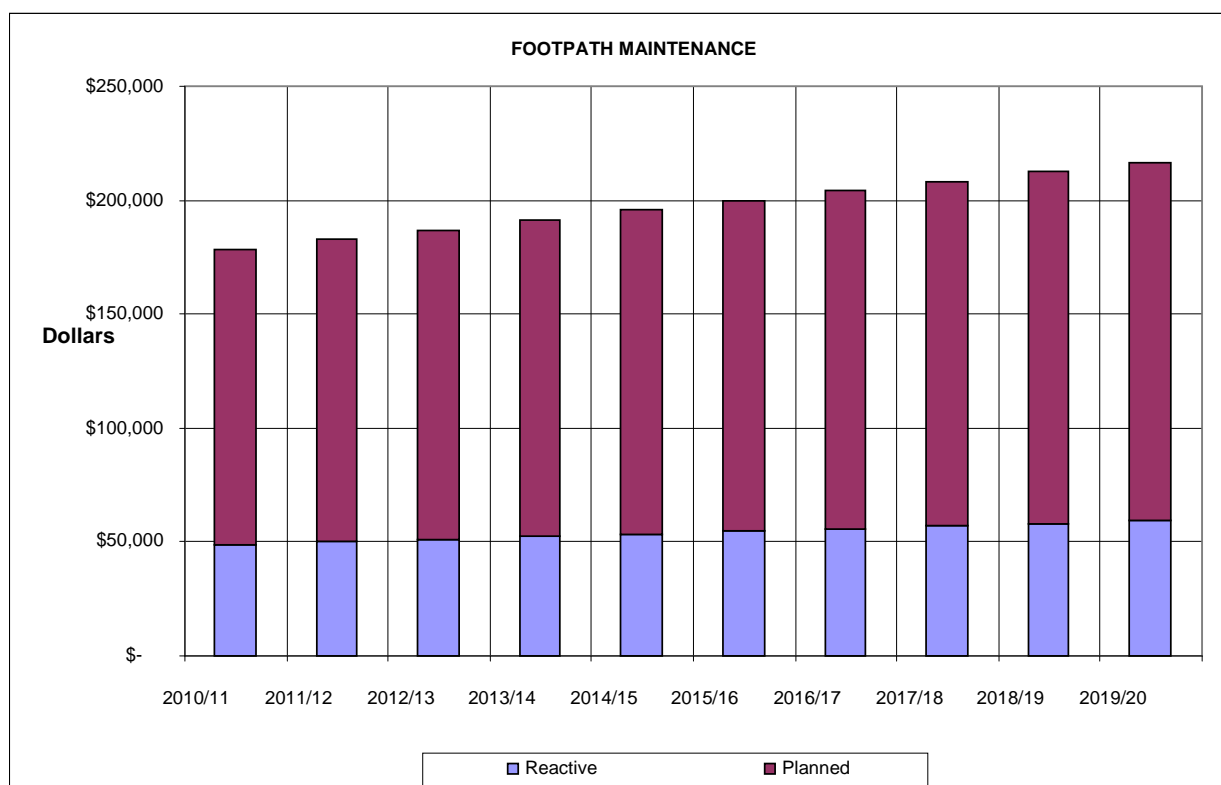


Fig 5.15 *Predicted Expenditure for footpaths*

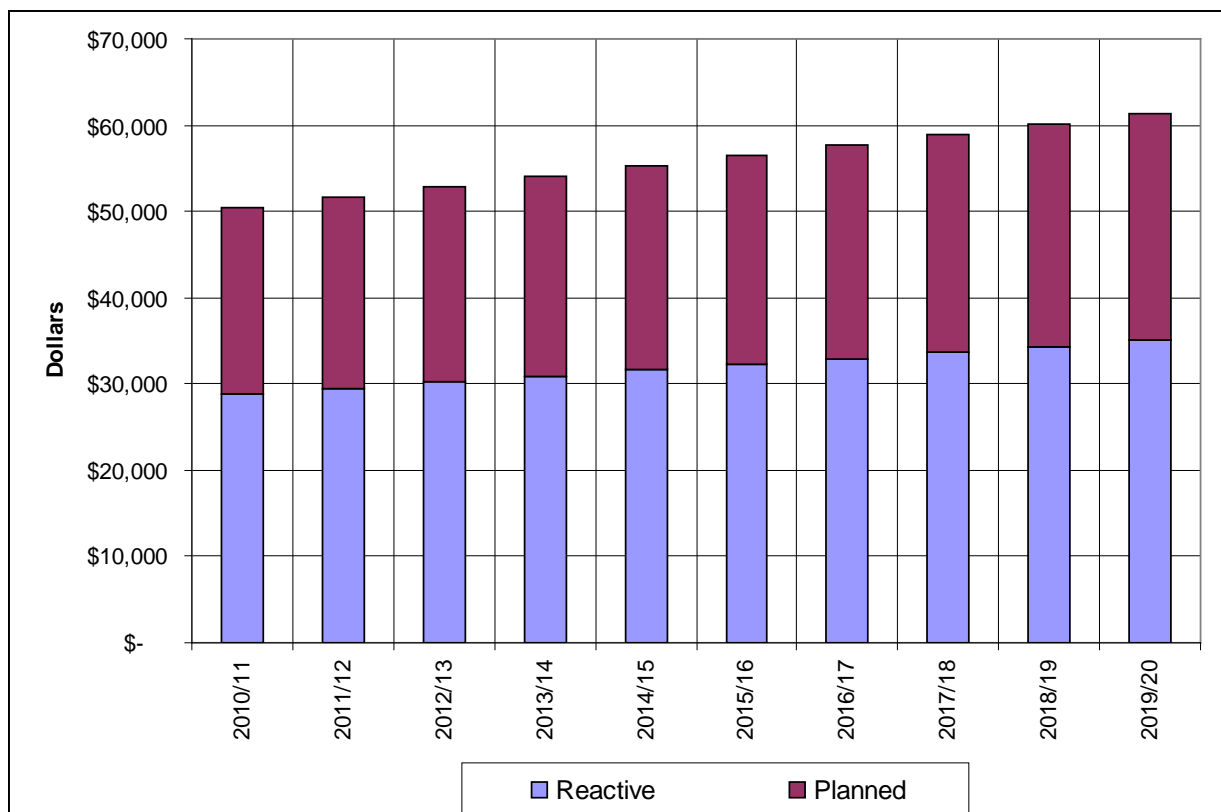


Fig 5.16 Predicted Expenditure for Kerb and Gutter

Maintenance refers to works undertaken to address minor defects such as pothole patching, edge breaks repair, minor kerb and gutter repair works or footpath grinding. These works are undertaken to keep Council's assets in a safe and operational condition, but not necessarily to improve the overall condition of these assets.

It should be noted that when undertaking the lifecycle modelling, these type of costs are taken into consideration by assuming that each year, a percentage of these distresses, such as potholes, footpath trip hazards, will be repaired as part of Council's routine maintenance. If these assets are left to deteriorate, by not allocating sufficient capital, then the amount of deterioration not being fixed under routine maintenance will increase. Equally if the condition of these assets improves then the routine maintenance expenditure required will decrease.

The prediction model are forecasting a proportional increase in future maintenance with the current levels of capital funding.

Deferred maintenance, i.e. works that are identified for maintenance and unable to be funded are to be included in the risk assessment process in the infrastructure risk management plan. Maintenance is funded from Council's operating budget and grants where available. This is discussed in Section 6.2.

5.4 Renewal/Replacement Plan

Renewal expenditure is major work which does not increase the asset's design capacity 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 upgrade/expansion or new works expenditure. Table 5.10 shows the past renewal expenditure that has been spent on Council roads.

Table 5.10 Historical Capital Renewal Expenditure

Year	Expenditure
2005/06	\$302,490
2006/07	\$53,031
2007/08	\$551,098
2008/09	\$739,246
Average	\$411,467

5.4.1 Renewal plan

Council's maintenance and renewal plan is currently incorporated into a 10 year Capital Works Program (Appendix C)..

Assets identified for renewal are inspected to verify the accuracy of the estimated remaining life obtained and develop a preliminary renewal estimate. Verified proposals are ranked by priority and available funds and scheduled in future works programmes. The priority ranking criteria is detailed in Table 5.11.

Table 5.11 Renewal Priority Ranking Criteria

Urban Roads Criteria	Weighting	Rural Road Criteria	Weighting
1. Road Usage	10	1. Road Usage	10
2. Road and Path Hierarchy	18	2. Road and Path Hierarchy	15
3. Road Condition	50	3. Road Condition	50
4. Cost Effectiveness	12	4. Cost Effectiveness	10
5. Safety	10	5. Safety	10
		6. Width Deficiency	5
Total	100%		100%

Renewal will be undertaken using 'low-cost' renewal methods where practical. The aim of 'low-cost' renewals is to restore the service potential or future economic benefits of the asset by renewing the assets at a cost less than replacement cost. An example of low cost renewal, in lieu of full pavement reconstruction, is pavement rehabilitation work or spraying an enrichment seal.

5.4.2 Renewal standards

Renewal work is carried out in accordance with the standards and specifications noted in Section 5.3.1.

5.4.3 Summary of future renewal expenditure

Figure 5.17 has the projected future renewal expenditure increase over time as the asset ages.

The projected capital renewal program is shown in Appendix C.

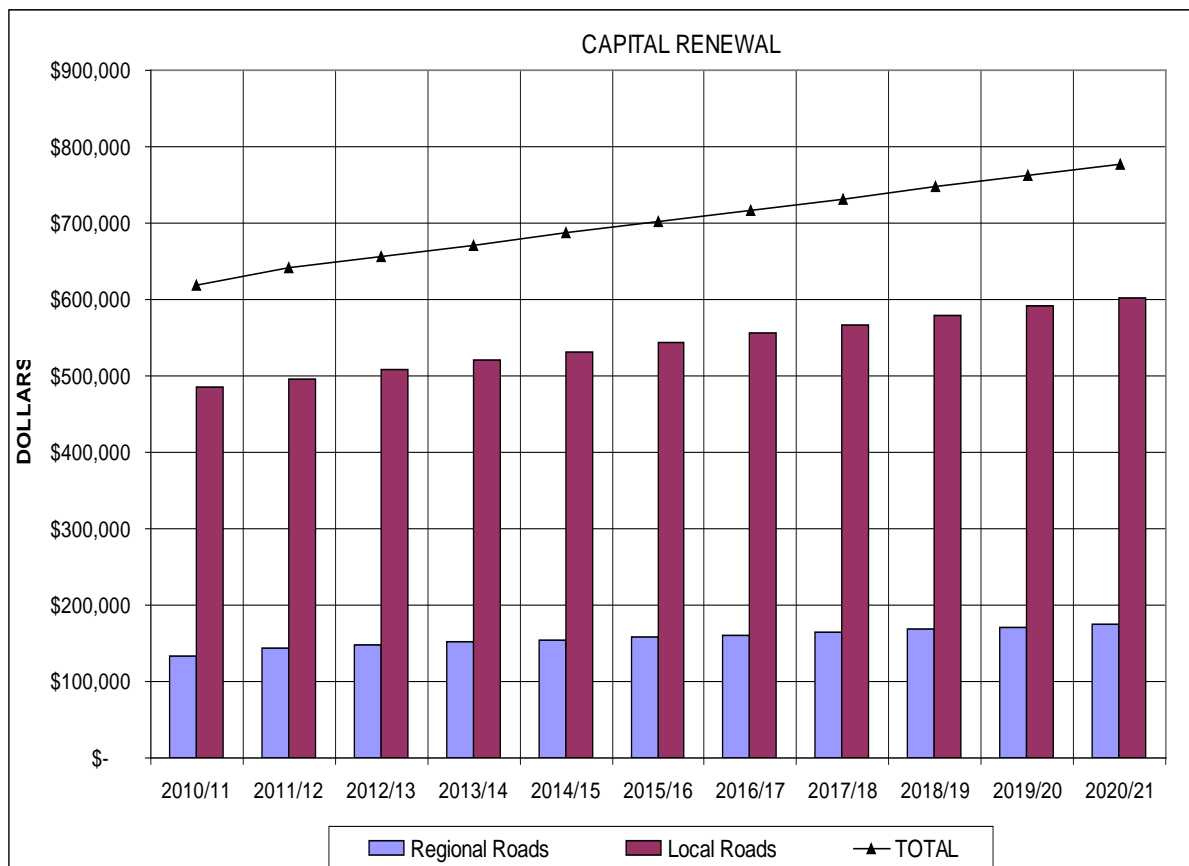


Fig 5.17 Predicted Capital Renewal for Regional and Local Roads

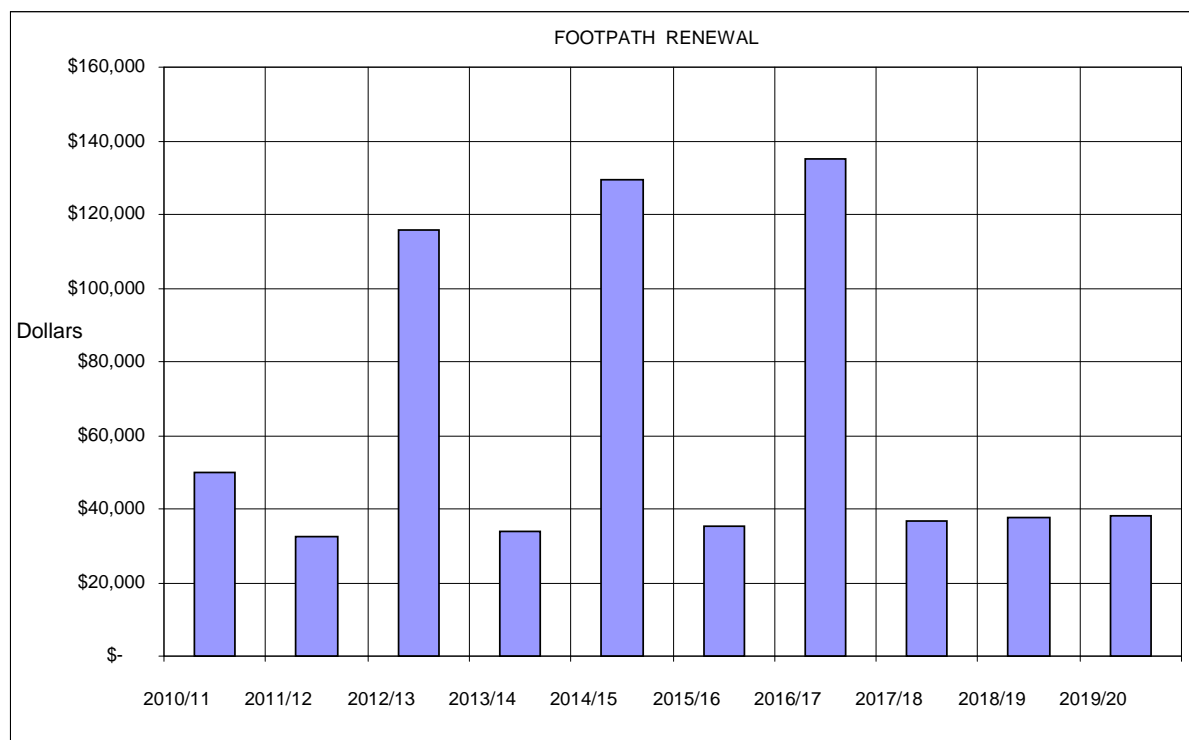


Fig 5.18 Predicted Capital Renewal for Footpaths

Deferred renewal, i.e. those assets identified for renewal and not scheduled for renewal in capital works programs are to be included in the risk assessment process in the risk management plan.

Renewals are to be funded from Council's capital works program and grants where available. This is further discussed in Section 6.2.

5.5 Creation/Acquisition/Upgrade Plan

New works are those works that create a new asset that did not previously exist, or works which upgrade or improve an existing asset beyond its existing capacity. They may result from growth, social or environmental needs. Assets may also be acquired at no cost to the Council from land development. These assets from growth are considered in Section 4.4.

5.5.1 Selection criteria

New assets and upgrade/expansion of existing assets are identified from various sources such as councillor or community requests, proposals identified by strategic plans or partnerships with other organisations. Candidate proposals are inspected to verify need and to develop a preliminary renewal estimate. Verified proposals are ranked by priority and available funds and scheduled in future works programmes. The priority ranking criteria is detailed below.

The selection criteria is the same as that used for assets requiring renewal, see figure 5.4.1

In addition to the above Council has a Road Hierarchy Policy and a Footpath Hierarchy Policy

5.5.2 Standards and specifications

Standards and specifications for new assets and for upgrade/expansion of existing assets are the same as those for maintenance and renewal see Section 5.3.2.

5.5.3 Summary of future upgrade/new assets expenditure

New assets and services are to be funded from Council's capital works program and grants where available. This is further discussed in Section 6.2. Council's 10 year Capital Works Program is shown in Appendix C

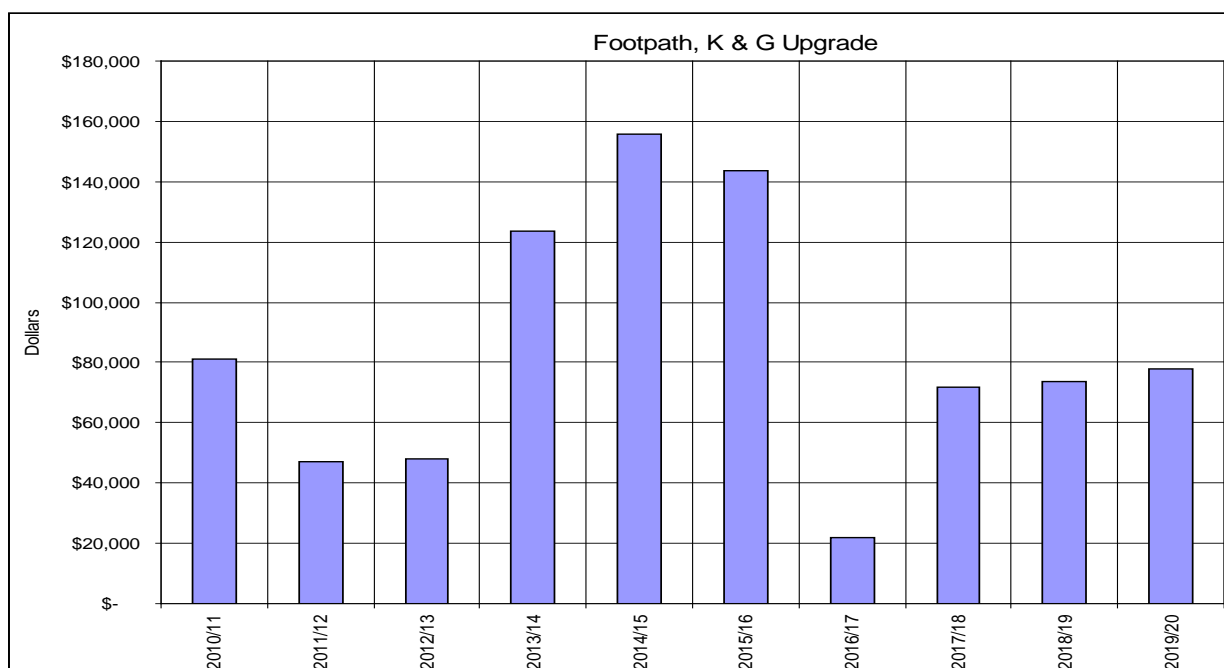


Fig 5.19. Planned Capital Upgrade/New Asset Expenditure

5.6 Disposal Plan

Disposal includes any activity associated with disposal of a decommissioned asset including sale, demolition or relocation. It is unlikely that any sealed road would be disposed of while still in service. It may be possible that if a sealed road is underutilised that it may be reverted back to gravel, but this would be a last resort and only after it is shown that the maintenance costs are unjustified.

There are no plans to dispose of any road assets.

6. FINANCIAL SUMMARY

This section contains the financial requirements resulting from all the information presented in the previous sections of this asset management plan. The financial projections will be improved as further information becomes available on desired levels of service, current and projected future asset performance and grant funding.

6.1 Financial Statements and Projections

The financial projections are shown in Table 6.1 and Fig 6.1 for planned operating (operations and maintenance) and capital expenditure (renewal and upgrade/expansion/new assets).

Activity	2010/11 (\$000)	2011/12 (\$000)	2012/13 (\$000)	2013/14 (\$000)	2014/15 (\$000)	2015/16 (\$000)	2016/17 (\$000)	2017/18 (\$000)	2018/19 (\$000)	2019/20 (\$000)
Urban sealed road maintenance.	113	118	122	126	131	136	140	145	149	150
Rural sealed road maintenance	187	193	198	214	221	227	234	241	248	264
Urban unsealed road maintenance	16	73	77	81	86	90	95	100	104	113
Rural unsealed road maintenance	701	696	708	726	746	771	766	803	887	920
Regional road maintenance	160	164	189	171	175	202	206	186	190	198
Sub total	1,177	1,242	1,294	1,319	1,359	1,426	1,441	1,476	1,579	1,645
Rural sealed upgrade	19	20	20	21		42	43	44	46	47
Regional road upgrade	150	240	300	300	300	300				
Urban unsealed road capital upgrade	50	51	52	53	54	55	57	57	57	57
Sub total	219	310	372	374	354	397	100	101	102	105
Urban sealed road capital renewal	133	136	139	142	146	149	152	155	158	162
Rural sealed road capital renewal	402	343	492	402	414	427	440	465	466	480
Rural unsealed capital renewal	808	975	742	777	775	802	809	826	843	860
Regional road renewal	115	124	127	130	132	169	172	141	202	147
Sub total	1,458	1,578	1,500	1,451	1,467	1,547	1,573	1,587	1,670	1,649
CBD footpath cleaning	133	136	139	142	145	151	154	157	161	164
Paved footpath maintenance	22	22	22	22	22	22	22	22	22	22
Unpaved footpath maintenance	27	28	29	29	30	31	31	32	32	33
Kerb & gutter maintenance	15	16	16	16	17	17	17	18	18	18
Sub total	197	201	205	209	213	221	224	226	230	234
Footpath capital	25	81	47	48	124	156	144	22	72	74
Kerb and gutter capital	68	68	68	68	68	68	68	68	68	68
Footpath, K&G renewal	50	32	116	134	129	135	37	38	38	38
Sub total	143	181	231	250	321	359	249	128	178	180
TOTAL	3,194	3,512	3,602	3,603	3,714	3,950	3,697	3,518	37,59	3,813

Table 6.1 Planned Operating and Capital Expenditure

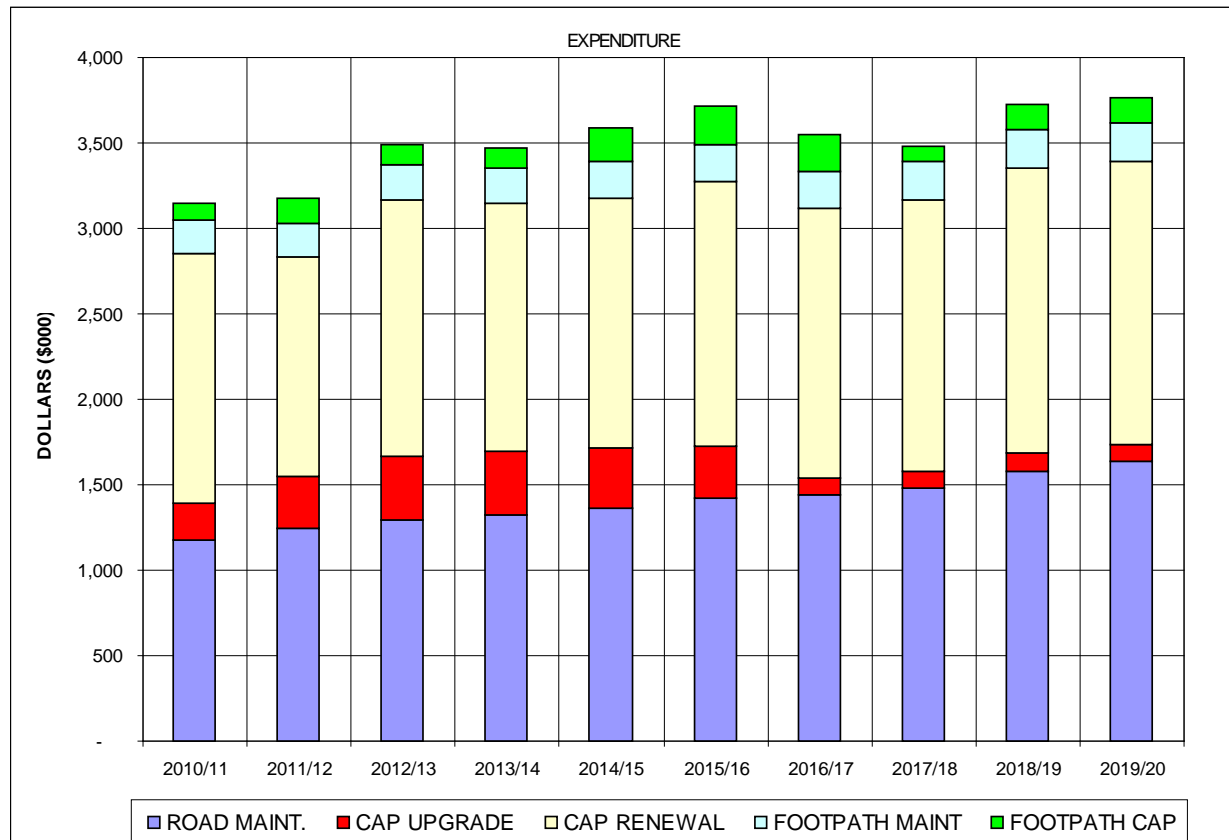


Fig 6.1 Planned Maintenance and Capital Expenditure Roads and Footpaths

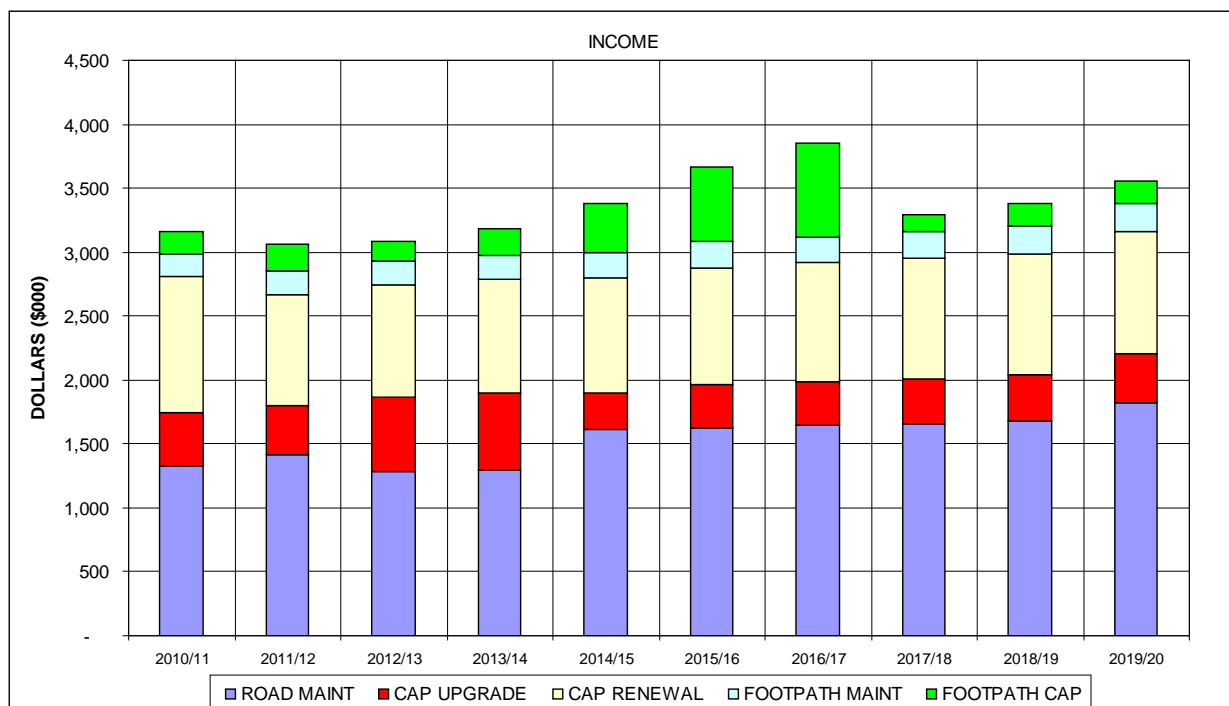


Fig 6.2 Proposed Maintenance and Capital Income from all sources

6.1.1 Sustainability of Service Delivery

There are two key indicators for financial sustainability that have been considered in the analysis of the services provided by this asset category, these being long term life cycle costs and medium term costs over the 10 year financial planning period.

Long term - Life Cycle Cost

The ratio of lifecycle costs to lifecycle expenditure gives an indicator of sustainability of service provision. Life cycle costs include maintenance and renewal expenditure. The annual average life cycle cost for the services covered in this asset management plan for a 20 year period is \$3.33 million. Table 6.3 compares the average income to the average expenditure.

Annual Average lifecycle Costs, \$000	Average Lifecycle Expenditure \$000	Average annual Disparity \$000
3,675	3,615	+90

Table 6.2 Lifecycle Costs vs. Expenditure – Roads& Footpaths

Refer to discussion at Table 6.2 regarding the factors contributing to this outcome.

Table 6.3 shows the indicative disparity between projected and planned renewals across the asset category.

Year End June 30	Predicted Maintenance Expenditure (\$000)	Funded Maintenance Expenditure (\$000)	Planned renewal Expenditure (\$000)	Funded Renewal Costs (\$000)	Disparity in Renewal Expenditure (Planned – Projected) (\$000)	Cumulative Renewal Funding Disparity (\$000)
2010/11	1,373	1,511	1,459	1,488	167	167
2011/12	1,462	1,604	1,350	1,480	272	439
2012/13	1,396	1,370	1,500	1,357	-169	270
2013/14	1,527	1,487	1,451	1,581	200	
2014/15	1,571	1,808	1,468	1,431	1298	470
2015/16	1,644	1,827	1,547	2,662	1115	1768
2016/17	1,661	1,843	1,573	2,506	118	2883
2017/18	1,702	1,864	1,587	1,543	-15	3001
2018/19	1,810	1,885	1,670	1,580	261	2986
2019/20	1,870	2,037	1,649	1,543	88	3247
2020/21	1,883	2,070	1,679	1,580	-12	3335
2021/22	2,002	2097	1,724	1,617	-54	3323

Year End June 30	Predicted Maintenance Expenditure (\$000)	Funded Maintenance Expenditure (\$000)	Planned renewal Expenditure (\$000)	Funded Renewal Costs (\$000)	Disparity in Renewal Expenditure (Planned – Projected) (\$000)	Cumulative Renewal Funding Disparity (\$000)
2022/23	2,056	2,125	1,775	1,652	-78	3269
2023/24	2,087	2,153	1,827	1,683	-224	9191
2024/25	2,144	2,183	1,977	1,714	-232	2967
2025/26	2,204	2,212	2,020	1,780	-232	2735
2026/27	2,264	2,244	2,064	1,814	-270	2465
2027/28	2,356	2,275	2,107	1,848	--340	2125
2028/29	2,231	2,118	2,373	1,882	-604	1521
2029/30	2,074	2,149	2,181	1,907	-199	1322

Table 6.3 10-Year Projection for Income plus Maintenance and Capital Expenditure

A gap between life cycle costs and life cycle expenditure gives an indication as to whether present consumers are paying their share of the assets they are consuming each year. The purpose of this road asset management plan is to identify levels of service that the community needs and can afford and develop the necessary long-term financial plans to provide the service in a sustainable manner.

The life cycle gap for services covered by this asset management plan varies each year, but over a 20-year period is positive \$0.9 million, giving a life cycle sustainability index is 1.03. That is, that is maintaining the road network..

Medium term – 10 year financial planning period

This asset management plan identifies the estimated maintenance and capital expenditures required to provide an agreed level of service to the community over a 20-year period for input into a 10-year financial plan and funding plan (see Appendix E) to provide the service in a sustainable manner.

The financial planning in this asset management plan, will need to be revised at least every four years as this is the usual time frame that government grants are know, To assume that grants will continue indefinitely may lead to a false expectation that levels of service can be maintained.

An asset management plan needs to compare the existing or planned expenditures in the 10-year period to identify monetary gaps. In a core asset management plan, a gap is generally due to increasing asset renewals, increased costs etc.

Fig 6.3 shows the projected asset renewals in the 10-year planning period from the asset register. The projected asset renewals are compared to planned renewal expenditure in the capital works program..

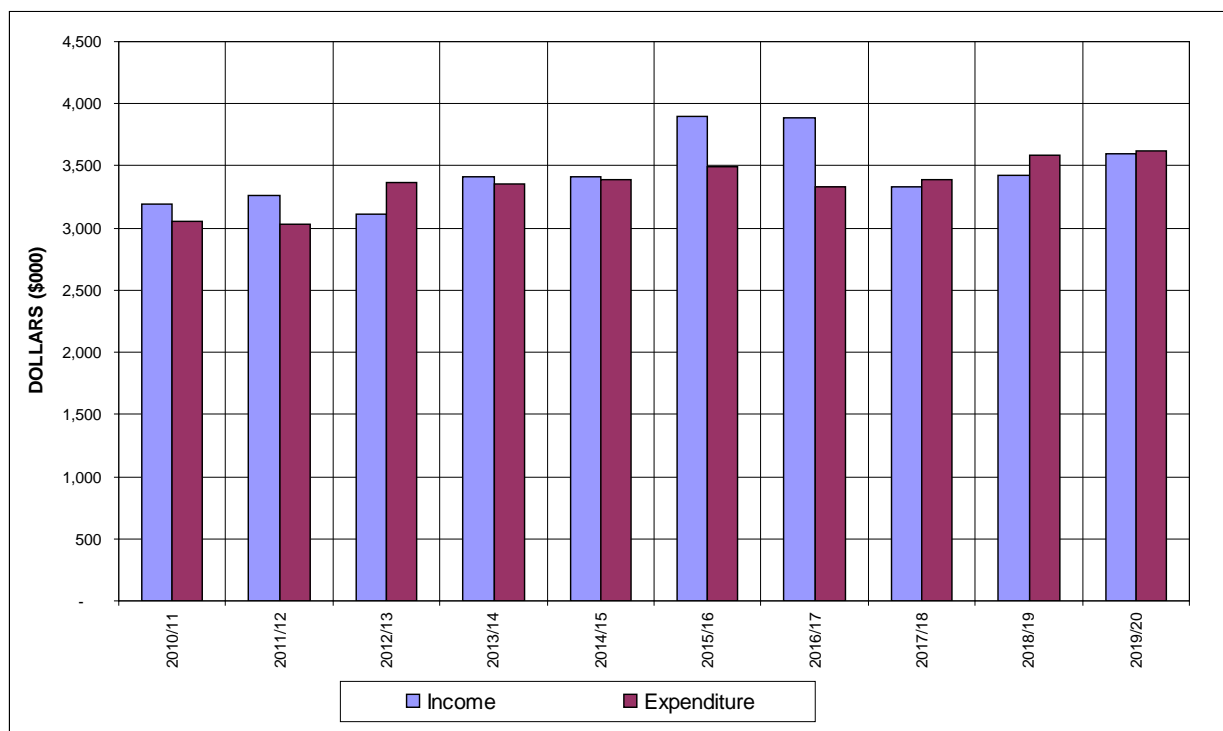


Fig 6.3 *Income and Expenditure for 10-Year Period*

Providing services in a sustainable manner will require matching of projected asset renewals to meet agreed service levels with planned capital works programs and available revenue.

A gap between projected asset renewals, planned asset renewals and funding indicates that further work is required to manage required service levels and funding to eliminate any funding gap.

Council will manage the 'gap' by developing this asset management plan to provide guidance on future service levels and resources required to provide these services, and determine what will be the result if the gap is not funded such as:

- ✓ Reduce level of service
- ✓ Reduce customer satisfaction levels
- ✓ Increased risk/safety
- ✓ Greater proportion of assets in poor condition

Council's long-term financial plan covers the first 10-years of the 20-year planning period. The total maintenance and capital renewal expenditure required over the 10 years is \$33.616 million.

This is an average expenditure of \$3.362 million per year. Estimated maintenance and capital renewal expenditure in year 1 is \$3.051 million. The 10 year sustainability index is 1.03

6.2 Funding Strategy

Projected expenditure identified in Section 6.1 is to be funded from Council's operating and capital budgets. The funding strategy is detailed in the Council's 10 year long term financial plan. Achieving the financial strategy will require:

- ✓ Increasing rates
- ✓ Receiving larger amounts of Federal and State grants

- ✓ Disposing of assets to reduce maintenance costs
- ✓ Accepting a lower level of service.

6.3 Valuation Forecasts

Asset values are forecast to increase as additional assets are added to the asset stock from construction and acquisition by Council and from assets constructed by developers and others and donated to Council. Fig 6.4 shows the projected replacement cost asset values over the planning period in current 2011 dollar values.

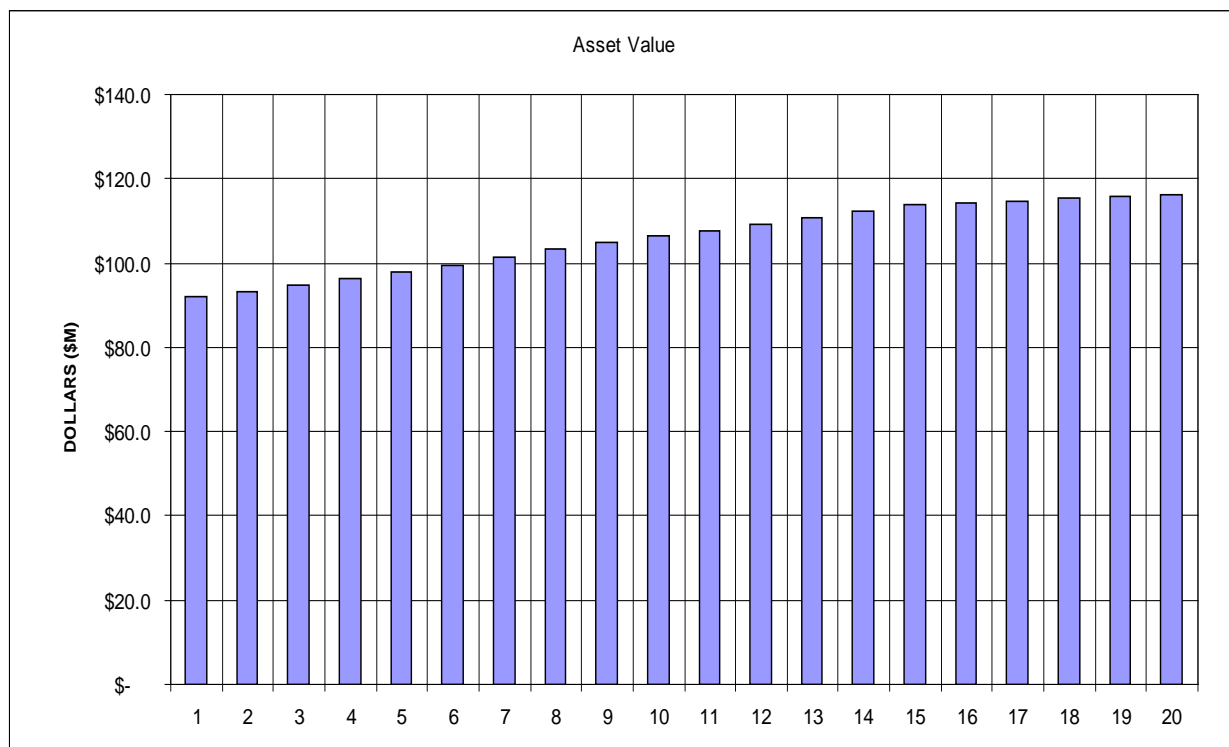


Fig 6.4 . Projected Asset Values

Depreciation expense values are forecast in line with asset values as shown in Fig 6.5.

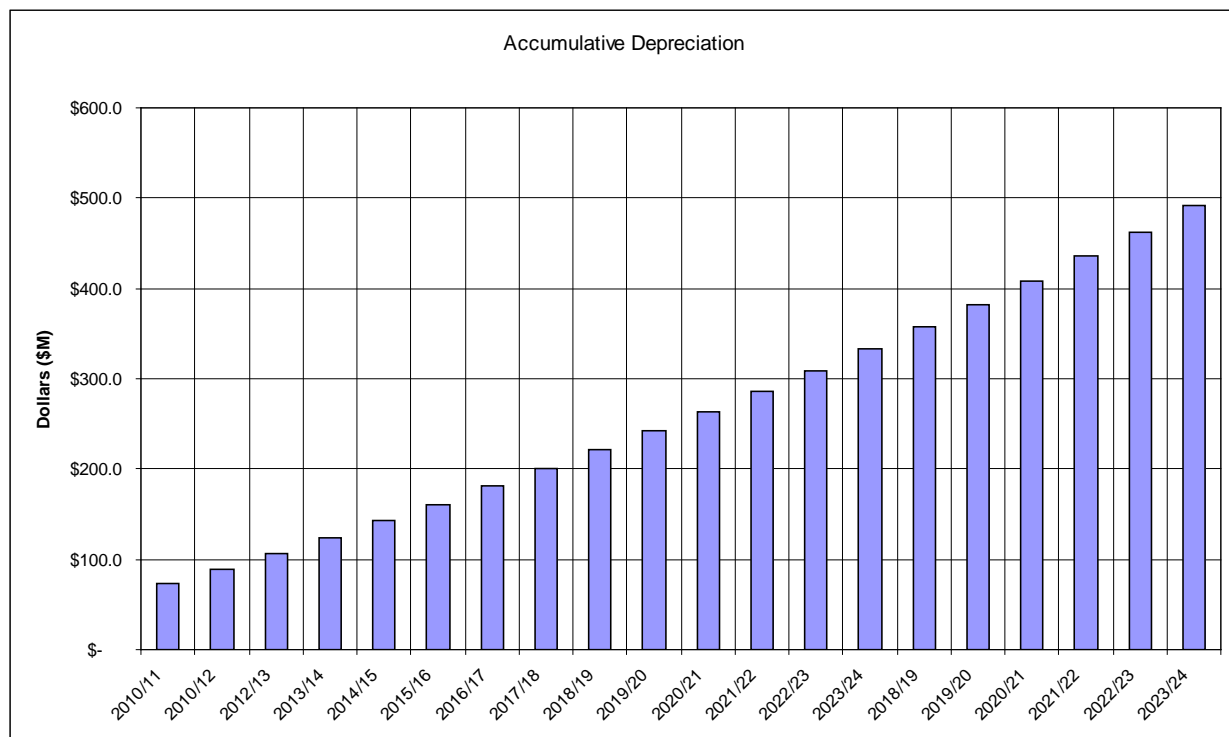


Fig 6.5 . Projected Depreciation Expense

The depreciated replacement cost (current replacement cost less accumulated depreciation) will vary over the forecast period depending on the rates of addition of new assets, disposal of old assets and consumption and renewal of existing assets. Forecast of the Written Down Capital Value is shown in Fig 6.6

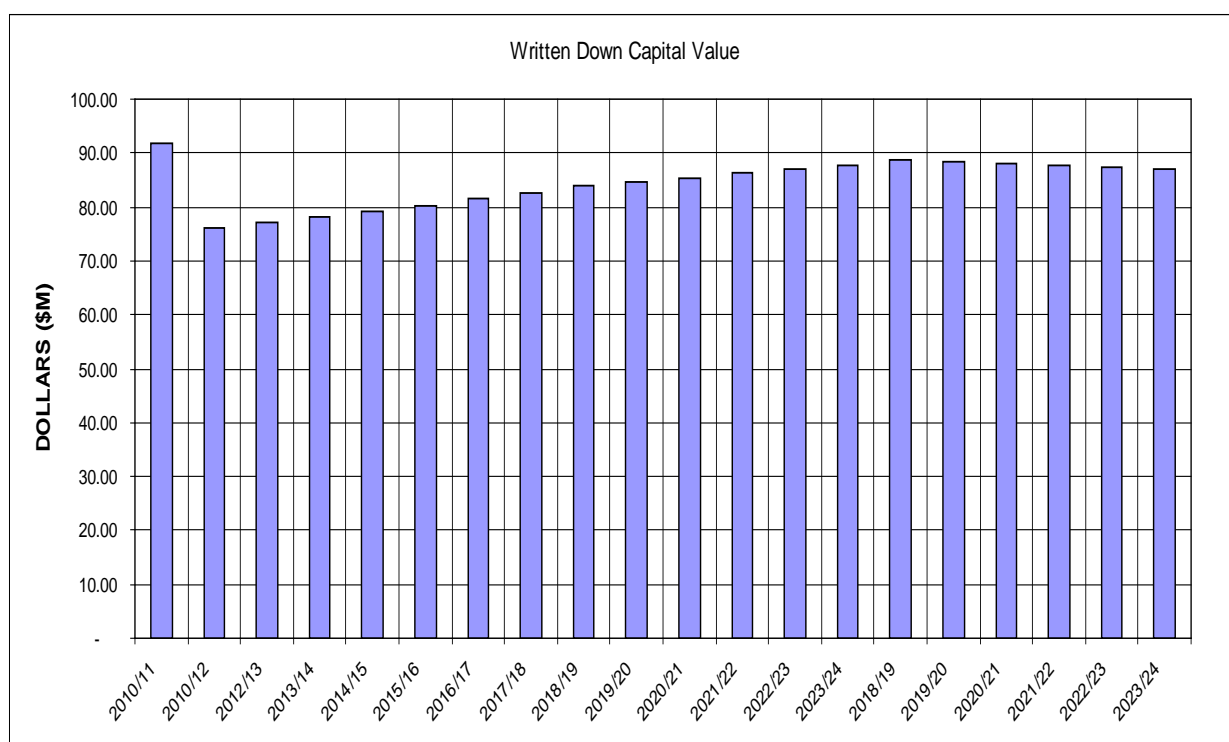


Fig 6.6. Projected Depreciated Replacement Cost

6.4 Key Assumptions made in Financial Forecasts

This section details the key assumptions made in presenting the information contained in this asset management plan and in preparing forecasts of required operating and capital expenditure and asset values, depreciation expense and carrying amount estimates. It is presented to enable readers to gain an understanding of the levels of confidence in the data behind the financial forecasts.

Key assumptions made in this asset management plan are:

- ✓ The current levels of service will be maintained over the life of this asset management plan
- ✓ The treatment and maintenance costs are based on Council's current schedule of rates
- ✓ All predicted financial figures are based on 2010/11 rates and have been adjusted for an inflation rate of 3.5%

Accuracy of future financial forecasts may be improved in future revisions of this asset management plan by the following actions.

- ✓ Consult with the community and other stakeholders to finalise the levels of service currently being delivered
- ✓ Refine and improve the prediction modelling (life cycle paths and decision matrices)

7. ASSET MANAGEMENT PRACTICES

7.1 Accounting/Financial Systems

Council uses CIVICA Authority as its corporate accounting system. Authority has a suite of accounting/financial modules to meet all day to day operational and reporting requirements

The Director of Administration is delegated the statutory responsibility as Council's Responsible Accounting Officer. The Responsible Accounting Officer is to ensure that Council has adequate control systems, processes and procedures in place and these are being applied to meet all financial operating and reporting requirements.

The Local Government Act 1993, Chapter 13 sets out the requirements for management reporting, accounting, auditing, and financial reporting for Councils. The NSW division of Local Government also issues the Local Government Code of Accounting Practice and Financial Reporting, which assists in the interpretation and application of the act and the application of Australian Accounting Standards to the audit financial reporting functions.

The Government Code of Accounting Practice and Financial Reporting also provides a mechanism which ensures appropriate accounting policies and practices are adopted. For infrastructure, significant accounting policies are detailed in the annual financial reports. These include policies on the acquisition of assets, initial asset recognition, subsequent costs, asset revaluation, capitalisation thresholds, depreciation and disposal and de-recognition.

It is possible that changes will be required to accounting policies and practices resulting from this asset management plan. These will be assessed and implemented as soon as practical.

7.2 Asset Management Systems

Council's adopted Asset Management System is "AIM" (Asset and Infrastructure Management) a component of CIVICA's "Authority System".

AIM links to the Authority accounting system through the use of Work Orders and Tasks. Asset Valuations can be stored in AIM but are also stored in the Capital Value Record (CVR) component of Authority.

The Director of Administration (and the Administration staff) are responsible for maintaining the Asset Management Systems in conjunction with the Director of Engineering to update information.

The development of AIM hierarchy for all road assets is practically complete. The Director of Engineering revalued the road assets, by using Fair Value rates from current projects. Part of the asset revaluation has been to split roads into segments. For sealed roads these segments related to sealed segments. Capacity, condition and valuation data relating to these segments were then imported into AIM.

7.3 Information Flow Requirements and Processes

The key information flows *into* this asset management plan are:

- ✓ The asset register data on size, age, value, remaining life of the network;
- ✓ The unit rates for categories of work/material;
- ✓ The adopted service levels;
- ✓ Projections of various factors affecting future demand for services;
- ✓ Correlations between maintenance and renewal, including decay models;
- ✓ Data on new assets acquired by council.

7.4 Key Assumptions made in Financial Forecasts

This section details the key assumptions made in presenting the information contained in this asset management plan and in preparing forecasts of required operating and capital expenditure and asset values, depreciation expense and amount estimates. It is presented to enable readers to gain an understanding of the levels of confidence in the data behind the financial forecasts.

The key assumptions made in this asset management plan are:

- ✓ The current levels of service will remain constant for the life of this plan
- ✓ The treatment and maintenance costs are based on Council's current schedule of rates.
- ✓ All financial figures are based on 2010/11 values and are adjusted for a 3.2% inflation rate, whereas income and grants are based on a 2% increase.
- ✓ The useful life analysis

These will impact the Long Term Financial Plan, Strategic Business Plan, annual budget and departmental business plans and budgets.

7.4 Standards and Guidelines

Refer to Section 5.3.2

8. PLAN IMPROVEMENT AND MONITORING

8.1 Performance Measures

The effectiveness of the asset management plan can be measured in the following ways:

- ✓ The degree to which the required cashflows identified in this asset management plan are incorporated into council's long term financial plan and Strategic Management Plan;
- ✓ The degree to which 1-5 year detailed works programs, budgets, business plans and organisational structures take into account the 'global' works program trends provided by the asset management plan;

8.2 Improvement Plan

The asset management improvement plan generated from this asset management plan is shown in Table 8.21

Table 8.1 Improvement Plan

Task No	Task	Responsibility	Resources Required	Timeline
1.	Valuation Unit Costs – review unit rates, derivations on a greenfield basis	DE	Staff	May 2011
2.	Asset Information System – implement software package, providing asset deterioration and other tools	DAF	Staff	Jul 2011
3.	Risk Management – Refine, expand and document the risk management plan	DE	Staff	Jul 2011
4.	Job costing system – develop system, incorporating current unit rates	DAF/DE	Staff	Dec 2011
5.	Document mythology and procedures for asset useful lives, unit rates, condition rating and scoring and depreciation calculations.	DE	Staff	June 2010
6.	Population predictions – review projects based on latest available Census	DE	Staff	May 2011
7.	Community Consultation – undertake targeted engagement with the community to resolve acceptable and achievable levels of service	GM	Staff	Aug 2012
8.	Condition Rating – refine data collected and analysis processes, including greater levels of componentisation and achievable levels of service	DE	Staff	Dec 2011
9.	Consider limiting the AMP time framework to 10 years, to coincide with the Long term financial plan	DAF/DE	Staff	May 2011

8.3 Monitoring and Review Procedures

This asset management plan will be reviewed during annual budget preparation and amended to recognise any changes in service levels and/or resources available to provide those services as a result of the budget decision process.

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

9 REFERENCES

1. Council 2010/10 Annual Management Plan and Budget.
2. AS27, Financial Reporting by Local Government Australian Accounting Standards, June 1996
3. AASB1031, Materiality, Australian Accounting Standard Board July 2004
4. AASB116 Property, Plant and Equipment, Australian Accounting Standards Board July 2007
5. Temora Shire Council Asset Valuation 2010
6. Temora Shire Road Hierarchy Policy 2007
7. Temora Shire Footpath Hierarchy 2004
8. International Infrastructure Management Manual, Institute of Public Works Engineering Australia, Sydney 2006 www.ipwea.org.au
9. Statistical snapshot Temora Shire ABS 2006 Census data

APPENDICES

- Appendix A Abbreviations
- Appendix B Glossary
- Appendix C 10 Year Maintenance and Capital Works Program
- Appendix D Maintenance response Levels of Service
- Appendix E Expenditure and Income Comparison

Appendix A ABBREVIATIONS

AAAC	Average annual asset consumption
AMP	Asset management plan
ARI	Average recurrence interval
BOD	Biochemical (biological) oxygen demand
CRC	Current replacement cost
CWMS	Community wastewater management systems
DA	Depreciable amount
DoH	Department of Health
EF	Earthworks/formation
IRMP	Infrastructure risk management plan
LCC	Life Cycle cost
LCE	Life cycle expenditure
MMS	Maintenance management system
PCI	Pavement condition index
RV	Residual value
SS	Suspended solids
vph	Vehicles per hour
GM	General Manager
DAF	Director of Administration and Finance
DE	Director of Engineering

Appendix B GLOSSARY

Annual service cost (ASC)

An estimate of the cost that would be tendered, per annum, if tenders were called for the supply of a service to a performance specification for a fixed term. The Annual Service Cost includes operating, maintenance, depreciation, finance/ opportunity and disposal costs, less revenue.

Asset class

Grouping of assets of a similar nature and use in an entity's operations (AASB 166.37).

Asset condition assessment

The process of continuous or periodic inspection, assessment, measurement and interpretation of the resultant data to indicate the condition of a specific asset so as to determine the need for some preventative or remedial action.

Asset management

The combination of management, financial, economic, engineering and other practices applied to physical assets with the objective of providing the required level of service in the most cost effective manner.

Assets

Future economic benefits controlled by the entity as a result of past transactions or other past events (AAS27.12).

Property, plant and equipment including infrastructure and other assets (such as furniture and fittings) with benefits expected to last more than 12 month.

Average annual asset consumption (AAAC)*

The amount of a local government's asset base consumed during a year. This may be calculated by dividing the Depreciable Amount (DA) by the Useful Life and totalled for each and every asset OR by dividing the Fair Value (Depreciated Replacement Cost) by the Remaining Life and totalled for each and every asset in an asset category or class.

Brownfield asset values**

Asset (re)valuation values based on the cost to replace the asset including demolition and restoration costs.

Capital expansion expenditure

Expenditure that extends an existing asset, at the same standard as is currently enjoyed by residents, to a new group of users. It is discretionary expenditure, which increases future operating, and maintenance costs, because it increases council's asset base, but may be associated with additional revenue from the new user group, eg. extending a drainage or road network, the provision of an oval or park in a new suburb for new residents.

Capital expenditure

Relatively large (material) expenditure, which has benefits, expected to last for more than 12 months. Capital expenditure includes renewal, expansion and upgrade. Where capital projects involve a combination of renewal, expansion and/or upgrade expenditures, the total project cost needs to be allocated accordingly.

Capital funding

Funding to pay for capital expenditure.

Capital grants

Monies received generally tied to the specific projects for which they are granted, which are often upgrade and/or expansion or new investment proposals.

Capital investment expenditure

See capital expenditure definition

Capital new expenditure

Expenditure which creates a new asset providing a new service to the community that did not exist beforehand. As it increases service potential it may impact revenue and will increase future operating and maintenance expenditure.

Capital renewal expenditure

Expenditure on an existing asset, which returns the service potential or the life of the asset up to that which it had originally. It is periodically required expenditure, relatively large (material) in value compared with the value of the components or sub-components of the asset being renewed. As it reinstates existing service potential, it has no impact on revenue, but may reduce future operating and maintenance expenditure if completed at the optimum time, eg. resurfacing or resheeting a material part of a road network, replacing a material section of a drainage network with pipes of the same capacity, resurfacing an oval. Where capital projects involve a combination of renewal, expansion and/or upgrade expenditures, the total project cost needs to be allocated accordingly.

Capital upgrade expenditure

Expenditure, which enhances an existing asset to provide a higher level of service or expenditure that will increase the life of the asset beyond that which it had originally. Upgrade expenditure is discretionary and often does not result in additional revenue unless direct user charges apply. It will increase operating and maintenance expenditure in the future because of the increase in the council's asset base, eg. widening the sealed area of an existing road, replacing drainage pipes with pipes of a greater capacity, enlarging a grandstand at a sporting facility. Where capital projects involve a combination of renewal, expansion and/or upgrade expenditures, the total project cost needs to be allocated accordingly.

Carrying amount

The amount at which an asset is recognised after deducting any accumulated depreciation / amortisation and accumulated impairment losses thereon.

Class of assets

See asset class definition

Component

An individual part of an asset which contributes to the composition of the whole and can be separated from or attached to an asset or a system.

Cost of an asset

The amount of cash or cash equivalents paid or the fair value of the consideration given to acquire an asset at the time of its acquisition or construction, plus any costs necessary to place the asset into service. This includes one-off design and project management costs.

Current replacement cost (CRC)

The cost the entity would incur to acquire the asset on the reporting date. The cost is measured by reference to the lowest cost at which the gross future economic benefits could be obtained in the normal course of business or the minimum it would cost, to replace the existing asset with a technologically modern equivalent new asset (not a second hand one) with the same economic benefits (gross service potential) allowing for any differences in the quantity and quality of output and in operating costs.

Current replacement cost "As New" (CRC)

The current cost of replacing the original service potential of an existing asset, with a similar modern equivalent asset, i.e. the total cost of replacing an existing asset with an as NEW or similar asset expressed in current dollar values.

Cyclic Maintenance**

Replacement of higher value components/sub-components of assets that is undertaken on a regular cycle including repainting, building roof replacement, cycle, replacement of air conditioning equipment, etc. This work generally falls below the capital/maintenance threshold and needs to be identified in a specific maintenance budget allocation.

Depreciable amount

The cost of an asset, or other amount substituted for its cost, less its residual value (AASB 116.6)

Depreciated replacement cost (DRC)

The current replacement cost (CRC) of an asset less, where applicable, accumulated depreciation calculated on the basis of such cost to reflect the already consumed or expired future economic benefits of the asset

Depreciation / amortisation

The systematic allocation of the depreciable amount (service potential) of an asset over its useful life.

Economic life

See useful life definition.

Expenditure

The spending of money on goods and services. Expenditure includes recurrent and capital.

Fair value

The amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties, in an arms length transaction.

Greenfield asset values **

Asset (re)valuation values based on the cost to initially acquire the asset.

Heritage asset

An asset with historic, artistic, scientific, technological, geographical or environmental qualities that is held and maintained principally for its contribution to knowledge and culture and this purpose is central to the objectives of the entity holding it.

Impairment Loss

The amount by which the carrying amount of an asset exceeds its recoverable amount.

Infrastructure assets

Physical assets of the entity or of another entity that contribute to meeting the public's need for access to major economic and social facilities and services, eg. roads, drainage, footpaths and cycleways. These are typically large, interconnected networks or portfolios of composite assets. The components of these assets may be separately maintained, renewed or replaced individually so that the required level and standard of service from the network of assets is continuously sustained. Generally the components and hence the assets have long lives. They are fixed in place and are often have no market value.

Investment property

Property held to earn rentals or for capital appreciation or both, rather than for:

- (a) use in the production or supply of goods or services or for administrative purposes; or
- (b) sale in the ordinary course of business (AASB 140.5)

Level of service

The defined service quality for a particular service against which service performance may be measured. Service levels usually relate to quality, quantity, reliability, responsiveness, environmental, acceptability and cost).

Life Cycle Cost **

The life cycle cost (LCC) is average cost to provide the service over the longest asset life cycle. It comprises annual maintenance and asset consumption expense, represented by depreciation expense. The Life Cycle Cost does not indicate the funds required to provide the service in a particular year.

Life Cycle Expenditure **

The Life Cycle Expenditure (LCE) is the actual or planned annual maintenance and capital renewal expenditure incurred in providing the service in a particular year. Life Cycle Expenditure may be compared to Life Cycle Expenditure to give an initial indicator of life cycle sustainability.

Loans / borrowings

Loans result in funds being received which are then repaid over a period of time with interest (an additional cost). Their primary benefit is in 'spreading the burden' of capital expenditure over time. Although loans enable works to be completed sooner, they are only ultimately cost effective where the capital works funded (generally renewals) result in operating and maintenance cost savings, which are greater than the cost of the loan (interest and charges).

Maintenance and renewal gap

Difference between estimated budgets and projected expenditures for maintenance and renewal of assets, totalled over a defined time (eg 5, 10 and 15 years).

Maintenance and renewal sustainability index

Ratio of estimated budget to projected expenditure for maintenance and renewal of assets over a defined time (eg 5, 10 and 15 years).

Maintenance expenditure

Recurrent expenditure, which is periodically or regularly required as part of the anticipated schedule of works required to ensure that the asset achieves its useful life and provides the required level of service. It is expenditure, which was anticipated in determining the asset's useful life.

Materiality

An item is material if its omission or misstatement could influence the economic decisions of users taken on the basis of the financial report. Materiality depends on the size and nature of the omission or misstatement judged in the surrounding circumstances.

Modern equivalent asset.

A structure similar to an existing structure and having the equivalent productive capacity, which could be built using modern materials, techniques and design. Replacement cost is the basis used to estimate the cost of constructing a modern equivalent asset.

Non-revenue generating investments

Investments for the provision of goods and services to sustain or improve services to the community that are not expected to generate any savings or revenue to the Council, eg. parks and playgrounds, footpaths, roads and bridges, libraries, etc.

Operating expenditure

Recurrent expenditure, which is continuously required excluding maintenance and depreciation, eg power, fuel, staff, plant equipment, on-costs and overheads.

Pavement management system

A systematic process for measuring and predicting the condition of road pavements and wearing surfaces over time and recommending corrective actions.

Planned Maintenance**

Repair work that is identified and managed through a maintenance management system (MMS). MMS activities include inspection, assessing the condition against failure/breakdown criteria/experience, prioritising scheduling, actioning the work and reporting what was done to develop a maintenance history and improve maintenance and service delivery performance.

PMS Score

A measure of condition of a road segment determined from a Pavement Management System.

Rate of annual asset consumption*

A measure of average annual consumption of assets (AAAC) expressed as a percentage of the depreciable amount (AAAC/DA). Depreciation may be used for AAAC.

Rate of annual asset renewal*

A measure of the rate at which assets are being renewed per annum expressed as a percentage of depreciable amount (capital renewal expenditure/DA).

Rate of annual asset upgrade*

A measure of the rate at which assets are being upgraded and expanded per annum expressed as a percentage of depreciable amount (capital upgrade/expansion expenditure/DA).

Reactive maintenance

Unplanned repair work that carried out in response to service requests and management/supervisory directions.

Recoverable amount

The higher of an asset's fair value, less costs to sell and its value in use.

Recurrent expenditure

Relatively small (immaterial) expenditure or that which has benefits expected to last less than 12 months. Recurrent expenditure includes operating and maintenance expenditure.

Recurrent funding

Funding to pay for recurrent expenditure.

Rehabilitation

See capital renewal expenditure definition above.

Remaining life

The time remaining until an asset ceases to provide the required service level or economic usefulness. Age plus remaining life is economic life.

Renewal

See capital renewal expenditure definition above.

Residual value

The net amount which an entity expects to obtain for an asset at the end of its useful life after deducting the expected costs of disposal.

Revenue generating investments

Investments for the provision of goods and services to sustain or improve services to the community that are expected to generate some savings or revenue to offset operating costs, eg public halls and theatres, childcare centres, sporting and recreation facilities, tourist information centres, etc.

Risk management

The application of a formal process to the range of possible values relating to key factors associated with a risk in order to determine the resultant ranges of outcomes and their probability of occurrence.

Section or segment

A self-contained part or piece of an infrastructure asset.

Service potential

The capacity to provide goods and services in accordance with the entity's objectives, whether those objectives are the generation of net cash inflows or the provision of goods and services of a particular volume and quantity to the beneficiaries thereof.

Service potential remaining*

A measure of the remaining life of assets expressed as a percentage of economic life. It is also a measure of the percentage of the asset's potential to provide services that is still available for use in providing services (DRC/DA).

Strategic Management Plan (SA)**

Documents Council objectives for a specified period (3-5 yrs), the principle activities to achieve the objectives, the means by which that will be carried out, estimated income and expenditure, measures to assess performance and how rating policy relates to the Council's objectives and activities.

Sub-component

Smaller individual parts that make up a component part.

Useful life

Either:

- (a) the period over which an asset is expected to be available for use by an entity, or
- (b) the number of production or similar units expected to be obtained from the asset by the entity.

It is estimated or expected time between placing the asset into service and removing it from service, or the estimated period of time over which the future economic benefits embodied in a depreciable asset, are expected to be consumed by the council. It is the same as the economic life.

Value in Use

The present value of estimated future cash flows expected to arise from the continuing use of an asset and from its disposal at the end of its useful life. It is deemed to be depreciated replacement cost (DRC) for those assets whose future economic benefits are not primarily dependent on the asset's ability to generate new cash flows, where if deprived of the asset its future economic benefits would be replaced.

Appendix C ROAD FOOTPATH AND KERB AND GUTTER PROGRAM

10 YEAR ROADS CAPITAL WORKS PROGRAM

As part of Council's Asset Management Plan process, and to develop a 10 Year Financial Plan for Council, a 10 Year Roads Capital Works Program has been developed. This plan is designed to address ratepayers requirements for urban and rural roads to provide a road network that meets the needs of the community and industry, within a 10-year span and that the road network is both affordable and sustainable for the community.

Careful consideration has been given to any new capital works and to consider them in terms of "asset management" principles and "whole of life" costs. Generally a more expensive asset means a more expensive maintenance and replacement cost. This also applies to the road network, however it has to be recognised that the higher use unsealed roads get to the point where it is more economical to seal the road rather than to maintain and resheet the road as an unsealed road. Council Road Hierarchy Policy addresses this issue and should be read in conjunction with this Asset Management Plan

In formulating the Road Hierarchy Plan and this Asset Management Plan, the following priorities have been taken into consideration.

- ✓ All towns and villages residential, and commercial streets to be bitumen sealed
- ✓ Traffic counts for rural unsealed roads with a vehicle score of 100
- ✓ High safety risk roads
- ✓ High road maintenance cost areas
- ✓ Known black spot areas

The 10 year program is to be a guideline for Council in adopting its Annual Business Plan. Council will reserve the right to review the program as situations and circumstances change over time. An annual update of the plan will need to be undertaken and a review of the full plan undertaken after 5 years.

Appendix D MAINTENANCE RESPONSE LEVELS OF SERVICE (Draft)

Table D1 Category Types

Category 1	Category 2	Category 3
Regional Road (Class1)	Rural Roads(Class 2,3,4 & 5)	Urban Lanes (Class 6 & 7)
State Road Parking Lanes (Class 6)	Urban Local Roads (Class 6 & &)	

Table D2 Defects Record

Sealed Road	Unsealed Road	Footpath	Kerb & Gutter	Signs
Pothole >300mm Shoving/Rutting Cracking Edge Break Seal Failure Vegetation Edge Drop Potholes < 300mm Delineation Linemarking faded	Pothole Corrugations Blowout Erosion Vegetation	Pothole Lifted pavers Lifted concrete path Seal failure Cracking Vegetation	K & G Broken K & G lifter >50mm	Regulatory – Replace Regulatory – Repair Regulatory – Dirty Other – Missing Other – Damaged Other – Faded

Table D3 Resources

Sealed Road	Unsealed Road	Footpath	Kerb & Gutter	Signs
Bitumen patching truck Backhoe Grader Water cart Skid steer Contractor Tree Contractor Vegetation Control Linemarking Contractor Sign Crew Gravel trucks	Grader Backhoe Water cart Tree Contractor Vegetation control Sign crew Gravel trucks	Day labour Paving Contractor Skid steer contractor Tree Contractor	Day labour Paving Contractor Skid steer contractor Tree Contractor	Sign Crew

Table D4 Response Times

Sealed Roads					
Category 1	Days	Category 2	Days	Category 3	Days
Sweeping	7	Sweeping	7	Sweeping	14
Vegetation	14	Vegetation	14	Vegetation	14
Pothole >300mm	7	Pothole >300mm	14	Pothole >300mm	28
Pothole< 300mm	14	Pothole< 300mm	30	Pothole< 300mm	30
Seal Stripping	14	Seal Stripping	30	Seal Stripping	60
Seal Bleeding	14	Seal Bleeding	30	Seal Bleeding	60
Edge Drop	60	Edge Drop	60	Edge Drop	60
Shoving/Rutting	30	Shoving/Rutting	60	Shoving/Rutting	90
Cracking	60	Cracking	60	Cracking	90
Edge Break	60	Edge Break	60	Edge Break	90

Table D5 Response Times (continued)

Unsealed Roads			
Category 2	Days	Category 3	Days
Vegetation	14	Vegetation	14
Pothole< 300mm	14	Pothole< 300mm	30
Corrugations	30	Corrugations	60
Erosion	30	Erosion	60
Shoving	7	Shoving	14

Table D6 Response Times (continued)

Footpaths			
Category 1	Days	Category 2	Days
Vegetation	7	Vegetation	7
Pothole	2	Pothole	2
Lifted Pavers	7	Lifted Pavers	7
Lifted Concrete Path	7	Lifted Concrete Path	7
Cracking	60	Cracking	60
Seal Failure	60	Seal Failure	60

Table D7 Response Times (continued)

Signs			
Regulatory	Days	Other	Days
Damaged	7	Damaged	28
Missing	7	Missing	28
Faded	7	Faded	28
New	7	New	28

Appendix E EXPENDITURE AND INCOME COMPARISON

TEMORA SHIRE COUNCIL



SEWERAGE TREATMENT AND EFFLUENT REUSE

ASSET MANAGEMENT PLAN

PART 3




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1. EXECUTIVE SUMMARY

What Council Provides

Council provides a sewerage and effluent network in partnership Temora has an extensive gravity sewer main network and effluent reuse distribution network.

What does it Cost?

There are two key indicators of cost to provide the Sewerage and effluent Asset service.

- The life cycle cost being the average cost over the life cycle of the asset, and
- The total maintenance and capital renewal expenditure required to deliver existing service levels in the next 10 years covered by Council's long term financial plan.

The life cycle cost to provide the sewerage and effluent network service is estimated at \$684,374 per annum averaged over a 20-year period. Council's planned life cycle expenditure for year 1 of the asset management plan is 525,545 which gives a life cycle sustainability index of 0.77 .

Plans for the Future

Council plans to operate and maintain the sewerage and effluent network to achieve the following strategic objectives.

- Ensure the sewerage and effluent network is maintained at a safe and functional standard as set out in this asset management plan.
- Ensure that capital renewal funding for both sewerage and effluent are maintained
- Improve sewerage treatment and the quality of effluent, To provide safe, effective and resource efficient and environmentally responsible sewerage schemes
- To ensure that Council's business activities operate at no cost to Council and generate sufficient revenue to provide the appropriate level of services, taking into account community service obligations for each business unit.
- Efficient use of Council Resources.
- Ensure the CWMS scheme is operated to meet license conditions and treated effluent is returned to the environment without causing harm.

Modelling in this report assumes the sewerage and effluent network is growing at a rate of 0.3 % per annum. While increased population will result in an increase in general rates income collected it will also result in higher traffic volumes which will result in reduced pavement lives and the possibility of increased level of service demands

Lifecycle Management

The model for management of sewerage and effluent reuse relates particularly to the maintenance and renewal stages of asset life. Early in the life of an asset, its condition

deteriorates slowly and maintenance is generally not required. This is often referred to the “**Do Nothing**” phase of an asset’s life. As the asset ages, it moves into what is known as the “**Maintain**” phase. Maintenance activities will need to be performed to minimise continued deterioration. As the asset moves towards the end of its life, activities are undertaken that restore the asset to a condition close to that of the original. This is referred to as the “**Renewal**” phase.

The importance of the time for intervention for renewal is paramount. If renewal activities are not undertaken in a timely manner, the condition of the asset will deteriorate rapidly to failure, and the cost of reconstruction may be many times that of renewal activities.

Financial Summary

A ten-year analysis of existing pavement conditions and costs has been undertaken to determine funding implications for the asset condition of the sewerage and effluent network. Annual adjustment for increases in the cost of sewerage and effluent construction materials and services would need to be made to accurately represent long-term results.

Modelling indicates that an annual renewal allocation of \$3.45 million is sufficient to keep the sewerage and effluent network in the current overall condition. An annual allocation of 3.45 million for renewals including normal maintenance is funded by Council to maintain the current overall condition in the sewerage and effluent network over the next 10-year period.

Measuring our Performance

An asset management plan is a dynamic document, reflecting and responding to changes over time. Monitoring of this sewerage and effluents asset management plan is required to:

- Ensure compliance with the proposed improvement program milestones.
- Ensure compliance with adopted standards and procedures for condition and performance.

A full review of this asset management plan should be undertaken every three to five years to document progress and set out proposals for the next five years. The recommendations below summarise the Improvement Program contained in Section 8 of this document.

Quality

- Sewer and effluent assets will be maintained in a reasonably usable condition. Defects found or reported that are outside our service standard will be repaired. See our maintenance response service levels for details of defect prioritisation and response time

Function

Our intent is that an appropriate Sewer and Effluent network is maintained in partnership with other levels of government and stakeholders to provide safe, effective and resource efficient and environmentally responsible sewerage and effluent schemes to Temora.

Sewer and Effluent asset attributes will be maintained at a safe level and associated signage and equipment be provided as needed to ensure public safety. We need to ensure key functional objectives are met:

Safety

Inspect all Sewer and Effluent Assets regularly and prioritise and repair any defects in accordance with the inspection schedule to ensure they are safe.

Recommendations

This actions resulting from this asset management plan are:

- Obtain Council approval of this asset management plan.
- Confirm desired levels of service by establishing current performance and setting performance targets. Have these levels of service adopted by Council.
- Review the level of service for routine maintenance response times.
- Further Investigate and improve estimates of growth in modelling.
- Expand the asset groups covered by this plan to include all Council sewerage and effluent.
- Systematically separate capital upgrade expenditure from capital renewal expenditure and capital new expenditure.
- Improve the delineation between planned, cyclic and reactive maintenance.
- Develop data collection models to ensure repeatability and ongoing improvement of condition data collection and modelling processes.
- Assess the structure and resources within council, to ensure that the asset management plan can be implemented.
- Investigate the feasibility of constructing stand alone sewerage and effluent systems at Aria Park and Springdale.

2. INTRODUCTION

2.1 Background

The fundamental purpose of this Sewerage and Effluent Asset Management Plan (SEAMP) is to improve Council's long-term strategic management of its sewerage and effluent assets in order to cater for the community's desired levels of service in the future.

This will be undertaken in accordance with Council's key strategic documents and demonstrates reasonable management in the context of Council's available financial and human resources.

The SEAMP achieves this by setting standards, service levels and programmes that Council will develop and deliver. The standards and service levels have been set in accordance with user needs, regulations, industry practice and legislative codes of practice.

The asset management plan is to be read with the following associated planning documents:

- _ DLG Integrated Planning Mandates 2009
- _ Temora Shire Council Management Plan 2011/12 – 2015
- _ Temora Shire Council Community Strategic Plan 2011— 2020
- _ Temora Shire Council 2008 Resident Satisfaction Survey Result

This SEAMP covers the following infrastructure assets which are summarised in Table 2.1

Table 2.1. Assets covered by this Plan

Asset category	Length km	Replacement Value \$
Sewer Gravity Mains	44.58	5,893,619
Sewer Rising Mains	0.36	20,960
Sewer Pump Stations	3	108,288
Sewer Property Connections	2029	507,250
Sewer Manholes	514	179,900
Sewerage Treatment works	1	1,196,715
4 - Effluent Dams (also collect stormwater)	4	114,898
4 – Effluent Pumping stations	4	110828
Effluent Lines		895,069
Effluent Telemetry System		275,000
2 – weather stations		10,000
TOTAL		9,312,527

2.2 Asset management Framework Applicable to RAMP

2.2.1 National Framework for Local Government Financial Sustainability

In March 2007 the Local Government and Planning Ministers' Council (LGPMC) agreed to a nationally consistent approach to asset planning and management, financial planning and reporting and assessing financial sustainability. Each State Minister endorsed the National Frameworks for Financial Sustainability in Local Government for implementation in the context of their relationships with their local government sectors.

The National Frameworks consist of three main components as follows:

1. Asset Planning and Management

This framework consists of seven elements which each State and Territory is expected to adopt as follows:

- Development of an **asset management policy** - Each state/territory is expected to develop an asset management policy, which provides high-level guidance to assist councils in developing their own asset management policy.
- Strategy and Planning — Councils should be provided with guidance from the State on developing an **asset management strategy**, which is designed to support and implement its asset management policy;
- **Governance and Management Arrangements** — Councils should be encouraged to apply and effect good governance and management arrangements which link asset management to service delivery and include assigning roles and responsibility for asset management between the CEO, the Council and senior managers;
- **Defining Levels of Service** — mechanisms should be established that include community consultation to define the levels of service councils are expected to provide from their asset base;
- **Data and Systems** — a framework for collection of asset management data should be established;
- **Skills and Processes** — the asset management framework should contain a continuous improvement program;
- Evaluation — the asset management framework should contain a **mechanism to measure its effectiveness**.

2. Financial Planning and Reporting

Focuses on Local Government's financial management at both the strategic and operational levels. The framework requires the preparation of:

- A long term strategic plan which includes a financial component, demonstrating how the outcomes of the plan will be funded.
- An annual budget format comparable with the audited financial statements, linked to strategic objectives, which at a minimum should include:
 - § Estimates of revenue and expenditure
 - § An explanation of how revenue will be applied
 - § An explanation of the financial performance and position of the council.

- Annual financial statements and annual report, which should include:
 - § A report on Council's operations during the financial year
 - § An explanation to the community on variations between the budget and the actual results and how this may impact on the strategic plan
 - § Audited financial statements for the financial year (prepared and audited in accordance with Australian Accounting and Auditing Standards).

3. Criteria for Assessing Financial Sustainability.

The National Frameworks define a council's long-term financial performance and position as sustainable when planned long term services and infrastructure standards are met without unplanned increases in rates and charges, or disruptive cuts to services.

The frameworks provide a range of financial sustainability indicators. However, they stress that the usefulness of indicators is not in the numbers themselves but the analysis of what is driving the indicator.

2.2.2 The NSW Department of Local Government - DIG Model

The DLG framework is to reshape the existing framework in some way to strengthen strategic focus, streamline the planning and reporting processes and encourage integration between the various council's strategic documents/plans. The proposed model is designed as a continuous framework, rather than a static planning model.

The recommendations provided through this Plan are essentially equipping Council to take a strategic approach to comply with this framework.

It is designed to allow councils more autonomy in responding to their community's various needs, and encourages elected representatives to play a leading role in developing long term plans.



Source – NSW Department of Local Government – Asset Management Planning for NSW Local Government – page 15
Fig 2.1 NSW LG DIG Model

Why mandate strategic planning?

This model includes a mandatory requirement for a long-term asset management plans. One of the recurrent themes emerging from the review is that councils need to develop a stronger strategic focus.

How is planning and reporting integrated?

The diagram below shows how the objectives from the Community Strategic Plan may be cascaded through the system.



For example, a Council's Community Strategic Plan might identify the objective of "A safe and healthy community" and nominate key strategies for achieving this. These strategies might include a wide variety of approaches, such as ensuring quality water supply and safe operation of sewerage services, ensuring efficient collection of domestic and commercial waste, promoting health education programs, lobbying for more aged care services in the area, developing crime prevention strategies for the community, and improving/extending the sewerage and effluent systems.

These intentions would be translated into the Delivery Program in the following way, for example:

Plan:

Improving sewerage and effluent safety Delivery Methods:

- Undertake a review of the condition of all sewerage and effluents in council's area.
- Update Councils Sewerage and effluent Hierarchy Policy.
- Identify funding options for sewerage and effluents management.

- _ Identify key community concerns with sewerage and effluent safety.
- _ Develop programs to address key sewerage and effluent safety issues.

The Operational Plan would then focus on what Council would do towards achieving each of these goals in the coming year. For example:

Develop sewerage and effluent safety programs: Actions for 2011-21

- _ Optimised effluent reuse through water saving techniques.
- _ Develop telemetry system for the automation of the effluent system.
- _ Increased testing of the effluent to ensure that it meets Department of Health Guidelines
- _ Minimise the number of sewerage over flows from manholes.

In this way, the objectives of the Community Strategic Plan are cascaded down through Council's planning framework, so that general directions and objectives for the community are translated into plans, then into programs and finally, individual actions.

The Integrated Planning and Reporting project aims to improve Councils' capacity for long-term planning and should help to identify resourcing needs earlier in the planning cycle. The requirement to consider resourcing over the 10-year period of the plan will help Councils to take a wider view of their needs, considering not only finances, but also human resources and asset requirements. They will be able to identify the additional resources that could be raised through borrowings, rate variations or grants and will be in a better position to take maximum advantage of funding opportunities, resource sharing options and strategic alliances.

2.3 Key stakeholders

The key stakeholders are internal custodians as well as external individuals, companies, service authorities, government authorities and community groups who have a vested interest in management of sewerage and effluents. The following groups have been identified as key stakeholders in the management and use of the sewerage and effluent network and sewerage and effluent related assets:

Elected Members	Endorsement of the asset management policy, strategy and plans. Set high level direction through the development of asset management principles in the Community Strategic Plan.
Senior Management	Endorse the development of asset management plans and provide the resources required to complete this task. Set high level priorities for asset management development in Council and raise the awareness of this function among Council staff and contractors. Support the implementation of actions resulting from this plan and prepared to make changes to a better way of managing assets and delivering services. Support for an asset management driven budget and Long Term Financial Plan (LTFP).
Corporate Services	Consolidating the asset register and ensuring the asset valuations are accurate. Development of supporting policies such as capitalisation and depreciation. Preparation of asset sustainability and financial reports incorporating asset depreciation in compliance with

current Australian accounting standards. Asset Management and GIS support and admin.

Field Services Staff	Provide local knowledge level detail on all sewerage and effluent assets. They verify the size, location and condition of assets. They can describe the maintenance standards deployed and Council's ability to meet technical and customer levels of service.
External Users	Sewerage and effluent Users; Developers & Utility companies; Federal and State Government authorities & agencies such as EPA, Department of Health..

2.4 Goals and Objectives of Asset Management

The Council exists to provide services to its community. Some of these services are provided by infrastructure assets. Council has acquired infrastructure assets by 'purchase', through construction by council staff and by donation of assets constructed by developers and others to meet increased levels of service.

Council's goal in managing infrastructure assets is to meet the required level of service in the most cost effective manner for present and future consumers. The key elements of infrastructure asset management are:

- **Taking a life cycle approach,**
 - § Have precise knowledge of what Council owns or has responsibility for or is legal liable for;
 - § Record and extract information on these assets in a register, down to an acceptable level which can be maintained and updated easily;
 - § Report on our annual depreciations and asset consumption at an asset component level;
 - § Develop cost-effective management strategies for the long term,
- **Developing cost-effective management strategies for the long term,**
 - § Understand the long term (10-20 years) funding needs of our sewerage and effluent network to meet our strategic expectations in both capital and maintenance expenditure;
- **Providing a defined level of service and monitoring performance,**
 - § Measure and monitor the condition, performance, utilisation and costs of assets down to the managed component level and aggregate this data up to give outputs of cost and performance at the master level;
 - § Understand and record the current levels of service in terms of responsiveness and performance;
 - § Understand the likely future levels of service required based on population growth, demographic changes and community expectations;
- **Understanding and meeting the demands of growth** through demand management and infrastructure investment,
- **Managing risks** associated with asset failures,
- **Sustainable** use of physical resources,

- **Continuous improvement** in asset management practices.¹
 - § Have uniform processes across our whole organisation for the evaluation of any investment in:
 - (a) Renewal, upgrades and expansions of existing assets;
 - (b) Creation of new assets;
 - (c) Maintenance of existing assets; and
 - (d) Operational expenditure to deliver services.

This asset management plan is prepared under the direction of Council's vision, mission, goals and objectives.

Council's vision is:

To sustain and grow the Temora Shire as a rural community of choice for current and future residents, being united in our heritage yet open to growth and diversity

To celebrate our past achievements in sport, culture and enterprise whilst maintaining our commitment to the future in providing a safe, happy and healthy environment for all

Success through determination and inspiration

Council's mission is:

To achieve the best possible outcomes for our community

Council Values relevant to this asset management plan are:

- **Community:**
In partnership with the community, respond to needs and aspirations in a caring, fair and accountable manner through the provision of quality services.
- **Governments:**
We encourage an open, productive relationship with all spheres of government and other organisations in the best interests of our community.
- **Customers and Suppliers:**
Conduct our business with integrity and respect, ensuring consistency and accountability in all our dealings.
- **Environment**
Conserve, enhance and develop our environment in an equitable and sustainable manner, acting as custodians for future generations.

2.5 Plan Framework

Key elements of the plan are

- **Levels of service** – specifies the services and levels of service to be provided by council.

¹ IIMM 2006 Sec 1.1.3, p 1.3

- **Future demand** – how this will impact on future service delivery and how this is to be met.
- **Life cycle management** – how Council will manage its existing and future assets to provide the required services
- **Financial summary** – what funds are required to provide the required services.
- **Asset management practices**
- **Monitoring** – how the plan will be monitored to ensure it is meeting Council's objectives.
- **Asset management improvement plan**

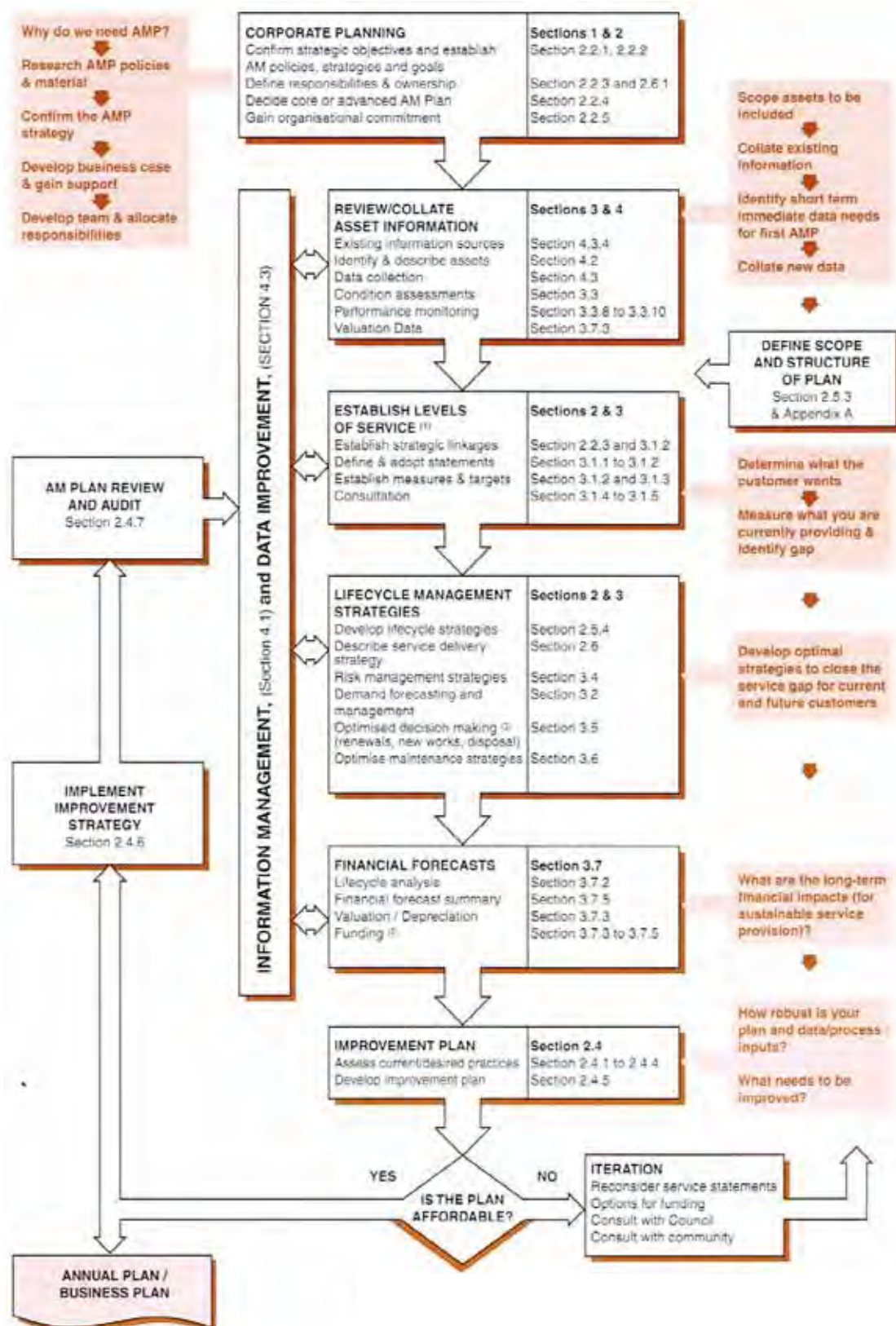


Fig 2.2 Sewerage and effluent Map for Preparing an Asset Management Plan

Source: IIMM Fig 1.5.1, p1.111

A flow chart for preparing an asset management plan is shown below.

2.6 Core and Advanced Asset Management

This sewerage and effluents asset management plan is prepared as a 'core' asset management plan in accordance with the International Infrastructure Management Manual. It is prepared to meet minimum legislative and organisational requirements for sustainable service delivery and long term financial planning and reporting. Core asset management is a 'top down' approach where analysis is applied at the 'system' or 'network' level.

Future revisions of this asset management plan will move towards 'advanced' asset management using a 'bottom up' approach for gathering asset information for individual assets to support the optimisation of activities and programs to meet agreed service levels.

3. LEVELS OF SERVICE

Levels of Service relate to outcomes the customer receives in terms of quality, quantity, responsiveness and performance as provided by the asset. To achieve and sustain acceptable standards of service for Council's sewerage and effluent asset network requires an annual commitment of funds. These funds provide for regular and responsive maintenance and for timely renewal or replacement of the asset. The provision of adequate financial resources ensures that the sewerage and effluent network is appropriately managed and preserved. Financial provisions below requirements impacts directly on community development and if prolonged, results in substantial needs for "catch up" expenditure imposed on ratepayers in the future. Additionally, deferred renewal results in increased and escalating reactive maintenance as aged assets deteriorate at increasing rates.

In developing the levels of service as documented in this SEAMP, Council has given due regard to the strategic goals and objectives in the 2011-2015 Strategic Plan which sets out the strategic direction of Council to implement its Management Plan over the following four years. Council has also given due regard to Legislative requirements and Australian Standards and stakeholder expectations in the form of customer research and expectation surveys.

The levels of service documented in this RAMP therefore reflect the best assumptions of current levels of service provided by Council, for the benefit of the community, in the context of Council's financial and human resources.

Councils current Level of Service are set out in Appendix D of this Asset Management Plan.

3.1 Customer Research and Expectations

Council participates in a Performance Measure Customer Satisfaction survey every four years in August prior to the Council election. This survey is distributed to all residents, requesting their level of satisfaction with Council's services. The most recent customer satisfaction survey (2008) reported satisfaction levels for the following sewerage and effluent related services

Table 3.1. Community Satisfaction Survey Levels

Performance Measure	Satisfaction Level (1 to 5)				
	Very Satisfied	Fairly Satisfied	Satisfied	Somewhat satisfied	Not satisfied
Ariah Park				2.67	
Other Villages					
Rural			3.38		
Temora		4.01			
Aggregated		3.92			

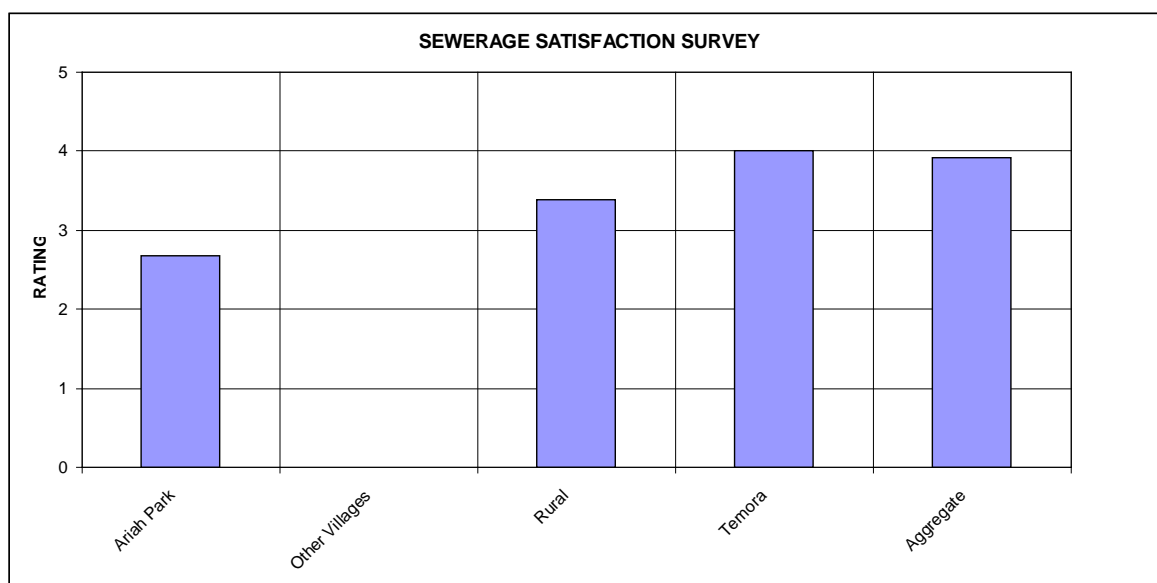


Figure 3.1 Customer Satisfaction Survey with Sewerage Services

The results of the 2008 survey indicate that the overall level of satisfaction with Council for sewerage and effluent related infrastructure is “fairly Satisfied” (78.4%). Refer to Table 3.1 and Figure 3.1. Other villages such as Springdale did not submit any possible since the village dwellings are all on septic tanks.

The results of this survey should also be combined with that of Parks and Sporting Fields, which rely on a high usage of recycled water to maintain the grounds.

Council uses this information in developing the Strategic Management and Social Plans and in allocation of resources in the budget.

3.2 Legislative Requirements

Council has to meet many legislative requirements including Australian and State legislation and State regulations. These include:

Table 3.2. Legislative Requirements

Legislation	Requirement
National Asset Management Framework Legislation 2010	Focuses on long term financial sustainability and provides a mandate to have long term strategy, financial statements and annual reporting mechanisms. AM plans are likely to be audited.
DLG Integrated Planning NSW	Key requirement is to integrated community plans with operational and delivery plans.
Local Government Act 1993	Sets out role, purpose, responsibilities and powers of local governments including the preparation of a long term financial plan supported by asset management plans for sustainable service delivery.
Occupational Health and Safety Act 2000	Aims to secure the health, safety and welfare of people at work. It lays down general requirements which must be met at places of work in New South Wales. The provisions of the Act cover every place of work in New South Wales. The Act covers self employed people as well as employees, employers, students, contractors and other visitors.
Occupational Health and Safety Regulation 2001	Regulations on the control and management of risk in the work place.
Public and Environmental Health Act 1987	Sets out the role, purpose, responsibilities of powers of Council relating to public and environmental health protection
Natural Resource Management Act 2004	Sets out the role, purpose, responsibilities and powers of Council relating to managing natural resources
The Protection of the Environment Operations Act 1997 (POEO Act)	Is the key piece of environment protection legislation administered by Department of the Environment and Climate Change (DECC). The POEO Act enables the Government to set out explicit protection of the environment policies (PEPs) and adopt more innovative approaches to reducing pollution.

Table 3.3. Legislative Requirements

Standards and Specifications	Requirements
Australian Accounting Standards.	<p>Sets out the financial reporting standards relating to infrastructure assets. Standards of particular relevance to Infrastructure Assets include:</p> <ul style="list-style-type: none"> • AASB116 Property, Plant & Equipment — prescribes requirements for recognition and depreciation of property, plant and equipment assets • AASB136 Impairment of Assets — aims to ensure that assets are carried at amounts that are not in excess of their recoverable amounts • AASB1021 Depreciation of Non-Current Assets — specifies how depreciation is to be calculated • AAS1001 Accounting Policies — specifies the policies that Council is to have for recognition of assets and depreciation • AASB1041 Accounting for the reduction of Non-Current Assets — specifies the frequency and basis of calculating depreciation and revaluation basis used for assets • AAS1015 Accounting for acquisition of assets — method of allocating the value to new assets on acquisition
Temora Shire Sewerage and effluent Hierarchy Policy	Sets out the criteria for maintenance , capital renewal and capital upgrade for the sewerage and effluent network

3.3 Current Levels of Service

Council has defined a two tier level of service.

Community Levels of Service relates to how the community receives the service in terms of safety, quality, quantity, reliability, responsiveness, cost/efficiency and legislative compliance.

Supporting the community service levels are operational or technical measures of performance developed to ensure that the minimum community levels of service are met. These technical measures relate to service criteria such as:

Service Criteria

Quality
Accessibility

Safety
Risk

Technical measures may relate to

No blockages/breakdowns, maintaining pumps
Access to the sewerage scheme from the residential property
No surcharges through manholes
Capital renewal undertaken when required

Council's current service levels are summarised in Table 3.3 and detailed in Appendix D

Table 3.3. Current Service Levels

Regional Sewerage and effluents and Local Rural Sewerage and effluents

Key Performance Measure	Level of Service	Performance Measure Process	Performance Target	Current Performance
COMMUNITY LEVELS OF SERVICE				
Quality	Well maintained and suitable sewerage and effluent network	Customer requests	50 per annum	Meets target
Customer satisfaction	Meets sewerage and effluent user requirements for:	Customer service requests	Less than 1 per month	78.4% (satisfaction survey 2008)
Accessible	Provide a fully accessible network	Customer service requests	All properties connected to sewer network	90% compliant
Safety	Provide safe network	Discharges from manholes or blockages	< 24 per annum	Meets Target
TECHNICAL LEVELS OF SERVICE				
Condition	Provide appropriate service to meet user requirements	Service requests	<1 reactive service request per month	To be monitored
		Average age of seals	10 years	9.5 years (2008)
		Condition rating	< 5% < condition 4	TBC
Environmental Impact		Maintenance response rates	100% of maintenance defects responded to within 4 hours	Meets Target
Function	Effluent to meet community requirements	Effluent discharge quality	Treated effluent discharge meets DoH approval conditions BOD <20 mg/L SS <30mg/L Chlorine <0.5 mg/L	Effluent water tested in accordance with conditions of approval
Cost Effectiveness	Maintain sewerage and effluents by proactive repairs	% of maintenance completed	70% proactive work value	TBC
Risk	sewerage and effluent network condition is maintained at optimum threshold	Condition served	Less than 1 per year	To date o safety issues have arisen

3.4 Desired Levels of Service

At present, indications of desired levels of service obtained from various sources including the Customer Satisfaction survey, residents' feedback to Councillors and staff, service requests and correspondence. Council has quantified desired levels of service when formulating the Sewerage and Effluent Policy.

4. FUTURE DEMAND

4.1 Demand Forecast

Council's fundamental role is to provide services to the community and its sewerage and effluent assets are a means to support this. Consequently, future demand for sewerage and effluent assets are tied to the demand for Council's services and this is a more complex consideration than population growth alone. Issues such as changing demands seasonal factors, consumer preferences and expectations, economic factors and environmental awareness.

Sewerage and effluent asset management plans are critically driven by the needs of the services to be delivered and therefore meaningful sewerage and effluent asset strategies cannot be developed in isolation or in absence of comprehensive service strategies. Maintaining Council's sewerage and effluent assets without adequate regard for service needs may result in a well-maintained portfolio of assets, but it may also result in an asset portfolio which does not meet the needs of staff that provide services to the community.

Demand factor trends and impacts on service delivery are summarised in Table 4.1.

Table 4.1. Demand Factors, Projections and Impact on Services

Demand factor	Present position	Projection	Impact on services
Population	5,914 (2006 census). The population increased by 1.05% between the 2001 and 2006 censuses. 57.1% of the population live in the urban area, 36.8% in the rural area and 6.1% in the surrounding villages	Temora's population is expected to grow over the next 10 years Future growth is likely to occur as a result of Council initiatives such as the airpark estate, Continued attraction to rural lifestyle	Nil
Demographics	Increase in ageing population 65+ represents 16.8% of the population and has increased by 3.3% since 1981. Whereas the overall population is static to a 0.27% increase	Temora TAFE and Charles Sturt University at Wagga will play a vital role in retaining and/or attracting young people to Temora. The number of aged over 65 will continue to increase. This is consistent with the national trend towards an ageing population and longer life expectancy	Nil

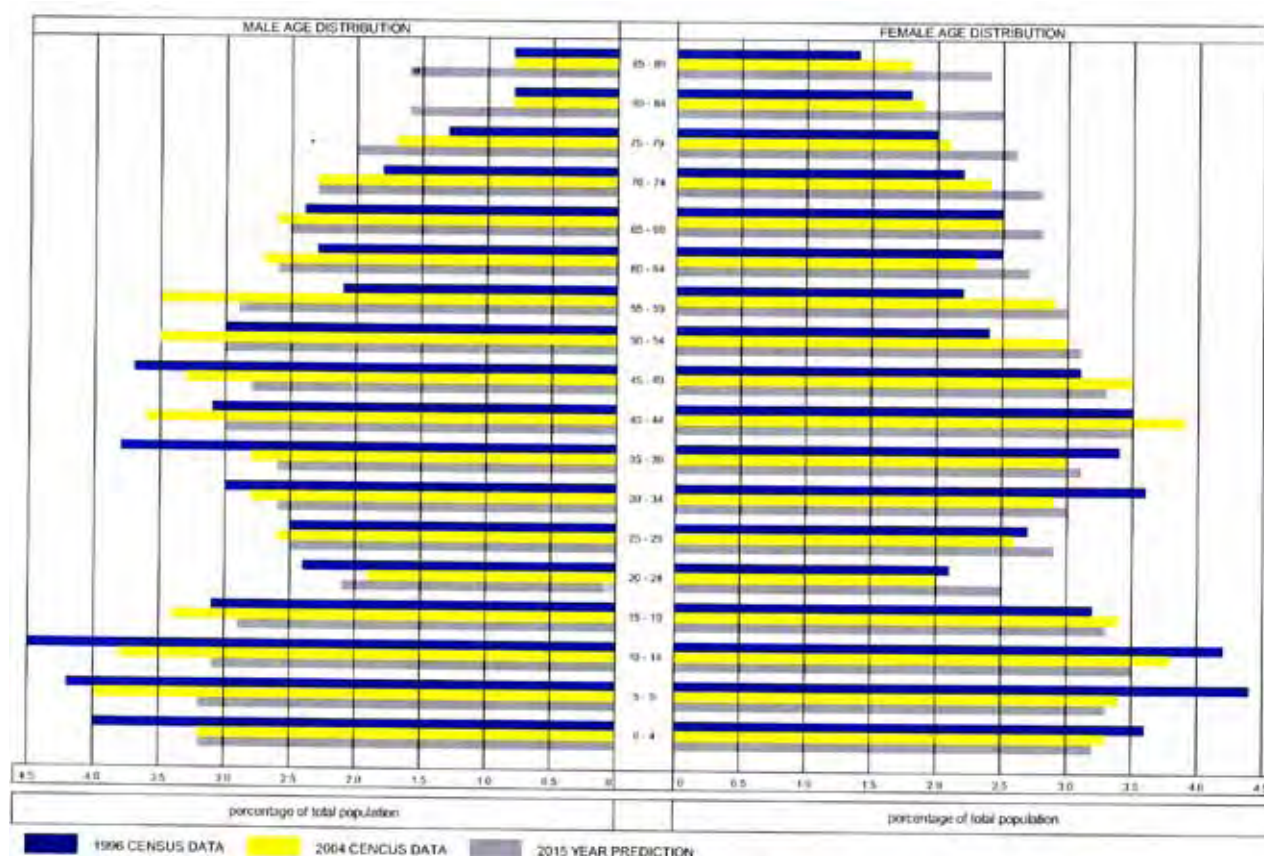


Figure 4.1 1996 and 2004 LGA Population by Age and Sex

4.2 Changes in Technology

Technology advances will allow for better monitoring of systems, capture of data for concise and accurate inflows and outflows measuring and up to date treatment plants and facilities. Final disposal of effluent is currently through evaporation at lagoons with 100% reuse. It is proposed to upgrade existing lagoon systems (evaporation) to treatment plants for reuse of treated water back into the community as a resource.

4.3 Demand Management Plan

Demand for new services will be managed through a combination of managing existing assets, upgrading of existing assets and providing new assets to meet demand and demand management. Demand management is defined here as the management of sewerage and effluent assets by the manipulation of demand for sewerage and effluent services and practices including non-asset solutions, insuring against risks and managing failures.

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

Table 4.3. Demand Management Plan Summary

Service Activity	Demand Management Plan
Community Engagement	Engage with the community to identify justifiable community needs from other expectations and consider only community needs consistent with Council's policies

Customer Requests	Analyse customer requests to optimise the use and performance of existing sewerage and effluent services and look for non-asset based solutions to meet demand for services
Volume control	Monitor the quantity of effluent being discharge and stop when ground saturated.
Explanatory marketing and education campaigns	Help modify community behaviour through explanatory marketing and education campaigns

4.4 New Assets from Growth

The new assets required to meet growth will be acquired from land developments and constructed by Council. Acquiring these new assets will commit Council to fund ongoing operations and maintenance costs for the period that the service provided from the new asset is required. Given the long term life-cycle of sewerage and effluent assets, the impact of this growth (future renewal costs) is only likely to be material after ten years. For the purpose of considering this core asset management plan the impacts of these future costs are not considered to be highly significant and are excluded in developing forecasts of future operating and maintenance costs.

Future versions of this asset management plan will consider the impacts of growth in greater detail. This activity has been included as a priority in the improvement plan. The valuation models in the financial summary section of this report use a rate of growth of 0.25%

5. LIFECYCLE MANAGEMENT PLAN

The lifecycle management plan details how Council plans to manage and operate the assets at the agreed levels of service (defined in section 3) while optimising life cycle costs. To undertake life cycle asset management, means considering all management options and strategies as part of the asset lifecycle, from planning to disposal. The objective of managing the assets in this manner is to look at long- term cost impacts (or savings) when making asset management decisions. Fig 5.1 below provides a graphical representation of the asset lifecycle including each of the stages an asset passes through during its life.

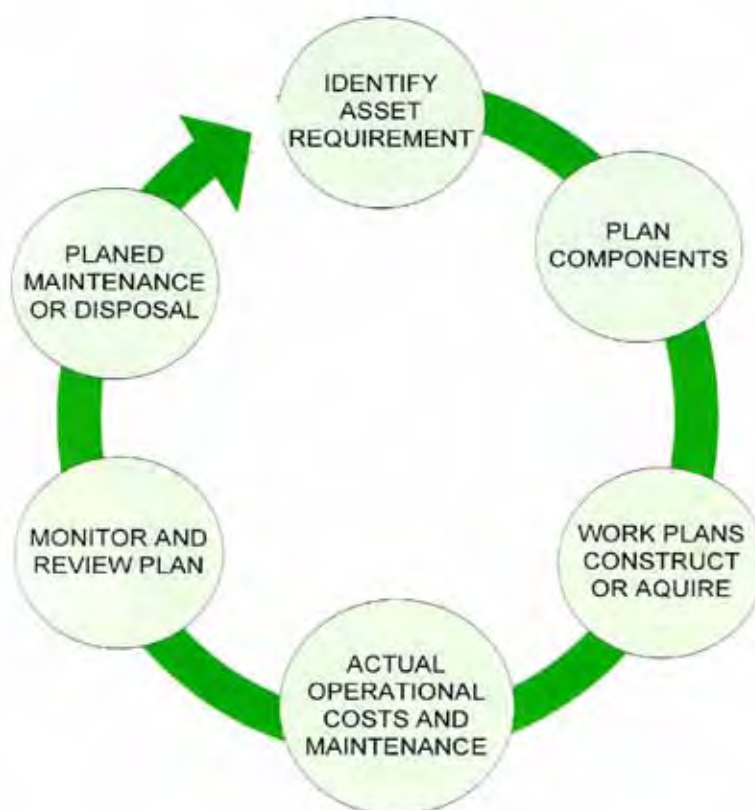


Figure 5.1 Asset Lifecycle

A model for the lifecycle for sealed sewerage and effluent pavements is presented later in this section. The model relates particularly to the maintenance and renewal stages of asset life (refer to figure 5.2.)

In the **“Do Nothing”** phase, the asset deteriorates slowly and maintenance is generally not required. In the **“Maintain”** phase, these activities will need to be performed to minimise continued deterioration. In the **“Rehabilitate”** or **“Renewal”** stage, activities are undertaken that restore the asset to a condition close to that of the original.

The importance of the time for intervention for renewal is paramount. If renewal activities are not undertaken in a timely manner, the condition of the asset will deteriorate rapidly to failure, and the cost of reconstruction may be many times that of the renewal cost.

5.1 Background Data

5.1.1 Physical parameters

The assets covered by this asset management plan are shown below. It should be noted that these statistics do not include the State Sewerage and effluent travel lanes, which are not the financial responsibility of Council, but do include the parking lanes within the CBD. The parking lanes have been included in the condition assessment and valuation. The characterises are given in Tables 5.1., 5..2 and 5..3

Table 5.1 Characteristics of Sewerage and Effluent Inventory

Asset	Quantity
150mm gravity main	36944.6 m
225mm gravity main	2533.3 m
300mm gravity main	3196.0 m
400mm gravity main	1904.7 m
50mm rising main	360.0 m
Sewer pump stations	3
Sewerage Treatment Works	1
Oxidation ponds	4
Effluent Reuse Mains	6628.0 m
Effluent distribution Pumps	4
Effluent Storage Dams	4
Effluent Telemetry System	1
Back up generator (treatment Works)	1
House Junctions	2029
Manholes	514

Temora Shire Council has a mix of earthenware, concrete and PVC sewerage and effluent mains with villages having septic systems.

The most predominant type of material used is earthenware and figure 5.2 below detail the various types percentages of materials used for the sewer mains in Temora.

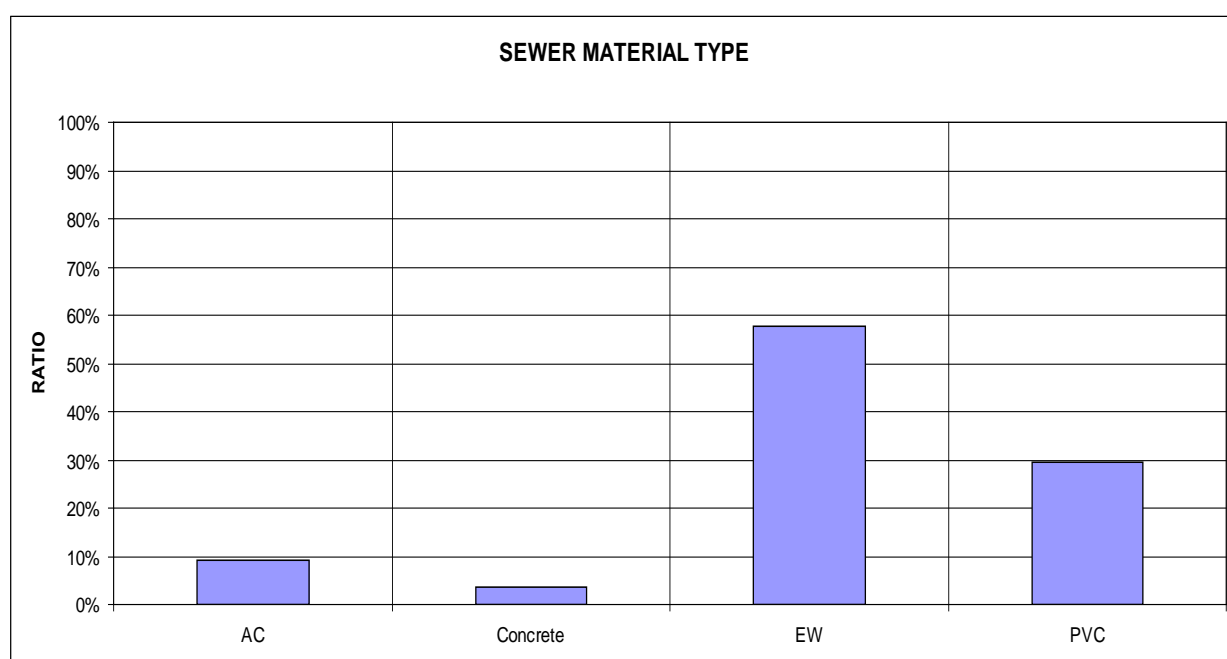


Figure 5.2 Sewerage Material Type

The age profile of Council's sewerage and effluent system is shown in Figure 5.3

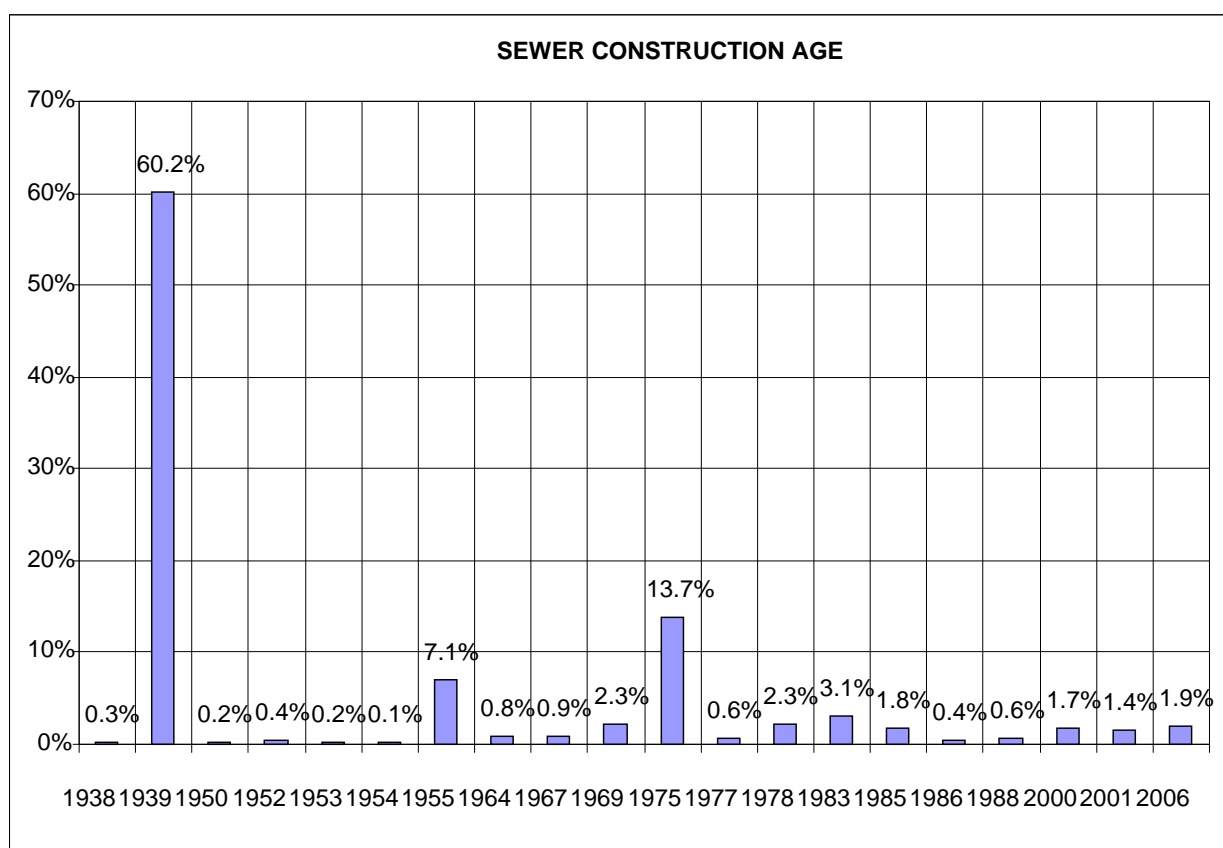


Figure 5.3 Sewer and Effluent Construction Age

The distribution of pipe sizes for both the sewer and effluent reuse scheme is shown in figure 5.4

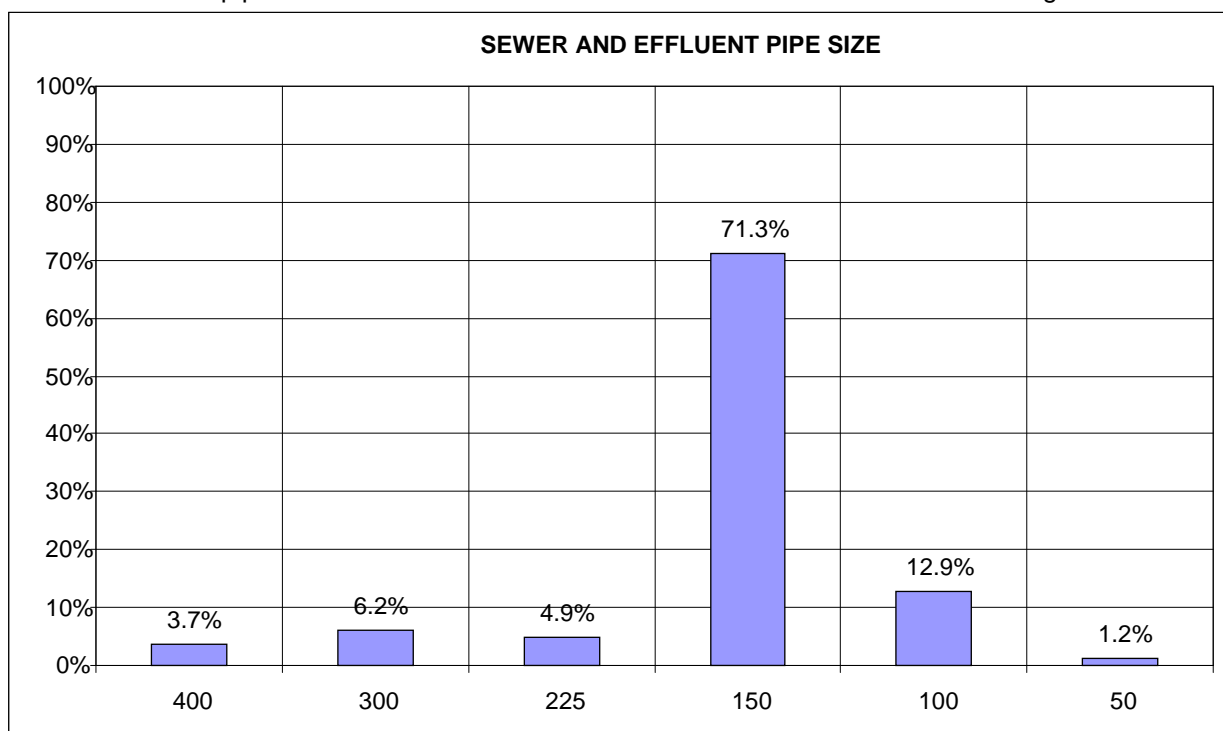


Figure 5.4 Sewer and Effluent pipe size

5.1.2 Asset Capacity and Performance

Council's services are generally provided to meet design standards where these are available. Locations where deficiencies in service performance are known are detailed in Table 5.5.

Table 5.5 Known Service Performance Deficiencies

Location	Service Deficiency
Sewer distribution	60% of the gravity mains were constructed in 1939, placing them 75% through their useful life.
Sewerage Distribution	Overloading in wet weather, investigate by smoke testing.
Lake Centenary	Existing septic system, need to connect to sewerage scheme
Ariah Park	Investigate the feasibility of a small town sewerage system and then the possibility of an effluent reuse scheme
Effluent Reuse	Limited lifespan of existing pumps. Require to be upgraded. Flow meters for all systems.

The above service deficiencies were identified from the results of inspections undertaken in the preparation of this plan

5.1.3 Asset condition

A simple number rating system has been adopted for this plan to describe asset condition. Condition is measured using a 1 to 5 rating system as described below:

Table 5.6. Sewerage and effluents, Footpath, Kerb and Gutter Condition Rating Description

Condition Index	Rating Scale	Condition Description
1	Excellent	Providing a very high level of service
2	Good	Good condition with no indication of any major failures and providing a good level of service.
3	Fair	Aged and in fair condition providing an adequate level of service. No signs of immediate obsolescence.
4	Poor	Will need to renew, upgrade or dispose of in the future and is included in the five year Capital Works Program
5	Very Poor	Below an acceptable level of service. Requires renewal/upgrade immediately within the following year or so.

Frequency of Assessment: Every 3 – 4 years

Rating Criteria

The condition profile of Council's assets has not been assessed at this stage. Future revisions of this infrastructure and asset management plan may include condition ratings. Condition assessment will consider the following criteria.

- **Cracking** Broken pipes
- **Root infestation** Blockages caused by tree roots entering the system
- **Pipe deterioration** wearing of the mains either by chemical or physical abrasion

5.1.4 Asset valuations

The value of assets as at 30th June 2010 covered by this asset management plan is summarised below. Assets were last revalued at 30th June 2010 and were valued at greenfield rates.

The value of assets as at 30th June 2007 covered by this infrastructure and asset management plan is summarised below. Assets are valued at greenfield rates.

Asset	Annual Depreciation Expense (\$,000)	Current Replacement Cost (\$,000)	Accumulated Depreciable Amount (\$,000)	Depreciated Replacement Cost (\$,000)
Pump Stations	1	95	28	67
Pipeline	91	11,788	5,310	6,478
Effluent System	17	1,873	386	1,487
Treatment Works	13	994	102	892
Other		15		15
TOTAL	122	14,765	5,826	8,939

Council's sustainability reporting reports the rate of annual asset consumption and compares this to asset renewal and asset upgrade and expansion.

Asset Ratio	Effluent Scheme	Sewer Scheme
Asset Consumption	7.94	0.99
Asset Renewal	8.44	TBD
Annual Upgrade Expansion		

5.2 Risk Management Plan

An assessment of risks associated with service delivery from infrastructure assets has identified critical risks to Council. The risk assessment process identifies credible risks, the likelihood of the risk event occurring, the consequences should the event occur, develops a risk rating, evaluates the risk and develops a risk treatment plan for non-acceptable risks.

Critical risks, being those assessed as 'Very High' - requiring immediate corrective action and 'High' – requiring prioritised corrective action identified in the infrastructure risk management plan are summarised in Table 5.8

Table 5.8 Critical Risks and Treatment Plans

Asset at Risk	What can Happen	Risk Rating	Risk Treatment Plan
Mechanical - Pumps	Power Failure	L	Treatment works has back-up generator,
Mechanical - other	Breakdown	L	Maintenance contingency plan, replacement program
Pump Station - Pumps	Power failure	L	Pump stations able to be run from portable generator.
Pump Station - Civil	Blockage, Silting	M	Inspections and maintenance as required
Property Connections	Blockage	L	Resident to clear own connection
Manhole	Silting	M	Inspections and Flushing
Oxidation Lagoon – Clay liner	Base/ Wall collapse, Leak	H	Capital repairs as required

Asset at Risk	What can Happen	Risk Rating	Risk Treatment Plan
Oxidation Lagoon – Bank rubble Protection	Loss of rubble undermining of bank	M	Capital Works as required
Evaporation Lagoons	Base/ Wall collapse, Leak	H	Capital repairs as required
Evaporation Lagoons	Loss of rubble undermining of bank	M	Capital Works as required
Irrigation Pump Blockage	Blockage	L	Maintenance plan
Rising Mains	Blow out	M	Repair or Replace line
Reuse Pipe	Blow out	M	Replace line

5.3 Maintenance Plan

Routine maintenance is the regular on-going work that is necessary to keep assets operating, including instances where portions of the asset fail and need immediate repair to make the asset operational again.

Routine maintenance work includes:

- Emptying rag bin
- Vegetation control on lagoon banks

5.3.1 Maintenance and improvement plan

Maintenance includes reactive, planned and cyclic maintenance work activities.

Reactive maintenance is unplanned repair work carried out in response to service requests and management/supervisory directions. Assessment and prioritisation of reactive maintenance is undertaken by Council staff using experience and judgement. **Reactive** maintenance work is typically 37% of total maintenance expenditure.

Planned improvement is repair work that is identified and managed through a maintenance management system (MMS). MMS activities include inspection, assessing the condition against failure/breakdown, experience, prioritising, scheduling, actioning the work and reporting what was done to develop a maintenance history and improve maintenance and service delivery performance. Planned maintenance work is approximately 49% of total expenditure on sewerage and effluents.

Cyclic maintenance is replacement of higher value components/sub-components of assets that are undertaken on a regular cycle including repainting of sewerage and effluent markings,

Expenditure trends are shown in Table 5.9

Table 5.9. Expenditure Trends

Year	Expenditure Dollars		
	Reactive	Planned	Cyclic
2005/06	\$108,783	\$4112,751	\$47,572
2006/07	\$83,975	\$124,412	\$37,709

Year	Expenditure as % of Total		
	Reactive	Planned	Cyclic
2005/06	47.5	49.2	3.3
2006/07	34.1	50.6	15.3
2007/08			
2008/09			
Average			

Expenditure levels are considered to be adequate to meet required service levels. Future revision of this asset management plan will look at maintenance expenditures compared to the level of service.

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

5.3.2 Standards and specifications

Maintenance work is carried out in accordance with the following Standards and Specifications.

- AS 1477 Requirements for PVC pipes and fittings
- AS 1646 Requirements for the use of elastomeric seals in water, sewerage and drainage systems.
- AS 1260 Specifies requirements for PVCU pipes and fittings for sewer, drain, waste and vent applications.
- AS 2280 Specifies requirements for ductile iron pressure pipes centrifugally cast in moulds, and ductile iron fittings.
- AS 2129 Requirements for circular flanges.
- AS 2544 Specifies requirements for grey iron fittings.
- AS 1326 Requirements for materials for loose polyethylene sleeving intended for the corrosion protection of ductile and grey iron pipelines.
- AS 1110 Specifies the characteristics of hexagon head bolts.
- AS 1112 Specifies the characteristics of hexagon nuts.
- AS 1237 Specifies the nominal dimensions of washers.

–	AS 1650	Requirements for galvanized coatings.
–	AS 4130	Requirements for polyethylene pipes.
–	AS 1204	Requirements for structural steels
–	AS 1628	Requirements for metallic gate, globe and non-return valves.
–	AS 2638	Requirements for solid gate metal-bodied metal-seated gate valves.
–	AS 3578	Requirements for flanged, shouldered and grooved end, cast iron non-return valves.
–	AS 1160	Requirements for anionic and cationic bituminous emulsions.
–	AS 1289	The procedure for preparing disturbed samples.
–	AS 1465	Requirements for natural aggregates for concrete.
–	AS 1480	Requirements of reinforced concrete in structures.
–	AS 1302	Geometrical product specifications
–	AS 1304	Requirements for welded wire reinforcing fabric for concrete.
–	AS 1250	Requirements for the use of steel in structures.
–	AS 3735	Requirements for concrete structures used for retaining liquids at ambient temperature.
–	AS 1830	Specifies the properties of unalloyed and low-alloyed grey cast irons used for castings.
–	AS 1725	Standard specifies requirements for chain link fabric security fencing and gates.
–	AS 2423	Requirements for zinc or zinc/aluminium-alloy coated steel wire and wire products.
–	AS 2429	Requirements for electroplated coatings of rhodium on metallic substrates for general engineering applications.
–	AS 3600	Requirements for the design and construction of concrete structures and members.
–	AS 1379	Requirements for the supply, delivery and mixing of concrete.
–	AS 1509	Design and construction of formwork
–	AS 1510	Code of practice for control of concrete services – Formwork
–	AS 3850	Requirements for the planning, design, casting, transportation and erection of tilt-up panels.
–	AS 2032	Methods for handling, storage, installation, testing and commissioning of polyvinyl chloride (PVC) pipelines.
–	AS 3500	Requirements for the design and installation of sanitary plumbing and sanitary drainage from the fixtures to the Authority's sewer main, or common effluent system.

- AS 1360 Specifies the dimensions and performance of electrical machines.
- AS 1359 Requirements of rotating electrical machines
- AS 3000 Requirements for the design, construction and verification of electrical installations.
- AS 1359 Requirements of rotating electrical machines
- AS 3000 Requirements for the design, construction and verification of electrical installations.
- AS 1939 Requirements for enclosures of electrical equipment.
- AS 1136 Requirements for switchgear and control gear assemblies.
- Australian Guidelines for Water Recycling: Managing Health and Environmental Risk (Phase I) – 2006 Natural Resource Management Council
- Environmental Guidelines – Use of Effluent by Irrigation

5.3.3 Summary of future maintenance expenditures

Future maintenance expenditure is forecast to trend in line with the value of the asset stock as shown in Fig 5.3.1 to 5.34. Note that all costs are shown in current 2010/11 dollar values.

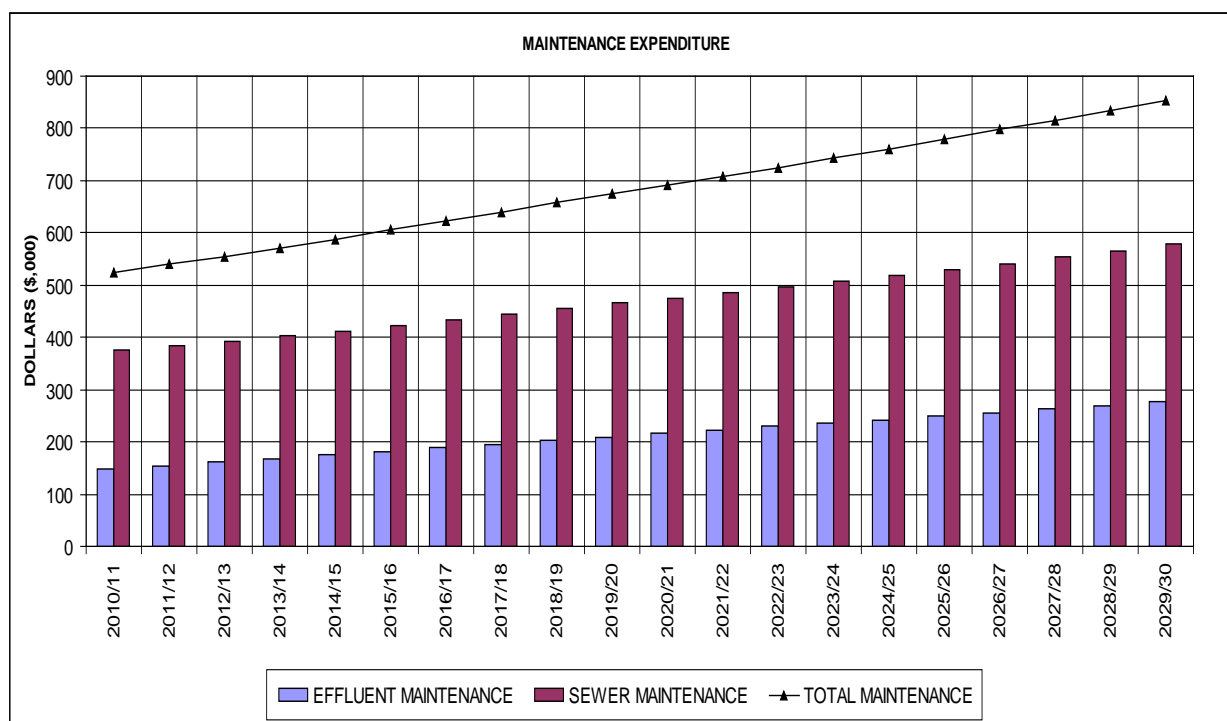


Fig 5.13 Predicted Expenditure on Sewerage and Effluent

Deferred maintenance, i.e. works that are identified for maintenance and unable to be funded is to be included in the risk assessment process in the infrastructure risk management plan.

Maintenance is funded from Council's operating budget and grants where available. This is discussed in Section 6.2.

5.4 Renewal/Replacement Plan

Renewal expenditure is major work which does not increase the asset's design capacity 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 upgrade/expansion or new works expenditure.

Table 5.10 shows the past renewal expenditure that has been spent on Council sewerage and effluents.

Table 5.10 Historical Capital Renewal Expenditure

Year	Effluent	Sewer
2005/06	\$113,467	\$210,877
2006/07	\$115,234	\$211,658
2007/08	\$120,751	\$205,267
2008/09	\$118,654	\$209,983
Average	\$117,027	\$209,446

5.4.1 Renewal plan

Council's maintenance and renewal plan is currently incorporated into a 10 year Capital Works Program (Appendix C)..

Assets identified for renewal are inspected to verify the accuracy of the estimated remaining life obtained and develop a preliminary renewal estimate. Verified proposals are ranked by priority and available funds and scheduled in future works programmes. The priority ranking criteria is detailed in Table 5.11.

Table 5.11 Renewal Priority Ranking Criteria

Urban Sewerage and effluents Criteria	Weighting
Safety – Public Health	40
Maintenance – Repeated complaints	50
Age	10
Total	100%

Renewal will be undertaken using 'low-cost' renewal methods where practical. The aim of 'low-cost' renewals is to restore the service potential or future economic benefits of the asset by renewing the assets at a cost less than replacement cost. An example of low cost renewal, in lieu of full pavement reconstruction, is pavement rehabilitation work or spraying an enrichment seal.

5.4.2 Renewal standards

Renewal work is carried out in accordance in accordance with the standards and specifications noted in Section 5.3.1.

5.4.3 Summary of future renewal expenditure

Figure 5.17 has the projected future renewal expenditure increase over time as the asset ages.

The projected capital renewal program is shown in Appendix C.

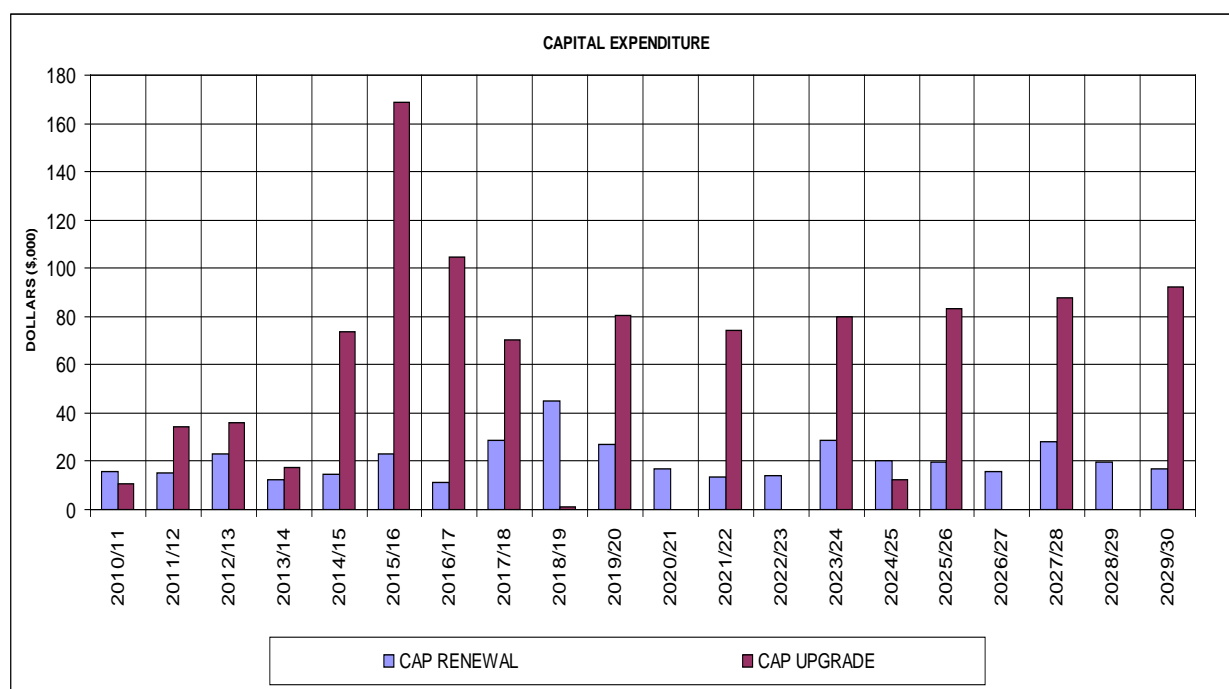


Fig 5.17 Predicted Capital Renewal for Regional and Local Sewerage and effluents

Deferred renewal, i.e. those assets identified for renewal and not scheduled for renewal in capital works programs are to be included in the risk assessment process in the risk management plan.

Renewals are to be funded from Council's capital works program and grants where available. This is further discussed in Section 6.2.

5.5 Creation/Acquisition/Upgrade Plan

New works are those works that create a new asset that did not previously exist, or works which upgrade or improve an existing asset beyond its existing capacity. They may result from growth, social or environmental needs. Assets may also be acquired at no cost to the Council from land development. These assets from growth are considered in Section 4.4.

5.5.1 Selection criteria

New assets and upgrade/expansion of existing assets are identified from various sources such as councillor or community requests, proposals identified by strategic plans or partnerships with other organisations. Candidate proposals are inspected to verify need and to develop a preliminary renewal estimate. Verified proposals are ranked by priority and available funds and scheduled in future works programmes.

5.5.2 Standards and specifications

Standards and specifications for new assets and for upgrade/expansion of existing assets are the same as those for maintenance and renewal see Section 5.3.2.

5.6 Disposal Plan

Disposal includes any activity associated with disposal of a decommissioned asset including sale, demolition or relocation. It is unlikely that any sealed sewerage and effluent would be disposed of while still in service. It may be possible that if a sealed sewerage and effluent is underutilised that it may be reverted back to gravel, but this would be a last resort and only after it is shown that the maintenance costs are unjustified.

There are no plans to dispose of any sewerage and effluent assets.

6. FINANCIAL SUMMARY

This section contains the financial requirements resulting from all the information presented in the previous sections of this asset management plan. The financial projections will be improved as further information becomes available on desired levels of service, current and projected future asset performance and grant funding.

6.1 Financial Statements and Projections

The financial projections are shown in Table 6.1 and Fig 6.1 for planned operating (operations and maintenance) and capital expenditure (renewal and upgrade/expansion/new assets).

Activity	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)
Effluent System General	49.81	52.07	54.34	56.60	58.86	61.13	63.39	65.66	67.92	70.18
Bob Aldridge Cemetery	12.65	13.22	13.80	14.38	14.95	15.53	16.10	16.78	17.25	17.83
Callaghan Park	4.95	5.18	5.40	5.63	5.85	6.08	6.30	6.53	6.75	6.978
Federal Park	12.10	12.65	13.20	13.75	14.30	14.85	15.40	15.95	16.50	17.05
Gloucester Park	2.20	2.30	2.40	2.50	2.60	2.70	2.80	2.90	3.00	3.10
Nixon Park	4.40	4.60	4.8	5.00	5.20	5.40	5.60	5.80	6.00	6.20
Recreation Ground	2.75	2.86	3.90	3.13	3.25	3.38	3.50	4.71	3.75	3.88
The Oval	3.85	4.03	4.20	4.38	4.55	4.73	4.90	5.08	5.25	5.43
Temora West Park	3.30	3.45	3.60	3.75	3.90	4.05	4.20	4.35	4.50	4.65
Temora West Sports	18.15	18.98	19.80	20.63	21.45	22.28	23.10	23.93	24.75	25.58
Father Hannan Oval	8.25	8.63	9.00	9.38	9.75	10.13	10.50	10.88	11.25	11.63
Airport Camping Grounds	1.10	1.15	1.20	1.25	1.30	1.35	1.40	1.45	1.50	1.55
Effluent Storage Dams	4.40	4.60	4.80	5.00	5.20	5.40	5.60	5.80	6.00	6.20
Sewer Maintenance	375.29	384.85	392.92	402.74	412.81	423.13	433.71	444.55	455.25	465.13
SUB TOTAL	523.5	539.8	554.7	571.2	588.0	605.1	622.4	640.0	657.4	674.0
CAPITAL RENEWAL										
Bob Aldridge Cemetery	0.55	0.58	0.60	0.63	0.65	0.68	0.70	0.73	0.75	0.78
Callaghan Park	0.55	0.58	0.60	0.63	0.65	0.68	0.70	0.73	0.75	0.78
Federal Park	5.78			2.25					32.70	
Gloucester Park	0.83	0.86	0.90	0.09	4.88	1.01	1.05	1.09	1.13	1.16
Nixon Park	1.01	1.05	2.00	14.14	1.19	1.23	1.28	1.33	1.37	1.42
Recreation Ground	2.75	7.88	3.90	3.13	3.25	3.38	3.50	4.71	3.75	3.88
The Oval	1.65	0.86	0.90	0.94	0.98	2.03	1.05	1.09	1.13	1.16
Temora West Park	1.10	1.15	1.20	1.25	1.30	2.36	1.40	1.45	1.50	1.55
Temora West Sports	1.10	1.15	1.20	1.25	1.30	2.36	1.40	1.45	1.50	1.55
Effluent Storage Dams	0.28	0.29	0.30	0.31	0.33	1.69	0.35	0.36	0.38	0.39
		5.52	11.52			8.64		14.5		9.92
SUB TOTAL	15.6	18.76	21.92	24.62	13.23	22.7	10.03	25.98	44.96	21.03
CAPITAL RENEWAL										
Bob Aldridge Cemetery				11.25						
Bradley Park						101.25				
Federal Park					7.15					8.53
The Oval		28.75								
Temora West Park	0.70								1.05	
Temora West Sports					0.98					1.16
Effluent Storage Dams					0.98					1.16
SUB TOTAL	4.11	28.75		11.25	9.11	101.25			1.05	10.85
TOTAL	543.2	587.31	576.62	607.07	610.34	1,34.95	632.4	665.98	703.4	705.9

Table 6.1 Planned Operating and Capital Expenditure

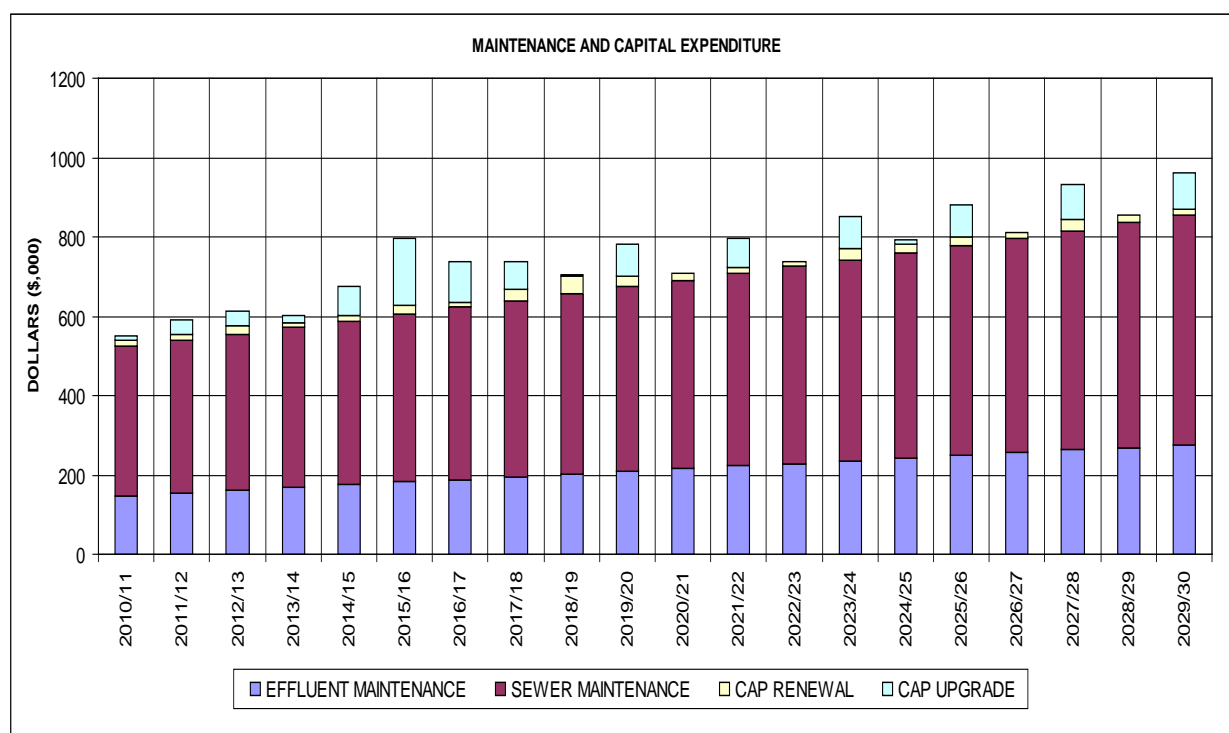


Fig 6.1 Planned Maintenance and Capital Expenditure Sewerage and effluents and Footpaths

6.1.1 Sustainability of service delivery

There are two key indicators for financial sustainability that have been considered in the analysis of the services provided by this asset category, these being long term life cycle costs and medium term costs over the 10 year financial planning period.

Long term - Life Cycle Cost

The ratio of lifecycle costs to lifecycle expenditure gives an indicator of sustainability of service provision. Life cycle costs include maintenance and asset consumption (depreciation expense). The annual average life cycle cost for the services covered in this asset management plan for a 20-year period is \$806,273. Table 6.3 compares the average income to the average expenditure.

Annual Average lifecycle Costs, \$000	Average Lifecycle Expenditure \$000	Average annual Disparity \$000
684.4	598.4	-86

Table 6.2 Lifecycle Costs vs. Expenditure – Sewerage and effluents

Refer to discussion at Table 6.2 regarding the factors contributing to this outcome.

Table 6.3 shows the indicative disparity between projected and planned renewals across the asset category.

Year End June 30	Yearly Lifecycle Cost (Including Depreciation)	Yearly Maintenance plus Capital works	Disparity in Renewal Expenditure (Planned – Projected)	Cumulative Renewal Funding Disparity	Yearly income	Yearly Surplus/ Deficit	Accumulative Surplus/ Deficit
2010/11	525,545	429,929	-95,606	-95,606	658,008	106,068	106,068
2011/12	539,841	464,093	-75,748	-171,354	691,900	102,806	208,874
2012/13	554,651	483,605	-71,046	-242,400	727,592	113,987	322,861
2013/14	571,213	467,748	-103,465	-345,865	765,181	164,183	487,044
2014/15	558,021	539,876	-48,145	-369,010	791,091	114,633	601,677
2015/16	605,081	565,688	-51,607	-342,403	817,891	21,208	622,885
2016/17	622,397	595,141	-27,256	-369,659	845,603	106,966	729,851
2017/18	639,980	591,879	-48,100	-417,760	874,257	135,295	865,146
2018/19	657,422	552,658	-104,764	-522,524	903,887	200,469	1,065,614
2019/20	674,038	627,333	-46,705	-569,229	934,525	152,662	1,218,277

Table 6.3 10-Year Projection for Income plus Maintenance and Capital Expenditure

A gap between life cycle costs and life cycle expenditure gives an indication as to whether the asset is being maintained adequately each year. The purpose of this sewerage and effluent asset management plan is to identify levels of service that the community needs and can afford and develop the necessary long-term financial plans to provide the service in a sustainable manner.

The life cycle gap for services covered by this asset management plan varies each year, but over a 10-year period is a negative\$569,229, giving a life cycle sustainability index of 0.87. That is, maintenance of the sewerage and effluent network, at the current service levels, will not sustain the network.

Table 6.3 also shows the anticipated income for the 10-year period. The income is in excess of the maintenance required to keep the asset at its current level of service. This indicates that Council has the capacity to do additional work on the asset, such as lining existing sewer mains and future asset management plans would need to identify sewer mains that have had several blockages or deterioration for remedial work.

Medium term – 10 year financial planning period

This asset management plan identifies the estimated maintenance and capital expenditures required to provide an agreed level of service to the community over a 20-year period for input into a 10-year financial plan and funding plan (see Appendix E) to provide the service in a sustainable manner.

The financial planning in this asset management plan, will need to be revised at least every four years.

An asset management plan needs to compare the existing or planned expenditures in the 10-year period to identify monetary gaps. In a core asset management plan, a gap is generally due to increasing asset renewals, increased costs etc.

Fig 6.3 shows the projected asset renewals in the 10-year planning period from the asset register. The projected asset renewals are compared to anticipated income.

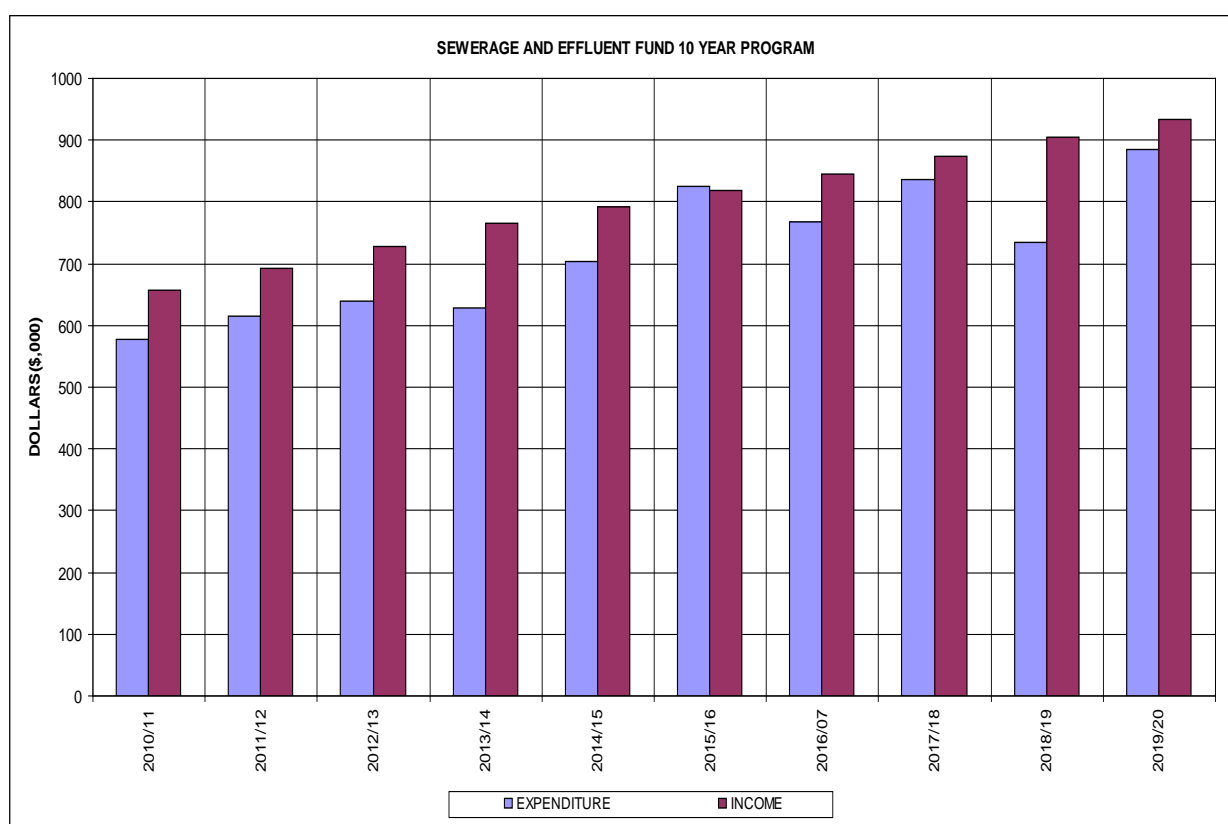


Fig 6.3 *Income and Expenditure for 10-Year Period*

Providing services in a sustainable manner will require matching of projected asset renewals to meet agreed service levels with planned capital works programs and available revenue.

A gap between projected asset renewals, planned asset renewals and funding indicates that further work is required to manage required service levels and funding to eliminate any disparity.

Council will manage the 'gap' by developing this asset management plan to provide guidance on future service levels and resources required to provide these services, and determine what will be the result if the gap is not funded such as:

- _ Reduce level of service
- _ Reduce customer satisfaction levels

- _ Increased risk/safety
- _ Greater proportion of assets in poor condition

6.2 Funding Strategy

Projected expenditure identified in Section 6.1 is to be funded from Council's operating and capital budgets. The funding strategy is detailed in the Council's 10 year long term financial plan. Achieving the financial strategy will require:

- _ Maintaining rate revenue
- _ Accepting a lower level of service.

6.3 Valuation Forecasts

Although the asset value is forecast to increase since as additional assets are installed the accumulate Depreciation is greater than the additional capital, so in real terms the current asset value is decreasing. Fig 6.4 shows the projected replacement cost asset values over the planning period.

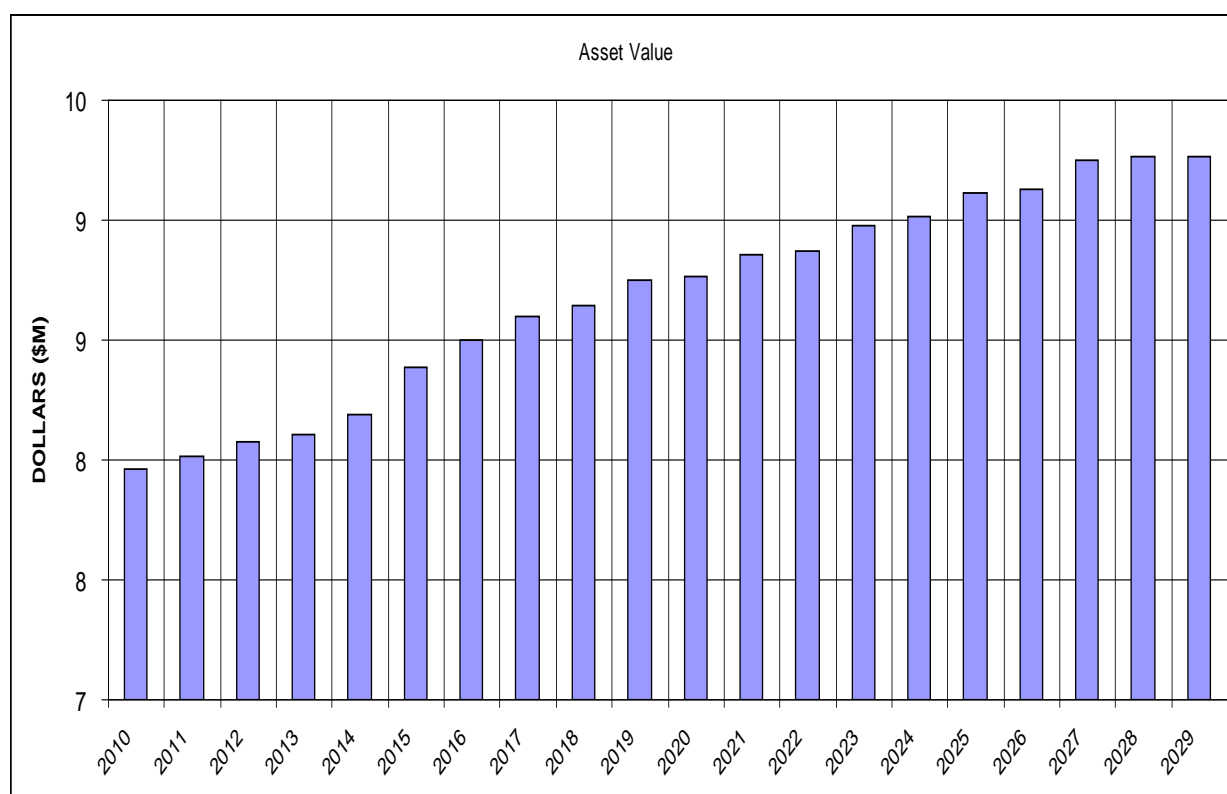


Fig 6.4 . Projected Asset Values

Depreciation expense values are forecast in line with asset values as shown in Fig 6.5.

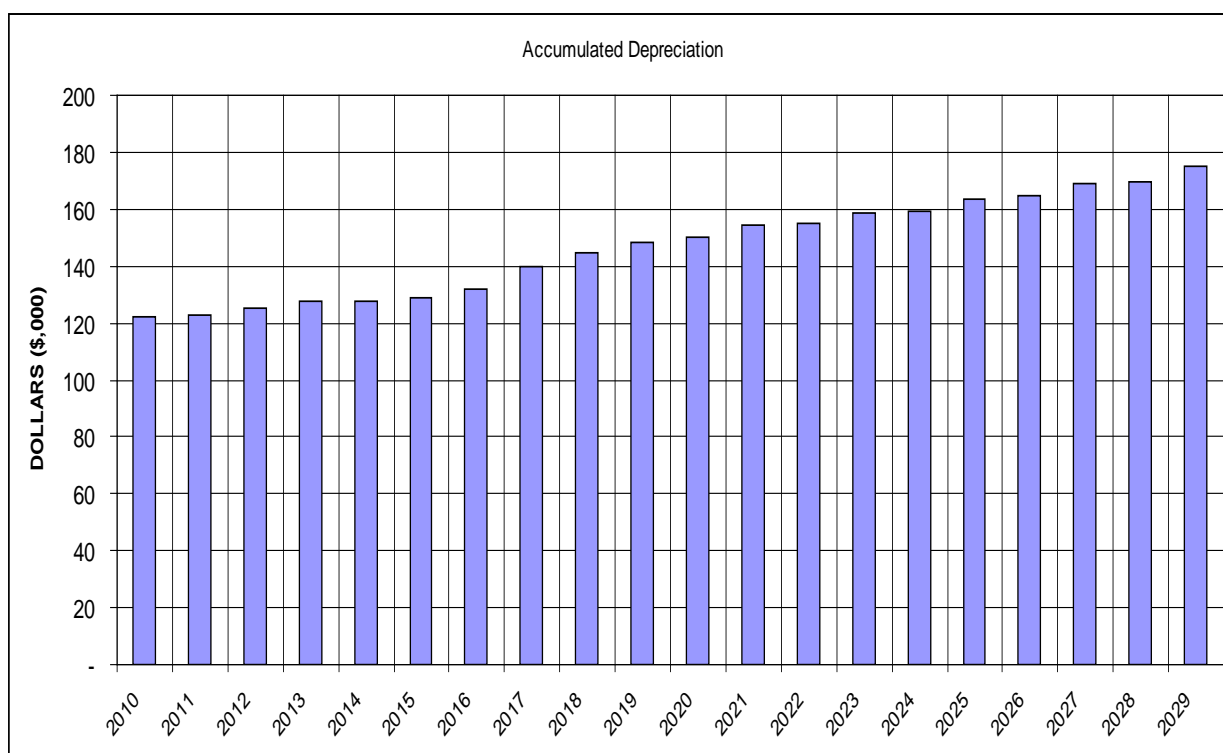


Fig 6.5 . Projected Depreciation Expense

The depreciated replacement cost (current replacement cost less accumulated depreciation) will vary over the forecast period depending on the rates of addition of new assets, disposal of old assets and consumption and renewal of existing assets. Forecast of the Written Down Capital Value is shown in Fig 6.6

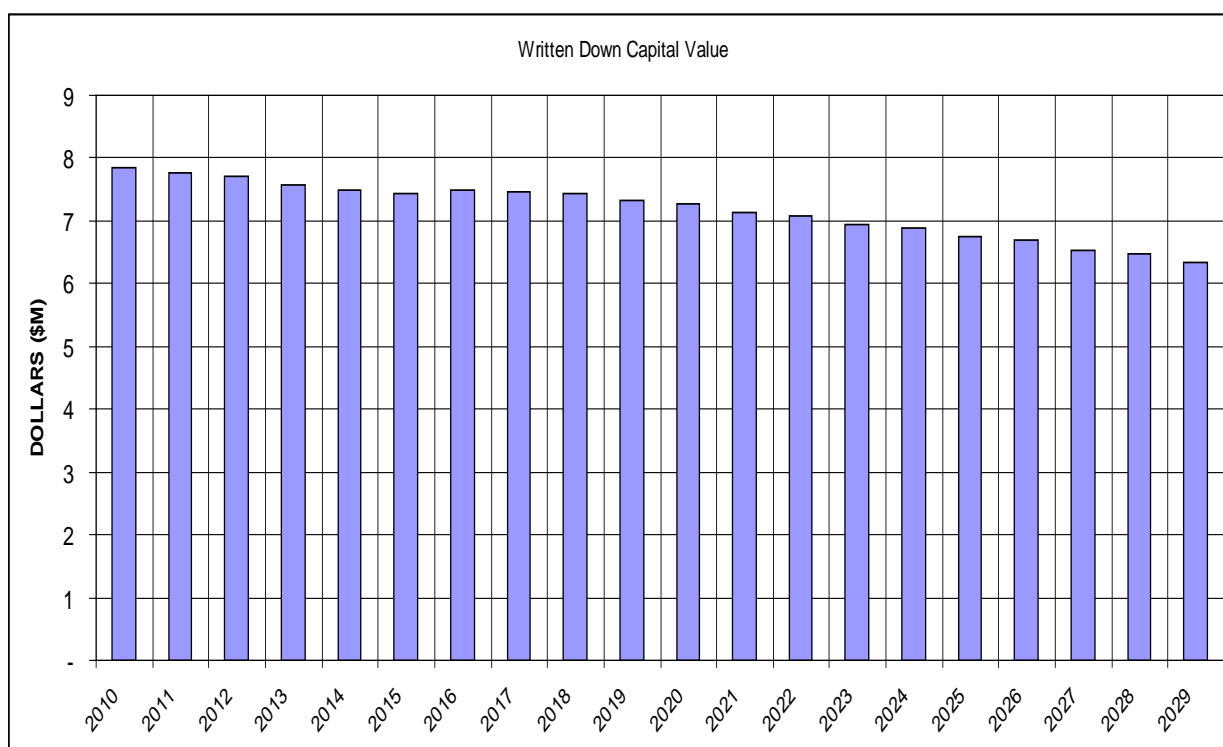


Fig 6.6. Projected Depreciated Replacement Cost

6.4 Key Assumptions made in Financial Forecasts

This section details the key assumptions made in presenting the information contained in this asset management plan and in preparing forecasts of required operating and capital expenditure and asset values, depreciation expense and carrying amount estimates. It is presented to enable readers to gain an understanding of the levels of confidence in the data behind the financial forecasts.

Key assumptions made in this asset management plan are:

- The current levels of service will be maintained over the life of this asset management plan
- The treatment and maintenance costs are based on Council's current schedule of rates
- All predicted financial figures are based on 2010/11 rates and have been adjusted for an inflation rate of 3.5%

Accuracy of future financial forecasts may be improved in future revisions of this asset management plan by the following actions.

- Consult with the community and other stakeholders to finalise the levels of service currently being delivered
- Refine and improve the prediction modelling (life cycle paths and decision matrices)

7. ASSET MANAGEMENT PRACTICES

7.1 Accounting/Financial Systems

Council uses CIVICA Authority as its corporate accounting system. Authority has a suite of accounting/financial modules to meet all day to day operational and reporting requirements

The Director of Administration is delegated the statutory responsibility as Council's Responsible Accounting Officer. The Responsible Accounting Officer is to ensure that Council has adequate control systems, processes and procedures in place and these are being applied to meet all financial operating and reporting requirements.

The Local Government Act 1993, Chapter 13 sets out the requirements for management reporting, accounting, auditing, and financial reporting for Councils. The NSW division of Local Government also issues the Local Government Code of Accounting Practice and Financial Reporting, which assists in the interpretation and application of the act and the application of Australian Accounting Standards to the audit financial reporting functions.

The Government Code of Accounting Practice and Financial Reporting also provides a mechanism which ensures appropriate accounting policies and practices are adopted. For infrastructure, significant accounting policies are detailed in the annual financial reports. These include policies on the acquisition of assets, initial asset recognition, subsequent costs, asset revaluation, capitalisation thresholds, depreciation and disposal and de-recognition.

It is possible that changes will be required to accounting policies and practices resulting from this asset management plan. These will be assessed and implemented as soon as practical.

7.2 Asset Management Systems

Council's adopted Asset Management System is "AIM" (Asset and Infrastructure Management) a component of CIVICA's "Authority System.

AIM links to the Authority accounting system through the use of Work Orders and Tasks. Asset Valuations can be stored in AIM but are also stored in the Capital Value Record (CVR) component of Authority.

The Director of Administration (and the Administration staff) are responsible for maintaining the Asset Management Systems in conjunction with the Director of Engineering to update information.

The development of AIM hierarchy for all sewerage and effluent assets is practically complete. The Director of Engineering revalued the sewerage and effluent assets, by using Fair Value rates from current projects. Part of the asset revaluation has been to split sewerage and effluents into segments. For sealed sewerage and effluents these segments related to sealed segments. Capacity, condition and valuation data relating to these segments were then imported into AIM.

7.3 Information Flow Requirements and Processes

The key information flows *into* this asset management plan are:

- The asset register data on size, age, value, remaining life of the network;
- The unit rates for categories of work/material;
- The adopted service levels;
- Projections of various factors affecting future demand for services;
- Correlations between maintenance and renewal, including decay models;

– Data on new assets acquired by council.

7.4 Standards and Guidelines

Refer to Section 5.3.2

8. PLAN IMPROVEMENT AND MONITORING

8.1 Performance Measures

The effectiveness of the asset management plan can be measured in the following ways:

- The degree to which the required cashflows identified in this asset management plan are incorporated into Council's long term financial plan and Strategic Management Plan;
- The degree to which 1-5 year detailed works programs, budgets, business plans and organisational structures take into account the 'global' works program trends provided by the asset management plan;

8.2 Improvement Plan

The asset management improvement plan generated from this asset management plan is shown in Table 8.21

Table 8.1 Improvement Plan

Task No	Task	Responsibility	Resources Required	Timeline
1.	Valuation Unit Costs – review unit rates, derivations on a greenfield basis	DE	Staff	May 2011
2.	Asset Information System – implement software package, providing asset deterioration and other tools	DAF	Staff	Jul 2011
3.	Risk Management – Refine, expand and document the risk management plan	DE	Staff	Jul 2011
4.	Job costing system – develop system, incorporating current unit rates	DAF/DE	Staff	Dec 2011
5.	Document mythology and procedures for asset useful lives, unit rates, condition rating and scoring and depreciation calculations.	DE	Staff	June 2010
6.	Population predictions – review projects based on latest available Census	DE	Staff	May 2011
7.	Community Consultation – undertake targeted engagement with the community to resolve acceptable and achievable levels of service	GM	Staff	Aug 2012
8.	Condition Rating – refine data collected and analysis processes, including greater levels of componentisation and achievable levels of service	DE	Staff	Dec 2012
9.	Consider limiting the AMP time framework to 10 years, to coincide with the Long term financial plan	DAF/DE	Staff	May 2012

8.3 Monitoring and Review Procedures

This asset management plan will be reviewed during annual budget preparation and amended to recognise any changes in service levels and/or resources available to provide those services as a result of the budget decision process.

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

9 REFERENCES

1. Council 2010/10 Annual Management Plan and Budget.
2. AS27, Financial Reporting by Local Government Australian Accounting Standards, June 1996
3. AASB1031, Materiality, Australian Accounting Standard Board July 2004
4. AASB116 Property, Plant and Equipment, Australian Accounting Standards Board July 2007
5. Temora Shire Council Asset Valuation 2010
6. Temora Shire Sewerage and effluent Hierarchy Policy 2007
7. Temora Shire Footpath Hierarchy 2004
8. International Infrastructure Management Manual, Institute of Public Works Engineering Australia, Sydney 2006 www.ipwea.org.au
9. Statistical snapshot Temora Shire ABS 2006 Census data.
- 10.

APPENDICES

Appendix A Abbreviations

Appendix B Glossary

Appendix C Maintenance response Levels of Service

Appendix D 20 Year Maintenance and Capital Works Program

Appendix E Temora Sewer and Effluent Asset Inventory

Appendix A ABBREVIATIONS

AAAC	Average annual asset consumption
AMP	Asset management plan
ARI	Average recurrence interval
BOD	Biochemical (biological) oxygen demand
CRC	Current replacement cost
CWMS	Community wastewater management systems
DA	Depreciable amount
DoH	Department of Health
EF	Earthworks/formation
IRMP	Infrastructure risk management plan
LCC	Life Cycle cost
LCE	Life cycle expenditure
MMS	Maintenance management system
PCI	Pavement condition index
RV	Residual value
SS	Suspended solids
vph	Vehicles per hour
GM	General Manager
DAF	Director of Administration and Finance
DE	Director of Engineering

Appendix B GLOSSARY

Annual service cost (ASC)

An estimate of the cost that would be tendered, per annum, if tenders were called for the supply of a service to a performance specification for a fixed term. The Annual Service Cost includes operating, maintenance, depreciation, finance/ opportunity and disposal costs, less revenue.

Asset class

Grouping of assets of a similar nature and use in an entity's operations (AASB 166.37).

Asset condition assessment

The process of continuous or periodic inspection, assessment, measurement and interpretation of the resultant data to indicate the condition of a specific asset so as to determine the need for some preventative or remedial action.

Asset management

The combination of management, financial, economic, engineering and other practices applied to physical assets with the objective of providing the required level of service in the most cost effective manner.

Assets

Future economic benefits controlled by the entity as a result of past transactions or other past events (AAS27.12).

Property, plant and equipment including infrastructure and other assets (such as furniture and fittings) with benefits expected to last more than 12 month.

Average annual asset consumption (AAAC)*

The amount of a local government's asset base consumed during a year. This may be calculated by dividing the Depreciable Amount (DA) by the Useful Life and totalled for each and every asset OR by dividing the Fair Value (Depreciated Replacement Cost) by the Remaining Life and totalled for each and every asset in an asset category or class.

Brownfield asset values**

Asset (re)valuation values based on the cost to replace the asset including demolition and restoration costs.

Capital expansion expenditure

Expenditure that extends an existing asset, at the same standard as is currently enjoyed by residents, to a new group of users. It is discretionary expenditure, which increases future operating, and maintenance costs, because it increases council's asset base, but may be associated with additional revenue from the new user group, eg. extending a drainage or sewerage and effluent network, the provision of an oval or park in a new suburb for new residents.

Capital expenditure

Relatively large (material) expenditure, which has benefits, expected to last for more than 12 months. Capital expenditure includes renewal, expansion and upgrade. Where capital projects involve a combination of renewal, expansion and/or upgrade expenditures, the total project cost needs to be allocated accordingly.

Capital funding

Funding to pay for capital expenditure.

Capital grants

Monies received generally tied to the specific projects for which they are granted, which are often upgrade and/or expansion or new investment proposals.

Capital investment expenditure

See capital expenditure definition

Capital new expenditure

Expenditure which creates a new asset providing a new service to the community that did not exist beforehand. As it increases service potential it may impact revenue and will increase future operating and maintenance expenditure.

Capital renewal expenditure

Expenditure on an existing asset, which returns the service potential or the life of the asset up to that which it had originally. It is periodically required expenditure, relatively large (material) in value compared with the value of the components or sub-components of the asset being renewed. As it reinstates existing service potential, it has no impact on revenue, but may reduce future operating and maintenance expenditure if completed at the optimum time, eg. resurfacing or resheeting a material part of a sewerage and effluent network, replacing a material section of a drainage network with pipes of the same capacity, resurfacing an oval. Where capital projects involve a combination of renewal, expansion and/or upgrade expenditures, the total project cost needs to be allocated accordingly.

Capital upgrade expenditure

Expenditure, which enhances an existing asset to provide a higher level of service or expenditure that will increase the life of the asset beyond that which it had originally. Upgrade expenditure is discretionary and often does not result in additional revenue unless direct user charges apply. It will increase operating and maintenance expenditure in the future because of the increase in the council's asset base, eg. widening the sealed area of an existing sewerage and effluent, replacing drainage pipes with pipes of a greater capacity, enlarging a grandstand at a sporting facility. Where capital projects involve a combination of renewal, expansion and/or upgrade expenditures, the total project cost needs to be allocated accordingly.

Carrying amount

The amount at which an asset is recognised after deducting any accumulated depreciation / amortisation and accumulated impairment losses thereon.

Class of assets

See asset class definition

Component

An individual part of an asset which contributes to the composition of the whole and can be separated from or attached to an asset or a system.

Cost of an asset

The amount of cash or cash equivalents paid or the fair value of the consideration given to acquire an asset at the time of its acquisition or construction, plus any costs necessary to place the asset into service. This includes one-off design and project management costs.

Current replacement cost (CRC)

The cost the entity would incur to acquire the asset on the reporting date. The cost is measured by reference to the lowest cost at which the gross future economic benefits could be obtained in the normal course of business or the minimum it would cost, to replace the existing asset with a technologically modern equivalent new asset (not a second hand one) with the same economic benefits (gross service potential) allowing for any differences in the quantity and quality of output and in operating costs.

Current replacement cost "As New" (CRC)

The current cost of replacing the original service potential of an existing asset, with a similar modern equivalent asset, i.e. the total cost of replacing an existing asset with an as NEW or similar asset expressed in current dollar values.

Cyclic Maintenance**

Replacement of higher value components/sub-components of assets that is undertaken on a regular cycle including repainting, building roof replacement, cycle, replacement of air conditioning equipment, etc. This work generally falls below the capital/ maintenance threshold and needs to be identified in a specific maintenance budget allocation.

Depreciable amount

The cost of an asset, or other amount substituted for its cost, less its residual value (AASB 116.6)

Depreciated replacement cost (DRC)

The current replacement cost (CRC) of an asset less, where applicable, accumulated depreciation calculated on the basis of such cost to reflect the already consumed or expired future economic benefits of the asset

Depreciation / amortisation

The systematic allocation of the depreciable amount (service potential) of an asset over its useful life.

Economic life

See useful life definition.

Expenditure

The spending of money on goods and services. Expenditure includes recurrent and capital.

Fair value

The amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties, in an arms length transaction.

Greenfield asset values **

Asset (re)valuation values based on the cost to initially acquire the asset.

Heritage asset

An asset with historic, artistic, scientific, technological, geographical or environmental qualities that is held and maintained principally for its contribution to knowledge and culture and this purpose is central to the objectives of the entity holding it.

Impairment Loss

The amount by which the carrying amount of an asset exceeds its recoverable amount.

Infrastructure assets

Physical assets of the entity or of another entity that contribute to meeting the public's need for access to major economic and social facilities and services, eg. sewerage and effluents, drainage, footpaths and cycleways. These are typically large, interconnected networks or portfolios of composite assets. The components of these assets may be separately maintained, renewed or replaced individually so that the required level and standard of service from the network of assets is continuously sustained. Generally the components and hence the assets have long lives. They are fixed in place and are often have no market value.

Investment property

Property held to earn rentals or for capital appreciation or both, rather than for:

- (a) use in the production or supply of goods or services or for administrative purposes; or
- (b) sale in the ordinary course of business (AASB 140.5)

Level of service

The defined service quality for a particular service against which service performance may be measured. Service levels usually relate to quality, quantity, reliability, responsiveness, environmental, acceptability and cost).

Life Cycle Cost **

The life cycle cost (LCC) is average cost to provide the service over the longest asset life cycle. It comprises annual maintenance and asset consumption expense, represented by depreciation expense. The Life Cycle Cost does not indicate the funds required to provide the service in a particular year.

Life Cycle Expenditure **

The Life Cycle Expenditure (LCE) is the actual or planned annual maintenance and capital renewal expenditure incurred in providing the service in a particular year. Life Cycle Expenditure may be compared to Life Cycle Expenditure to give an initial indicator of life cycle sustainability.

Loans / borrowings

Loans result in funds being received which are then repaid over a period of time with interest (an additional cost). Their primary benefit is in 'spreading the burden' of capital expenditure over time. Although loans enable works to be completed sooner, they are only ultimately cost effective where the capital works funded (generally renewals) result in operating and maintenance cost savings, which are greater than the cost of the loan (interest and charges).

Maintenance and renewal gap

Difference between estimated budgets and projected expenditures for maintenance and renewal of assets, totalled over a defined time (eg 5, 10 and 15 years).

Maintenance and renewal sustainability index

Ratio of estimated budget to projected expenditure for maintenance and renewal of assets over a defined time (eg 5, 10 and 15 years).

Maintenance expenditure

Recurrent expenditure, which is periodically or regularly required as part of the anticipated schedule of works required to ensure that the asset achieves its useful life and provides the required level of service. It is expenditure, which was anticipated in determining the asset's useful life.

Materiality

An item is material if its omission or misstatement could influence the economic decisions of users taken on the basis of the financial report. Materiality depends on the size and nature of the omission or misstatement judged in the surrounding circumstances.

Modern equivalent asset.

A structure similar to an existing structure and having the equivalent productive capacity, which could be built using modern materials, techniques and design. Replacement cost is the basis used to estimate the cost of constructing a modern equivalent asset.

Non-revenue generating investments

Investments for the provision of goods and services to sustain or improve services to the community that are not expected to generate any savings or revenue to the Council, eg. parks and playgrounds, footpaths, sewerage and effluents and bridges, libraries, etc.

Operating expenditure

Recurrent expenditure, which is continuously required excluding maintenance and depreciation, eg power, fuel, staff, plant equipment, on-costs and overheads.

Pavement management system

A systematic process for measuring and predicting the condition of sewerage and effluent pavements and wearing surfaces over time and recommending corrective actions.

Planned Maintenance**

Repair work that is identified and managed through a maintenance management system (MMS). MMS activities include inspection, assessing the condition against failure/breakdown criteria/experience, prioritising scheduling, actioning the work and reporting what was done to develop a maintenance history and improve maintenance and service delivery performance.

PMS Score

A measure of condition of a sewerage and effluent segment determined from a Pavement Management System.

Rate of annual asset consumption*

A measure of average annual consumption of assets (AAAC) expressed as a percentage of the depreciable amount (AAAC/DA). Depreciation may be used for AAAC.

Rate of annual asset renewal*

A measure of the rate at which assets are being renewed per annum expressed as a percentage of depreciable amount (capital renewal expenditure/DA).

Rate of annual asset upgrade*

A measure of the rate at which assets are being upgraded and expanded per annum expressed as a percentage of depreciable amount (capital upgrade/expansion expenditure/DA).

Reactive maintenance

Unplanned repair work that carried out in response to service requests and management/supervisory directions.

Recoverable amount

The higher of an asset's fair value, less costs to sell and its value in use.

Recurrent expenditure

Relatively small (immaterial) expenditure or that which has benefits expected to last less than 12 months. Recurrent expenditure includes operating and maintenance expenditure.

Recurrent funding

Funding to pay for recurrent expenditure.

Rehabilitation

See capital renewal expenditure definition above.

Remaining life

The time remaining until an asset ceases to provide the required service level or economic usefulness. Age plus remaining life is economic life.

Renewal

See capital renewal expenditure definition above.

Residual value

The net amount which an entity expects to obtain for an asset at the end of its useful life after deducting the expected costs of disposal.

Revenue generating investments

Investments for the provision of goods and services to sustain or improve services to the community that are expected to generate some savings or revenue to offset operating costs, eg public halls and theatres, childcare centres, sporting and recreation facilities, tourist information centres, etc.

Risk management

The application of a formal process to the range of possible values relating to key factors associated with a risk in order to determine the resultant ranges of outcomes and their probability of occurrence.

Section or segment

A self-contained part or piece of an infrastructure asset.

Service potential

The capacity to provide goods and services in accordance with the entity's objectives, whether those objectives are the generation of net cash inflows or the provision of goods and services of a particular volume and quantity to the beneficiaries thereof.

Service potential remaining*

A measure of the remaining life of assets expressed as a percentage of economic life. It is also a measure of the percentage of the asset's potential to provide services that is still available for use in providing services (DRC/DA).

Strategic Management Plan (SA)**

Documents Council objectives for a specified period (3-5 yrs), the principle activities to achieve the objectives, the means by which that will be carried out, estimated income and expenditure, measures to assess performance and how rating policy relates to the Council's objectives and activities.

Sub-component

Smaller individual parts that make up a component part.

Useful life

Either:

- (a) the period over which an asset is expected to be available for use by an entity, or
 - (b) the number of production or similar units expected to be obtained from the asset by the entity.
- It is estimated or expected time between placing the asset into service and removing it from service, or the estimated period of time over which the future economic benefits embodied in a depreciable asset, are expected to be consumed by the council. It is the same as the economic life.

Value in Use

The present value of estimated future cash flows expected to arise from the continuing use of an asset and from its disposal at the end of its useful life. It is deemed to be depreciated replacement cost (DRC) for those assets whose future economic benefits are not primarily dependent on the asset's ability to generate new cash flows, where if deprived of the asset its future economic benefits would be replaced.

Appendix C SEWERAGE AND EFFLUENT PROGRAM

10 YEAR SEWERAGE AND EFFLUENTS CAPITAL WORKS PROGRAM

As part of Council's Asset Management Plan process, and to develop a 10 Year Financial Plan for Council, a 10 Year Sewerage and Effluents Capital Works Program has been developed. This plan is designed to address ratepayers requirements for urban and rural sewerage and effluents to provide a sewerage and effluent network that meets the needs of the community and industry, within a 10-year span and that the sewerage and effluent network is both affordable and sustainable for the community.

Careful consideration has been given to any new capital works and to consider them in terms of "asset management" principles and "whole of life" costs. Generally a more expensive asset means a more expensive maintenance and replacement cost. In formulating the Sewerage and effluent Hierarchy Plan and this Asset Management Plan, the following priorities have been taken into consideration.

- Level of Service to be maintained
- Investigation of expanding sewerage scheme to un sewerred areas of Temora and other villages, such as Arian Park
- Upgrade of Toilets to Parks and Sporting Fields
- Installation of Toilets at Federal Park

The 10 year program is to be a guideline for Council in adopting its Annual Business Plan. Council will reserve the right to review the program as situations and circumstances change over time. An annual update of the plan will need to be undertaken and a review of the full plan undertaken after 5 years.

Appendix C MAINTENANCE RESPONSE LEVELS OF SERVICE (Draft)

Table C1 Category Types

Category 1	Category 2	Category 3
Sewer Pipes	Effluent system	
Sewerage Treatment Works		
Sewer Manholes		

Table C2 Defects Record

Sewer Lines & Treatment Works	Sewer Manholes	Effluent Lines
Blockage by tree roots Blockage from cracked pipes Pump Failure Electrical Failure Pond breaches in wall	Blockage by tree roots	Split pipe Sprinkler not delivering quantity of water Pump failure

Table C3 Resources

Sewer Lines & Treatment Works	Sewer Manholes	Effluent Lines
Backhoe Water cart Skid steer Contractor Tree Contractor Council Plumber Plumbing Contractor	Backhoe Water cart Tree Contractor Council Plumber Plumbing Contractor	Parks & Garden Staff Skid steer contractor Backhoe Water cart Plumbing Contractor

Table C4 Response Times

Sewerage and effluents					
Category 1	Hours	Category 2	Hours	Category 3	Hours
Sewer pipe blockage	2	Line breakage	4		
Sewer treatment blockage	2	Sprinkler malfunction	8		
Power failure	Backup generator				
Aeration pond pump	8				
Blockage sewer manhole	4				

Appendix D 20-YEAR MAINTENANCE AND CAPITAL WORKS PROGRAM

TEMORA SHIRE COUNCIL



AERODROME

ASSET MANAGEMENT PLAN

PART 4




Document Control	<div></div>				
	Document ID: Temora Shire Council - Aerodrome Asset Management Plan				
Rev No	Date	Revision Details	Author	Reviewer	Approver
1	22 March 2011	First Draft	F. Giacomini	F. Giacomini	

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1. EXECUTIVE SUMMARY

1.1 Infrastructure and Asset Management Plans

Council provides a aerodrome for recreational aviation and as an attraction to aviation enthusiasts settle at the airpark subdivision to further enhance their enjoyment of flying.

The Temora Aerodrome encompasses the following assets:

- W Sealed main runway 05/23
- W Sealed north- south runway 18/36
- W Unsealed east-west runway 09/27
- W Sealed taxiways A to H
- W General aviation apron
- W Concrete apron at front of Aviation Museum
- W PAL runway lights on 05/23
- W Taxiway lights on 18/36 and taxiway D
- W Three lit windsocks and one unlit windsock.

1.2 What does it Cost?

There are two key indicators of cost to provide the service at the aerodrome.

- W The life cycle cost being the average cost over the life cycle of the asset, and
- W The total maintenance and capital renewal expenditure required to deliver existing service levels in the next 10 years covered by Council's long-term financial plan.

The life cycle cost for the aerodrome asset is estimated at \$220,913 per annum averaged over a 10-year period. Council's planned life cycle expenditure for year 1 of the asset management plan is \$160,107 million which gives a life cycle sustainability index of 0.95 .

The total maintenance and capital renewal expenditure (excluding capital upgrade) required to provide the infrastructure at the aerodrome in the next 10 years is estimated at \$2.209 million.

1.3 Plans for the Future

Council plans to operate and maintain the aerodrome to achieve the following strategic objectives.

- W Ensure the aerodrome is maintained at a safe and functional standard as set out in this asset management plan.
- W Ensure that capital renewal funding for reseals are maintained

- W Ensure that capital upgrade funding is available as per Council's 10-year management plan
- W Improve airside pavements as required
- W Efficient use of Council Resources.
- W Comply with CARS 139
- W Attract further aviation related functions/events at the aerodrome to attract tourism
- W Promote the Airpark Estate for commercial and residential use

Modelling in this report assumes the population is growing at a rate of 0.3 % per annum (based on historical growth statistics and the impact of growth of neighbouring shires and the airpark estate). While increased residents at the subdivision will result in an increase in general rates income collected it will also result in higher landing and takeoff volumes which will result in reduced pavement lives and the possibility of increased level of service demands

1.4 Lifecycle Management

The model for management of the aerodrome relates particularly to the maintenance and renewal stages of asset life. Early in the life of an asset, its condition deteriorates slowly and maintenance is generally not required. This is often referred to the **"Do Nothing"** phase of an asset's life. As the asset ages, it moves into what is known as the **"Maintain"** phase. Maintenance activities will need to be performed to minimise continued deterioration. As the asset moves towards the end of its life, activities are undertaken that restore the asset to a condition close to that of the original. This is referred to as the **"Renewal"** phase.

The importance of the time for intervention for renewal is paramount. If renewal activities are not undertaken in a timely manner, the condition of the asset will deteriorate rapidly to failure, and the cost of reconstruction may be many times that of renewal activities.

1.5 Financial Summary

A ten-year analysis of existing pavement conditions and costs has been undertaken to determine funding implications for the asset condition of the aerodrome pavements. Annual adjustment for increases in the cost of construction materials and services would need to be made to accurately represent long-term results.

Modelling indicates that an annual renewal allocation of \$128,892 is sufficient to keep the aerodrome in the current overall condition. The average annual allocation of \$26,314 for renewals, plus \$202,140 in normal maintenance is funded by Council to maintain the current overall condition of the aerodrome over the next 10-year period.

1.6 Measuring our Performance

An asset management plan is a dynamic document, reflecting and responding to changes over time. Monitoring of this Aerodromes Asset Management Plan is required to:

- W Ensure compliance with the proposed improvement program milestones.

- W Ensure compliance with adopted standards and procedures for condition and performance.

A full review of this asset management plan should be undertaken every three to five years to document progress and set out proposals for the next five years. The recommendations below summarise the Improvement Program contained in Section 8 of this document.

1.7 Recommendations

This actions resulting from this asset management plan are:

- W Obtain Council approval of this asset management plan.
- W Confirm desired levels of service by establishing current performance and setting performance targets. to comply with CAR139. Have these levels of service adopted by Council.
- W Review the level of service for routine maintenance response times.
- W Further Investigate and improve estimates of growth in modelling.
- W Systematically separate capital upgrade expenditure from capital renewal expenditure.
- W Improve the delineation between planned, cyclic and reactive maintenance.
- W Develop data collection models to ensure repeatability and ongoing improvement of condition data collection and modelling processes.
- W Assess the structure and resources within council, to ensure that the asset management plan can be implemented.

2. INTRODUCTION

2.1 Background

The fundamental purpose of this Aerodrome Asset Management Plan (AAMP) is to improve Council's long-term strategic management of its aerodrome assets in order to cater for the community's desired levels of service in the future. This will be undertaken in accordance with Council's key strategic documents and demonstrates reasonable management in the context of Council's available financial and human resources.

The RAMP achieves this by setting standards, service levels and programmes that Council will develop and deliver. The standards and service levels have been set in accordance with user needs, regulations, industry practice and legislative codes of practice.

The asset management plan is to be read with the following associated planning documents:

- W Aerodrome Management Plan
- W DLG Integrated Planning Mandates 2009
- W Temora Shire Council Management Plan 2011/12 – 2015
- W Temora Shire Council Community Strategic Plan 2011— 2020
- W Temora Shire Council 2007 Resident Satisfaction Survey Result
- W This RAMP covers the following infrastructure assets which are summarised in Table 2.1

Table 2.1. Assets covered by this Plan

Asset category	Dimensions km	Replacement Value (\$M)
Aerodrome land		\$1,220,000
Buildings	Seven Buildings/Structures	\$1,010,000
Fencing	9,150	123,647
Drainage	1.16	483,147
Runways	4.38	4,532,263
Apron, Taxiways & Hardstand	1.46	1,075,160
Electrical & Lighting	6.5	193,670
TOTAL		\$8,637,887.00

2.2 Asset Management Framework Applicable to AAMP

2.2.1 National Framework for Local Government Financial Sustainability

In March 2007, the Local Government and Planning Ministers' Council (LGPMC) agreed to a nationally consistent approach to asset planning and management, financial planning and reporting and assessing financial sustainability. Each State Minister endorsed the National Frameworks for Financial Sustainability in Local Government for implementation in the context of their relationships with their local government sectors.

The National Frameworks consist of three main components as follows:

1. Asset Planning and Management

This framework consists of seven elements which each State and Territory is expected to adopt as follows:

- W Development of an **Asset Management Policy** - Each state/territory is expected to develop an asset management policy, which provides high-level guidance to assist councils in developing their own asset management policy.
- W Strategy and Planning — Councils should be provided with guidance from the State on developing an **Asset Management Strategy**, which is designed to support and implement its asset management policy;
- W **Governance and Management Arrangements** — Councils should be encouraged to apply and effect good governance and management arrangements which link asset management to service delivery and include assigning roles and responsibility for asset management between the CEO, the Council and senior managers;
- W **Defining Levels of Service** — mechanisms should be established that include community consultation to define the levels of service councils are expected to provide from their asset base;
- W **Data and Systems** — a framework for collection of asset management data should be established;
- W **Skills and Processes** — the asset management framework should contain a continuous improvement program;
- W Evaluation — the asset management framework should contain a **mechanism to measure its effectiveness.**

2. Financial Planning and Reporting

Focuses on Local Government's financial management at both the strategic and operational levels. The framework requires the preparation of:

- W A long term strategic plan which includes a financial component, demonstrating how the outcomes of the plan will be funded.
 - W An annual budget format comparable with the audited financial statements, linked to strategic objectives, which at a minimum should include:
 - § Estimates of revenue and expenditure
 - § An explanation of how revenue will be applied
 - § An explanation of the financial performance and position of the council.
 - W Annual financial statements and annual report, which should include:
 - § A report on council's operations during the financial year
 - § An explanation to the community on variations between the budget and the actual results and how this may impact on the strategic plan
 - § Audited financial statements for the financial year (prepared and audited in accordance with Australian Accounting and Auditing Standards).
-

3. Criteria for Assessing Financial Sustainability.

The National Frameworks define a council's long-term financial performance and position as sustainable when planned long term services and infrastructure standards are met without unplanned increases in rates and charges, or disruptive cuts to services.

The frameworks provide a range of financial sustainability indicators. However, they stress that the usefulness of indicators is not in the numbers themselves but the analysis of what is driving the indicator.

2.2.2 The NSW Department of Local Government - DIG Model

The DLG framework is to reshape the existing framework in some way to strengthen strategic focus, streamline the planning and reporting processes and encourage integration between the various council's strategic documents/plans. The proposed model is designed as a continuous framework, rather than a static planning model.

The recommendations provided through this Plan are essentially equipping Council to take a strategic approach to comply with this framework.

It is designed to allow councils more autonomy in responding to their community's various needs, and encourages elected representatives to play a leading role in developing long term plans.



Source – NSW Department of Local Government – Asset Management Planning for NSW Local Government – page 15

Fig 2.1 NSW LG DIG Model

Why mandate strategic planning?

This model includes a mandatory requirement for a long-term asset management plans. One of the recurrent themes emerging from the review is that councils need to develop a stronger strategic focus.

How is planning and reporting integrated?

The diagram below shows how the objectives from the Community Strategic Plan may be cascaded through the system.



For example, a council's Community Strategic Plan might identify the objective of "A safe and healthy community" and nominate key strategies for achieving this. These strategies might include a wide variety of approaches, such as ensuring quality water supply and safe operation of sewerage services, ensuring efficient collection of domestic and commercial waste, promoting health education programs, lobbying for more aged care services in the area, developing crime prevention strategies for the community, and improving aerodrome safety.

These intentions would be translated into the Delivery Program in the following way, for example:

Plan:

Improving aerodrome safety Delivery Methods:

- W Undertake a review of the condition of the aerodrome.
- W Update Councils 10-year Aerodrome Maintenance and Capital Plan.
- W Identify funding options for aerodromes management.

- W Identify key user concerns with aerodrome safety.
- W Develop programs to address key aerodrome safety issues.
- W The Operational Plan would then focus on what Council would do towards achieving each of these goals in the coming year. For example:

Develop aerodrome safety programs: Actions for 2011-30

- W Optimised reseal programs
- W Ensure sufficient staff are trained as Safety Officers.
- W Ensure continued consultation with users through the Aerodrome Users Meeting

In this way, the objectives of the Aerodrome Strategic Plan are cascaded down through Council's planning framework, so that general directions and objectives for the users are translated into plans, then into programs and finally, individual actions.

The Integrated Planning and Reporting project aims to improve Councils' capacity for long-term planning and should help to identify resourcing needs earlier in the planning cycle. The requirement to consider resourcing over the 10-year period of the plan will help Councils to take a wider view of their needs, considering not only finances, but also human resources and asset requirements. They will be able to identify the additional resources that could be raised through borrowings, rate variations or grants and will be in a better position to take maximum advantage of funding opportunities, resource sharing options and strategic alliances.

2.3 Key stakeholders

The key stakeholders are internal custodians as well as external individuals, companies, service authorities, government authorities and community groups who have a vested interest in management of aerodromes. The following groups have been identified as key stakeholders in the management and use of the aerodrome network and aerodrome related assets:

Elected Members	Endorsement of the asset management policy, strategy and plans. Set high level direction through the development of asset management principles in the Community Strategic Plan.
Senior Management	Endorse the development of asset management plans and provide the resources required to complete this task. Set high level priorities for asset management development in Council and raise the awareness of this function among Council staff and contractors. Support the implementation of actions resulting from this plan and prepared to make changes to a better way of managing assets and delivering services. Support for an asset management driven budget and Long Term Financial Plan (LTFP).
Corporate Services	Consolidating the asset register and ensuring the asset valuations are accurate. Development of supporting policies such as capitalisation and depreciation. Preparation of asset sustainability and financial reports incorporating asset depreciation in compliance with

current Australian accounting standards. Asset Management and GIS support and admin.

Field Services Staff	Provide local knowledge level detail on all aerodrome assets. They verify the size, location and condition of assets. They can describe the maintenance standards deployed and Council's ability to meet technical and customer levels of service.
External Users	Tourists and Visitors (as occasional users); Aerodrome Users; Emergency services; Developers & Utility companies; Local Businesses and; Federal and State Government authorities & agencies such as CASA, local law enforcement and land use/development planning.

2.4 Goals and Objectives of Asset Management

The Council exists to provide services to its community. Some of these services are provided by infrastructure assets. Council has acquired infrastructure assets by 'purchase', through construction by Council staff and by donation of assets constructed by developers and others to meet increased levels of service.

Council's goal in managing infrastructure assets is to meet the required level of service in the most cost effective manner for present and future consumers. The key elements of infrastructure asset management are:

- W Taking a life cycle approach,**
 - § Have precise knowledge of what Council owns or has responsibility for or is legal liable for;
 - § Record and extract information on these assets in a register, down to an acceptable level which can be maintained and updated easily;
 - § Report on our annual depreciations and asset consumption at an asset component level;
 - § Develop cost-effective management strategies for the long term,
- W Developing cost-effective management strategies for the long term,**
 - § Understand the long term (10-20 years) funding needs of the aerodrome to meet strategic expectations in both capital and maintenance expenditure;
- W Providing a defined level of service and monitoring performance,**
 - § Measure and monitor the condition, performance, utilisation and costs of assets down to the managed component level and aggregate this data up to give outputs of cost and performance at the master level;
 - § Understand and record the current levels of service in terms of responsiveness and performance;
 - § Understand the likely future levels of service required based on population growth, demographic changes and community expectations;
- W Understanding and meeting the demands of growth** through demand management and infrastructure investment,
- W Managing risks** associated with asset failures,

W Sustainable use of physical resources,

W Continuous improvement in asset management practices.¹

§ Have uniform processes across our whole organisation for the evaluation of any investment in:

- (a) Renewal, upgrades and expansions of existing assets;
- (b) Creation of new assets;
- (c) Maintenance of existing assets; and
- (d) Operational expenditure to deliver services.

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

Council's vision is:

To sustain and grow the Temora Shire as a rural community of choice for current and future residents, being united in our heritage yet open to growth and diversity

To celebrate our past achievements in sport, culture and enterprise whilst maintaining our commitment to the future in providing a safe, happy and healthy environment for all

Success through determination and inspiration

Council's mission is:

To achieve the best possible outcomes for our community

Council Values relevant to this asset management plan are:

W Users:

In partnership with the Users, respond to needs and aspirations in a caring, fair and accountable manner through the provision of quality services.

W Governments:

We encourage an open, productive relationship with all spheres of government and other organisations in the best interests of our community.

W Customers and Suppliers:

Conduct our business with integrity and respect, ensuring consistency and accountability in all our dealings.

W Environment

Conserve, enhance and develop our environment in an equitable and sustainable manner, acting as custodians for future generations.

¹ IIMM 2006 Sec 1.1.3, p 1.3

2.5 Plan Framework

Key elements of the plan are

- W **Levels of service** – specifies the services and levels of service to be provided by council.
- W **Future demand** – how this will impact on future service delivery and how this is to be met.
- W Life cycle management – how Council will manage its existing and future assets to provide the required services
- W **Financial summary** – what funds are required to provide the required services.
- W **Asset management practices**
- W **Monitoring** – how the plan will be monitored to ensure it is meeting Council's objectives.
- W **Asset management improvement plan**

A road map for preparing an asset management plan is shown below in Fig 2.2

2.6 Core and Advanced Asset Management

This Aerodromes Asset Management Plan is prepared as a 'core' asset management plan in accordance with the International Infrastructure Management Manual. It is prepared to meet minimum legislative and organisational requirements for sustainable service delivery and long term financial planning and reporting. Core asset management is a 'top down' approach where analysis is applied at the 'system' or 'network' level.

Future revisions of this asset management plan will move towards 'advanced' asset management using a 'bottom up' approach for gathering asset information for individual assets to support the optimisation of activities and programs to meet agreed service levels.

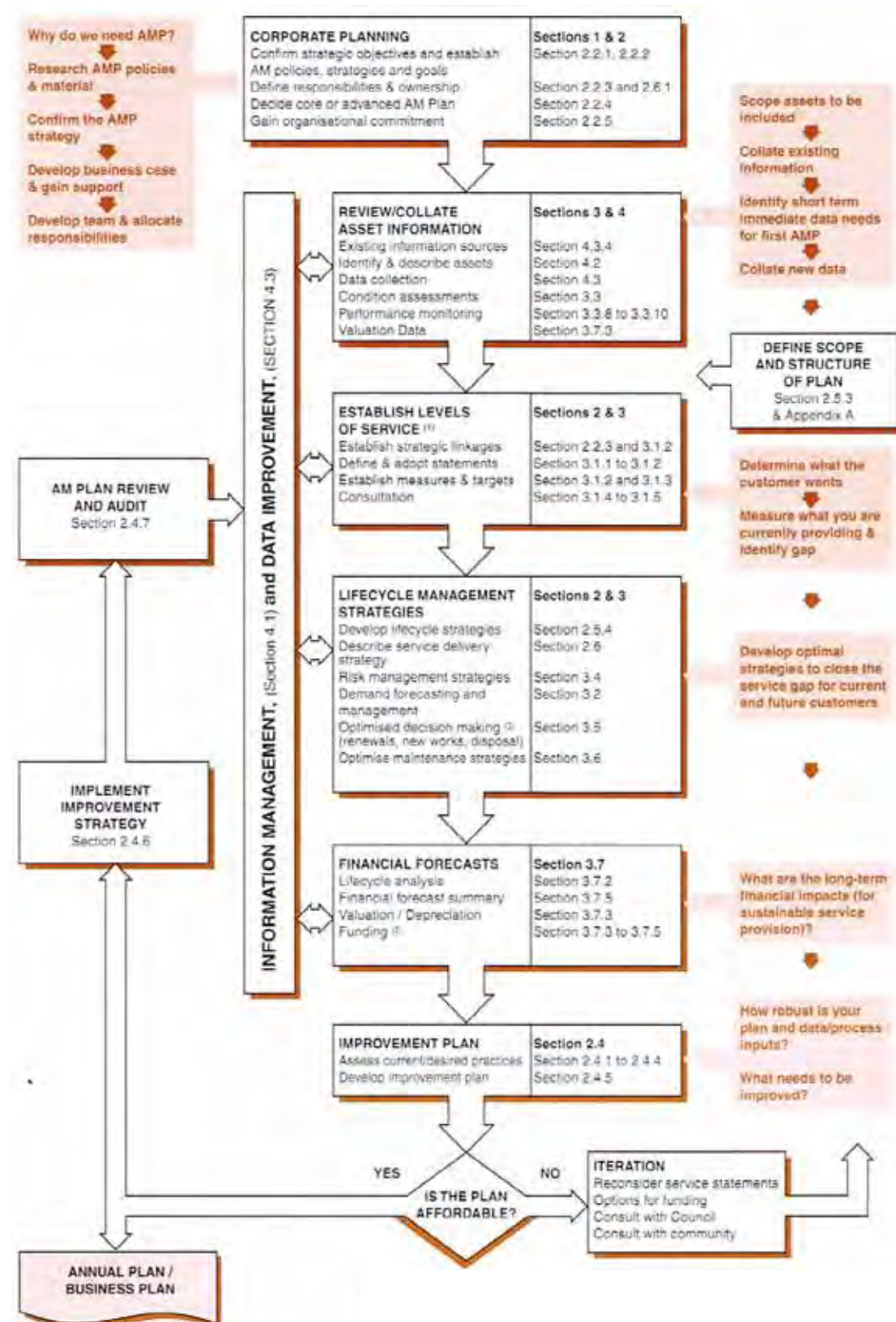


Fig 2.2 Aerodrome Map for Preparing an Asset Management Plan
Source: IIMM Fig 1.5.1, p1.111

3. LEVELS OF SERVICE

Levels of Service relate to outcomes the customer receives in terms of quality, quantity, responsiveness and performance as provided by the asset. To achieve and sustain acceptable standards of service for Council's aerodrome asset, requires Council to commit to an annual maintenance and capital program.

These funds provide for regular and responsive maintenance and for timely renewal or replacement of the asset. The provision of adequate financial resources ensures that the aerodrome is appropriately managed and preserved. Financial provisions below requirements impacts directly on community development and if prolonged, results in substantial needs for "catch up" expenditure imposed on ratepayers in the future. Additionally, deferred renewal results in increased and escalating reactive maintenance as aged assets deteriorate at increasing rates.

In developing the levels of service as documented in this AAMP, Council has given due regard to the strategic goals and objectives in the 2011-2015 Strategic Plan which sets out the strategic direction of Council to implement its Management Plan over the following four years. Council has also given due regard to Legislative requirements and Australian Standards and stakeholder expectations in the form of customer research and expectation surveys.

The levels of service documented in this AAMP therefore reflect the best assumptions of current levels of service provided by Council, for the benefit of the community, in the context of Council's financial and human resources.

Councils current Level of Service are set out in Appendix D of this Asset Management Plan.

3.1 Customer Research and Expectations

Council participates in a Performance Measure Customer Satisfaction survey every four years in August prior to the Council election. This survey is distributed to all residents, requesting their level of satisfaction with Council's services. The most recent customer satisfaction survey (2008) placed the aerodrome in the category of Economic Development. Because of other development occurring in the Shire at the time, Economic Development scored low, hence it is not possible to give an accurate score for the aerodrome

However when speaking to the users of the aerodrome and NATFLY executives, they rate the facility as excellent or very satisfied.

Council, needs to place this asset in a separate category for future surveys.

3.2 Legislative Requirements

Council has to meet many legislative requirements including Australian and State legislation and State regulations. These include:

Table 3.2. Legislative Requirements

Legislation	Requirement
National Asset Management Framework Legislation 2010	Focuses on long term financial sustainability and provides a mandate to have long term strategy, financial statements and annual reporting mechanisms. AM plans are likely to be audited.
DLG Integrated Planning NSW	Key requirement is to integrated community plans with operational and delivery plans.

Legislation	Requirement
Local Government Act 1993	Sets out role, purpose, responsibilities and powers of local governments including the preparation of a long term financial plan supported by asset management plans for sustainable service delivery.
CASA Regulations MOS Part139	Facilitates the adoption of nationally consistent aerodrome rules in Australia. It also makes provision for safety and aircraft management on aerodromes, including alcohol and other drug use,.
Occupational Health and Safety Act 2000	Aims to secure the health, safety and welfare of people at work. It lays down general requirements which must be met at places of work in New South Wales. The provisions of the Act cover every place of work in New South Wales. The Act covers self employed people as well as employees, employers, students, contractors and other visitors.
Occupational Health and Safety Regulation 2001	Regulations on the control and management of risk in the work place.
The Protection of the Environment Operations Act 1997 (POEO Act)	Is the key piece of environment protection legislation administered by Department of the Environment and Climate Change (DECC). The POEO Act enables the Government to set out explicit protection of the environment policies (PEPs) and adopt more innovative approaches to reducing pollution.
Disability Discrimination Act	Sets out the responsibilities of Council and staff in dealing with access and use of public infrastructure.

Table 3.3. Legislative Requirements

Standards and Specifications	Requirements
Australian Accounting Standards.	<p>Sets out the financial reporting standards relating to infrastructure assets. Standards of particular relevance to Infrastructure Assets include:</p> <ul style="list-style-type: none"> • AASB116 Property, Plant & Equipment — prescribes requirements for recognition and depreciation of property, plant and equipment assets • AASB136 Impairment of Assets — aims to ensure that assets are carried at amounts that are not in excess of their recoverable amounts • AASB1021 Depreciation of Non-Current Assets — specifies how depreciation is to be calculated • AAS1001 Accounting Policies — specifies the policies that Council is to have for recognition of assets and depreciation • AASB1041 Accounting for the reduction of Non-Current Assets — specifies the frequency and basis of calculating depreciation and revaluation basis used for assets • AAS1015 Accounting for acquisition of assets — method of allocating the value to new assets on acquisition

Standards and Specifications	Requirements
Temora Shire Aerodrome Hierarchy Policy	Sets out the criteria for maintenance , capital renewal and capital upgrade for the aerodrome network
Temora Shire Footpath Hierarchy Policy	Sets out the priority for maintaining and upgrading of footpaths
Australian Standards	<p>Including:</p> <ul style="list-style-type: none"> Australian Standard 1742.3-1996 — Manual of uniform traffic control devices - Traffic control devices for works on aerodromes Guide to Traffic Engineering Practice (part 14 Bicycles) Manual of Uniform Traffic Control Devices — Part 3 - Traffic Control Devices for Works on Aerodromes Integrated Asset Management Guidelines for Aerodrome Networks APR202: 2002 Austaerodromes AS/NZS 4360:2004 Risk Management HB 4360:2004 Risk Management Guidelines — Companion to AS/NZS 4360:2004

3.3 Current Levels of Service

Council has defined a two tier level of service.

Community Levels of Service relates to how the community receives the service in terms of safety, quality, quantity, reliability, responsiveness, cost/efficiency and legislative compliance.

Supporting the community service levels are operational or technical measures of performance developed to ensure that the minimum community levels of service are met. These technical measures relate to service criteria such as:

Service Criteria

Quality
Function
Accessibility
Safety
Risk

Technical measures may relate to

Provision of a well maintained service
Does the asset meet functional standards
Meeting future needs
Number of injury/accidents
Capital renewal undertaken when required

Council's current service levels are summarised in Table 3.3 and detailed in Appendix D

Table 3.3. Current Service Levels

Key Performance Measure	Level of Service	Performance Measure Process	Performance Target	Current Performance
COMMUNITY LEVELS OF SERVICE				
Quality	To provide a well maintained and suitable aerodrome service	<p>Customer requests</p> <p>Reports from visitors</p>	<p>Meet request requirements</p> <p>Work towards meeting KPIs in Strategic Plan</p> <p>Maintain and improve quality of service</p>	<p>Meeting requirements</p> <p>Good</p>
Function	Meets aerodrome user requirements	Usage of asset	> 70% customer satisfaction	69.0% (satisfaction survey 2008)

Key Performance Measure	Level of Service	Performance Measure Process	Performance Target	Current Performance
Accessible	Provide a fully accessible aerodrome	Usage of asset	100% compliance	100% compliance except when a aerodrome is closed for maintenance, upgrading, renewal or public event, then appropriate notification will be given to users, through Users Committee Meeting
Safety	Provide safe and suitable facility free from hazards	Accident reports	Reduction in the recorded number of incidents	0 per year
TECHNICAL LEVELS OF SERVICE				
Condition	Provide appropriate airport facilities that are maintained to meet CASA regulations and user requirements	Service and maintenance request responses Emergency Requests	Less than 5 reactive service requests per month Provide full assistance to emergency service authorities	Meeting requirements
Availability	To meet the criteria of Council and community demand	Record times aerodrome closed	Facility available when scheduled 100% of the time	Satisfactory
Cost Effectiveness	Maintain aerodromes by proactive repairs	% of maintenance completed	Reduced maintenance costs	Satisfactory
Risk	aerodrome condition is maintained at optimum threshold	% of maintenance completed	Ensure speedy maintenance once defect has been discovered	Satisfactory

3.4 Desired Levels of Service

At present, indications of desired levels of service obtained from various sources including the Customer Satisfaction survey, residents' feedback to Councillors and staff, service requests, correspondence and through Aerodrome Users Committee meetings.

Council has quantified the desired levels of service when formulating the 20-year maintenance and capital works plan. The plan determines the aerodrome maintenance requirements for each year plus capital upgraded are to be carried out.

4. FUTURE DEMAND

4.1 Demand Forecast

Council's fundamental role is to provide services to the community and the aerodrome assets is a means to support this. Consequently, future demand for aerodrome are tied to the demand for Council's services and this is a more complex than just consideration population growth alone. Issues such as changing demands from the transport industry, closure of some aerodromes, increasing rental fees for hangers at regional aerodromes, increased landing and parking fees can effect how the industry views Temora aerodrome, with its unrestricted air space, and no landing or parking fees, all affect the need for improving the aerodrome.

Aerodrome Asset Management Plans are critically driven by the needs of the services to be delivered and therefore meaningful strategies cannot be developed in isolation or in absence of comprehensive service strategies. Maintaining Council's aerodrome assets without adequate regard for service needs may result in a well-maintained portfolio of assets, but it may also result in an asset portfolio which does not meet the needs of staff that provide services to the community.

Factors affecting demand include population change, changes in demographics, seasonal factors, aircraft ownership, consumer preferences and expectations, economic factors, agricultural practices, environmental awareness, etc. Demand factor trends and impacts on service delivery are summarised in Table 4.1.

Table 4.1. Demand Factors, Projections and Impact on Services

Demand factor	Present position	Projection	Impact on services
Population	5,914 (2006 census). The population increased by 1.05% between the 2001 and 2006 censuses. 57.1% of the population live in the urban area, 36.8% in the rural area and 6.1% in the surrounding villages	Temora's population is expected to grow over the next 10 years Future growth is likely to occur as a result of Council initiatives such as the airpark estate, Continued attraction to rural lifestyle	Changes in aircraft numbers may be proportional to the change in population; however the more significant affect on aircraft numbers would be due to expansion of the airpark estate and tourism numbers.
Demographics	Increase in ageing population 65+ represents 16.8% of the population and has increased by 3.3% since 1981. Whereas the overall population is static to a 0.27% increase	Temora TAFE and Charles Sturt University at Wagga will play a vital role in retaining and/or attracting young people to Temora. The number of aged over 65 will continue to increase. This is consistent with the national trend towards an ageing population and longer life expectancy	Increase in demand for life style retirees interested in aviation

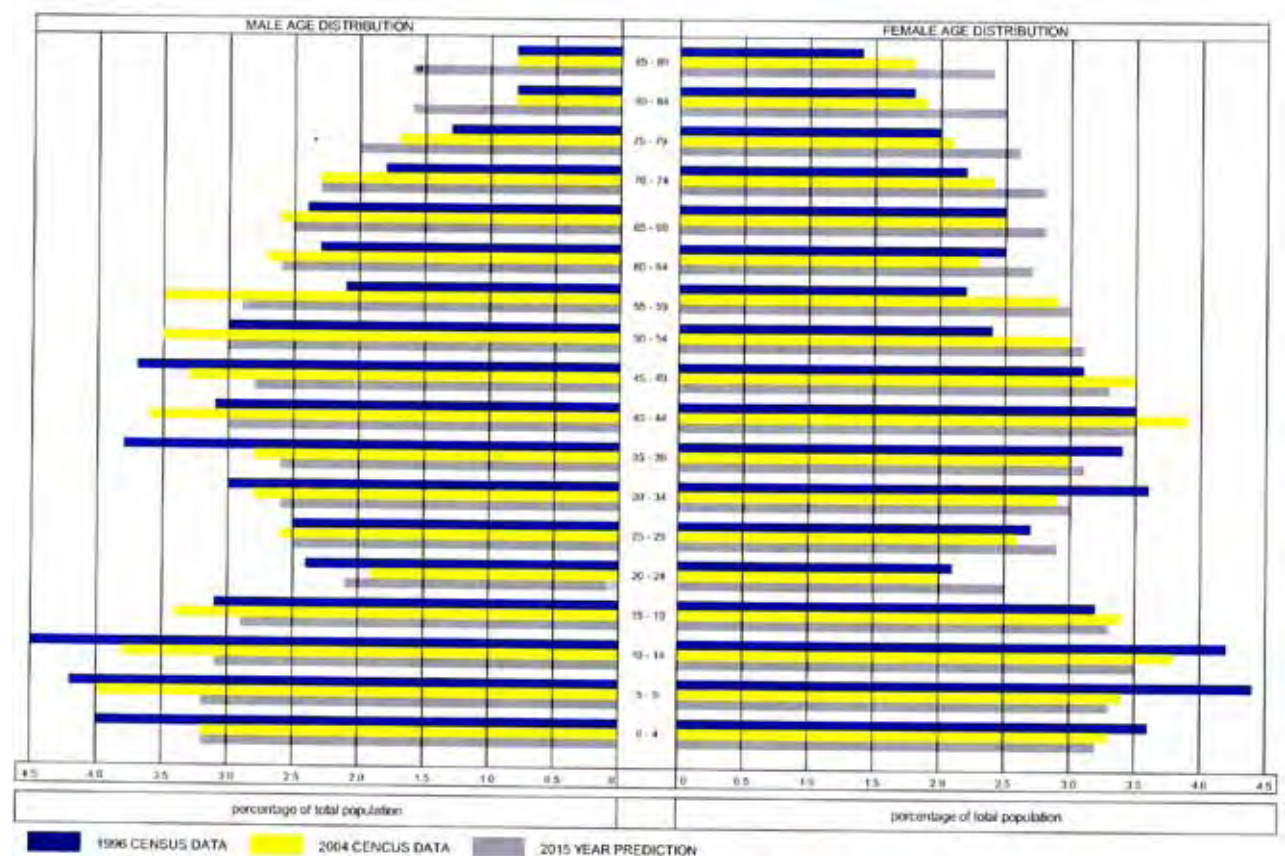


Figure 4.1 1996 and 2004 LGA Population by Age and Sex

4.2 Changes in Technology

Technology changes are forecast to have little effect on the delivery of services covered by this plan. However changes may effect the following areas.

Table 4.2. Changes in Technology and Forecast effect on Service Delivery

Technology Change	Effect on Service Delivery
Tourism	Different types of aircraft using the airport in order to meet the requirements of different clientele. Some heavier and with greater tyre pressure – increased loading on runway
Larger Aircraft	Some heavier and with greater tyre pressure – increased loading on runway
Lighting	Improve runway lighting – less likelihood of failure with the installation of a back up generator.

4.3 Demand Management Plan

Demand for new services will be managed through a combination of managing existing assets, upgrading of existing assets and providing new assets to meet demand and demand management. Demand management is defined here as the management of aerodrome assets by the manipulation of demand for aerodrome services and practices including non-asset solutions, insuring against risks and managing failures.

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

Table 4.3. Demand Management Plan Summary

Service Activity	Demand Management Plan
Community Engagement	Engage with the community to identify justifiable community needs from other expectations and consider only community needs consistent with Council's policies
Customer Requests	Analyse customer requests to optimise the use and performance of existing aerodrome services and look for non-asset based solutions to meet demand for services
Passengers	Forecasting growth and monitoring service usage and being able to cater for growth.
Explanatory marketing and education campaigns	Help modify community behaviour through explanatory marketing and education campaigns
Emergency and NSWRF base	Temora Shire Aerodrome Management Plan

4.4 New Assets from Growth

The new assets required to meet growth will be acquired from land developments and constructed by Council. Acquiring these new assets will commit Council to fund ongoing operations and maintenance costs for the period that the service provided from the new asset is required. Given the long term life-cycle of aerodrome assets, the impact of this growth (future renewal costs) is only likely to be material after ten years. For the purpose of considering this core asset management plan the impacts of these future costs are not considered to be highly significant and are excluded in developing forecasts of future operating and maintenance costs.

Future versions of this asset management plan will consider the impacts of growth in greater detail. This activity has been included as a priority in the improvement plan. The valuation models in the financial summary section of this report use a rate of growth of 0.25%

5. LIFECYCLE MANAGEMENT PLAN

The Lifecycle Management Plan details how Council plans to manage and operate the aerodrome at the agreed levels of service (defined in section 3) while optimising life cycle costs. To undertake life cycle asset management, means considering all management options and strategies as part of the asset lifecycle, from planning to disposal. The objective of managing the assets in this manner is to look at long- term cost impacts (or savings) when making asset management decisions. Fig 5.1 below provides a graphical representation of the asset lifecycle including each of the stages an asset passes through during its life.



Figure 5.1 Asset Lifecycle

A model for the lifecycle of aerodrome pavements is presented later in this section. The model relates particularly to the maintenance and renewal stages of asset life (refer to figure 5.2.)

In the “**Do Nothing**” phase, the asset deteriorates slowly and maintenance is generally not required. In the “**Maintain**” phase, these activities will need to be performed to minimise continued deterioration. In the “**Rehabilitate**” or “**Renewal**” stage, activities are undertaken that restore the asset to a condition close to that of the original.

The importance of the time for intervention for renewal is paramount. If renewal activities are not undertaken in a timely manner, the condition of the asset will deteriorate rapidly to failure, and the cost of reconstruction may be many times that of the renewal cost.

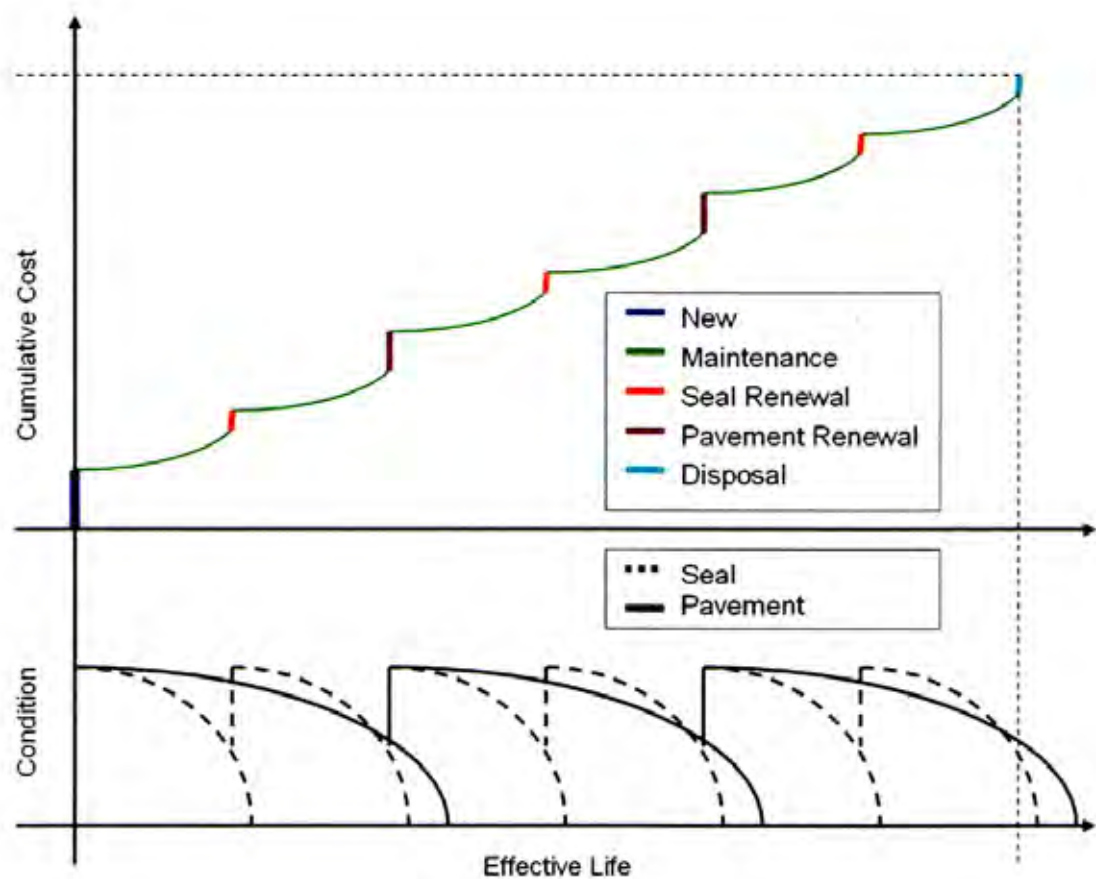


Figure 5.2 **Sealed Aerodrome Pavement Lifecycle**

5.1 Background Data

5.1.1 Physical parameters

The assets covered by this Asset Management Plan is shown below. The characterises are given in Tables 5.1., 5..2 and 5..3

Table 5.1 **Characteristics of Aerodrome Inventory**

Asset	Description
Sealed Runways	05/23 – 2060 metres long 30 metres wide with turning circle of 60 by 60 metres at each end 18/36 – 1863 metres long, 30 metres wide. Plus a 30 metre wide grass strip on the western side
Unsealed Runways	09/27 – 850 metres, 30 metres wide. Plus a 30 m wide grass strip on the northern side

Asset	Description
Taxiways & Apron	Bitumen sealed taxiways Taxiway A – joins the 05/23 runway to the 18/36 runway Taxiway B – joins the 05/23 runway to the western end of 09/27 Taxiway C – extends from 18/36 to Stage II of the airpark subdivision Taxiway D – extends from 18/36 to the general aviation apron Taxiway E – extends from 18/36 to Stage I of the airpark subdivision Taxiway F – extends from 18/36 to Aviation Museum Apron and private residence Taxiway G – extends from 18/36 to the eastern unsealed aircraft parking area Taxiway H – extends from 18/36 to the western grass aircraft parking area General aviation apron Runway lighting 05/23 Taxiway lighting 18/36 Taxiway lighting – Taxiway A Apron lights
Property owned by Council	Land Buildings Caravan Park Fencing
Airport Drainage	East-west unlined drain Reinforced concrete culverts Multi-cell culvert under 05/23

The age profile of Council's assets is shown below.

Table 5.2 Physical Quantity of Aerodrome Assets

Asset	Length (m)	Width (m)	Surface Area (m ²)
05/23 runway	2060	30	61,800
05/36 runway turning circles x 2	60	60	7,200
18/36 runway	1466	30	43,980
09/27 runway	830	30	24,900
Taxiway A	161	20	3,220
Taxiway B	148	28	4,144
Taxiway C	923	10	9,230
Taxiway D	93	16	1,488
Taxiway E	617	10	6,170
Taxiway F	153	15	2,295
Taxiway G	57	15	855
Taxiway H	82	15	1,230
GA Apron	170	58	9,860
Museum apron	185	55	10,360
Open unlined western drain	866		
North South piped drain	1,150		
Fencing	9,510		

The most predominant sealed surface type is spray seal which is 30.4% off the total aerodrome network. The figures below detail the various types of aerodrome and footpath surfaces and kerb types in the Temora LGA

5.1.2 Asset Capacity and Performance

Council's services are generally provided to meet design standards where these are available. Locations where deficiencies in service performance are known are detailed in Table 5.3. These deficiencies were identified by Council staff

Table 5.3 Known Service Performance Deficiencies

Location	Service Deficiency
05/23 resealing	Resealing is required for the 1,000 m central section of the runway. Because of the high speed as jets land they flick off the stone causing pit marks on leading edges of wings
09/23 runway	Surface condition requires regular maintenance
General Aviation Apron	Apron has an uneven surface that pools water. At the north western corner old concrete footings protrude slightly from the surface
Western Drain	Drain required regular cleaning
Concrete Culverts	Require cleaning of silt because of their flat grade
Access from E to GA Apron	Requires to have the dog leg in the pavement removed
Council Cabins	Units 1 and 4, (bunk bed accommodation) complaints that toilet and shower facilities be provided.

The above service deficiencies were identified from the results of inspections undertaken in the preparation of this plan

5.1.3 Asset condition

A simple number rating system has been adopted for this plan to describe asset condition. Condition is measured using a 1 to 5 rating system as described below: in Table 5.6 and Figure 5.3

Table 5.6. Aerodromes, Footpath, Kerb and Gutter Condition Rating Description

Condition Index	Rating Scale	Condition Description
1	Excellent	Providing a very high level of service
2	Good	Good condition with no indication of any major failures and providing a good level of service.
3	Fair	Aged and in fair condition providing an adequate level of service. No signs of immediate obsolesce.
4	Poor	Will need to renew, upgrade or dispose of in the future and is included in the five year Capital Works Program
5	Very Poor	Below an acceptable level of service. Requires renewal/upgrade immediately within the following year or so.

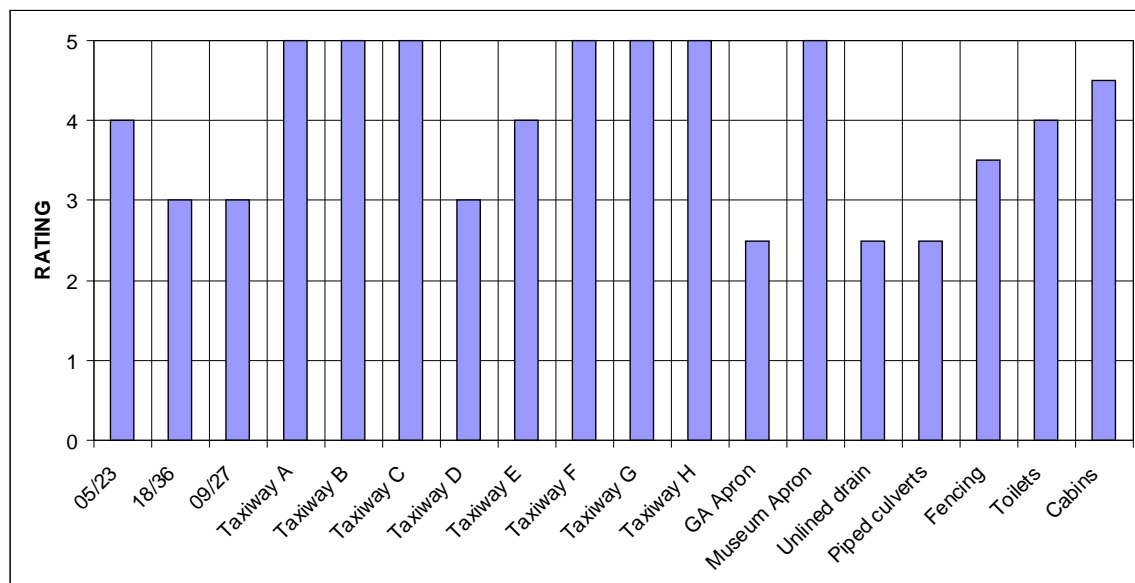


Figure 5.3 Condition Rating of Airport Assets

5.1.4 Asset valuations

The value of assets as at 30th June 2010 covered by this asset management plan is summarised below. Assets were last revalued at 30th June 2010 and were valued at greenfield rates. Table 5.7 lists current asset values

Table 5.7 Current Asset Values

Asset category	Replacement Value (\$M)	Annual Depreciation (\$M)	Accumulated Depreciation (\$M)	Written Down Value (\$M)
05/23 runway	2,565,134	56,488	282,442	2,282,692
18/36 runway	1,647,555	28,338	141,692	1,505,863
09/27 runway	782,850	7,829	39,142	743,708
Taxiway A	123,393	2,040	10,200	113,193
Taxiway B	150,627	2,370	11,849	138,778
Taxiway C	52,400	830	2,490	49,910
Taxiway D	49,968	826	24,792	25,176
Taxiway E	178,560	3,472	38,192	140,368
Taxiway F	61,211	1,012	3,036	58,175
Taxiway G	14,990	248	248	14,743
Taxiway H	33,312	551	551	32,761
GA Apron	333,661	5,288	147,978	165,682
Museum apron	353,970	5,865	17,596	336,374
Electrical	203,863	2,039	10,193	193,670
North South piped drain	161,000	3,220	80,500	80,500
05/23 Culvert	423,839	4,238	21,192	402,647
Buildings	1,010,000	20,200	12,400	997,600
Fencing	137,250	4,238	13,725	123,647
TOTAL	8,283,583	149,092	858,218	7,405,487

Council's sustainability reporting reports the rate of annual asset consumption and compares this to asset renewal and asset upgrade and expansion.

Asset Consumption	0.61
Asset renewal	0.31
Annual Upgrade/expansion	1.47

5.2 Risk Management Plan

An assessment of risks associated with service delivery from infrastructure assets has identified critical risks to Council. The risk assessment process identifies credible risks, the likelihood of the risk event occurring, the consequences should the event occur, develops a risk rating, evaluates the risk and develops a risk treatment plan for non-acceptable risks.

Critical risks, being those assessed as 'Very High' - requiring immediate corrective action and 'High' – requiring prioritised corrective action identified in the infrastructure risk management plan are summarised in Table 5.8

Table 5.8 Critical Risks and Treatment Plans

Asset at Risk	What can Happen	Risk Rating (VH, H)	Risk Treatment Plan
Runways	Tyre blow out due to debris on runway	H	Through inspection of all runways and remove or sweep. Monitor current program, increase if necessary
Runways	Tyre blow out due to pavement failure	H	Increase frequency of resealing. Engineers assessment and reports.
Aircraft	Damage due to animal activity	H	Regular monitoring and repairs to perimeter fence. Replace as required. Occasional eradication and bird dispersal Mowing to ensure minimal seeds left on grass.
Drainage	Water on apron hardstand	H	Repair depressions Increase frequency of resealing
Runway Lighting	Electrical fault	H	Regular inspections and preventative treatment Replace individual globes when light outage noted. Call electrician immediately if problem remains
Buildings	Fire	H	Maintain fire equipment in buildings. Check fire equipment on regular basis to ensure currency

5.3 Routine Maintenance Plan

Routine maintenance is the regular on-going work that is necessary to keep assets operating, including instances where portions of the asset fail and need immediate repair to make the asset operational again.

Routine maintenance work includes:

- W Runway inspections
- W Vegetation control on aerodrome verges
- W Replace faulty light globes

5.3.1 Maintenance and improvement plan

Maintenance includes reactive, planned and cyclic maintenance work activities.

Reactive maintenance is unplanned repair work carried out in response to service requests and management/supervisory directions. Assessment and prioritisation of reactive maintenance is undertaken by Council staff using experience and judgement. **Reactive** maintenance work has been determined as being typically 30% of total maintenance expenditure.

Planned improvement is repair work that is identified and managed through a maintenance management system (MMS). MMS activities include inspection, assessing the condition against failure/breakdown, experience, prioritising, scheduling, actioning the work and reporting what was done to develop a maintenance history and improve maintenance and service delivery performance. Planned maintenance work is approximately 72.65% of total expenditure on aerodromes.

Cyclic maintenance is replacement of higher value components/sub-components of assets that are undertaken on a regular cycle including repainting of aerodrome markings, grading and gravelling unsealed runway 09/27, etc.

Expenditure trends are shown in Table 5.9 and Figure 5.4

Table 5.9. Expenditure Trends

Year	Expenditure Dollars		
	Reactive	Planned	Cyclic
2005/06	\$13,895	\$44,167	\$20,391
2006/07	\$35,468	\$42,452	\$6,463
2007/08	\$89,246	\$40,752	\$28,466
2008/09	\$37,034	\$58,085	\$11,808

Year	Expenditure as % of Total		
	Reactive	Planned	Cyclic
2005/06	18.1	55.3	26.6
2006/07	42.9	49.3	7.8
2007/08	58.3	23.1	18.6
2008/09	34.6	54.3	11.0
Average	41.9	42.1	16.0

Expenditure levels are considered to be adequate to meet required service levels. Future revision of this asset management plan will look at maintenance expenditures compared to the level of service.

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

5.3.2 Standards and specifications

Maintenance work is carried out in accordance with the following Standards and Specifications.

- W CASA Manual of standards Part 139
- W AS2734 Guide to Good Asphalt Practice
- W Temora Shire Council Aerodrome maintenance and capital plan
- W Temora Shire Footpath Hierarchy Plan
- W OH&S Legislative requirements

5.3.3 Summary of future maintenance expenditures

Future maintenance expenditure is forecast to trend in line with the value of the asset stock as shown in Fig 5.4. Note that all costs have been indexed from the current 2010/11 dollar values.

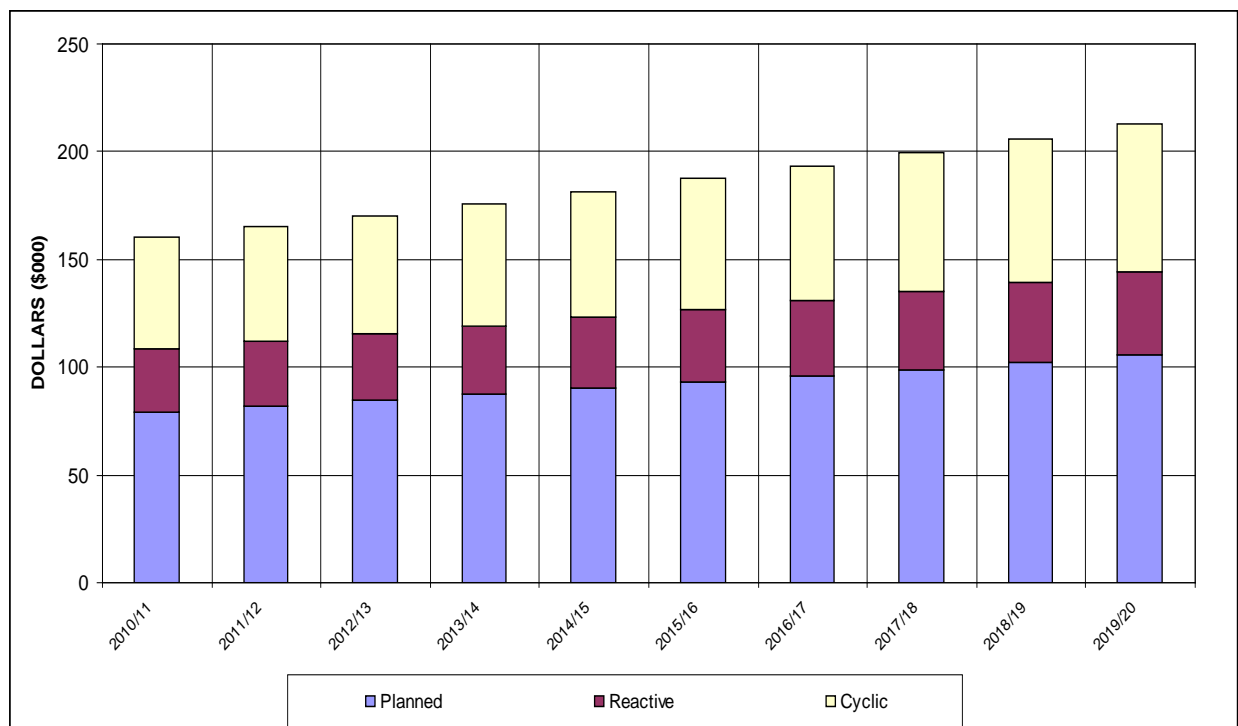


Fig 5.4 Predicted Maintenance Expenditure

Maintenance refers to works undertaken to address minor defects. These works are undertaken to keep Council's assets in a safe and operational condition, but not necessarily to improve the overall condition of these assets.

It should be noted that when undertaking the lifecycle modelling, these type of costs are taken into consideration by assuming that each year, a percentage of these distresses, will be repaired as part of Council's routine maintenance. If these assets are left to deteriorate, by not allocating sufficient capital, then the amount of deterioration not being fixed under routine maintenance will increase. Equally if the condition of these assets improves then the routine maintenance expenditure required will decrease.

The prediction model are forecasting a proportional increase in future maintenance with the current levels of capital funding.

Deferred maintenance, i.e. works that are identified for maintenance and unable to be funded are to be included in the risk assessment process in the infrastructure risk management plan.

Maintenance is funded from Council's operating budget and grants where available. This is discussed in Section 6.2.

5.4 Renewal/Replacement Plan

Renewal expenditure is major work which does not increase the asset's design capacity 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 upgrade/expansion or new works expenditure.

Table 5.10 shows the past renewal expenditure that has been spent on Council aerodromes.

Table 5.10 Historical Capital Renewal Expenditure

Year	Expenditure
2005/06	\$76,737
2006/07	\$91,685
2007/08	\$97,397
2008/09	\$129,015

5.4.1 Renewal plan

Council's maintenance and renewal plan is currently incorporated into a 10 year Capital Works Program (Appendix C)..

Assets identified for renewal are inspected to verify the accuracy of the estimated remaining life obtained and develop a preliminary renewal estimate. Verified proposals are ranked by priority and available funds and scheduled in future works programmes. The priority ranking criteria is detailed in Table 5.11.

Table 5.11 Renewal Priority Ranking Criteria

Aerodrome Criteria	Weighting
1. Aerodrome Usage	10
2. Safety	50
3. Access	30
4. Economic Development & Commercial Potential	10
Total	100%

Renewal will be undertaken using 'low-cost' renewal methods where practical. The aim of 'low-cost' renewals is to restore the service potential or future economic benefits of the asset by renewing the assets at a cost less than replacement cost.

Examples of low cost renewal include surface enrichment treatments such as cold tar rejuvenation to control localised degradation of sealed surfaces due too aircraft loading, and to extend seal life between major reseals. Spray seal overlays and granular overlays of runway pavements and hardstands in lieu of reconstruction are other options to be considered.

5.4.2 Renewal standards

Renewal work is carried out in accordance in accordance with the standards and specifications noted in Section 5.3.1.

5.4.3 Summary of future renewal expenditure

Figure 5.17 has the projected future renewal expenditure increase over time as the asset ages.

The projected capital renewal program is shown in Appendix C.

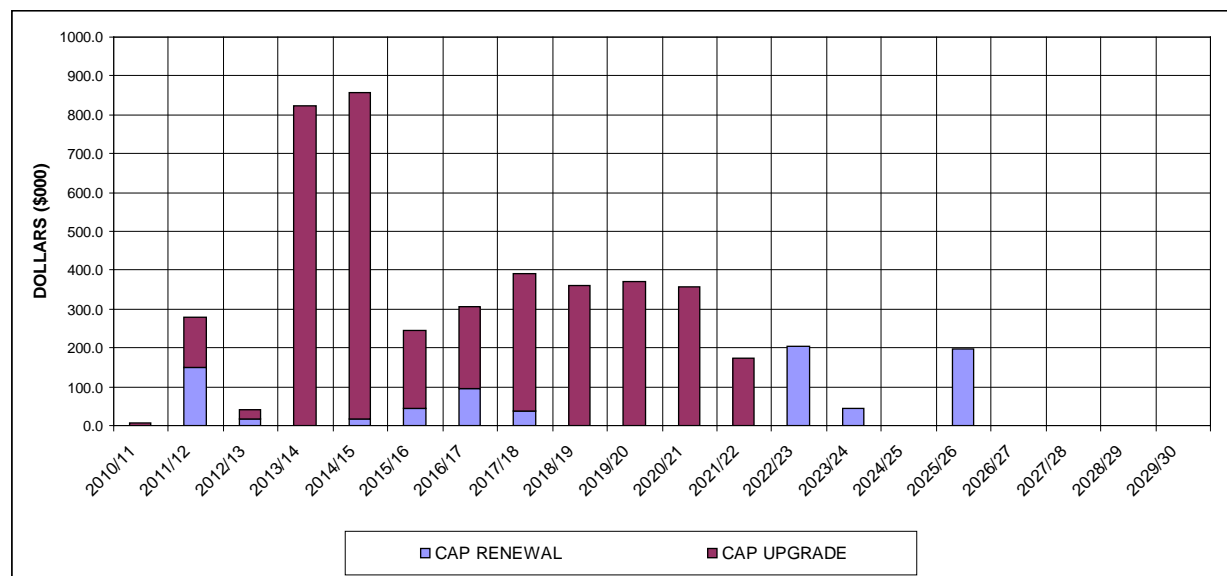


Fig 5.5 Predicted Capital Renewal and Upgrade for Aerodrome

Deferred renewal, i.e. those assets identified for renewal and not scheduled for renewal in capital works programs are to be included in the risk assessment process in the risk management plan.

Renewals are to be funded from Council's capital works program and grants where available. This is further discussed in Section 6.2.

5.5 Creation/Acquisition/Upgrade Plan

New works are those works that create a new asset that did not previously exist, or works which upgrade or improve an existing asset beyond its existing capacity. They may result from growth, social or environmental needs. Assets may also be acquired at no cost to the Council from land development. These assets from growth are considered in Section 4.4.

5.5.1 Selection criteria

New assets and upgrade/expansion of existing assets are identified from various sources such as Councillor or community requests, proposals identified by strategic plans or partnerships with other organisations. Candidate proposals are inspected to verify need and to develop a preliminary renewal estimate. Verified proposals are ranked by priority and available funds and scheduled in future works programmes. The priority ranking criteria is detailed below.

The selection criteria is the same as that used for assets requiring renewal, see figure 5.4.1

5.5.2 Standards and specifications

Standards and specifications for new assets and for upgrade/expansion of existing assets are the same as those for maintenance and renewal see Section 5.3.2.

5.5.3 Summary of future upgrade/new assets expenditure

New assets and services are to be funded from Council's capital works program and grants where available. This is further discussed in Section 6.2. Council's 10 year Capital Works Program is shown in Appendix C

5.6 Disposal Plan

Disposal includes any activity associated with disposal of a decommissioned asset including sale, demolition or relocation. It is unlikely that any sealed aerodrome would be disposed of while still in service. It may be possible that if a sealed aerodrome is underutilised that it may be reverted back to gravel, but this would be a last resort and only after it is shown that the maintenance costs are unjustified.

There are no plans to dispose of any aerodrome assets.

6. FINANCIAL SUMMARY

This section contains the financial requirements resulting from all the information presented in the previous sections of this asset management plan. The financial projections will be improved as further information becomes available on desired levels of service, current and projected future asset performance and grant funding.

6.1 Financial Statements and Projections

The financial projections are shown in Table 6.1 and Fig 6.1 for planned operating (operations and maintenance) and capital expenditure (renewal and upgrade/expansion/new assets).

Activity	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)
Maintenance	79.1	81.6	84.3	86.9	89.7	92.6	95.6	98.6	101.8	105.0
Utilities & Administration	81.0	83.6	86.3	89.0	91.9	94.8	97.9	101.0	104.2	107.5
Subtotal	160.1	165.2	170.6	175.9	181.6	187.4	193.5	199.6	205.0	212.5
Linemarking 05/23		61.2								
Linemarking 18/36										
Reseal 1 km - 05/23		86.6								
Reseal Taxiways						42.7	57.4	37.4		
Replace 500m fence			16.1		16.9					
Subtotal	0	148.2	16.1		16.9	42.7	57.4	37.4		
Strengthen 18/36				789.2	816.4					
Straighten Pavement at Aeroclub		131.3								
Strengthen GA Apron						177.4	184.5			
Extend culverts 05/23 to fence								328.0	335.1	349.3
Tie downs near Bellman hanger	6.0									
Concrete line western drain			23.2	23.8	24.4	24.9	25.4	26.0	26.5	27.1
Seal parking Area Hardy Street										
Subtotal	6.0	131.3	23.2	822.1	840.7	202.3	210.0	354	361.7	369.3
TOTAL	166.3	444.8	210.0	998.0	1,039.2	498.6	591.0	567.6	581.9	575.0

Table 6.1 *Planned Operating and Capital Expenditure*

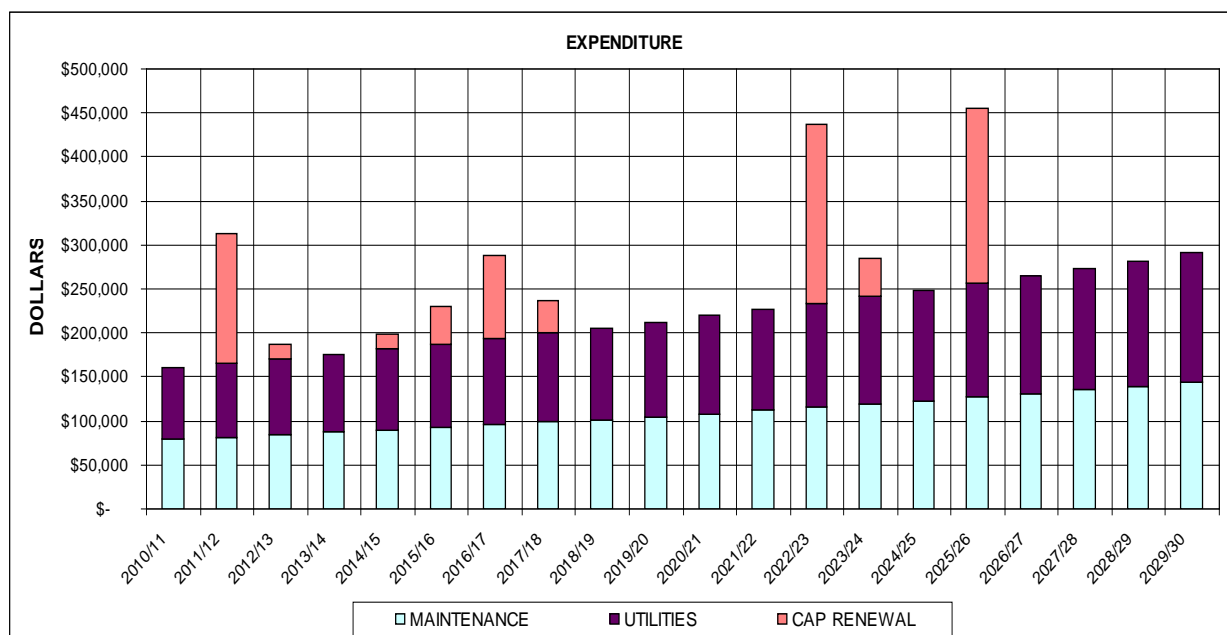


Fig 6.1 Planned Maintenance and Capital Renewal Only

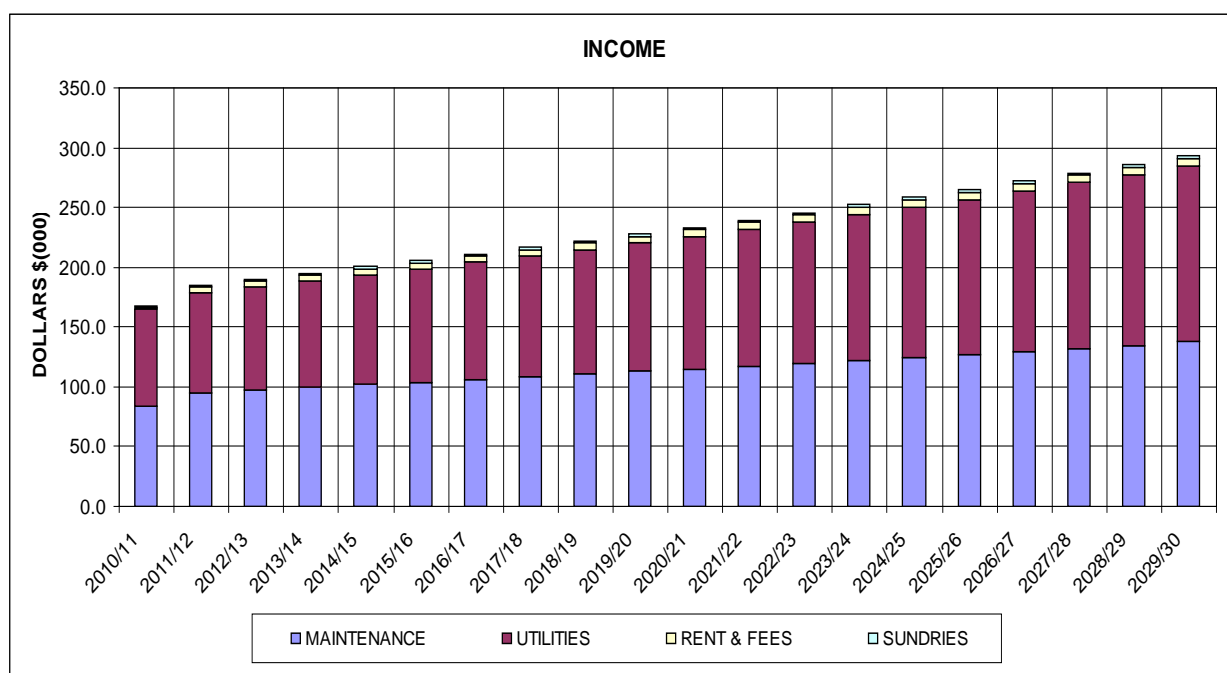


Fig 6.2 Proposed Maintenance and Capital Income from all sources

6.1.1 Sustainability of service delivery

There are two key indicators for financial sustainability that have been considered in the analysis of the services provided by this asset category, these being long term life cycle costs and medium term costs over the 10 year financial planning period.

In reporting the financial sustainability in this Asset Management Plan, it has been assumed that Council will fund the capital renewal component, so that the asset remains at the required level of service.

Long term - Life Cycle Cost

The ratio of lifecycle costs to lifecycle expenditure gives an indicator of sustainability of service provision. Life cycle costs include maintenance and renewal expenditure. The annual average life cycle cost for the services covered in this asset management plan for a 10 year period is \$3.33 million. Table 6.3 compares the average income to the average expenditure.

Annual Average lifecycle Costs, \$000	Average Lifecycle Expenditure \$000	Average annual Disparity \$000
220.9	202.1	18.8

Table 6.2 Lifecycle Costs vs. Expenditure – Aerodromes& Footpaths

Refer to discussion at Table 6.2 regarding the factors contributing to this outcome.

Table 6.3 shows the indicative disparity between projected and planned renewals across the asset category.

Year End June 30	Predicted Maintenance Expenditure (\$000)	Funded Maintenance Expenditure (\$000)	Planned renewal Expenditure (\$000)	Funded ² Renewal Costs (\$000)	Disparity in Renewal Expenditure (Planned – Projected) (\$000)	Cumulative Renewal Funding Disparity (\$000)
2010/11	79,107	84,223	0	0	0	0
2011/12	81,638	95,136	148,271	0	148,271	148,271
2012/13	84,251	97,348	16,125	0	16,125	164,396
2013/14	86,947	99,561	0	0	0	164,396
2014/15	89,729	101,773	16,875	0	16,875	181,271
2015/16	92,601	103,986	42,729	0	42,729	224,000
2016/17	95,564	106,198	95,252	0	95,252	319,252
2017/18	98,622	108,411	37,433	0	37,433	356,685
2018/19	101,778	110,579	0	0	0	356,685
2019/20	105,035	112,791	0	0	0	356,385

Table 6.3 10-Year Projection for Income plus Maintenance and Capital Renewal Expenditure

A gap between life cycle costs and life cycle expenditure gives an indication as to whether present consumers are paying their share of the assets they are consuming each year. The purpose of this aerodrome asset management plan is to identify levels of service that the community needs and can afford and develop the necessary long-term financial plans to provide the service in a sustainable manner.

² Council required to set priority for both renewal and capital

The life cycle gap for services covered by this asset management plan varies each year. At present Council has not prioritised either the capital renewal or the capital upgrade. Once these are determined, a more accurate life cycle sustainability index can be calculated.

Medium term – 10 year financial planning period

This asset management plan identifies the estimated maintenance and capital expenditures required to provide an agreed level of service to the community over a 20-year period for input into a 10-year financial plan and funding plan (see Appendix E) to provide the service in a sustainable manner.

The financial planning in this asset management plan, will need to be revised at least every five years An asset management plan needs to compare the existing or planned expenditures in the 10-year period to identify monetary gaps. In a core asset management plan, a gap is generally due to increasing asset renewals, increased costs etc.

Fig 6.3 shows the projected asset renewals in the 10-year planning period from the asset register. The projected asset renewals are compared to planned renewal expenditure in the capital works program..

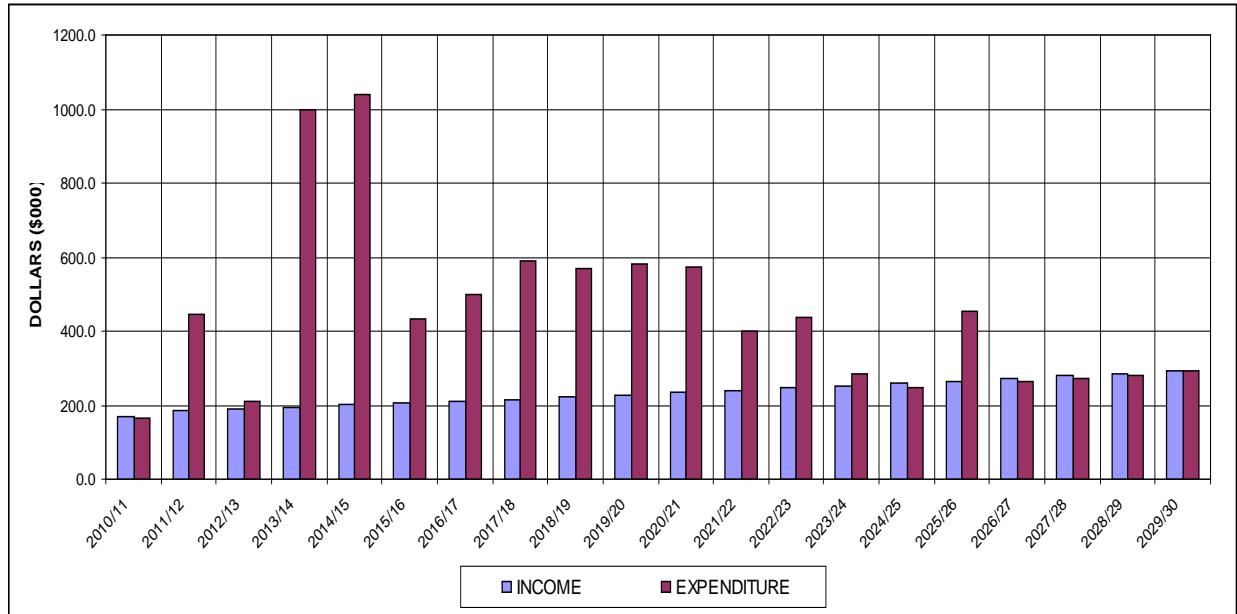


Fig 6.3 Income and Expenditure for 20-Year Period

Providing services in a sustainable manner will require matching of projected asset renewals to meet agreed service levels with planned capital works programs and available revenue.

A gap between projected asset renewals, planned asset renewals and funding indicates that further work is required to manage required service levels and funding to eliminate any funding gap.

Council will manage the ‘gap’ by developing this asset management plan to provide guidance on future service levels and resources required to provide these services, and determine what will be the result if the gap is not funded such as:

- W Reduce level of service (difficult given risk involved and CASA regulations)
- W Reduce customer satisfaction levels (again difficult)

W Increased risk/safety

W Greater proportion of assets in poor condition

Council's long-term financial plan covers the first 10-years of the 20-year planning period, requires to meet the maintenance costs and at least the capital renewal costs. The total maintenance and capital renewal expenditure required over the 10 years is \$2,209,128 million.

This is an average expenditure of \$220,913 per year. Estimated maintenance and capital renewal expenditure in year 1 is \$160,107. The 10 year sustainability index is 0.92

6.2 Funding Strategy

Projected expenditure identified in Section 6.1 is to be funded from Council's operating and capital budgets. The funding strategy is detailed in the Council's 10 year long term financial plan. Achieving the financial strategy will require:

W Increasing rates

W Receiving larger amounts of Federal and State grants

W Disposing of assets to reduce maintenance costs

W Accepting a lower level of service.

6.3 Valuation Forecasts

Asset values are forecast to increase as additional assets are added to the asset stock from construction and acquisition by Council and from assets constructed by developers and others and donated to Council. Fig 6.4 shows the projected replacement cost asset values over the planning period in current 2011 dollar values.

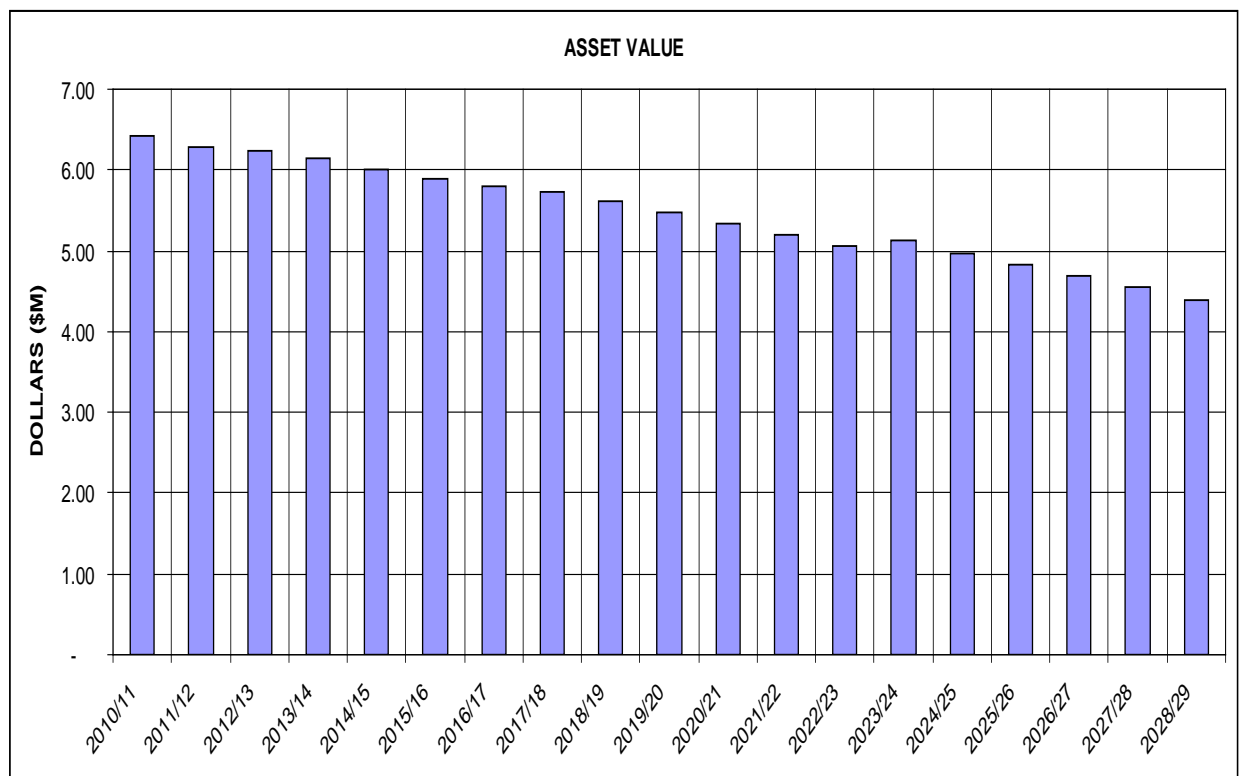


Fig 6.4 . Projected Asset Values

Depreciation expense values are forecast in line with asset values as shown in Fig 6.5.

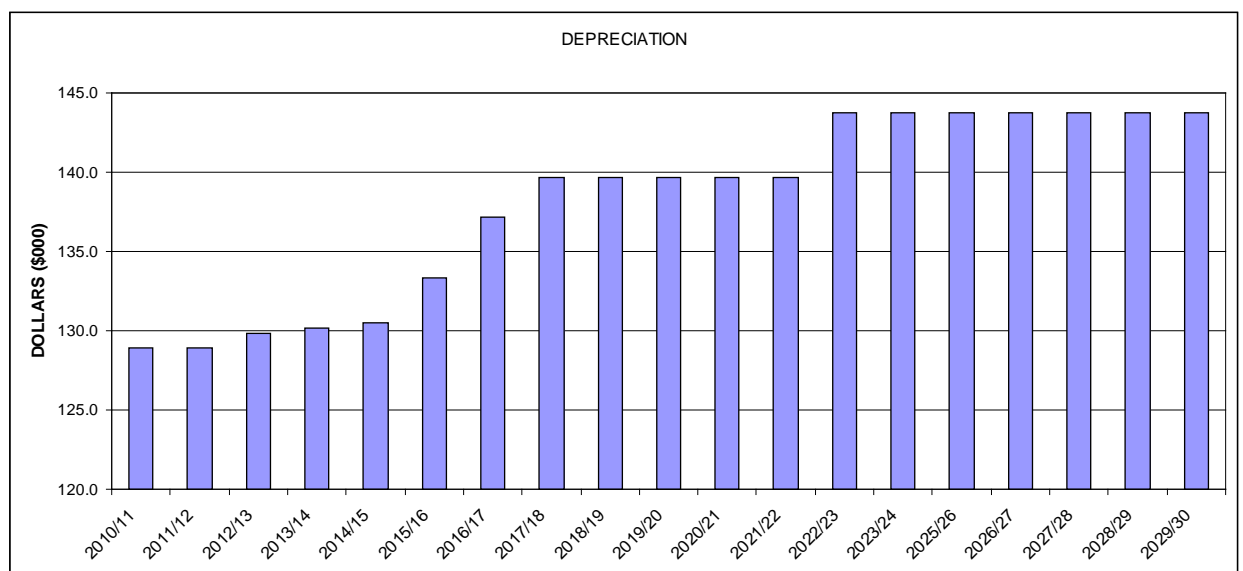


Fig 6.5 . Projected Depreciation Expense

The depreciated replacement cost (current replacement cost less accumulated depreciation) will vary over the forecast period depending on the rates of addition of new assets, disposal of old assets and consumption and renewal of existing assets. Forecast of the Written Down Capital Value is shown in Fig 6.6

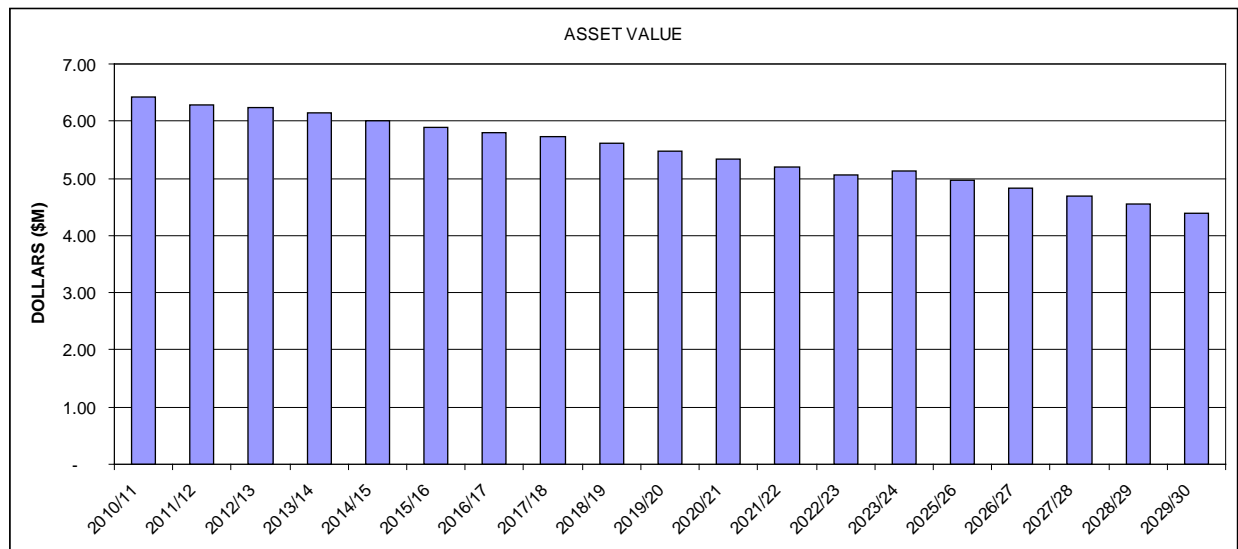


Fig 6.6. Projected Depreciated Replacement Cost

6.4 Key Assumptions made in Financial Forecasts

This section details the key assumptions made in presenting the information contained in this asset management plan and in preparing forecasts of required operating and capital renewal expenditure and asset values, depreciation expense and carrying amount estimates. It is presented to enable readers to gain an understanding of the levels of confidence in the data behind the financial forecasts.

Key assumptions made in this asset management plan are:

- W** The current levels of service will be maintained over the life of this asset management plan
- W** The treatment and maintenance costs are based on Council's current schedule of rates
- W** All predicted financial figures are based on 2010/11 rates and have been adjusted for an inflation rate of 3.5%
- W** Accuracy of future financial forecasts may be improved in future revisions of this asset management plan by the following actions.
 - W** Consult with the community and other stakeholders to finalise the levels of service currently being delivered
 - W** Refine and improve the prediction modelling (life cycle paths and decision matrices)

7. ASSET MANAGEMENT PRACTICES

7.1 Accounting/Financial Systems

Council uses CIVICA Authority as its corporate accounting system. Authority has a suite of accounting/financial modules to meet all day to day operational and reporting requirements

The Director of Administration is delegated the statutory responsibility as Council's Responsible Accounting Officer. The Responsible Accounting Officer is to ensure that Council has adequate control systems, processes and procedures in place and these are being applied to meet all financial operating and reporting requirements.

The Local Government Act 1993, Chapter 13 sets out the requirements for management reporting, accounting, auditing, and financial reporting for Councils. The NSW division of Local Government also issues the Local Government Code of Accounting Practice and Financial Reporting, which assists in the interpretation and application of the act and the application of Australian Accounting Standards to the audit financial reporting functions.

The Government Code of Accounting Practice and Financial Reporting also provides a mechanism which ensures appropriate accounting policies and practices are adopted. For infrastructure, significant accounting policies are detailed in the annual financial reports. These include policies on the acquisition of assets, initial asset recognition, subsequent costs, asset revaluation, capitalisation thresholds, depreciation and disposal and de-recognition.

It is possible that changes will be required to accounting policies and practices resulting from this asset management plan. These will be assessed and implemented as soon as practical.

7.2 Asset Management Systems

Council's adopted Asset Management System is "AIM" (Asset and Infrastructure Management) a component of CIVICA's "Authority System.

AIM links to the Authority accounting system through the use of Work Orders and Tasks. Asset Valuations can be stored in AIM but are also stored in the Capital Value Record (CVR) component of Authority.

The Director of Administration (and the Administration staff) is responsible for maintaining the Asset Management Systems in conjunction with the Director of Engineering to update information.

The development of AIM hierarchy for all aerodrome assets is practically complete. The Director of Engineering revalued the aerodrome assets, by using Fair Value rates from current projects. Part of the asset revaluation has been to split aerodromes into segments. For sealed aerodromes these segments related to sealed segments. Capacity, condition and valuation data relating to these segments were then imported into AIM.

7.3 Information Flow Requirements and Processes

The key information flows *into* this asset management plan are:

- W** The asset register data on size, age, value, remaining life of the network;
- W** The unit rates for categories of work/material;
- W** The adopted service levels;

- W Projections of various factors affecting future demand for services;
- W Correlations between maintenance and renewal, including decay models;
- W Data on new assets acquired by council.

7.4 Key Assumptions made in Financial Forecasts

This section details the key assumptions made in presenting the information contained in this asset management plan and in preparing forecasts of required operating and capital expenditure and asset values, depreciation expense and amount estimates. It is presented to enable readers to gain an understanding of the levels of confidence in the data behind the financial forecasts.

The key assumptions made in this asset management plan are:

- ✓ The current levels of service will remain constant for the life of this plan
- ✓ The treatment and maintenance costs are based on Council's current schedule of rates.
- ✓ All financial figures are based on 2010/11 values and are adjusted for a 3.2% inflation rate, whereas income and grants are based on a 2% increase.
- ✓ The useful life analysis

These will impact the Long Term Financial Plan, Strategic Business Plan, annual budget and departmental business plans and budgets.

7.5 Standards and Guidelines

Refer to Section 5.3.2

8. PLAN IMPROVEMENT AND MONITORING

8.1 Performance Measures

The effectiveness of the asset management plan can be measured in the following ways:

- W** The degree to which the required cashflows identified in this asset management plan are incorporated into council's long term financial plan and Strategic Management Plan;
- W** The degree to which 1-5 year detailed works programs, budgets, business plans and organisational structures take into account the 'global' works program trends provided by the asset management plan;

8.2 Improvement Plan

The asset management improvement plan generated from this asset management plan is shown in Table 8.21

Table 8.1 Improvement Plan

Task No	Task	Responsibility	Resources Required	Timeline
1.	Valuation Unit Costs – review unit rates, derivations on a greenfield basis	DE	Staff	May 2011
2.	Asset Information System – implement software package, providing asset deterioration and other tools	DAF	Staff	Jul 2011
3.	Risk Management – Refine, expand and document the risk management plan	DE	Staff	Jul 2011
4.	Job costing system – develop system, incorporating current unit rates	DAF/DE	Staff	Dec 2011
5.	Document mythology and procedures for asset useful lives, unit rates, condition rating and scoring and depreciation calculations.	DE	Staff	June 2010
6.	Population predictions – review projects based on latest available Census	DE	Staff	May 2011
7.	Community Consultation – undertake targeted engagement with the community to resolve acceptable and achievable levels of service	GM	Staff	Aug 2012
8.	Condition Rating – refine data collected and analysis processes, including greater levels of componentisation and achievable levels of service	DE	Staff	Dec 2011
9.	Consider limiting the AMP time framework to 10 years, to coincide with the Long term financial plan	DAF/DE	Staff	May 2011

8.3 Monitoring and Review Procedures

This asset management plan will be reviewed during annual budget preparation and amended to recognise any changes in service levels and/or resources available to provide those services as a result of the budget decision process.

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

9 REFERENCES

1. Council 2010/10 Annual Management Plan and Budget.
2. AS27, Financial Reporting by Local Government Australian Accounting Standards, June 1996
3. AASB1031, Materiality, Australian Accounting Standard Board July 2004
4. AASB116 Property, Plant and Equipment, Australian Accounting Standards Board July 2007
5. Temora Shire Council Asset Valuation 2010
6. Temora Shire 20-year Aerodrome Maintenance Plan
7. International Infrastructure Management Manual, Institute of Public Works Engineering Australia, Sydney 2006 www.ipwea.org.au
8. Statistical snapshot Temora Shire ABS 2006 Census data

APPENDICES

- Appendix A Abbreviations
- Appendix B Glossary
- Appendix C 10 Year Maintenance and Capital Works Program
- Appendix D Maintenance response Levels of Service
- Appendix E Expenditure and Income Comparison

Appendix A ABBREVIATIONS

AAAC	Average annual asset consumption
AMP	Asset management plan
ARI	Average recurrence interval
BOD	Biochemical (biological) oxygen demand
CRC	Current replacement cost
CWMS	Community wastewater management systems
DA	Depreciable amount
DoH	Department of Health
EF	Earthworks/formation
IRMP	Infrastructure risk management plan
LCC	Life Cycle cost
LCE	Life cycle expenditure
MMS	Maintenance management system
PCI	Pavement condition index
RV	Residual value
SS	Suspended solids
vph	Vehicles per hour
GM	General Manager
DAF	Director of Administration and Finance
DE	Director of Engineering

Appendix B GLOSSARY

Annual service cost (ASC)

An estimate of the cost that would be tendered, per annum, if tenders were called for the supply of a service to a performance specification for a fixed term. The Annual Service Cost includes operating, maintenance, depreciation, finance/ opportunity and disposal costs, less revenue.

Asset class

Grouping of assets of a similar nature and use in an entity's operations (AASB 166.37).

Asset condition assessment

The process of continuous or periodic inspection, assessment, measurement and interpretation of the resultant data to indicate the condition of a specific asset so as to determine the need for some preventative or remedial action.

Asset management

The combination of management, financial, economic, engineering and other practices applied to physical assets with the objective of providing the required level of service in the most cost effective manner.

Assets

Future economic benefits controlled by the entity as a result of past transactions or other past events (AAS27.12).

Property, plant and equipment including infrastructure and other assets (such as furniture and fittings) with benefits expected to last more than 12 month.

Average annual asset consumption (AAAC)*

The amount of a local government's asset base consumed during a year. This may be calculated by dividing the Depreciable Amount (DA) by the Useful Life and totalled for each and every asset OR by dividing the Fair Value (Depreciated Replacement Cost) by the Remaining Life and totalled for each and every asset in an asset category or class.

Brownfield asset values**

Asset (re)valuation values based on the cost to replace the asset including demolition and restoration costs.

Capital expansion expenditure

Expenditure that extends an existing asset, at the same standard as is currently enjoyed by residents, to a new group of users. It is discretionary expenditure, which increases future operating, and maintenance costs, because it increases council's asset base, but may be associated with additional revenue from the new user group, eg. extending a drainage or aerodrome network, the provision of an oval or park in a new suburb for new residents.

Capital expenditure

Relatively large (material) expenditure, which has benefits, expected to last for more than 12 months. Capital expenditure includes renewal, expansion and upgrade. Where capital projects involve a combination of renewal, expansion and/or upgrade expenditures, the total project cost needs to be allocated accordingly.

Capital funding

Funding to pay for capital expenditure.

Capital grants

Monies received generally tied to the specific projects for which they are granted, which are often upgrade and/or expansion or new investment proposals.

Capital investment expenditure

See capital expenditure definition

Capital new expenditure

Expenditure which creates a new asset providing a new service to the community that did not exist beforehand. As it increases service potential it may impact revenue and will increase future operating and maintenance expenditure.

Capital renewal expenditure

Expenditure on an existing asset, which returns the service potential or the life of the asset up to that which it had originally. It is periodically required expenditure, relatively large (material) in value compared with the value of the components or sub-components of the asset being renewed. As it reinstates existing service potential, it has no impact on revenue, but may reduce future operating and maintenance expenditure if completed at the optimum time, eg. resurfacing or resheeting a material part of an aerodrome network, replacing a material section of a drainage network with pipes of the same capacity, resurfacing an oval. Where capital projects involve a combination of renewal, expansion and/or upgrade expenditures, the total project cost needs to be allocated accordingly.

Capital upgrade expenditure

Expenditure, which enhances an existing asset to provide a higher level of service or expenditure that will increase the life of the asset beyond that which it had originally. Upgrade expenditure is discretionary and often does not result in additional revenue unless direct user charges apply. It will increase operating and maintenance expenditure in the future because of the increase in the council's asset base, eg. widening the sealed area of an existing aerodrome, replacing drainage pipes with pipes of a greater capacity, enlarging a grandstand at a sporting facility. Where capital projects involve a combination of renewal, expansion and/or upgrade expenditures, the total project cost needs to be allocated accordingly.

Carrying amount

The amount at which an asset is recognised after deducting any accumulated depreciation / amortisation and accumulated impairment losses thereon.

Class of assets

See asset class definition

Component

An individual part of an asset which contributes to the composition of the whole and can be separated from or attached to an asset or a system.

Cost of an asset

The amount of cash or cash equivalents paid or the fair value of the consideration given to acquire an asset at the time of its acquisition or construction, plus any costs necessary to place the asset into service. This includes one-off design and project management costs.

Current replacement cost (CRC)

The cost the entity would incur to acquire the asset on the reporting date. The cost is measured by reference to the lowest cost at which the gross future economic benefits could be obtained in the normal course of business or the minimum it would cost, to replace the existing asset with a technologically modern equivalent new asset (not a second hand one) with the same economic benefits (gross service potential) allowing for any differences in the quantity and quality of output and in operating costs.

Current replacement cost "As New" (CRC)

The current cost of replacing the original service potential of an existing asset, with a similar modern equivalent asset, i.e. the total cost of replacing an existing asset with an as NEW or similar asset expressed in current dollar values.

Cyclic Maintenance**

Replacement of higher value components/sub-components of assets that is undertaken on a regular cycle including repainting, building roof replacement, cycle, replacement of air conditioning equipment, etc. This work generally falls below the capital/ maintenance threshold and needs to be identified in a specific maintenance budget allocation.

Depreciable amount

The cost of an asset, or other amount substituted for its cost, less its residual value (AASB 116.6)

Depreciated replacement cost (DRC)

The current replacement cost (CRC) of an asset less, where applicable, accumulated depreciation calculated on the basis of such cost to reflect the already consumed or expired future economic benefits of the asset

Depreciation / amortisation

The systematic allocation of the depreciable amount (service potential) of an asset over its useful life.

Economic life

See useful life definition.

Expenditure

The spending of money on goods and services. Expenditure includes recurrent and capital.

Fair value

The amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties, in an arms length transaction.

Greenfield asset values **

Asset (re)valuation values based on the cost to initially acquire the asset.

Heritage asset

An asset with historic, artistic, scientific, technological, geographical or environmental qualities that is held and maintained principally for its contribution to knowledge and culture and this purpose is central to the objectives of the entity holding it.

Impairment Loss

The amount by which the carrying amount of an asset exceeds its recoverable amount.

Infrastructure assets

Physical assets of the entity or of another entity that contribute to meeting the public's need for access to major economic and social facilities and services, eg. aerodromes, drainage, footpaths and cycleways. These are typically large, interconnected networks or portfolios of composite assets. The components of these assets may be separately maintained, renewed or replaced individually so that the required level and standard of service from the network of assets is continuously sustained. Generally the components and hence the assets have long lives. They are fixed in place and are often have no market value.

Investment property

Property held to earn rentals or for capital appreciation or both, rather than for:

- (a) use in the production or supply of goods or services or for administrative purposes; or
- (b) sale in the ordinary course of business (AASB 140.5)

Level of service

The defined service quality for a particular service against which service performance may be measured. Service levels usually relate to quality, quantity, reliability, responsiveness, environmental, acceptability and cost).

Life Cycle Cost **

The life cycle cost (LCC) is average cost to provide the service over the longest asset life cycle. It comprises annual maintenance and asset consumption expense, represented by depreciation expense. The Life Cycle Cost does not indicate the funds required to provide the service in a particular year.

Life Cycle Expenditure **

The Life Cycle Expenditure (LCE) is the actual or planned annual maintenance and capital renewal expenditure incurred in providing the service in a particular year. Life Cycle Expenditure may be compared to Life Cycle Expenditure to give an initial indicator of life cycle sustainability.

Loans / borrowings

Loans result in funds being received which are then repaid over a period of time with interest (an additional cost). Their primary benefit is in 'spreading the burden' of capital expenditure over time. Although loans enable works to be completed sooner, they are only ultimately cost effective where the capital works funded (generally renewals) result in operating and maintenance cost savings, which are greater than the cost of the loan (interest and charges).

Maintenance and renewal gap

Difference between estimated budgets and projected expenditures for maintenance and renewal of assets, totalled over a defined time (eg 5, 10 and 15 years).

Maintenance and renewal sustainability index

Ratio of estimated budget to projected expenditure for maintenance and renewal of assets over a defined time (eg 5, 10 and 15 years).

Maintenance expenditure

Recurrent expenditure, which is periodically or regularly required as part of the anticipated schedule of works required to ensure that the asset achieves its useful life and provides the required level of service. It is expenditure, which was anticipated in determining the asset's useful life.

Materiality

An item is material if its omission or misstatement could influence the economic decisions of users taken on the basis of the financial report. Materiality depends on the size and nature of the omission or misstatement judged in the surrounding circumstances.

Modern equivalent asset.

A structure similar to an existing structure and having the equivalent productive capacity, which could be built using modern materials, techniques and design. Replacement cost is the basis used to estimate the cost of constructing a modern equivalent asset.

Non-revenue generating investments

Investments for the provision of goods and services to sustain or improve services to the community that are not expected to generate any savings or revenue to the Council, eg. parks and playgrounds, footpaths, aerodromes and bridges, libraries, etc.

Operating expenditure

Recurrent expenditure, which is continuously required excluding maintenance and depreciation, eg power, fuel, staff, plant equipment, on-costs and overheads.

Pavement management system

A systematic process for measuring and predicting the condition of aerodrome pavements and wearing surfaces over time and recommending corrective actions.

Planned Maintenance**

Repair work that is identified and managed through a maintenance management system (MMS). MMS activities include inspection, assessing the condition against failure/breakdown criteria/experience, prioritising scheduling, actioning the work and reporting what was done to develop a maintenance history and improve maintenance and service delivery performance.

PMS Score

A measure of condition of a aerodrome segment determined from a Pavement Management System.

Rate of annual asset consumption*

A measure of average annual consumption of assets (AAAC) expressed as a percentage of the depreciable amount (AAAC/DA). Depreciation may be used for AAAC.

Rate of annual asset renewal*

A measure of the rate at which assets are being renewed per annum expressed as a percentage of depreciable amount (capital renewal expenditure/DA).

Rate of annual asset upgrade*

A measure of the rate at which assets are being upgraded and expanded per annum expressed as a percentage of depreciable amount (capital upgrade/expansion expenditure/DA).

Reactive maintenance

Unplanned repair work that carried out in response to service requests and management/supervisory directions.

Recoverable amount

The higher of an asset's fair value, less costs to sell and its value in use.

Recurrent expenditure

Relatively small (immaterial) expenditure or that which has benefits expected to last less than 12 months. Recurrent expenditure includes operating and maintenance expenditure.

Recurrent funding

Funding to pay for recurrent expenditure.

Rehabilitation

See capital renewal expenditure definition above.

Remaining life

The time remaining until an asset ceases to provide the required service level or economic usefulness. Age plus remaining life is economic life.

Renewal

See capital renewal expenditure definition above.

Residual value

The net amount which an entity expects to obtain for an asset at the end of its useful life after deducting the expected costs of disposal.

Revenue generating investments

Investments for the provision of goods and services to sustain or improve services to the community that are expected to generate some savings or revenue to offset operating costs, eg public halls and theatres, childcare centres, sporting and recreation facilities, tourist information centres, etc.

Risk management

The application of a formal process to the range of possible values relating to key factors associated with a risk in order to determine the resultant ranges of outcomes and their probability of occurrence.

Section or segment

A self-contained part or piece of an infrastructure asset.

Service potential

The capacity to provide goods and services in accordance with the entity's objectives, whether those objectives are the generation of net cash inflows or the provision of goods and services of a particular volume and quantity to the beneficiaries thereof.

Service potential remaining*

A measure of the remaining life of assets expressed as a percentage of economic life. It is also a measure of the percentage of the asset's potential to provide services that is still available for use in providing services (DRC/DA).

Strategic Management Plan (SA)**

Documents Council objectives for a specified period (3-5 yrs), the principle activities to achieve the objectives, the means by which that will be carried out, estimated income and expenditure, measures to assess performance and how rating policy relates to the Council's objectives and activities.

Sub-component

Smaller individual parts that make up a component part.

Useful life

Either:

- (a) the period over which an asset is expected to be available for use by an entity, or
- (b) the number of production or similar units expected to be obtained from the asset by the entity.

It is estimated or expected time between placing the asset into service and removing it from service, or the estimated period of time over which the future economic benefits embodied in a depreciable asset, are expected to be consumed by the council. It is the same as the economic life.

Value in Use

The present value of estimated future cash flows expected to arise from the continuing use of an asset and from its disposal at the end of its useful life. It is deemed to be depreciated replacement cost (DRC) for those assets whose future economic benefits are not primarily dependent on the asset's ability to generate new cash flows, where if deprived of the asset its future economic benefits would be replaced.

Appendix C Aerodrome Maintenance and Capital Program

10 YEAR AERODROMES CAPITAL WORKS PROGRAM

As part of Council's Asset Management Plan process, and to develop a 10 Year Financial Plan for Council, a 10 Year Aerodromes Capital Works Program has been developed. This plan is designed to address ratepayers requirements for urban and rural aerodromes to provide a aerodrome network that meets the needs of the community and industry, within a 10-year span and that the aerodrome network is both affordable and sustainable for the community.

Careful consideration has been given to any new capital works and to consider them in terms of "asset management" principles and "whole of life" costs. Generally a more expensive asset means a more expensive maintenance and replacement cost. This also applies to the aerodrome network, however it has to be recognised that the higher use unsealed aerodromes get to the point where it is more economical to seal the aerodrome rather than to maintain and resheet the aerodrome as an unsealed aerodrome. Council Aerodrome Hierarchy Policy addresses this issue and should be read in conjunction with this Asset Management Plan

In formulating the Aerodrome Maintenance Plan and this Asset Management Plan, the following priorities have been taken into consideration.

- W** Maintain bitumen seal on all sealed runways
- W** Maintain bitumen seal on all taxiways
- W** Maintain or upgrade high safety risk areas

The 10 year program is to be a guideline for Council in adopting its Annual Business Plan. Council will reserve the right to review the program as situations and circumstances change over time. An annual update of the plan will need to be undertaken and a review of the full plan undertaken after 5 years.

Appendix D Maintenance Response for Levels of service (Draft)

Table D1 Category Types

Category 1	Category 2	Category 3
Runways	Taxiway	Buildings
Fencing		
Apron		

Table D2 Defects Record

Sealed Runway	Unsealed Runway	Taxiway	Aerodrome General	Buildings
Pothole >100mm Shoving/Rutting Cracking Seal Failure Grass mowing Tree trimming Potholes < 100mm Delineation Linemarking faded Runway lights	Pothole Corrugations Erosion Grass mowing Tree trimming roughness	Pothole Shoving/Rutting Cracking Seal Failure Vegetation Linemarking faded Taxiway lights	PAPI PALC Windssocks lights Windssock tube Backup generator Fencing	General maintenance Broken glass Paint faded Carpet Guttering Water heater Electrical Roofing

Table D3 Resources

Sealed Runway	Unsealed Runway	Taxiway	Aerodrome General	Buildings
Bitumen patching truck Backhoe Grader Water cart Skid steer Contractor Tree Contractor Vegetation Control Linemarking Contractor Gravel trucks Electrical Contractor	Grader Backhoe Water cart Tree Contractor Vegetation control Gravel trucks	Bitumen patching truck Backhoe Grader Water cart Skid steer Contractor Vegetation Control Linemarking Contractor Gravel trucks Electrical Contractor	Day labour Electrical Contractor Fencing Contractor	Day labour Painting Contractor Carpet Contractor Electrical Contractors Building Contractors

Table D4 Response Times

Aerodrome					
Category 1	Days	Category 2	Days	Category 3	Days
Sweeping	2	Sweeping	7	General Maintenance	14
Vegetation	7	Vegetation	14	Broken Glass	2
Pothole >100mm	1	Pothole >100mm	7	Faded Paint	60
Pothole< 100mm	4	Pothole< 100mm	7	Carpet	60
Seal Stripping	60	Seal Stripping	60	Guttering	60
Seal Bleeding	1	Seal Bleeding	1	Water heater	7
Shoving/Rutting	1	Shoving/Rutting	7	Electrical	2
Cracking	30	Cracking < 5mm	30	Roofing	30
Fencing (temporary repairs)	1	Cracking > 5mm	14		
Fencing(permanent repairs)	7				

Appendix E Expenditure and Income

Item	Description	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	GENERAL MAINTENANCE	\$ 79,107	\$ 81,638	\$ 84,251	\$ 86,947	\$ 89,729	\$ 92,601	\$ 95,564	\$ 98,622	\$101,778	\$105,035	\$108,396	\$111,864	\$115,444	\$119,138	\$122,951	\$126,885	\$130,945	\$135,136	\$139,460	\$143,923
3510.0510	Ground Maintenance	\$ 55,623	\$ 57,403	\$ 59,240	\$ 61,136	\$ 63,092	\$ 65,111	\$ 67,194	\$ 69,345	\$ 71,564	\$ 73,854	\$ 76,217	\$ 78,656	\$ 81,173	\$ 83,770	\$ 86,451	\$ 89,217	\$ 92,072	\$ 95,019	\$ 98,059	\$101,197
3510.0610	Runway Maintenance	\$ 22,368	\$ 23,084	\$ 23,822	\$ 24,585	\$ 25,371	\$ 26,183	\$ 27,021	\$ 27,886	\$ 28,778	\$ 29,699	\$ 30,650	\$ 31,630	\$ 32,643	\$ 33,687	\$ 34,765	\$ 35,878	\$ 37,026	\$ 38,210	\$ 39,433	\$ 40,695
3510.0611	Aerodrome Electrical Repairs	\$ 624	\$ 644	\$ 665	\$ 686	\$ 708	\$ 730	\$ 754	\$ 778	\$ 803	\$ 829	\$ 855	\$ 882	\$ 911	\$ 940	\$ 970	\$ 1,001	\$ 1,033	\$ 1,066	\$ 1,100	\$ 1,135
3510.0970	Internal Plant Hire	\$ 492	\$ 508	\$ 524	\$ 541	\$ 558	\$ 576	\$ 594	\$ 613	\$ 633	\$ 653	\$ 674	\$ 696	\$ 718	\$ 741	\$ 765	\$ 789	\$ 814	\$ 840	\$ 867	\$ 895
	UTLITIES AND ADMINISTRATION	\$ 81,000	\$ 83,592	\$ 86,267	\$ 89,027	\$ 91,876	\$ 94,816	\$ 97,851	\$100,982	\$104,213	\$107,548	\$110,990	\$114,541	\$118,207	\$121,989	\$125,893	\$129,921	\$134,079	\$138,369	\$142,797	\$147,367
3510.0415	Utilities	\$ 23,300	\$ 24,046	\$ 24,815	\$ 25,609	\$ 26,429	\$ 27,274	\$ 28,147	\$ 29,048	\$ 29,977	\$ 30,937	\$ 31,927	\$ 32,948	\$ 34,003	\$ 35,091	\$ 36,214	\$ 37,372	\$ 38,568	\$ 39,803	\$ 41,076	\$ 42,391
3510.0530	Building Maintenance	\$ 5,000	\$ 5,160	\$ 5,325	\$ 5,496	\$ 5,671	\$ 5,853	\$ 6,040	\$ 6,233	\$ 6,433	\$ 6,639	\$ 6,851	\$ 7,070	\$ 7,297	\$ 7,530	\$ 7,771	\$ 8,020	\$ 8,276	\$ 8,541	\$ 8,815	\$ 9,097
3510.0980	Overheads	\$ 48,700	\$ 50,258	\$ 51,867	\$ 53,526	\$ 55,239	\$ 57,007	\$ 58,831	\$ 60,714	\$ 62,657	\$ 64,662	\$ 66,731	\$ 68,866	\$ 71,070	\$ 73,344	\$ 75,691	\$ 78,113	\$ 80,613	\$ 83,192	\$ 85,855	\$ 88,602
3510.0410	Insurances	\$ 3,000	\$ 3,096	\$ 3,195	\$ 3,297	\$ 3,403	\$ 3,512	\$ 3,624	\$ 3,740	\$ 3,860	\$ 3,983	\$ 4,111	\$ 4,242	\$ 4,378	\$ 4,518	\$ 4,663	\$ 4,812	\$ 4,966	\$ 5,125	\$ 5,289	\$ 5,458
3510.0450	Sundry Expenses	\$ 1,000	\$ 1,032	\$ 1,065	\$ 1,099	\$ 1,134	\$ 1,171	\$ 1,208	\$ 1,247	\$ 1,287	\$ 1,328	\$ 1,370	\$ 1,414	\$ 1,459	\$ 1,506	\$ 1,554	\$ 1,604	\$ 1,655	\$ 1,708	\$ 1,763	\$ 1,819
	CAPITAL RENEWAL	\$ -	\$ 148,271	\$ 16,125	\$ -	\$ 16,875	\$ 42,729	\$ 95,252	\$ 37,433	\$ -	\$ -	\$ -	\$ -	\$203,957	\$ 43,540	\$ -	\$197,694	\$ -	\$ -		
CR1	Linemarking 05/23 runway runways within 7 years		\$ 61,646														\$ 82,194				
CR2	Linemarking18/36 runway runways within 17 years							\$ 37,896							\$ 43,540						
CR3	Runway 05/23 will require the central 1 kilometre resealed in the next 15 years		\$ 86,625														\$115,500				
CR4	Runway 18/36 will require a reseal in the next 15 years													\$203,957							
CR5	Reseal Taxiway A						\$ 18,032														
CR6	Reseal Taxiway B						\$ 16,905														
CR7	Reseal Taxiway C							\$ 57,356													
CR8	Reseal Taxiway D						\$ 7,792														
CR9	Reseal Taxiway E							\$ 37,433													
CR10	Reseal Taxiway F																				
CR11	Reseal Taxiway G																				
CR12	Reseal Taxiway H																				
CR13	Perimeter fencing renew (500 metres every 2 years initially)			\$ 16,125		\$ 16,875															
	CAPITAL IMPROVEMENT	\$ 6,000	\$ 131,250	\$ 23,274	\$ 877,052	\$ 840,735	\$202,314	\$209,952	\$353,980	\$361,652	\$369,323	\$355,613	\$173,138	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		
CI 1	Strengthen 18/36 runway				\$ 798,237	\$ 816,379															
CI 2	Strengthen apron and level depressions						\$177,416	\$184,513													
CI 3	Back up generator for the runway lights.																				
CI 4	Taxiway in front of the Aero Club requires to be straightened		\$ 131,250																		
CI 5	Extend pipes on both sides of the 05/23 runway to the fence line (one side each year)								\$328,000	\$335,130	\$342,261	\$349,391									
CI 6	Extend 09/27 runway to the west												\$173,138								
CI 7	Level and grade grass runway along western side of 18/36																				
CI 8	Level and grade grass runway along northern side of 09/27																				
CI 9	Improve grass verges along side runway 05/23 (south west end)																				
CI 10	Improve grass verges along side runway 05/23 (north east end)																				
CI 11	Construction of Stage III subdivision																				
CI 12	Construction of future subdivision north of 05/23 runway																				
CI 13	Construct bunk style accommodation on Council block at Stage II (one per year)																				
CI 14	Concrete line the east west drain to Trigalong creek			\$ 23,274	\$ 23,815	\$ 24,356	\$ 24,898	\$ 25,439	\$ 25,980	\$ 26,521	\$ 27,063										

Item	Description	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30
CI 15	Improve airport signage.																				
CI 16	Seal car parking area on Tiger Moth Avenue along the eastern side of the Aero Club and apron											\$ 6,222									
CI 17	Paint and restore Bellman hanger to Historical 10EFTS scheme																				
CI 18	Reseal hanger floor.																				
CI 19	Install tie down system to south area of Bellman Hanger.	\$ 6,000																			
CI 20	Install pumps to cater for different aviation fuels.																				
CI 21	Establish new gliding strip and improve airside infrastructure																				
CI 22	Establish new aircraft parking areas and level out existing areas.																				
CI 23	Conference/function centre capable of accommodating 250.																				
CI 24	Widen the 09/27 glider strip on the north side																				
CI 25	Level all grass areas and grass runway strips																				
CI 26	Consider flush mounting all runway lights																				
CI 27	Shower and Toilets to Council Cabins				55000																
	EXPENDITURE																				
	MAINTENANCE	\$ 79,107	\$ 81,638	\$ 84,251	\$ 86,947	\$ 89,729	\$ 92,601	\$ 95,564	\$ 98,622	\$101,778	\$105,035	\$108,396	\$111,864	\$115,444	\$119,138	\$122,951	\$126,885	\$130,945	\$135,136	\$139,460	\$143,923
	UTILITIES & ADMINISTRATION	\$ 81,000	\$ 83,592	\$ 86,267	\$ 89,027	\$ 91,876	\$ 94,816	\$ 97,851	\$100,982	\$104,213	\$107,548	\$110,990	\$114,541	\$118,207	\$121,989	\$125,893	\$129,921	\$134,079	\$138,369	\$142,797	\$147,367
	CAPITAL RENEWAL	\$ -	\$ 148,271	\$ 16,125	\$ -	\$ 16,875	\$ 42,729	\$ 95,252	\$ 37,433	\$ -	\$ -	\$ -	\$ -	\$203,957	\$ 43,540	\$ -	\$197,694	\$ -	\$ -	\$ -	\$ -
	CAPITAL IMPROVEMENT	\$ 6,000	\$ 131,250	\$ 23,274	\$ 877,052	\$ 840,735	\$202,314	\$209,952	\$353,980	\$361,652	\$369,323	\$355,613	\$173,138	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	TOTAL	\$ 166,107	\$ 444,751	\$209,917	\$1,053,026	\$ 1,039,216	\$432,460	\$498,618	\$591,016	\$567,643	\$581,906	\$574,998	\$399,543	\$437,608	\$284,668	\$248,843	\$454,500	\$265,024	\$273,505	\$282,257	\$291,289
	EXPENDITURE																				
	MAINTENANCE	79.1	81.6	84.3	86.9	89.7	92.6	95.6	98.6	101.8	105.0	108.4	111.9	115.4	119.1	123.0	126.9	130.9	135.1	139.5	143.9
	UTILITIES & ADMINISTRATION	81.0	83.6	86.3	89.0	91.9	94.8	97.9	101.0	104.2	107.5	111.0	114.5	118.2	122.0	125.9	129.9	134.1	138.4	142.8	147.4
	CAPITAL RENEWAL	0.0	148.3	16.1	0.0	16.9	42.7	95.3	37.4	0.0	0.0	0.0	0.0	204.0	43.5	0.0	197.7	0.0	0.0	0.0	0.0
	CAPITAL IMPROVEMENT	6.0	131.3	23.3	877.1	840.7	202.3	210.0	354.0	361.7	369.3	355.6	173.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	TOTAL	166.1	444.8	209.9	1053.0	1039.2	432.5	498.6	591.0	567.6	581.9	575.0	399.5	437.6	284.7	248.8	454.5	265.0	273.5	282.3	291.3
	INCOME																				
	INCOME																				
	MAINTENANCE	84223	95136	97348	99561	101773	103986	106198	108411	110579	112791	115047	117348	119695	122089	124530	127021	129561	132153	134796	137492
	UTILITIES & ADMINISTRATION	81000	83592	86267	89027	91876	94816	97851	100982	104213	107548	110990	114541	118207	121989	125893	129921	134079	138369	142797	147367
	CAPITAL RENEWAL																				
	CAPITAL IMPROVEMENT																				
	RENT & FEES	1393	4700	4700	4794	4890	4988	5087	5189	5293	5399	5507	5617	5729	5844	5961	6080	6202	6326	6452	6581
	SUNDRIES	1500	1700	1700	1734	1769	1804	1840	1877	1914	1953	1992	2032	2072	2114	2156	2199	2243	2288	2334	2381
	TOTAL	168116	185128	190015	195116	200308	205594	210976	216459	221999	227691	233535	239538	245703	252036	258540	265222	272085	279136	286379	293820
	INCOME																				
	MAINTENANCE	84.2	95.1	97.3	99.6	101.8	104.0	106.2	108.4	110.6	112.8	115.0	117.3	119.7	122.1	124.5	127.0	129.6	132.2	134.8	137.5
	UTILITIES & ADMINISTRATION	81.0	83.6	86.3	89.0	91.9	94.8	97.9	101.0	104.2	107.5	111.0	114.5	118.2	122.0	125.9	129.9	134.1	138.4	142.8	147.4
	CAPITAL RENEWAL	0.0	0.0																		
	CAPITAL IMPROVEMENT	0.0	0.0																		
	RENT & FEES	1.4	4.7	4.7	4.8	4.9	5.0	5.1	5.2	5.3	5.4	5.5	5.6	5.7	5.8	6.0	6.1	6.2	6.3	6.5	6.6
	SUNDRIES	1.5	1.7	1.7	1.7	1.8	1.8	1.8	1.9	1.9	2.0	2.0	2.0	2.1	2.1	2.2	2.2	2.2	2.3	2.3	2.4
	TOTAL	168.1	185.1	190.0	195.1	200.3	205.6	211.0	216.5	222.0	227.7	233.5	239.5	245.7	252.0	258.5	265.2	272.1	279.1	286.4	293.8
	maintenance average over 10 years	\$ 202,140.26																			
	EXPENDITURE LESS CAP UPGRADE																				
	MAINTENANCE	79.1	81.6	84.3	86.9	89.7	92.6	95.6	98.6	101.8	105.0	108.4	111.9	115.4	119.1	123.0	126.9	130.9	135.1	139.5	143.9
	UTILITIES & ADMINISTRATION	81.0	83.6	86.3	89.0	91.9	94.8	97.9	101.0	104.2	107.5	111.0	114.5	118.2	122.0	125.9	129.9	134.1	138.4	142.8	147.4

Item	Description	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30
	CAPITAL RENEWAL	0.0	148.3	16.1	0.0	16.9	42.7	95.3	37.4	0.0	0.0	0.0	0.0	204.0	43.5	0.0	197.7	0.0	0.0	0.0	0.0
	TOTAL	160.1	313.5	186.6	176.0	198.5	230.1	288.7	237.0	206.0	212.6	219.4	226.4	437.6	284.7	248.8	454.5	265.0	273.5	282.3	291.3
		-\$ 160,107																			
	10 YEAR EXPENDITURE	\$ 2,209,127.98	\$ 220,912.8		\$ 259.6	\$ 259,631															
	10 YEAR INCOME	2021402.6	\$ 202,140.3		232.369881	\$ 232,370															
	SUSTAINABILITY INDEX																				
	DISPARITY	\$ 2	-\$ 260	-\$ 20	-\$ 858	-\$ 839	-\$ 227	-\$ 288	-\$ 375	-\$ 346	-\$ 354	-\$ 341	-\$ 160	-\$ 192	-\$ 33	\$ 10	-\$ 189	\$ 7	\$ 6	\$ 4	\$ 3

TEMORA SHIRE COUNCIL



OPERATIONAL & COMMUNITY LAND & PUBLIC BUILDINGS

ASSET MANAGEMENT PLAN

PART 5




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1. EXECUTIVE SUMMARY

1.1 What Council Provides

Under the heading of Community Land and Buildings, Council provides Parks, Gardens, Sporting Fields and Public Buildings to ensure that Temora has an extensive network of recreational open space and operational buildings, which are accessible, safe and efficient for public use by residents and visitors to Temora..

Within Temora Shire, the Parks, Gardens, Sporting Fields and Building assets shown below:

Parks and Gardens	Public Buildings & Facilities
Apex Park	Council Chambers
Aerodrome Park	Town Hall and Cinema
Bradley Park	Recreation Centre
Brophy Place	Temora Swimming Pool
Callaghan Park	Temora Rural Museum
Davey Park	Temora Library
Edis Park	Temora Rural Museum
Federal Park	Ariah Park Swimming Pool
Gloucester Park	Polaris Street Depot
Golden Gate Reserve	Temora Library
Harper Park	Temora Rural Museum & Visitor Information Centre
Hillview Park	Temora Recreational Centre
Lake Centenary	Temora Swimming Pool
Main Street Gardens	Ariah Park Swimming Pool
Paleface Park	Home and Community Care Centres
Pinney Park	Springdale Hall
Springdale Reserve	The Peppers Ariah Park
Temora West Park	
Town Hall Gardens	
The Pines	Operational Land
Sporting Fields	Saleyards
Ariah Park Recreational Ground	Temora Cemetery
Bob Aldridge Park	Ariah Park Cemetery
Father Hannan Oval (maintained but not Council owned)	Temora Garbage Tip
Temora West Sports Ground	Ariah Park Garbage Tip
Tennis Courts	
The Oval	
Recreation Ground	
Nixon Park	
Golf Course (Ariah Park)	
Temora Golf Course	

1.2 What does it Cost?

There are two key indicators of cost to provide the Parks, Gardens, Sporting Fields and Building Asset.

- X The life cycle cost being the average cost over the life cycle of the asset, and
- X The total maintenance and capital renewal expenditure required to deliver existing service levels in the next 10 years covered by Council's long-term financial plan.

The life cycle cost to provide the Parks, Gardens and Sporting Fields estimated at \$1.55 million per annum averaged over a 20-year period. Council's planned life cycle expenditure for year 1 of the asset management plan is \$1.84 million which gives a life cycle sustainability index of 1.2.

The total maintenance and capital renewal expenditure required to provide the Parks, Gardens Sporting Fields infrastructure service in the next 10 years is estimated at \$3.72 million. with \$12.3 million for Buildings and open space

Statistics on Temora Shire Parks and Sporting Fields				
Feature	Temora	Ariah Park	Springdale	Total
Town Population	4,700	322	240	5,262
Number of Parks, Sporting Fields maintained	19	6	1	26
Total area in hectares (* includes Golf Course)	141.8538*	40.0707*	4.1151	186.0396
Number of residents per hectare of open space	33.13	8.04	58.32	28.28
Area of park per 1000 resident (Minimum standard = 2.83 hectares)	30.18	124.44	17.15	35.4
Cost to Maintain Open Areas (2010/11 Expenditure)	\$547,338	\$53,085	\$4,766	\$605,189
Cost to Maintain per Person	\$116.45	\$164.86	\$19.86	\$115.01
Number of Parks	13	4		17
Total area in hectares	60.368	1.0931		61.4611
Number of residents per hectare of open space	77.86	293.77		
Area of park per 1000 resident (Minimum standard = 2.83 hectares)	12.84	3.35		
Cost to Maintain Parks and Gardens (2010/11 Expenditure)	\$299,521.55	15,277.53		\$314,799.08
Cost to Maintain per Person	\$63.73	\$47.45		
Number of Sporting Fields	6	2	1	9
Total area in hectares	80.4557	39.4021	4.1151	123.9729
Number of residents per hectare of Sporting Fields	58.41	8.1722	58.32	42.44
Area of Sporting Field per 1000 resident (Minimum standard = 2.83 hectares)	17.1	25.38	17.1463	23.56
Cost to Maintain Sporting Fields (2010/11 Expenditure)	\$247,616.43	\$37,607.48	\$4,766.26	\$289,990.17
Cost to Maintain per Person	\$52.68	\$116.79	\$19.86	\$55.11

1.3 Plans for the Future

Council plans to operate and maintain the Parks, Gardens, Sporting Fields and Building assets to achieve the following strategic objectives.

- X Ensure that Parks, Gardens, Sporting Fields are maintained at a safe and functional standard as set out in this asset management plan.
- X Ensure that capital renewal funding for the assets are maintained and completed on time.
- X Ensure that capital upgrade funding is available as per Council's Parks, Gardens, Sporting Fields and Buildings 20-year management plan.
- X Improve the Parks, Gardens, Sporting Fields and Buildings
- X Ensure efficient use of Council Resources
- X Reduction in the number of complaints regarding the standard of maintenance and preparation of recreational areas and buildings
- Ö Ensure buildings and operational land is maintained in a safe and functional standard as set out in this asset management plan

Modelling in this report assumes the Parks, Gardens, Sporting Fields and Buildings requirements are growing at a rate of 0.3 % per annum (based on historical growth statistics and the impact of growth of neighbouring shires and the airpark estate). While increased population will result in an increase in general rates income collected it will also result in higher usage which will result in reduced asset amenity and the possibility of increased level of service demands.

1.4 Lifecycle Management

The model for management of Parks, Gardens, Sporting Fields and Buildings relates particularly to the maintenance and renewal stages of asset life. Early in the life of an asset, its condition deteriorates slowly and maintenance is generally not required. This is often referred to the “**Do Nothing**” phase of an asset's life. As the asset ages, it moves into what is known as the “**Maintain**” phase. Maintenance activities will need to be performed to minimise continued deterioration. As the asset moves towards the end of its life, activities are undertaken that restore the asset to a condition close to that of the original. This is referred to as the “**Renewal**” phase.

The importance of the time for intervention for renewal is paramount. If renewal activities are not undertaken in a timely manner, the condition of the asset will deteriorate rapidly to failure, and the cost of reconstruction may be many times that of renewal activities.

1.5 Financial Summary

A ten-year analysis of existing pavement conditions and costs has been undertaken to determine funding implications for the asset condition of the Parks, Gardens, Sporting Fields and Buildings. Annual adjustment for increases in the cost of Parks, Gardens and Sporting Fields construction materials and services would need to be made to accurately represent long-term results.

Modelling indicates that an average annual renewal allocation of \$1.32 million is sufficient to keep the Parks, Gardens, Sporting Fields, in the current overall condition. An annual allocation of \$1.32

million for renewals, including normal maintenance is funded by Council to maintain the current overall condition in the Parks, Gardens, Sporting Fields..

Similarly, for buildings and operational land, the modelling indicates that an average annual renewal allocation of 1.14 million is insufficient to keep the buildings and operational land in the current overall condition. An annual allocation of \$1.01 million for renewals, including normal maintenance, which is funded by Council to maintain the current overall condition of the buildings over the next 10-year period.

1.6 Measuring our Performance

An asset management plan is a dynamic document, reflecting and responding to changes over time. Monitoring of this Parks, Gardens, Sporting Fields and Building Asset Management Plan is required to:

- X Ensure compliance with the proposed improvement program milestones.
- X Ensure compliance with adopted standards and procedures for condition and performance.

A full review of this asset management plan should be undertaken every three to five years to document progress and set out proposals for the next five years. The recommendations below summarise the Improvement Program contained in Section 8 of this document.

Recommendations

This actions resulting from this asset management plan are:

- X Obtain Council approval of this asset management plan.
- X Confirm desired levels of service by establishing current performance and setting performance targets. Have these levels of service adopted by Council.
- X Review the level of service for routine maintenance response times.
- X Further Investigate and improve estimates of growth in modelling.
- X Expand the asset groups covered by this plan to include all Council Parks, Gardens, Sporting Fields and Building Assets.
- X Neighbourhood parks be situated within 500 metres of residential areas.
- X Council place funds in to the Public Toilet and Building Reserve to upgrade the toilets at Temora West Park and other public buildings
- X Maintenance agreements be established between Council and Community Groups
- X Systematically separate capital upgrade expenditure from capital renewal expenditure
- X Improve the delineation between planned, cyclic and reactive maintenance.

- X Develop data collection processes to ensure repeatability and ongoing improvement of condition data is entered into the "AIM" system.
- X Assess the structure and resources within Council, to ensure that the Asset Management Plan can be implemented.
- ö Ensure wheel chair access at all facilities

2. INTRODUCTION

2.1 Background

The fundamental purpose of this Parks, Gardens, Sporting Field and Building Asset Management Plan (PGSBAMP) is to improve Council's long-term strategic management of its Parks, Gardens, Sporting Field and Building assets in order to cater for the community's desired levels of service in the future. This will be undertaken in accordance with Council's key strategic documents and demonstrates reasonable management in the context of Council's available financial and human resources.

The building assets owned and maintained by Council represent Council's commitment to provide the community strong and stable infrastructure to provide administrative and cultural facilities. The facilities provide for cultural and social events administrative and operational processes childcare, services for the elderly and disadvantaged in our community. It is critical that Council maintains these assets so that they are

It is common knowledge that sporting, physical and cultural activities are essential for a healthy lifestyle and longevity of a community. Many studies have further proven that sport, physical and cultural activities lead to:

- X Increased community pride and identity
- X Crime prevention
- X Development of life skills
- X Improved mood
- X Personal well-being
- X Higher self esteem
- X Improved Social behaviour and social cohesion

The PGSBAMP achieves this by setting standards, service levels and programmes that Council will develop and deliver. The standards and service levels have been set in accordance with user needs, regulations, industry practice and legislative codes of practice.

In 2008 Council adopted the 20-year Parks, Gardens, and Sporting Field Capital Strategy which focused solely on the shires public parks and sporting fields. This strategy proved extremely successful and was instrumental in not only creating a greater awareness of the importance of public open space but also in developing a hierarchy structure for maintaining and upgrading the Parks and Sporting Fields..

This asset management plan relating to Parks, Gardens and Sporting Fields is to be read with the following associated planning documents:

- X Parks, Gardens and Sporting 20-year maintenance and capital renewal plan
- X Temora Shire Council Management Plan 2011/12 – 2015
- X Temora Shire Council Community Strategic Plan 2011— 2020
- X Temora Shire Council 2008 Resident Satisfaction Survey Result

Council has also considered the requirements for Public Buildings and is developing a plan for improvements to these buildings such as

- ö Establishment of the Town Hall Picture Theatre
- ö Plans for further improvements to the Town Hall
- ö Support for TASK in the construction of a heated pool at Temora.
- ö Support to the Arianah Park Community for aged care housing

This PGSBAMP covers the following infrastructure assets, which are summarised in Table 2.1

Table 2.1. Assets covered by this Plan

Asset category	Area Ha.	Land Value (\$)	Replacement Value Buildings & Infrastructure (\$)	TOTAL
Parks and Gardens				
Apex Park	0.1226	\$15,000		\$1,650
Bradley Park	0.7434	\$10,000		
Brophy Place	0.1693	\$		
Callaghan Park	2.5391	\$		
Davey Park	0.2074	\$3,000		
Edis Park	0.6686			
Federal Park	0.5608	\$20,000	\$283,640	\$303,640
Gloucester Park	1.575	\$37,500	\$148,323	\$185,823
Golden Gate Reserve	4.0989			
Harper Park	0.0478	\$4,050		
Hillview Park	0.7215			
Lake Centenary	48.5829	\$159,041	\$433,135	\$592,176
Main Street Gardens	Various			
Paleface Park	0.1019	\$44,000	\$161,543	\$201,543
Pinney Park	0.2919	\$20,800	\$79,982	\$100,785
Springdale Reserve	4.1151	\$20,000	\$20,000	\$40,000
The Pines		\$8,700		\$8,700
Temora West Park	0.4048	\$20,800		
Town Hall Gardens	Various			\$13,510
Sporting Fields				
Ariah Park Recreational Ground	4.6946	\$15,000	\$327,327	\$342,327
Bob Aldridge Park	2.8704	\$44,300	\$188,864	\$233,164
Father Hannan Oval	0.9685			(Not Council Asset)
Temora West Sports Ground	2.1449	\$57,000	\$165,304	\$222,304
Tennis Courts	1.03	\$20,000	\$170,000	
The Oval	1.6148	\$35,000	\$59,653	\$94,653
Temora Recreation Ground	3.2881	\$102,300	\$206,005	\$308,305
Nixon Park	6.8771	\$148,144	\$1,344,174	\$1,492,318
Other Open Space				
Temora Golf Course	62.6919			
Ariah Park Golf Course	34.7075			
Public Buildings				
Ariah Park Council Depot		\$17,500	\$102,500	\$120,000
Ariah Park Swimming Pool		\$600	\$536,500	\$580,800
Ariah Park Golf course		\$25,000	\$80,000	\$105,000
Ariah Park Tip		\$7,500	\$4,450	\$11,950
Council Chambers		\$35,000	\$3,330,091	\$3,365,091
Peppers Village Ariah Park		0	\$56,000	\$56,000
Polaris Street Depot		\$35,000	\$1,020,000	\$1,050,000
Recreation Centre		\$6,030	\$2,900,000	\$2,906,030
Temora Cemetery		\$10,000	\$51,214	\$61,214
Town Hall and Cinema		\$60,000	\$3,417,095	\$3,477,095
Temora Library		\$120,000	\$4,081,601	\$4,201,601
Temora Rural Museum		\$188,945	\$1,565,489	\$1,754,434
Temora Swimming Pool		\$34090	\$348,746	\$382,836
Temora Tip		\$7,500	\$12,240	\$19,740
Temora Saleyards		\$40,000	\$118,937	\$158,937

2.2 Asset Management Framework Applicable to PGSAMP

2.2.1 National Framework for Local Government Financial Sustainability

In March 2007, the Local Government and Planning Ministers' Council (LGPMC) agreed to a nationally consistent approach to asset planning and management, financial planning and reporting and assessing financial sustainability. Each State Minister endorsed the National Frameworks for Financial Sustainability in Local Government for implementation in the context of their relationships with their Local Government sectors.

The National Frameworks consist of three main components as follows:

1. Asset Planning and Management

This framework consists of seven elements which each State and Territory is expected to adopt as follows:

- X Development of an **asset management policy** - Each state/territory is expected to develop an asset management policy, which provides high-level guidance to assist councils in developing their own asset management policy.
- X Strategy and Planning — Councils should be provided with guidance from the State on developing an **asset management strategy**, which is designed to support and implement its asset management policy;
- X **Governance and Management Arrangements** — Councils should be encouraged to apply and effect good governance and management arrangements which link asset management to service delivery and include assigning roles and responsibility for asset management between the CEO, the Council and senior managers;
- X **Defining Levels of Service** — mechanisms should be established that include community consultation to define the levels of service Councils are expected to provide from their asset base;
- X **Data and Systems** — a framework for collection of asset management data should be established;
- X **Skills and Processes** — the asset management framework should contain a continuous improvement program;
- X Evaluation — the asset management framework should contain a **mechanism to measure its effectiveness**.

2. Financial Planning and Reporting

Focuses on local government's financial management at both the strategic and operational levels. The framework requires the preparation of:

- X A long-term strategic plan, which includes a financial component, demonstrating how the outcomes of the plan will be funded.

- X An annual budget format comparable with the audited financial statements, linked to strategic objectives, which at a minimum should include:
 - § Estimates of revenue and expenditure
 - § An explanation of how revenue will be applied
 - § An explanation of the financial performance and position of the council.
- X Annual financial statements and annual report, which should include:
 - § A report on council's operations during the financial year
 - § An explanation to the community on variations between the budget and the actual results and how this may impact on the strategic plan
 - § Audited financial statements for the financial year (prepared and audited in accordance with Australian Accounting and Auditing Standards).

3. Criteria for Assessing Financial Sustainability.

The National Frameworks define a council's long-term financial performance and position as sustainable when planned long term services and infrastructure standards are met without unplanned increases in rates and charges, or disruptive cuts to services.

The frameworks provide a range of financial sustainability indicators. However, they stress that the usefulness of indicators is not in the numbers themselves but the analysis of what is driving the indicator.

2.2.2 The NSW Department of Local Government - DIG Model

The DLG framework is to reshape the existing framework in some way to strengthen strategic focus, streamline the planning and reporting processes and encourage integration between the various council's strategic documents/plans. The proposed model is designed as a continuous framework, rather than a static planning model.

The recommendations provided through this Plan are essentially equipping Council to take a strategic approach to comply with this framework.

It is designed to allow councils more autonomy in responding to their community's various needs, and encourages elected representatives to play a leading role in developing long term plans.



Source – NSW Department of Local Government – Asset Management Planning for NSW Local Government – page 15

Fig 2.1 NSW LG DIG Model

Why mandate strategic planning?

This model includes a mandatory requirement for a long-term asset management plans. One of the recurrent themes emerging from the review is that councils need to develop a stronger strategic focus.

How is planning and reporting integrated?

The diagram below shows how the objectives from the Community Strategic Plan may be cascaded through the system.



For example, a Council's Community Strategic Plan might identify the objective of "A safe and healthy community" and nominate key strategies for achieving this. These strategies might include a wide variety of approaches, such as ensuring quality water supply and safe operation of sewerage services, ensuring efficient collection of domestic and commercial waste, promoting health education programs, lobbying for more aged care services in the area, developing crime prevention strategies for the community, and improving Parks, Gardens and Sporting Fields.

These intentions would be translated into the Delivery Program in the following way, for example:

Plan:

Improving Parks, Gardens and Sporting Fields Delivery Methods:

- X Undertake a review of the condition of all Parks, Gardens and Sporting Fields in Council's area.
- X Update Councils Parks, Gardens and Sporting Fields 20-year funding Policy.
- X Identify funding options for Parks, Gardens and Sporting Fields management.
- X Identify key community concerns with Parks, Gardens and Sporting Fields safety.
- X Develop programs to address key Parks, Gardens and Sporting Fields safety issues.
- X The Operational Plan would then focus on what Council would do towards achieving each of these goals in the coming year. For example:

Develop Parks, Gardens and Sporting Fields safety programs: Actions for 2011-21

X Optimised capital renewal programs

X Explore joint project options with sporting groups.

In this way, the objectives of the Community Strategic Plan are cascaded down through Council's planning framework, so that general directions and objectives for the community are translated into plans, then into programs and finally, individual actions.

The Integrated Planning and Reporting project aims to improve Councils' capacity for long-term planning and should help to identify resourcing needs earlier in the planning cycle. The requirement to consider resourcing over the 10-year period of the plan will help Councils to take a wider view of their needs, considering not only finances, but also human resources and asset requirements. They will be able to identify the additional resources that could be raised through borrowings, rate variations or grants and will be in a better position to take maximum advantage of funding opportunities, resource sharing options and strategic alliances.

2.3 Key stakeholders

The key stakeholders are internal custodians as well as external individuals, companies, service authorities, government authorities and community groups who have a vested interest in management of Parks, Gardens and Sporting Fields. The following groups have been identified as key stakeholders in the management and use of the Parks, Gardens and Sporting Fields related assets:

Elected Members	Endorsement of the asset management policy, strategy and plans. Set high level direction through the development of asset management principles in the Community Strategic Plan.
Senior Management	Endorse the development of asset management plans and provide the resources required to complete this task. Set high level priorities for asset management development in Council and raise the awareness of this function among Council staff and contractors. Support the implementation of actions resulting from this plan and prepared to make changes to a better way of managing assets and delivering services. Support for an asset management driven budget and Long Term Financial Plan (LTFP).
Corporate Services	Consolidating the asset register and ensuring the asset valuations are accurate. Development of supporting policies such as capitalisation and depreciation. Preparation of asset sustainability and financial reports incorporating asset depreciation in compliance with current Australian accounting standards. Asset Management and GIS support and admin.
Field Services Staff	Provide local knowledge level detail on all Parks, Gardens and Sporting Fields assets. They verify the size, location and condition of assets. They can describe the maintenance standards deployed and Council's ability to meet technical and customer levels of service.
External Users such as the Sports Council	Tourists and Visitors (as occasional users); Parks, Gardens and Sporting Fields Users;; Local Businesses

2.4 Goals and Objectives of Asset Management

The Council exists to provide services to its community. Some of these services are provided by infrastructure assets. Council has acquired infrastructure assets by 'purchase', through construction by council staff and by donation of assets constructed by developers and others to meet increased levels of service.

Council's goal in managing infrastructure assets is to meet the required level of service in the most cost effective manner for present and future consumers. The key elements of infrastructure asset management are:

X **Taking a life cycle approach,**

- § Have precise knowledge of what Council owns or has responsibility for or is legal liable for;
- § Record and extract information on these assets in a register, down to an acceptable level which can be maintained and updated easily;
- § Report on our annual depreciations and asset consumption at an asset component level;
- § Develop cost-effective management strategies for the long term,

X **Developing cost-effective management strategies for the long term,**

- § Understand the long term (10-20 years) funding needs of our Parks, Gardens and Sporting Fields to meet our strategic expectations in both capital and maintenance expenditure;

X **Providing a defined level of service and monitoring performance,**

- § Measure and monitor the condition, performance, utilisation and costs of assets down to the managed component level and aggregate this data up to give outputs of cost and performance at the master level;
- § Understand and record the current levels of service in terms of responsiveness and performance;
- § Understand the likely future levels of service required based on population growth, demographic changes and community expectations;

X **Understanding and meeting the demands of growth** through demand management and infrastructure investment,

X **Managing risks** associated with asset failures,

X **Sustainable** use of physical resources,

X **Continuous improvement** in asset management practices.¹

- § Have uniform processes across our whole organisation for the evaluation of any investment in:

¹ IIMM 2006 Sec 1.1.3, p 1.3

- (a) Renewal, upgrades and expansions of existing assets;
- (b) Creation of new assets;
- (c) Maintenance of existing assets; and
- (d) Operational expenditure to deliver services.

This asset management plan is prepared under the direction of Council's vision, mission, goals and objectives.

Council's vision is:

To sustain and grow the Temora Shire as a rural community of choice for current and future residents, being united in our heritage yet open to growth and diversity

To celebrate our past achievements in sport, culture and enterprise whilst maintaining our commitment to the future in providing a safe, happy and healthy environment for all

Success through determination and inspiration

Council's mission is:

To achieve the best possible outcomes for our community

Council Values relevant to this asset management plan are:

- X Community:**
In partnership with the community, respond to needs and aspirations in a caring, fair and accountable manner through the provision of quality services.
- X Governments:**
We encourage an open, productive relationship with all spheres of government and other organisations in the best interests of our community.
- X Customers and Suppliers:**
Conduct our business with integrity and respect, ensuring consistency and accountability in all our dealings.
- X Environment**
Conserve, enhance and develop our environment in an equitable and sustainable manner, acting as custodians for future generations.

2.5 Plan Framework

Key elements of the plan are

- X Levels of service** – specifies the services and levels of service to be provided by council.
- X Future demand** – how this will impact on future service delivery and how this is to be met.

- X Life cycle management** – how Council will manage its existing and future assets to provide the required services
- X Financial summary** – what funds are required to provide the required services.
- X Asset management practices**
- X Monitoring** – how the plan will be monitored to ensure it is meeting Council’s objectives.
- X Asset management improvement plan**

A Parks, Gardens and Sporting Fields map for preparing an asset management plan is shown below.

2.6 Core and Advanced Asset Management

This Parks, Gardens and Sporting Fields Asset Management Plan is prepared as a ‘core’ asset management plan in accordance with the International Infrastructure Management Manual. It is prepared to meet minimum legislative and organisational requirements for sustainable service delivery and long term financial planning and reporting. Core asset management is a ‘top down’ approach where analysis is applied at the ‘system’ or ‘network’ level.

Future revisions of this asset management plan will move towards ‘advanced’ asset management using a ‘bottom up’ approach for gathering asset information for individual assets to support the optimisation of activities and programs to meet agreed service levels.

Table 2.2 Goals and how these will be addressed

Objective 1: Strong, cohesive and connected community			
Strategies		Actions	
1.1	Build and support opportunities for connection, trust and interaction in the community	X	Support, provide and maintain community facilities as focal points for community involvement, learning, leisure and sporting activities
		X	Plan and implement appropriate public and civic spaces
		X	Explore improvements to community access to facilities and venues across the shire
1.2	Promote community pride reflecting on past and present achievements and future possibilities	X	Support and promote special events to celebrate our culture, diversity and history
		X	Improve the promotion of our achievements and successes – both community and Councils

Objective 2: A safe community			
Strategies		Actions	
2.1	Investigate and develop crime prevention initiatives to improve the sense of personal and community safety in the shire	X	Ensure good open space design and management in crime prevention
		X	Ensure safe roads, footpaths and crossings, safe parks and playgrounds
		X	Maintain urban development guidelines
		X	Support community and personal safety through appropriate services

2.2	Create partnership with community, volunteers and government agencies to build a safer community	X	Continue to work together with Police
2.3	Increase awareness and prevention of violence	X	Through urban planning, ensure a child friendly environment

Objective 3: A socially inclusive community

Strategies		Actions	
3.1	Respect and celebrate the cultural and social diversity of the Shire	X	Promote and facilitate cultural events
		X	Ensure an understanding of, respect for and responsiveness to the Shires social diversity – historically, current and future.
3.2	Focus on the needs and opportunities for children and families	X	In calibration with stakeholders, develop and maintain recreation facilities – including playgrounds, skate parks, sporting facilities, and parks.
3.3	Focus on the needs and opportunities for young people	X	In calibration with stakeholders, develop and maintain recreation facilities – including playgrounds, skate parks, sporting facilities, and parks.
		X	Ensure young people have safe and affordable places to be, meet, learn and connect – recreation facilities

Objective 3: A socially inclusive community

Strategies		Actions	
3.4	Focus on the needs and opportunities for older people	X	In calibration with stakeholders, develop and maintain recreation facilities – including parks, cycleways, walking tracks, fitness facilities.
		X	Ensure the diverse need of older people are acknowledged and supported, including age diversity, cultural needs, health needs, socio-economic need and social isolation
3.5	Focus on the needs and opportunities for people with disability	X	Continue to meet legislative requirements and implement and review the Disability Discrimination Act
		ö	Continue to proactively address barriers and improve access to infrastructure and services for people with a disability
		ö	In calibration with stakeholders, support the diverse needs of people with a disability through services and facilities, including libraries and resources, groups and programs
		ö	Working with key agencies and community to support the needs of carers of people with disabilities

Objective 4: A liveable environment

Strategies		Actions	
4.1	Develop and maintain quality open space with a wide range of recreation, sporting and leisure opportunities	X	Improve open space and urban design policy
		X	Provide, maintain and improve parks
		X	Ensure a range of leisure and recreation activities that are safe, accessible and meet community needs – i.e. parks, paths, community facilities, bike paths.
		X	Implement sustainable landscapes across reserves and streetscapes
		X	Provide and maintain appropriate sporting facilities and grounds
		X	Provide and maintain safe and accessible playgrounds with

		X	appropriate facilities – i.e. shade sails, seating, amenities
		X	Ensure facilities are local and accessible for the community, particularly in rural villages
		X	Ensure consultation with community on open space needs
Objective 4: A liveable environment			
Strategies		Actions	
4.2	Ensure the natural, open space and built environments promote health, physical activity and community interaction and meet the needs of a diverse community.	X	Create, improve and maintain parks and open space with facilities such as shade, seating, BBQ's and accessible toilets.
		X	Provide and maintain appropriate sporting facilities and grounds (see 4.1.5).
		X	Provide and maintain accessible and appropriate playgrounds and facilities for children and young people — ie skate park, bike tracks,
		X	Improve streetscapes and linear parks.
		X	Ensure consultation with the community on open space needs.
		X	Provide, maintain and promote accessible facilities and equipment
		X	Support sporting groups and clubs, and promote sporting successes and the community benefits of sport.
4.3	Promotion of Shire to a wider tourism market, state, nationally and overseas	X	Promote the Shire outside the region, to both build community pride and attract new residents.
		X	Promote the recreational / leisure facilities and tourism i.e. to Golf Courses, Rural Museum, the Aviation Museum and villages
		X	Plan for future community demand and ensure adequate access to open space and leisure and recreation options.
		X	Promote a positive image of Temora, through our achievements and future possibilities (see 1 .4.5).

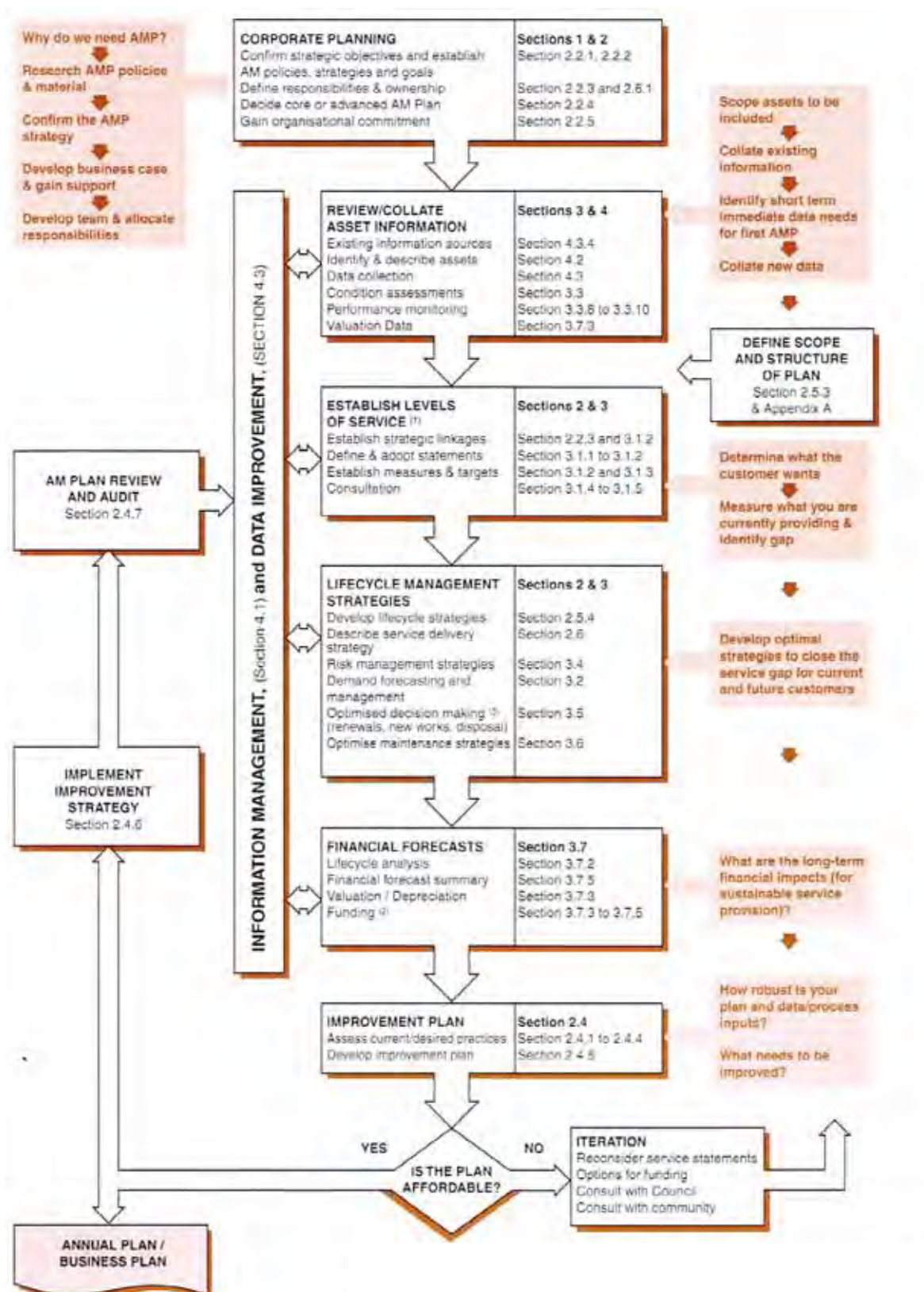


Fig 2.2 Parks, Gardens and Sporting Fields Map for Preparing an Asset Management Plan
Source: IIMM Fig 1.5.1, p1.111

3. LEVELS OF SERVICE

Levels of Service relate to outcomes the customer receives in terms of quality, quantity, responsiveness and performance as provided by the asset. To achieve and sustain acceptable standards of service for Council's Parks, Gardens, Sporting Fields and Building assets requires an annual commitment of funds. These funds provide for regular and responsive maintenance and for timely renewal or replacement of the assets. The provision of adequate financial resources ensures that the Parks, Gardens, Sporting Fields and Buildings are appropriately managed, preserved and/or improved. Financial provisions below requirements impacts directly on community development and if prolonged, results in substantial needs for "catch up" expenditure imposed on ratepayers in the future. Additionally, deferred renewal results in increased and escalating reactive maintenance as aged assets deteriorate at increasing rates.

In developing the levels of service as documented in this PGSBAMP, Council has given due regard to the strategic goals and objectives in the 2011-2015 Strategic Plan which sets out the strategic direction of Council to implement its Management Plan over the following four years. Council has also given due regard to Legislative requirements and Australian Standards and stakeholder expectations in the form of customer research and expectation surveys.

The levels of service documented in this PGSAMP therefore reflect the best assumptions of current levels of service provided by Council, for the benefit of the community, in the context of Council's financial and human resources.

Councils current Level of Service are set out in Appendix D of this Asset Management Plan.

3.1 Customer Research and Expectations

Council participates in a Performance Measure Customer Satisfaction Survey every four years in August prior to the Council election. This survey is distributed to all residents, requesting their level of satisfaction with Council's services. The most recent customer satisfaction survey (2008) reported satisfaction levels for the following Parks, Gardens and Sporting Fields related services

Table 3.1. Community Satisfaction Survey Levels

Performance Measure	Satisfaction Level (1 to 5)				
	Very Satisfied	Fairly Satisfied	Satisfied	Somewhat satisfied	Not satisfied
Parks & Gardens		4.06			
Sporting Fields		4.10			
Garbage Tips			3.50		
Cemeteries		4.12			
Library Facilities		4.23			
Public Toilets			3.39		
Town Hall			3.4		
Temora Saleyards			3.50		
Temora Recreation Centre		4.13			
Ariah Park Pool			3.40		

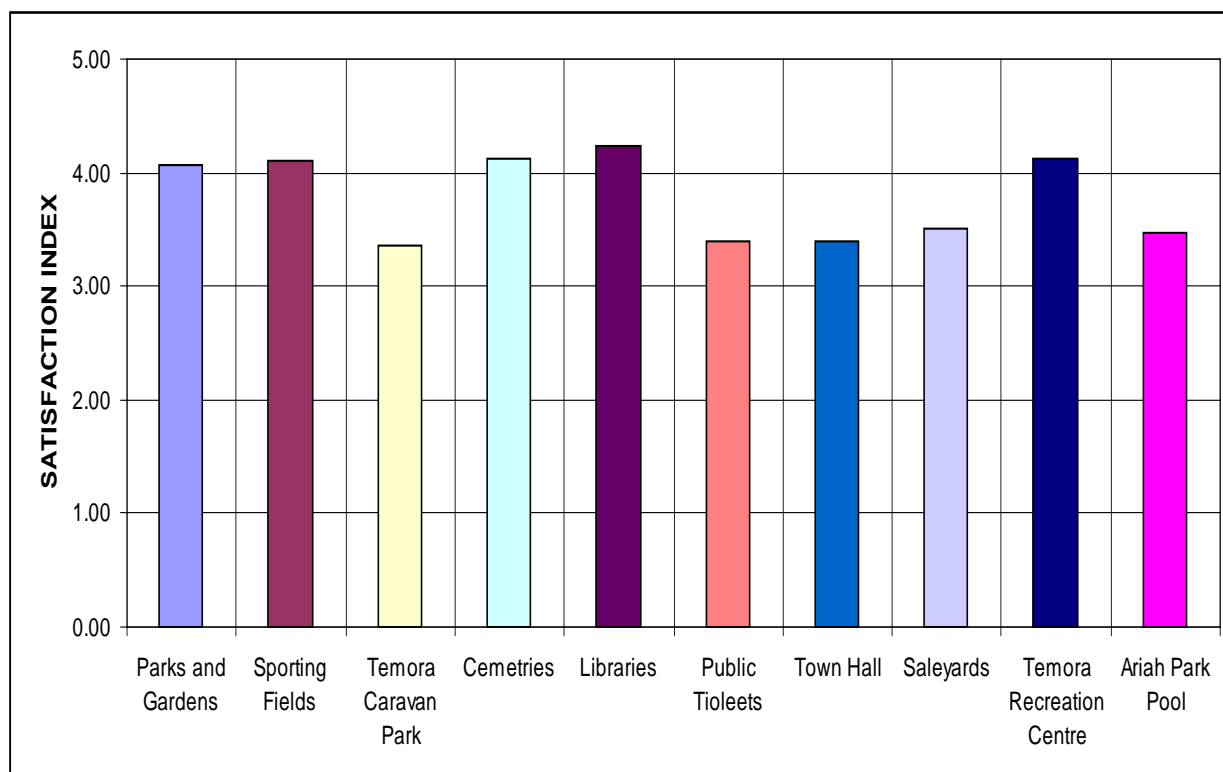


Figure 3.1 Satisfaction Survey for Parks, Gardens Sporting Fields and Buildings

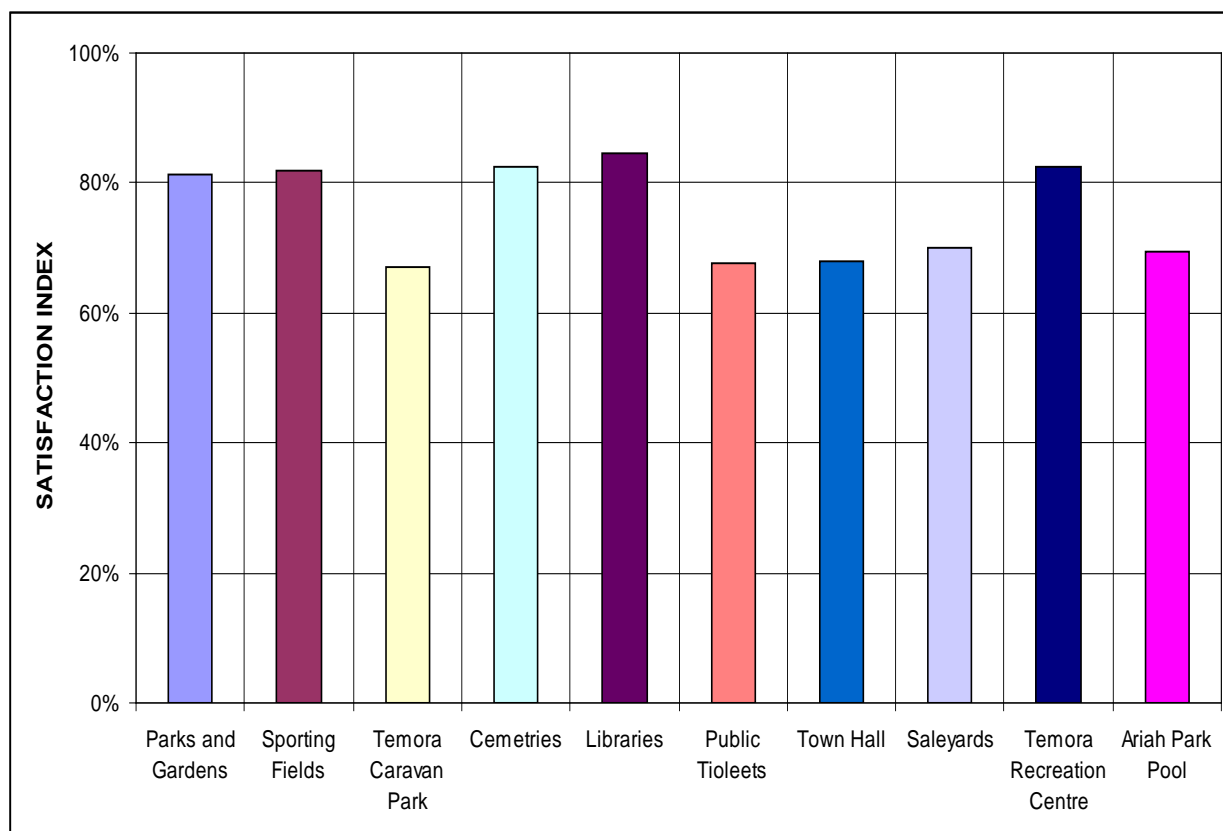


Fig 3.1 Satisfaction Survey results as a percentage satisfied

The results of the 2008 survey indicate that the overall level of satisfaction with Council for Parks, Gardens and Sporting Fields related infrastructure is good at 81% and 82% respectively, with Public Toilets having the lowest result at 67.8%. Refer to Table 3.1, Figure 3.1a and 3.2.

Council uses this information in developing the Strategic Management and Social Plans and in allocation of resources in the budget.

3.2 Legislative Requirements

Council has to meet many legislative requirements including Australian and State legislation and State regulations. These include:

Table 3.2. Legislative Requirements

Legislation	Requirement
National Asset Management Framework Legislation 2010	Focuses on long term financial sustainability and provides a mandate to have long term strategy, financial statements and annual reporting mechanisms. AM plans are likely to be audited.
DLG Integrated Planning NSW	Key requirement is to integrated community plans with operational and delivery plans.
Local Government Act 1993	Sets out role, purpose, responsibilities and powers of local governments including the preparation of a long term financial plan supported by asset management plans for sustainable service delivery.
Occupational Health and Safety Act 2000	Aims to secure the health, safety and welfare of people at work. It lays down general requirements which must be met at places of work in New South Wales. The provisions of the Act cover every place of work in New South Wales. The Act covers self employed people as well as employees, employers, students, contractors and other visitors.
Heritage Act 1997	Act to conserve the environment heritage of the State
Building Code of Australia	Enable the achievement of nationally consistent, minimum standards of relevant health, safety, (including structural safety and safety from fire), amenity and sustainability objectives efficiently
Electrical Safety Act 2002	Regulations on the insulation, reporting and safe use of electricity
Building Fire and Safety Regulations 1991	Regulates for means of escape, limitations of people in buildings, fire and evacuation plans and testing of special fire services and installation
Plumbing and Drainage Act 2002	Requirements for plumbing and drainage
Occupational Health and Safety Regulation 2001	Regulations on the control and management of risk in the work place.
The Protection of the Environment Operations Act 1997 (POEO Act)	Is the key piece of environment protection legislation administered by Department of the Environment and Climate Change (DECC). The POEO Act enables the Government to set out explicit protection of the environment policies (PEPs)

Legislation	Requirement
	and adopt more innovative approaches to reducing pollution.
Disability Discrimination Act 1992	Sets out the responsibilities of Council and staff in dealing with access and use of public infrastructure.
Australian Accounting Standards.	<p>Sets out the financial reporting standards relating to infrastructure assets. Standards of particular relevance to Infrastructure Assets include:</p> <ul style="list-style-type: none"> • AASB116 Property, Plant & Equipment — prescribes requirements for recognition and depreciation of property, plant and equipment assets • AASB136 Impairment of Assets — aims to ensure that assets are carried at amounts that are not in excess of their recoverable amounts • AASB1021 Depreciation of Non-Current Assets — specifies how depreciation is to be calculated • AAS1001 Accounting Policies — specifies the policies that Council is to have for recognition of assets and depreciation • AASB1041 Accounting for the reduction of Non-Current Assets — specifies the frequency and basis of calculating depreciation and revaluation basis used for assets • AAS1015 Accounting for acquisition of assets — method of allocating the value to new assets on acquisition
Temora Shire Parks, Gardens and Sporting Fields Management Plan	Sets out the criteria for maintenance , capital renewal and capital upgrade for the Parks, Gardens and Sporting Fields network
Australian Standards	<p>Including:</p> <ul style="list-style-type: none"> § AS4685.1-2004 Playground Equipment – General safety requirements and test methods § AS4685.1-2004/Amdt 2-2008 Playground Equipment – General safety requirements and test methods § AS4685.2-2004 Playground equipment – Particular safety requirements and test methods for swings § AS4685.2-2004/Amdt 1-2006 Playground equipment – Particular safety and test methods for swings § AS4685.3-2004 Playground equipment – Particular safety requirements and test methods for slides § AS4685.3-2004/Amdt 1-2006 Particular safety requirements and test methods for slides § AS4685.4-2004 Play equipment – Particular safety requirements and test methods for runways § AS4685.5-2004 Playground equipment – Particular safety requirements and test methods for carousels § AS4685.5-2004/Amdt 1-2006 Playground equipment – Particular safety requirements and test methods for carousels § AS4685.6-2004 Play Equipment – Particular safety Requirements and test methods for rocking equipment § AS4685.6-2004/Amdt 1-2008 Playground equipment – Particular safety requirement and test methods for rocking equipment § AS4866.1-2007 Playing field equipment – Soccer goals – Safety Aspects § AS/NZS4486.1-1997 Playgrounds and playground equipment – Development, installation, inspection, maintenance and operation • AS/NZS 4360:2004 Risk Management § HB 4360:2004 Risk Management Guidelines — Companion to AS/NZS 4360:2004 § AS2560.2.3-2007 Sports lighting – Specific applications - Lights for football (all codes)

3.3 Current Levels of Service

Council has defined a two tier level of service.

Community Levels of Service relates to how the community receives the service in terms of safety, quality, quantity, reliability, responsiveness, cost/efficiency and legislative compliance.

Supporting the community service levels are operational or technical measures of performance developed to ensure that the minimum community levels of service are met. These technical measures relate to service criteria such as:

- X Maintenance is work undertaken to ensure that all assets continue to meet the required performance and standard throughout their useful life.
- X There are two strategies of maintenance adopted, namely “preventative” maintenance and “reactive” maintenance.
- X Preventative maintenance – retains an asset in its original condition as far as possible, by providing a systematic inspection, detection and prevention of possible failure. Preventative maintenance is usually programmed.
- X Reactive maintenance – preformed as a result of an unexpected failure.

Service Criteria	Technical measures may relate to
Quality	Smoothness of Parks, Gardens and Sporting Fields Quality grassed playing surfaces Buildings meet appropriate standards
Customer satisfaction	Area of parks per resident Regular maintenance Buildings meet the needs of residents
Accessibility	Number of Parks, Gardens and Sporting Fields per resident Reasonable access to facilities
Safety	Number of injury/accidents, condition of playground facilities
Risk	Capital renewal undertaken when required

Council's current service levels are summarised in Table 3.3 and detailed in Appendix D

Table 3.3. Current Service Levels

Regional Parks, Gardens and Sporting Fields and Local Rural Parks, Gardens and Sporting Fields

Key Performance Measure	Level of Service	Performance Measure Process	Performance Target	Current Performance
COMMUNITY LEVELS OF SERVICE				
Quality	Well maintained and suitable Parks, Gardens and Sporting Fields Buildings look well maintained and clean	Customer requests Customer Survey	< 2 per annum	5 per year
	Quality Watering	Customer	Thickness of grass no	Meets current needs

Key Performance Measure	Level of Service	Performance Measure Process	Performance Target	Current Performance
		Requests	undulations	
	Building availability and accessible. Adequate accommodation.	Customer requests	Satisfactory community and administrative facilities appropriate to meet needs	To be determined
Customer satisfaction	Meets Parks, Gardens and Sporting Fields user requirements for: - Playground equipment - accessibility	Customer service requests	100% customer satisfaction	81% (satisfaction survey 2008)
Accessible	Provide a fully accessible	Customer service requests	100% compliance	100% compliance except when a Parks, Gardens and Sporting Fields are closed for maintenance, upgrading, renewal or for public event, then appropriate notification will be given to users, through advertisement
	Buildings easy to access and fit for their required use	Customer service request	< 2 per year	100% compliance
Safety	Provide safe recreational areas and buildings	Accident reports Customer service requests	0 per annum	1 per year
TECHNICAL LEVELS OF SERVICE				
Condition	Maintain grassed surface and equipment - optimal maintenance	Number of items renewed each year	Maintain Capital upgrade	Meets current targets
		Average age of equipment	7.5 years	7 years (2008)
		Condition rating of equipment	< 5% < condition 4	TBC
	Maintain surface integrity	undulations repaired before depth is excessive	< 150 mm	90% compliance
	Provide appropriate building maintenance	Routine repairs and preventative maintenance undertaken	Hazard identification controlled or removed	Proactive and reactive maintenance to limit of budget allocation. If required report to Council for additional funding.
	Renewal	Replacement of building components	Implement a planned renewal and maintenance program that is proactive rather than reactive	Renewal program reviewed annually
Function	Parks, Gardens and Sporting Fields meets Hierarchy requirements	Annual compliance inspection	100% meets desired condition	100% (2008)
	Provide buildings to support the services provided by Council	Suitable buildings	Community satisfied with buildings provided	Inspect buildings and identify deficiencies in the required level of service
Cost Effectiveness	Maintain Parks, Gardens and Sporting Fields by proactive repairs	% of maintenance completed	100% proactive work value	TBC
Risk	Parks, Gardens and Sporting Fields network condition is maintained at optimum threshold	No damaged equipment, good grass cover without weeds	No Parks, Gardens and Sporting Fields to be in a condition	TBC
	Remove hazards from building to be user and worker friendly facilities	Respond to complaints	Regular inspections	Budget for reactive maintenance

3.4 Desired Levels of Service

At present, indications of desired levels of service obtained from various sources including the Customer Satisfaction Survey, residents' feedback to Councillors and staff, service requests and correspondence. Council has quantified desired levels of service when formulating the Parks, Gardens, Sporting Fields and Building Asset Policy. This policy determines the Parks, Gardens, Sporting Fields and Building Hierarchy and the maintenance requirements for each asset plus when a Park, Garden, Sporting Field and Building will be upgraded to a higher standard.

4. FUTURE DEMAND

4.1 Demand Forecast

Council's fundamental role is to provide services to the community and its Parks, Gardens Sporting Fields and Building assets are a means to support this. Consequently, future demand for Parks, Gardens Sporting Fields and Building assets are tied to the demand for Council's services and this is a more complex consideration than population growth alone. Issues such as changing demands from the users, closure of sporting fields in other Local Government areas, and changing community expectations of service levels, the need to ensure that all buildings are disabled friendly all affect the need for these assets.

Parks, Gardens, Sporting Fields and Buildings asset management plans are critically driven by the needs of the services to be delivered and therefore meaningful asset strategies cannot be developed in isolation or in absence of comprehensive service strategies. Maintaining Council's Parks, Gardens, Sporting Fields and Building assets without adequate regard for service needs may result in a well-maintained portfolio of assets, but it may also result in an asset portfolio, which does not meet the needs of staff that provide services to the community.

Factors affecting demand include population change, changes in demographics, seasonal factors, consumer preferences and expectations, economic factors, environmental awareness, availability of effluent reuse in watering (for parks and sporting fields) etc. Demand factor trends and impacts on service delivery are summarised in Table 4.1.

Table 4.1. Demand Factors, Projections and Impact on Services

Demand factor	Present position	Projection	Impact on services
Population	5,914 (2006 census). The population increased by 1.05% between the 2001 and 2006 censuses. 57.1% of the population live in the urban area, 36.8% in the rural area and 6.1% in the surrounding villages	Temora's population is expected to grow over the next 10 years Future growth is likely to occur as a result of Council initiatives such as the airpark estate, Continued attraction to rural lifestyle	Some impact such as Parks, Gardens and Sporting Fields increased use, leading to increased maintenance. Parking issues in and around the facility Increased demand for more individual usage, such as exercise station.
Demographics	Increase in ageing population 65+ represents 16.8% of the population and has increased by 3.3% since 1981. Whereas the overall population is static to a 0.27% increase	Temora TAFE and Charles Sturt University at Wagga will play a vital role in retaining and/or attracting young people to Temora. The number of aged over 65 will continue to increase. This is consistent with the national trend towards an ageing population and longer life expectancy	Increase in demand for safe multi-use areas Increased demand for accessibility for mobility impaired.

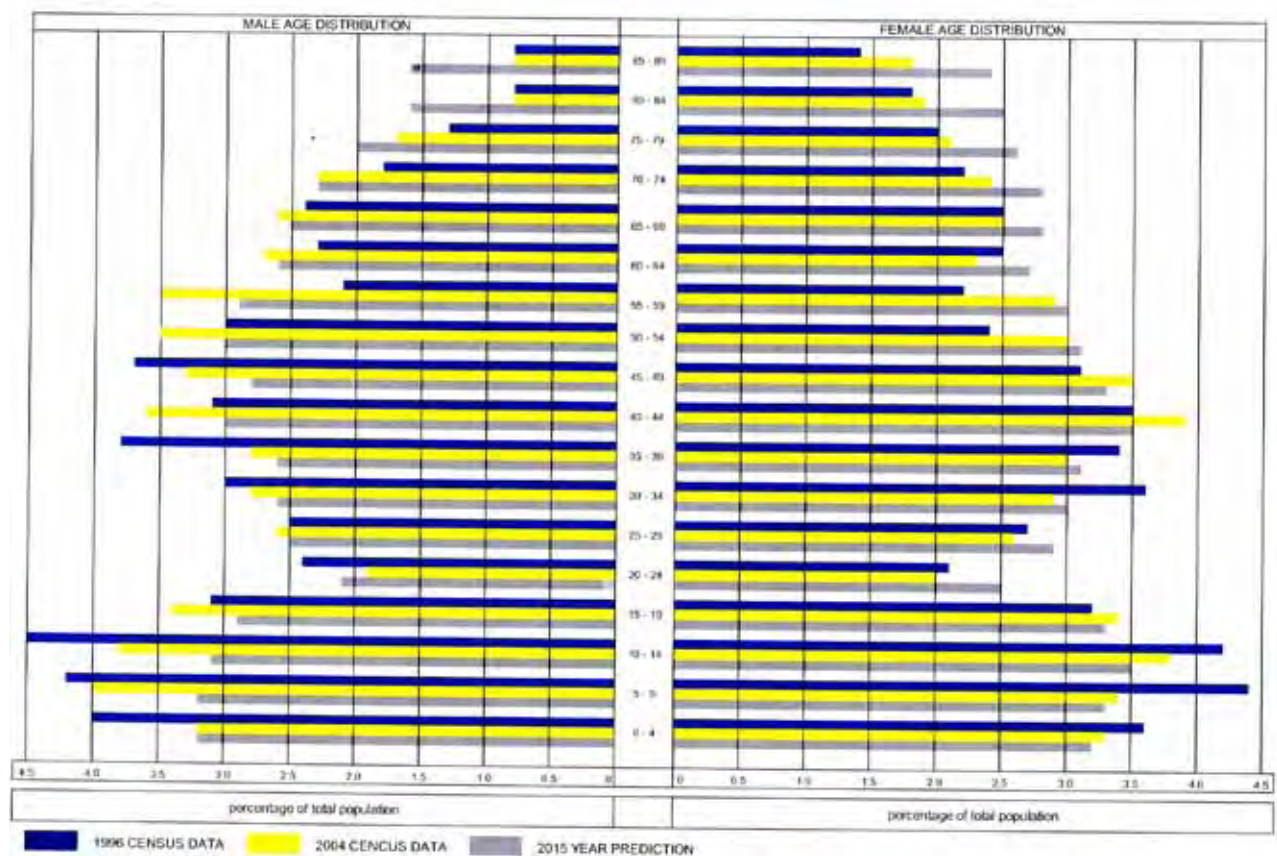


Figure 4.1 1996 and 2004 LGA Population by Age and Sex

4.2 Changes in Technology

Technological changes, more particularly those related to climate change, energy consumption patterns and water usage are forecast to have some effect on service delivery. These impacts will be investigated and qualified in future revisions of the Asset Management Plan.

4.3 Demand Management Plan

Demand for new services will be managed through a combination of managing existing assets, upgrading of existing assets and providing new assets to meet demand and demand management. Demand management is defined here as the management of Parks, Gardens and Sporting Fields assets by the manipulation of demand for Parks, Gardens and Sporting Fields services and practices including non-asset solutions, insuring against risks and managing failures.

Opportunities identified to date for demand management are shown in Table 4.2. Further opportunities will be developed in future revisions of this asset management plan.

Table 4.2. Demand Management Plan Summary

Service Activity	Demand Management Plan
Community Engagement	Engage with the community through the Sports Council to identify justifiable needs from other expectations and consider community needs consistent with Council's policies
Customer Requests	Analyse customer requests to optimise the use and performance of existing Parks, Gardens and Sporting Fields services and look for non-asset based solutions to meet demand for services
Playing surface and equipment	Improved Parks, Gardens and Sporting Fields performance through appropriate maintenance regimes.
Building and Community Assets	Monitor community expectations and building user groups/committees capacity to be involved in operation and maintenance activities of buildings
	Link Asset Management Plans to long term financial plans
	Improvements to Assets, especially for handicapped or disabled residents
Explanatory marketing and education campaigns	Help modify community behaviour through explanatory marketing and education campaigns

4.4 New Assets from Growth

The new assets required to meet growth will be acquired from land developments and constructed by Council. Acquiring these new assets will commit Council to fund ongoing operations and maintenance costs for the period that the service provided from the new asset is required. Given the long term life-cycle of Parks, Gardens and Sporting Fields assets, the impact of this growth (future renewal costs) is only likely to be material after ten years. For the purpose of considering this core asset management plan the impacts of these future costs are not considered to be highly significant and are excluded in developing forecasts of future operating and maintenance costs.

Future versions of this asset management plan will consider the impacts of growth in greater detail. This activity has been included as a priority in the improvement plan. The valuation models in the financial summary section of this report use a rate of growth of 0.25%

5. LIFECYCLE MANAGEMENT PLAN

The lifecycle management plan details how Council plans to manage and operate the assets at the agreed levels of service (defined in section 3) while optimising life cycle costs. To undertake life cycle asset management, means considering all management options and strategies as part of the asset lifecycle, from planning to disposal. The objective of managing the assets in this manner is to look at long- term cost impacts (or savings) when making asset management decisions. Fig 5.1 below provides a graphical representation of the asset lifecycle including each of the stages an asset passes through during its life.

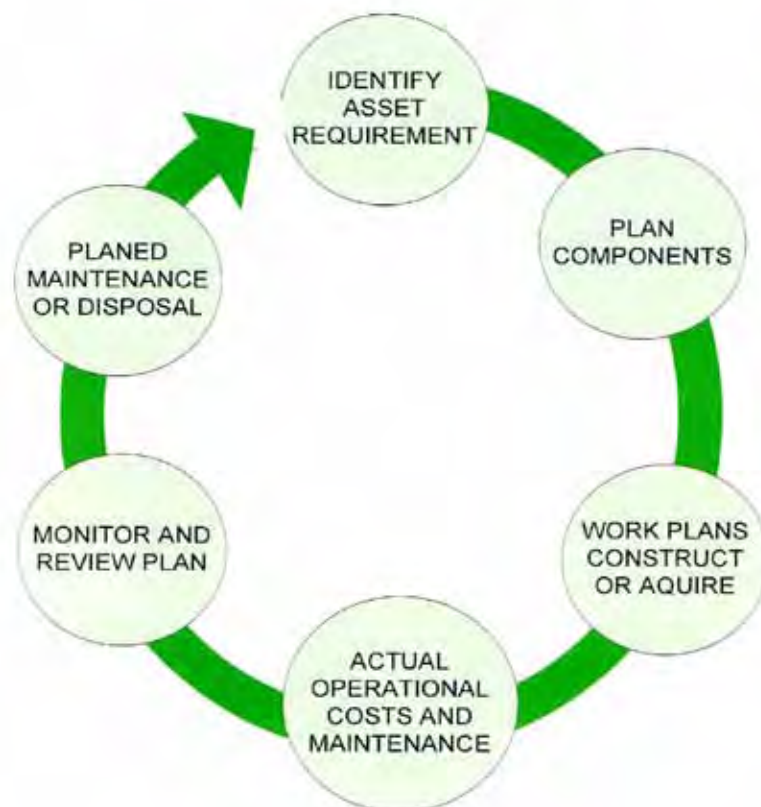


Figure 5.1 Asset Lifecycle

A model for the lifecycle for sealed Parks, Gardens and Sporting Fields pavements is presented later in this section. The model relates particularly to the maintenance and renewal stages of asset life. This model can be adapted for the renewal of playground equipment, other structures and grassed surfaces. (refer to figure 5.2.)

Although figure 5.2 relates to the maintenance of roads, the principles involved in renewal and upgrade relate equally to Parks, Gardens, Sporting Fields and Buildings

In the **“Do Nothing”** phase, the asset deteriorates slowly and maintenance is generally not required. In the **“Maintain”** phase, these activities will need to be performed to minimise continued deterioration. In the **“Rehabilitate”** or **“Renewal”** stage, activities are undertaken that restore the asset to a condition close to that of the original.

The importance of the time for intervention for renewal is paramount. If renewal activities are not undertaken in a timely manner, the condition of the asset will deteriorate rapidly to failure, and the cost of reconstruction may be many times that of the renewal cost.

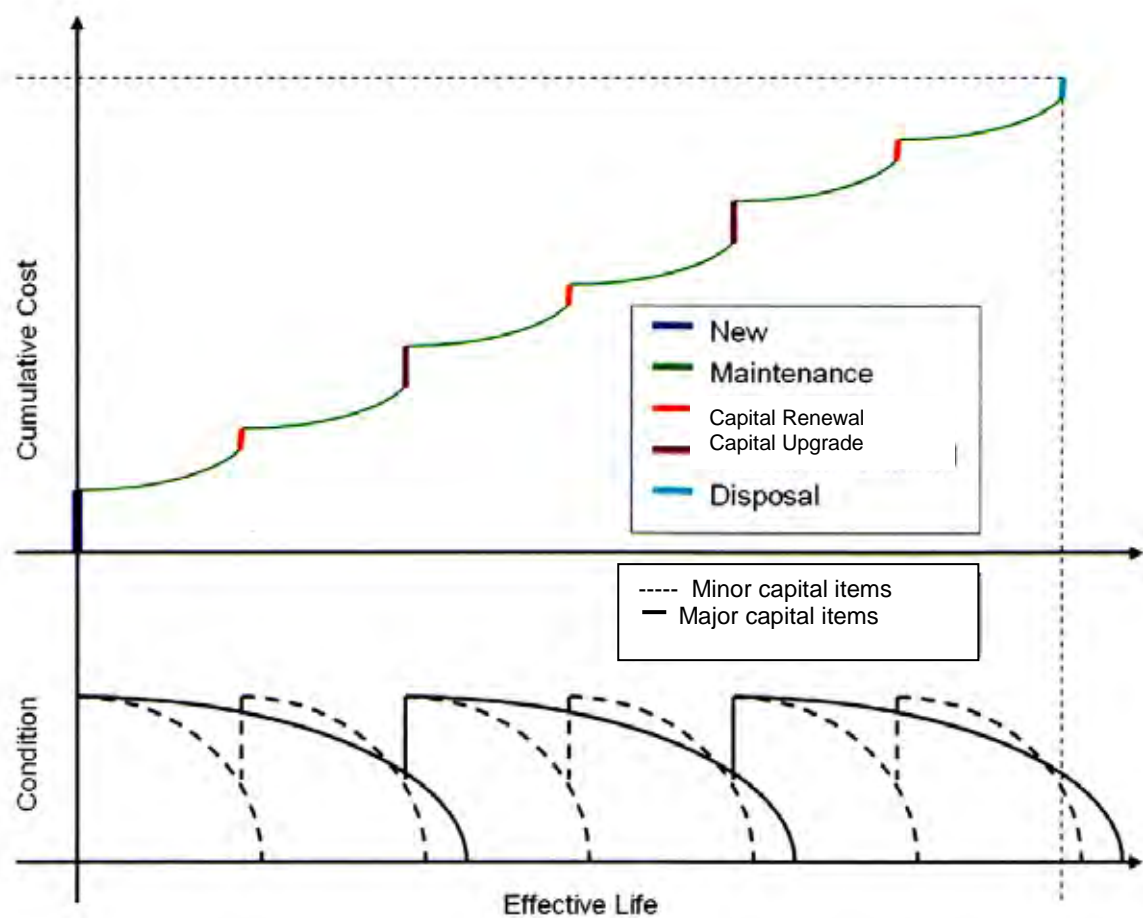




Figure 5.2 *Parks, Gardens and Sporting Fields Lifecycle Costs*



5.1 Background Data


5.1.1 Physical parameters



The assets covered by this asset management plan are shown below. The characterises is given in Tables 5.1


Table 5.1 Characteristics of Parks, Gardens and Sporting Fields Inventory



Asset	Description
<p>Apex Park</p> 	<p>Surrounded by Hoskins, Trungley Hall and Kitchener Roads. The park has the following improvements;</p> <ul style="list-style-type: none"> X Rocky garden, X Two tables and seat (one with roof over) X Irrigation system (potable water) X Public telephone <p>Maintenance of the park is on a weekly basis for mowing and whipper snipper, with watering set manually.</p> <p>Other activities: the facilities are inspected monthly, watering system on an as needs basis.</p>
<p>Bradley Park</p> 	<p>Fronts onto Chifley, Hyde and Williams Streets. The park is mowed on a weekly basis and whipper snipped. There is no watering systems at the park</p> <p>Inspection of the facility are monthly for any equipment, quarterly for the facility, with the surface inspected on an as needs basis.</p> <p>Other improvements to the park are:</p> <ul style="list-style-type: none"> X Trees, X Large rock outcrops X Playground equipment


Asset	Description
<p>Brophy Park (Ariah Park)</p> 	<p>Has been formed by the closure of Reid Street at the intersection with Harrison Street. In 2006 at the schools request, Council staff to rehabilitate the gardens, repair the sprinkler system and replant the area ready for the school to maintain the area.</p> <p>The old bitumen seal of the road is used as a playground.</p> <p>Requests to maintain the seal at Councils cost have been refused due to the precedent that would be set.</p>
<p>Callaghan Park and Lions Place</p> 	<p>Incorporates the Recreation Centre and Pool (considered with Council Building Asset Management Plan)</p> <p>Both parks are mowed; whipper snipped and edges to paths carried out on a weekly basis. The BBQs in Lions Place are checked at the beginning of the week and cleaned if necessary</p> <p>Improvements in the parks are:</p> <ul style="list-style-type: none"> X Play equipment, X War memorial, cenotaph. Including up-lights. X decorative lighting, X Automatic watering system (effluent reuse) X Hotmix footpaths X Effluent and stormwater dam in Callaghan Park (Dam included in Stormwater Management Plan) X Open lined concrete drain that separates Callaghan from Lions Place X Pool type fencing along both sides of the drain and around effluent dam X BBQs


Asset	Description
	<p>X Table and bench seats</p> <p>X Shelter</p> <p>X Security camera and supporting pole</p> <p>X Lions Place garden including circular wall</p> <p>X Rendered brick fence along the frontage of Lions Place</p> <p>X Seating</p> <p>Inspections on various elements in the park are equipment inspections monthly, facility inspection quarterly, maintenance of grass surface as required, replacement of sprinklers as required, effluent sampling on a monthly basis, soil sampling on a yearly basis</p> <p>The park is also used for open air masses, concerts etc, by setting up Councils mobile stage and for Anzac Day services.</p>
<p>Davey Park (Ariah Park)</p> 	<p>Situated at Coolamon Street Ariah Park between the Rural Fire shed and hotel.</p> <p>The park is mowed, whipper snipped on a weekly basis. The BBQs are checked at the beginning of the week and cleaned if necessary</p> <p>Other inspections are, facilities inspected quarterly, maintenance of surrounding area as required, the watering system is manually operated with in ground sprinklers</p> <p>Other improvements are:</p> <p>X Picnic table and chairs,</p> <p>X Public toilet (at rear of Rural Fire Shed)</p> <p>X Reconstructed timber shed (open one side)</p> <p>X Decorative lighting</p> <p>X A picket fence along the north and West boundary</p>



Asset	Description
<p>Edis Park (Ariah Park)</p> 	<p>Situated at the corner of Wellman and Coolamon Streets, Ariah Park.</p> <p>The park is maintained on a weekly basis. There are quarterly inspections of the facility and a staged upgrade of tables and chairs planned.</p> <p>Improvements in the park are</p> <ul style="list-style-type: none"> X the play equipment, comprising seesaw and slippery dip, climbing frame, X small sprinkler system at the garden, and seats. X Table and bench seats
<p>Federal Park</p> 	<p>The park is mowed, whipper snipped and edges to paths carried out on a weekly basis.</p> <p>The BBQs are checked at the beginning of the week and cleaned if necessary. Equipment inspections are carried out on a monthly basis, facility inspections quarterly,</p> <p>Watering system is maintained as required, maintenance to grassed areas as required,</p> <p>Other improvements to the park are:</p> <ul style="list-style-type: none"> X Skate Park X Tennis wall, X Half court basketball X BBQs X Shelter X Playground equipment X Security camera X Recycled watering system



Asset	Description
<p>Gloucester Park</p> 	<p>The park is mowed, whipper snipped and edges to paths carried out on a weekly basis. The BBQs are checked at the beginning of the week and cleaned if necessary.</p> <p>Other inspections are play equipment monthly, the facilities are checked quarterly, maintenance of the watering system as required, maintenance of the grass surface as required, replacement of sprinklers as required, tree removals and replacements as per the tree audit.</p> <p>Other improvements in the parks are:</p> <ul style="list-style-type: none"> X Toilet Block X Play equipment X Shade sails, X Gazebo type shelters X Gardens X Decorative lighting, X Automatic watering system (effluent reuse) X Hotmix footpaths X BBQs X Table and bench seats X Security camera


Asset	Description
<p>Golden Gate Reserve</p> 	<p>There are no facilities on the reserve.</p> <p>Maintenance is on an as required basis.</p>
<p>Harper Park</p> 	<p>Maintenance is carried out on a weekly basis for mowing and edging, toilet and cleaning</p> <p>Other items inspected are, equipment inspection monthly, facility inspections monthly and maintenance of the surrounding area is on an as required basis.</p> <p>Improvements in the park are:</p> <ul style="list-style-type: none"> X Play equipment, X Toilet block, X Seating

Asset	Description
<p>Hillview Park</p> 	<p>Maintenance such as mowing is on a weekly basis. Whipper snipping and weeding on a fortnightly basis</p> <p>The watering of gardens is activated manually, with staff returning several times through the day to close and open various sections.</p> <p>The facilities are inspected quarterly, and the surrounds on an as needs basis.</p> <p>Improvements to the park include:</p> <ul style="list-style-type: none"> X Table and seating X Drinking fountain X Swing set X Rubberised soft fall zone X Decomposed granite path

Asset	Description
<p>Lake Centenary</p> 	<p>The lake is opened seven days per week between the hours of 7.00am and 10.30 pm (summer time earlier than in winter).</p> <p>Mowing is carried out on a weekly basis. During summer months around BBQs. Watering is done with above ground sprinklers and relocated manually, while in other areas from underground sprinklers.</p> <p>Other inspections are, play equipment monthly, facilities quarterly, maintenance of the watering system as needed, grassed areas as required.</p> <p>Improvements to the park are:</p> <ul style="list-style-type: none"> X Sealed entrance and road X Sealed car park X Brick kiosk and toilet block/change facilities X Electric BBQs and shelter area X Smaller shelters, X Playground equipment, X Playground shade shelter X Shade shelter near swimming hole X Concrete boat ramps, X Wooden rail fencing, X Automatic underground sprinklers X V8 Mud boat course (private lease) X Two silt and rubbish collection dams for stormwater prior to entering the lake.

Asset	Description
<p>Paleface Park</p> 	<p>The facilities are inspected on a monthly basis. Watering the surrounds and grass area is on an as required basis.</p> <p>Improvements to the park are:</p> <ul style="list-style-type: none"> X Brick toilet block X Raised brick garden beds X Tables and chairs X Paleface Adios monument X Tourist information guide X underground watering system X Electrical outlets X Paved hardstand area X Manual floodlight
<p>Pinney Park</p> 	<p>The park has no improvements and is separated from The Oval by a major drain.</p> <p>Inspections are carried out on a needs basis.</p>

Asset	Description
<p>Springdale Reserve</p> 	<p>The facilities are inspected on a quarterly basis. Toilets are cleaned on a regular basis by the Progress Association.</p> <p>Improvements at the park are</p> <ul style="list-style-type: none"> X brick toilet block, X community hall, X shelter and table, X Vietnam Veterans War Memorial X grass around memorial with potable water tap X street lighting. X Playground X Tennis wall <p>Recently the progress Association has constructed an enclosed playground compound, which has a wall hand ball and a separate basket ball hoop.</p>
<p>Temora West Park</p> 	<p>The park is mown weekly, gardens, whipper snipper weekly, underground water system</p> <p>Inspections of the parks facilities are carried out on a quarterly basis, the equipment is monthly. Maintenance of the grassed areas and the playground surface as required, sprinklers are replaced as required.</p> <p>The improvements in the park are:</p> <ul style="list-style-type: none"> X Playground equipment, X Toilet facilities, X Shade sails' X BBQ, X Under ground sprinkler system (recycled effluent)

Asset	Description
<p>Ariah Park Recreation Grounds</p> 	<p>Ariah Park maintenance man mows the area approximately once per week and whipper snips under fence, plus checks the irrigation sprinklers. He also cleans the public toilets along side the shower block that is used by travellers.</p> <p>Inspections of the facilities are carried out on a regular basis. The equipment is checked monthly, buildings quarterly, watering system as required, playground surface is checked as required,</p> <p>Facilities and buildings at grounds are:</p> <ul style="list-style-type: none"> X Ticket collector booth, X Scout hall, X drinks shed, X 3 player shelters, X basketball court, rings and lights, X oval lights, X club change-rooms, X kiosk and office, X toilet block, X fenced oval X steel seats, X score board, X 2 BBQ's, X rest centre roadside rotunda, X 6 tennis courts with lights, X tennis clubroom, X concrete tank, X septic tank, X pole electric connectors for caravans, X water bubbler, X netball change-room, X underground watering system (Town Water Supply) X New multipurpose centre

Bob Aldridge Park



Mowing and whipper snipper is carried out on weekly basis during the warmer months. Irrigation maintenance is usually on a weekly basis.

There is a yearly fertilising program after the soil is tested. On a by-annual basis the surface is dethatched and aerated.

Facilities at the grounds are:

- X Canteen
- X Besser block change rooms with toilets
- X Small parking area
- X Automatic underground sprinklers (effluent water)
- X Fencing
- X New canteen building, with toilets currently under construction

Nixon Park



This is the major sporting ground in Temora, catering for both cricket, football and little athletics plus the Golden Gift carnival in February.

Maintenance and whipper snipper is carried out on a weekly plus edging. Spraying for broad leaf, pest and applying growth regulators are carried out on a three monthly basis to both ovals. Gypsum soil conditioner program is yearly after the soil has been tested.

Inspections of the facilities are carried out; as follows

- X buildings on a quarterly basis,
- X watering system as needed,
- X playing surface weekly,
- X effluent sampling monthly,
- X soil sampling yearly,
- X sprinkler head replacement as required.

The facilities an Nixon Park are:

Aussie Rules:

- X Brick Club House,
- X surrounding fence,
- X surrounding seating,
- X interchange shelters,
- X timekeepers box,
- X Tower lights,
- X Manual scoreboard,
- X sealed car park & road.

Rugby League:

- X Lights,
- X timekeepers box,
- X long shelter with seating,
- X main amenities block with kiosk each side,
- X dressing sheds each side,
- X toilets each side,
- X new storage shed,
- X asphalt netball courts,
- X brick shed at gate,
- X Automatic Sprinkler System (Effluent Water)

Temora West Sports Ground



Maintenance, covers mowing and whipper snipper on a weekly basis, soil conditioning program on yearly basis plus a fertiliser program twice yearly. Aeration on a yearly basis..

Facilities are inspected on a quarterly basis, maintenance of sprinkler system as required, effluent sampling monthly and soil sampling yearly

The facilities at the field are

- X Brick amenities block with shelter awning
- X Toilets and change rooms
- X Tower lights
- X Surrounding roll top fence
- X Automatic underground sprinkler system (effluent water)

Tennis Courts (Temora)



The area surrounding the tennis court is mowed weekly and tree trimming on needs basis, fertilising and watering plus garden maintenance weekly.

The facilities include:

- X Brick club house with toilets
- X Fencing around tennis courts
- X Hard and clay tennis courts
- X Seating, net holding posts,
- X Lights
- X Car parking
- X Landscaping

Inspection of the facility is completed on a quarterly basis, with advice from users between inspections

The Oval



The ground is used for senior and junior netball, senior and junior cricket (concrete wicket) and school; sports. The grass area in general is reasonable, as there are some depressions.

Facilities at the ground include:

- X Brick amenities block
- X Concrete cricket pitch
- X Netball courts (hotmix)
- X Automatic underground sprinklers
- X Seating
- X Lights at netball courts

Maintenance mowing and whipper snipper on weekly basis, minor top dressing, fertilising and gypsum program aeration once per year.




Recreation Ground







Mowing and whipper snipping on a weekly basis. Fertiliser gypsum program yearly minor top dressing.

Facilities at the ground include

- X Fencing around oval
- X Road perimeter fencing
- X Canteen with change rooms and toilets
- X Storage rooms
- X Tower lights
- X Underground sprinkler system

<p>Father Hannan Oval</p> 	<p>Not a Council Asset, however minor maintenance is carried out relating to mowing and repairs to the underground sprinkler system.</p>
<p>Council Depot Arian Park</p> 	<p>Located at Barnes Street Arian Park.</p> <p>Consists of</p> <ul style="list-style-type: none"> Ö Colour bond shed Ö concrete floor Ö unsealed compound area Ö small materials storage area Ö Cyclone type man proof fencing. Ö Paper recycle bin is situated outside the fence.
<p>Arian Park Swimming Pool</p> 	<p>Located opposite the intersection of Barnes and Maxwell Streets</p> <p>Facility include</p> <ul style="list-style-type: none"> Ö Main 25 metre pool Ö Children's pool Ö Shade shelter Ö Canteen and change rooms

<p>Ariah Park Golf Course</p> 	<p>Bounded by Davidson Street, Barnes Street, and Coolamon Street Ariah Park.</p> <p>This facility is not maintained by Council</p>
<p>Ariah Park Tip</p> 	<p>Situated 580 metres off Burley Griffin Way to the north of west of Ariah Park. T</p> <p>The tip consists of</p> <ul style="list-style-type: none"> ö Open pit for dumping of household rubbish and waste ö Recycling compound for plastics etc ö Tip has been locked with access to local residents only for a fee that is retained by the Ariah park community ö Council maintains the tip an a quarterly basis
<p>Council Chambers</p> 	<p>Located at the intersection of Loftus Street and De Boos Street</p> <p>Consists of</p> <ul style="list-style-type: none"> ö Original Narraburra Council Chambers in Loftus with the new extension to the west ö Lower car parking facilities under new extension ö Back up generator located in carpark on northern side of new section
<p>Peppers Village Ariah Park</p> 	<p>Located at the intersection of Coolamon Street and Pitt Street.</p> <ul style="list-style-type: none"> ö Council is a minor partner (9%) of the Village through an interest free loan to the Ariah Park community ö Council does not maintain the village

Polaris Street Depot



Located at the intersection of Polaris Street and Vesper street Temora.

This is Council's old works depot consisting of:

- Ö Male and female toilets and lunch room in one building
- Ö Stores building at the exit gate
- Ö Mechanics workshop and stores area in the central building
- Ö One building with separate sections for Gardeners, Sign writer, Plumber and Concrete Gang
- Ö Open stores area at rear with material bins for sand, premix etc
- Ö Sealed pavement

The individual depot buildings are now leased to small firms.

Recreation Centre and Swimming Pool



Located opposite the intersection of Anzac Street and Aurora Street.

The centre consists of

- Ö Multipurpose stadium
- Ö 50 metre swimming pool with diving board
- Ö Toddlers pool with shade shelter
- Ö Change rooms and canteen




Temora Cemetery






Located at the intersection of Vesper Street, Austral Street and Thom Street

The cemetery consists of:

- Ö Lawn cemetery to the south
- Ö Monumental cemetery to the north
- Ö Cremation wall
- Ö Internal sealed roads
- Ö Maintenance on a weekly basis
- Ö Restoration projects by "Friends of the Temora Cemetery"
- Ö

<p>Temora Town hall and Cinema</p> 	<p>Located at the intersection of Loftus street and De Boos Street</p> <p>The complex consists of:</p> <ul style="list-style-type: none"> Ö A newly constructed cinema to seat 80 people, Ö Town Hall, main auditorium with stage able to be divided into two sections Ö Newly fitted out commercial kitchen Ö Newly fitted out foyer with bar area
<p>Temora Library and NRCC House</p> 	<p>Located at the corner of Hoskins Street and Britannia Street.</p> <p>The Centre incorporates:</p> <ul style="list-style-type: none"> Ö Temora Library Ö HACC services Ö Community health Ö NRCC house, which will be the site of the future medical centre
<p>Temora Rural Museum and Mens Shed</p> 	<p>The museum is located at the corner of Hoskins Street and Macauley Street The Mens shed is at the rear of the block in Hinde Street (not shown in photograph)</p> <p>The Museum incorporates</p> <ul style="list-style-type: none"> Ö The rural Museum main building Ö Numerous machinery shed Ö Numerous historical buildings Ö Newly constructed Visitor Information Centre Ö 60 person Cafeteria Ö Mens Shed – Colourbond building

<p>Temora Tip</p> 	<p>Located at Teal Street Temora, situated alongside Councils sewerage treatment works</p> <ul style="list-style-type: none"> Ö The complex comprises of a caretakers office and amenities Ö One active rubbish cell Ö Area for green waste Ö Area for recycling metal
<p>Temora Saleyards</p> 	<p>Located at the intersection of Airport Road and Bartondale Road.</p> <p>The complex comprises of:</p> <ul style="list-style-type: none"> Ö Uncovered steel sheep and cattle yards Ö Covered steel pig yards Ö Five holding paddocks to the west of the yards Ö Small toilet Ö Truck wash facility Ö Effluent evaporation pond Ö Fast fill stand pipe Ö Unsealed entry road and parking area
<p>Temora Caravan Park</p> 	<p>Located at Hoskins Street, south of the railway line.</p> <p>The complex comprises of:</p> <ul style="list-style-type: none"> Ö Sealed internal roads Ö Shower/Toilet/Laundry complex Ö Electrical turrets

Ariah Park Cemetery



Located approximately 2.5 kilometres north of railway line crossing Davidson Road

The cemetery comprises

- Monumental section
- Lawn cemetery
- Irrigation system to the Lawn cemetery

Council, as an asset owner, is committed to maintaining recreational open space and building assets to ensure stakeholders' desired levels of service are maintained at sustainable levels commensurate with affordable expectations.

To meet this requirement Council seeks to match funding levels, condition and community expectations.

One specific lifecycle issue is the in the number of events at the aerodrome, which has led to a significant change to demand and usage of regional facilities within Temora and outer areas.

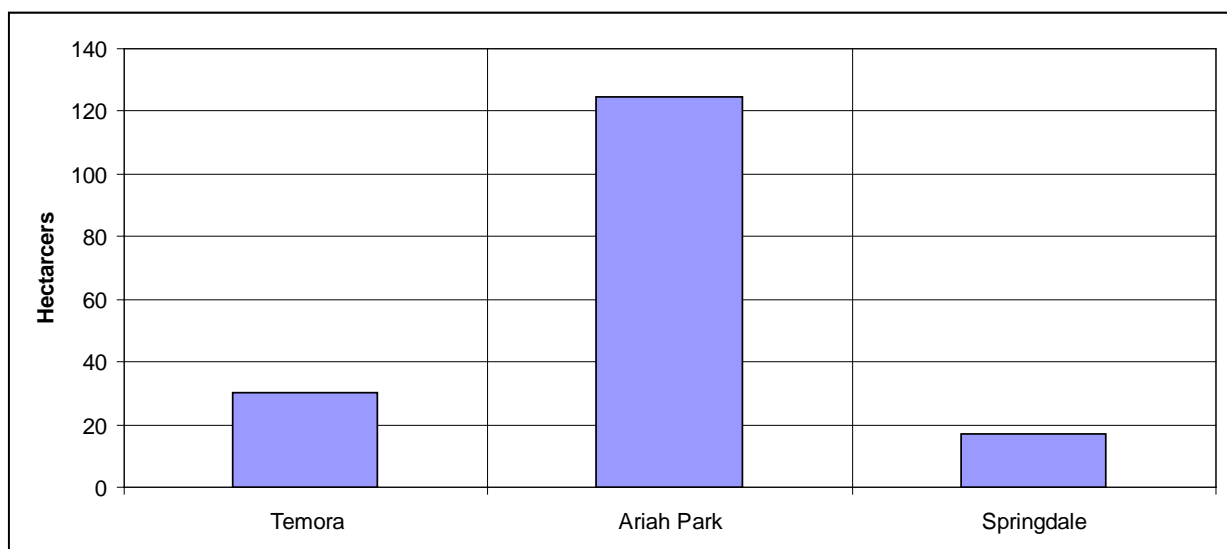


Fig 5.1 *Recreational Space Ratio per 1000 residents*

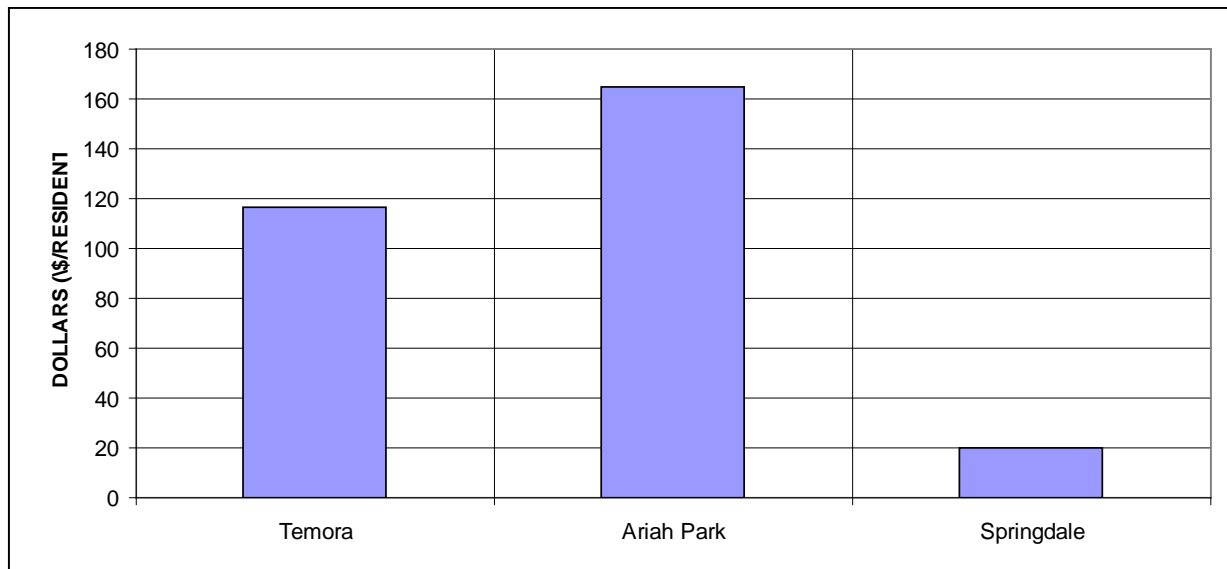


Fig 5.2 *Maintenance Dollars Spent Per Resident on Recreational space*

5.1.2 Asset Capacity and Performance

Council's services are generally provided to meet design standards where these are available. Locations where deficiencies in service performance are known are detailed in Table 5.2.

Table 5.2 *Known Service Performance Deficiencies*

Location	Service Deficiency
Parks,	Surface even, no undulations Shade availability BBQs
Sporting Fields	Lights for night games Ensure that all surfaces are level
Playground equipment	Soft fall zones to be of the same standard, i.e. rubberised mat Replacement of vandalised equipment in a timely manner
Buildings	Not all buildings have wheel chair access

The above service deficiencies were identified from the results of inspections undertaken in the preparation of this plan

5.1.3 Asset condition

A simple number rating system has been adopted for this plan to describe asset condition. Condition is measured using a 1 to 5 rating system as described below:

Table 5.6. Parks, Gardens and Sporting Fields Condition Rating Description

Condition Index	Rating Scale	Condition Description
1	Excellent	Providing a very high level of service
2	Good	Good condition with no indication of any major failures and providing a good level of service.
3	Fair	Aged and in fair condition providing an adequate level of service. No signs of immediate obsolescence.
4	Poor	Will need to renew, upgrade or dispose of in the future and is included in the five year Capital Works Program
5	Very Poor	Below an acceptable level of service. Requires renewal/upgrade immediately within the following year or so.

Frequency of Assessment: Every 2 – 3 years

Rating Criteria

Condition assessment is undertaken for the following criteria.

○	Buildings	Serviceable, user friendly, age of building
X	Grass surface	Level, no undulations or large isolated clumps
X	Play equipment	Variety, no damaged sections, seating available close to equipment
X	Soft fall zone	Even type of surface
X	Shade sails	Age, damage or holes
X	Gardens	No weeds, quality and quantity of flowers

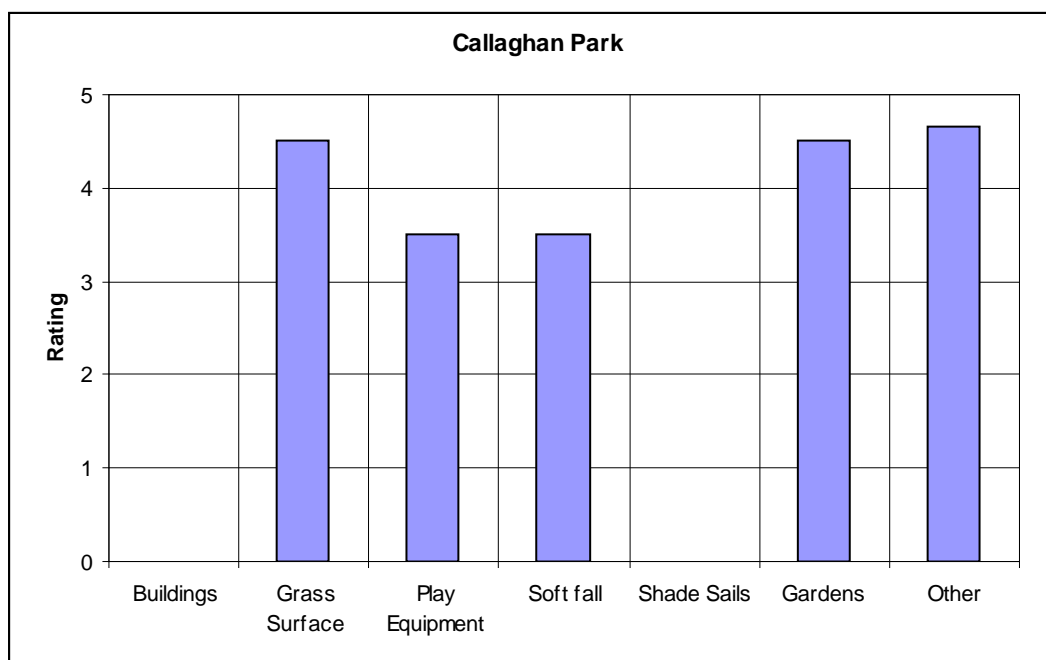


Figure 5.7 Callaghan Park Condition Assessment

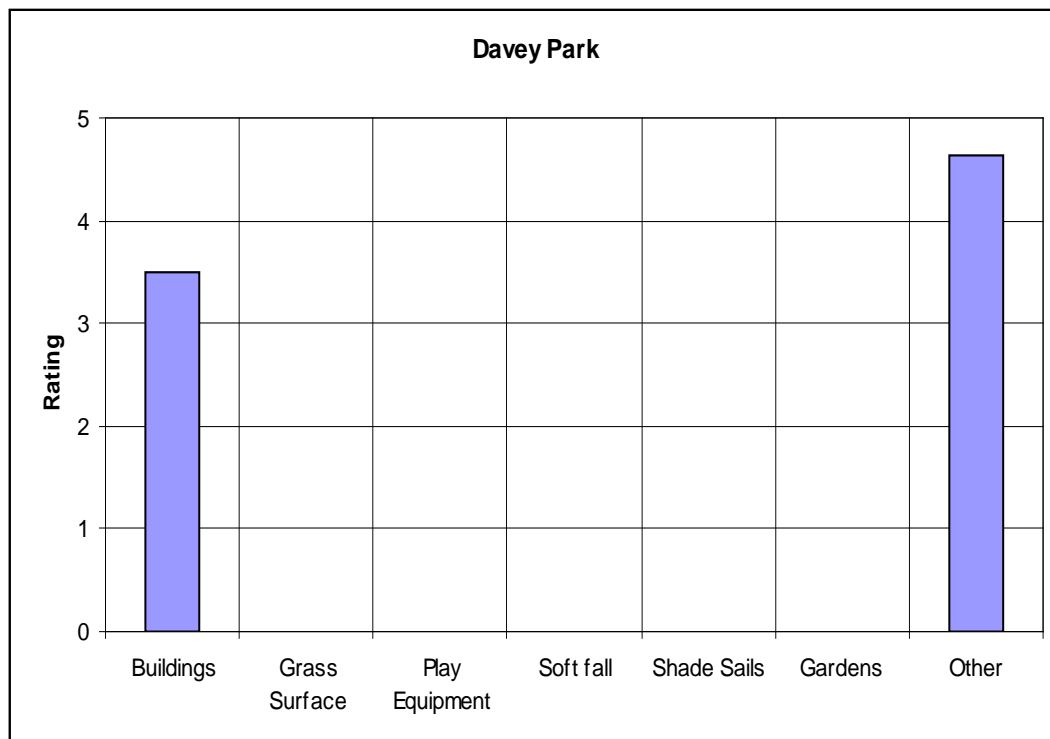


Figure 5.8 Davey Park Condition Assessment

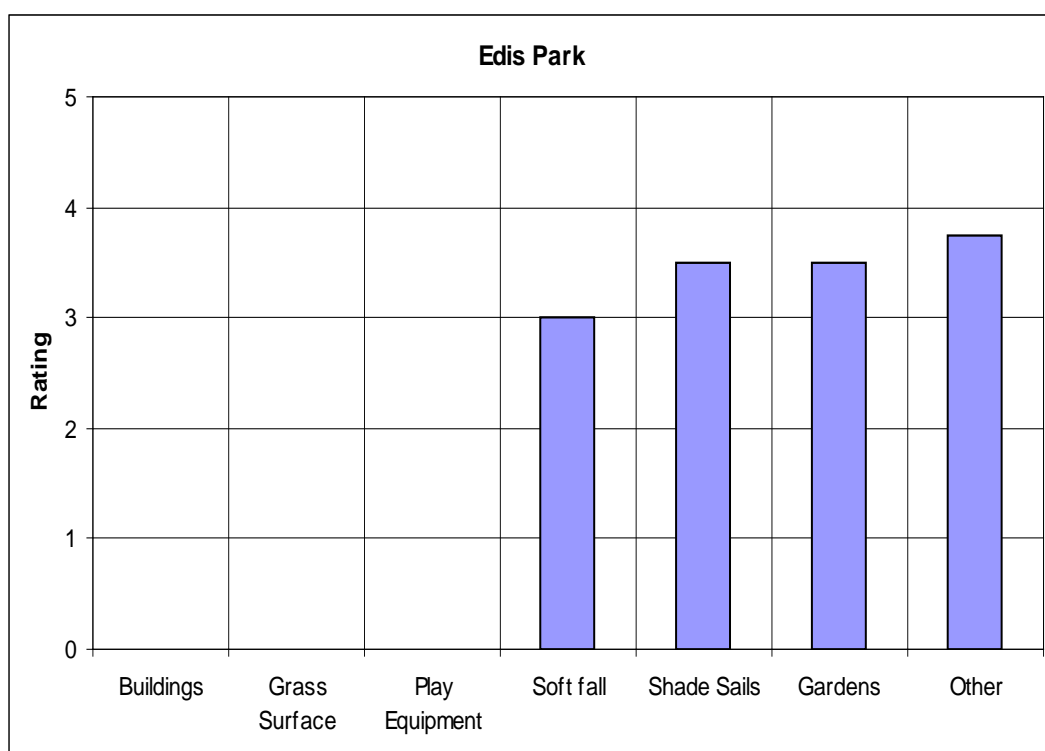


Figure 5.8 Edis Park Condition Assessment

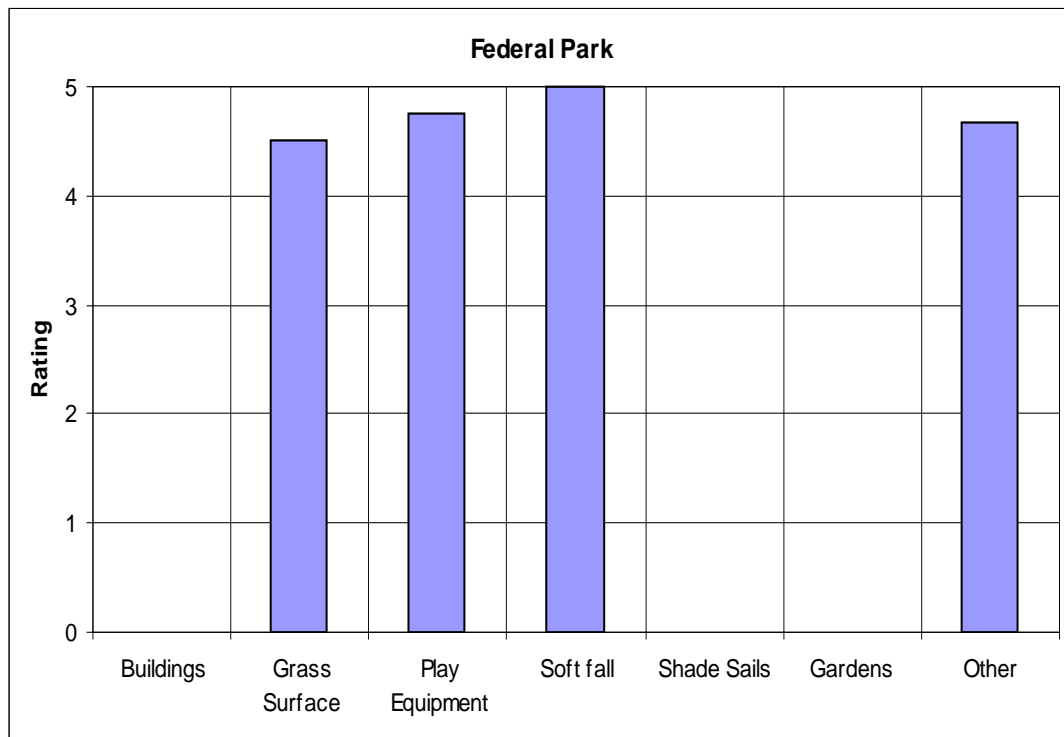


Figure 5.10 *Federal Park Condition Assessment*

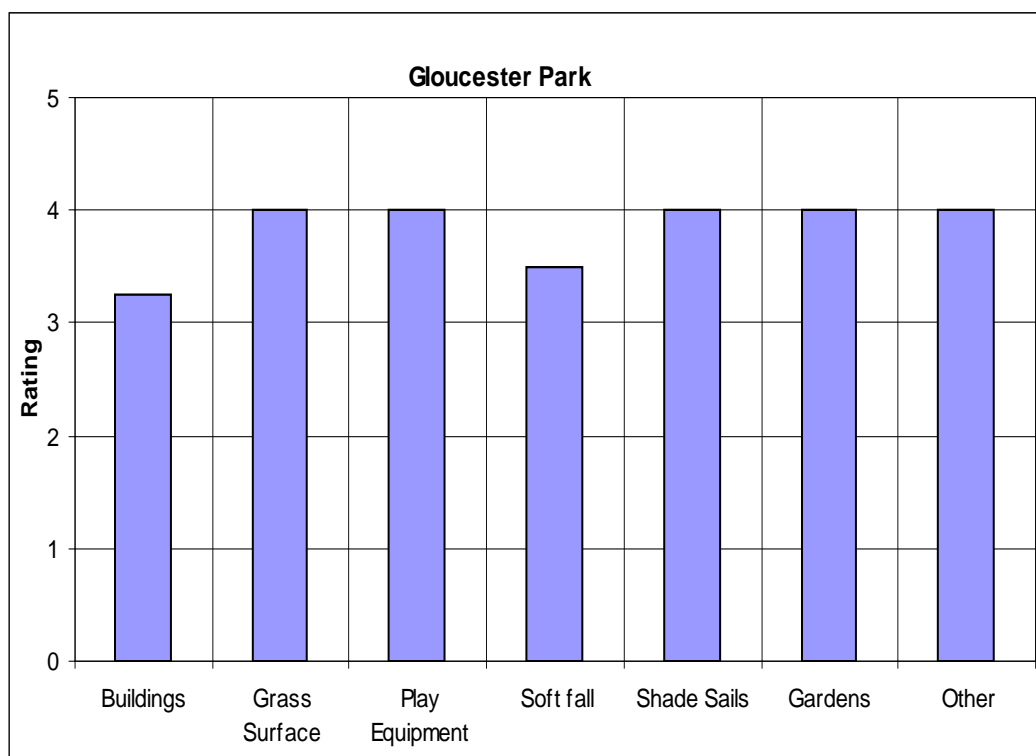


Figure 5.11 *Gloucester Park Condition Assessment*

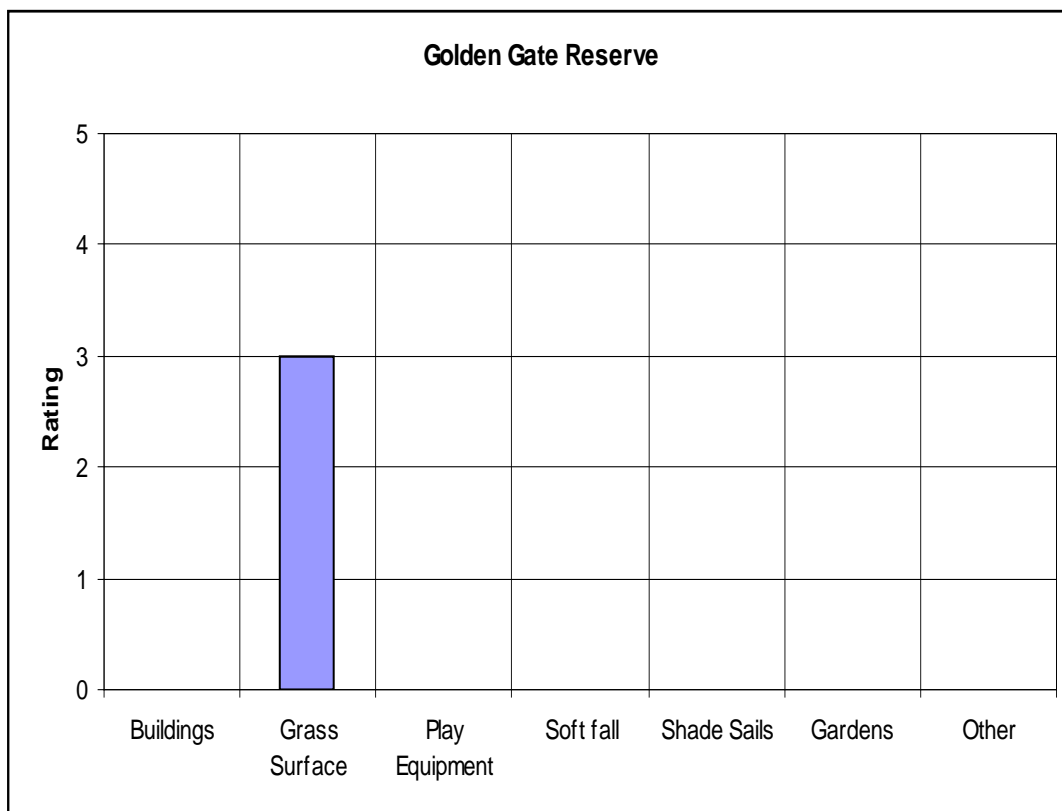


Figure 5.12 Golden Gate Reserve Condition Assessment

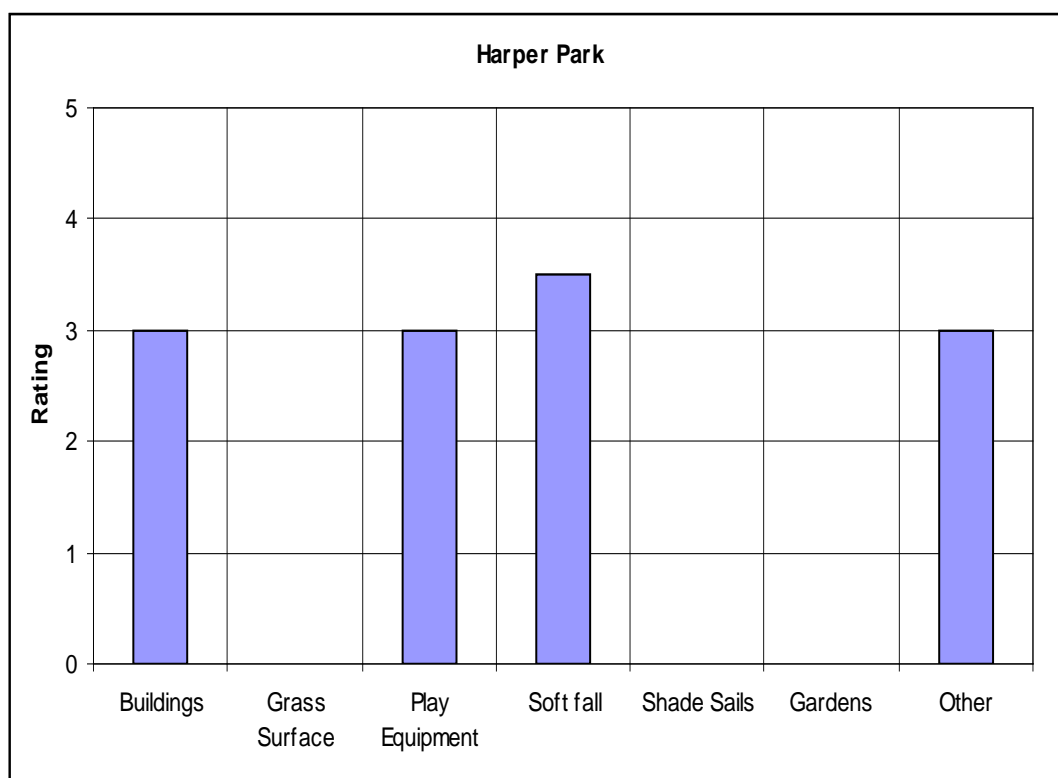


Figure 5.12 Harper Park Condition Assessment

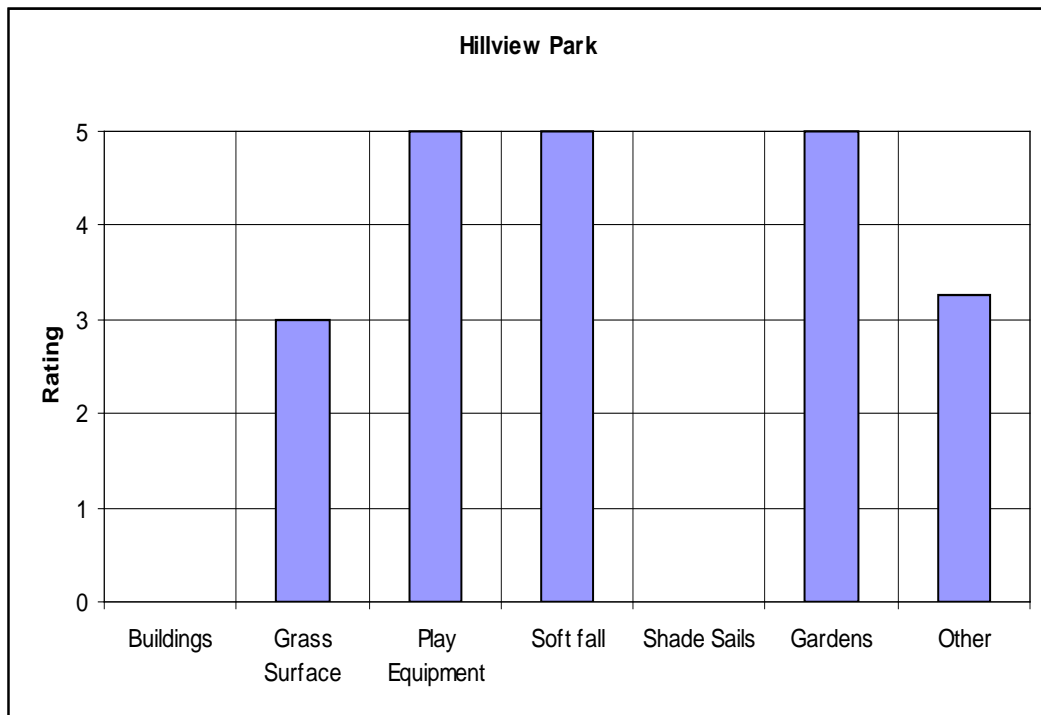


Figure 5.13 Hillview Park Condition Assessment

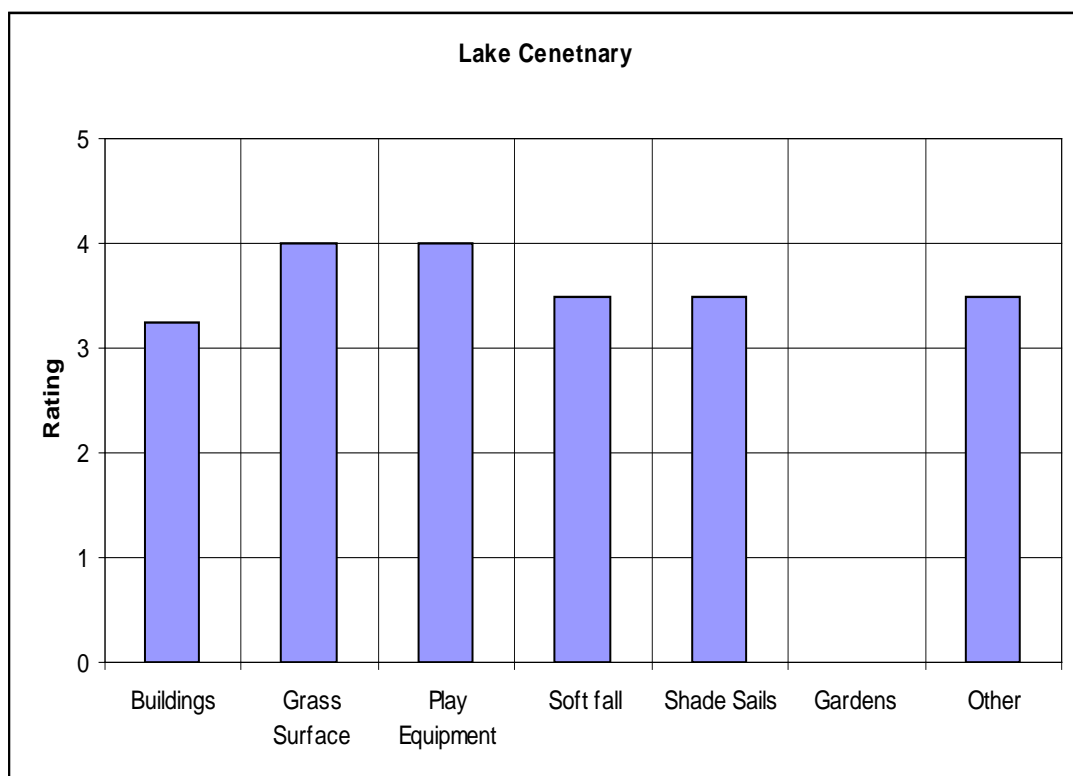


Figure 5.14 Lake Centenary Condition Assessment

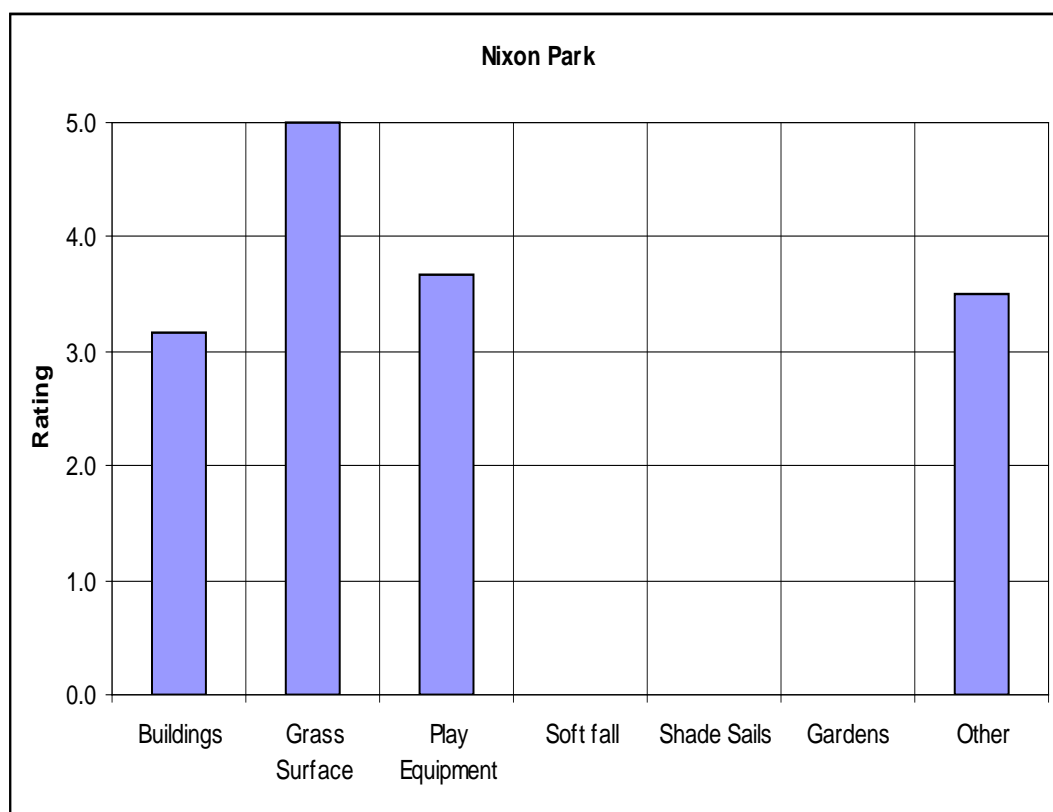


Figure 5.15 Nixon Park Condition Assessment

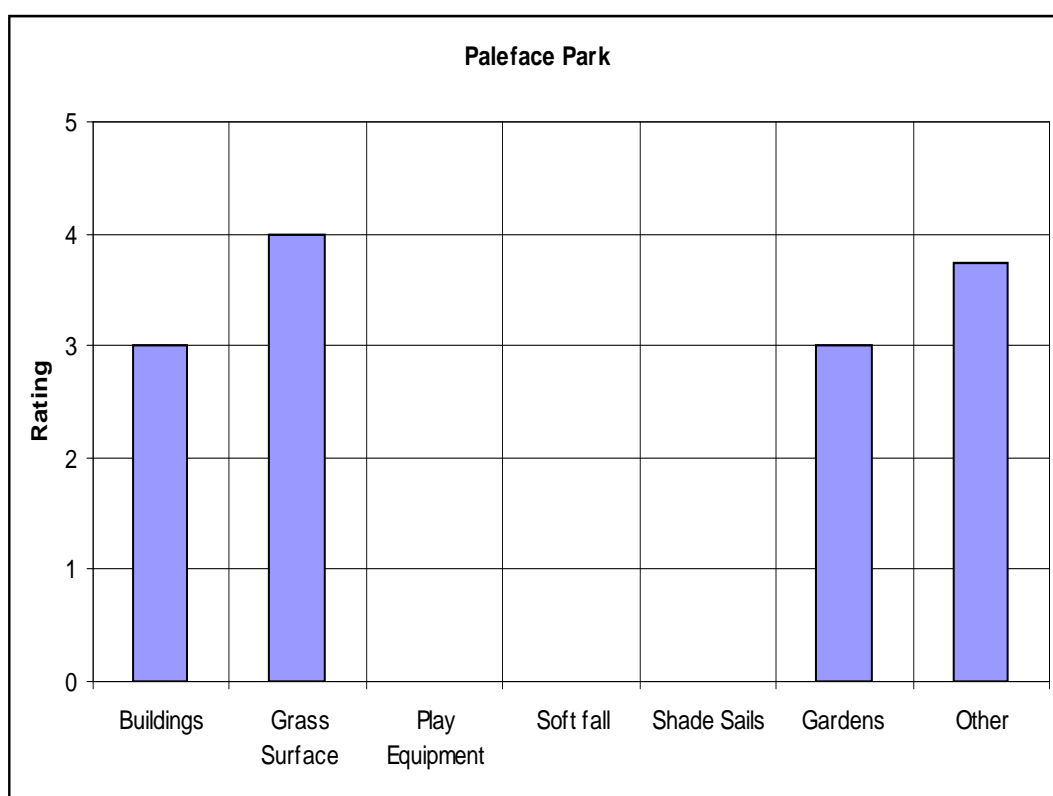


Figure 5.16 Paleface Park Condition Assessment

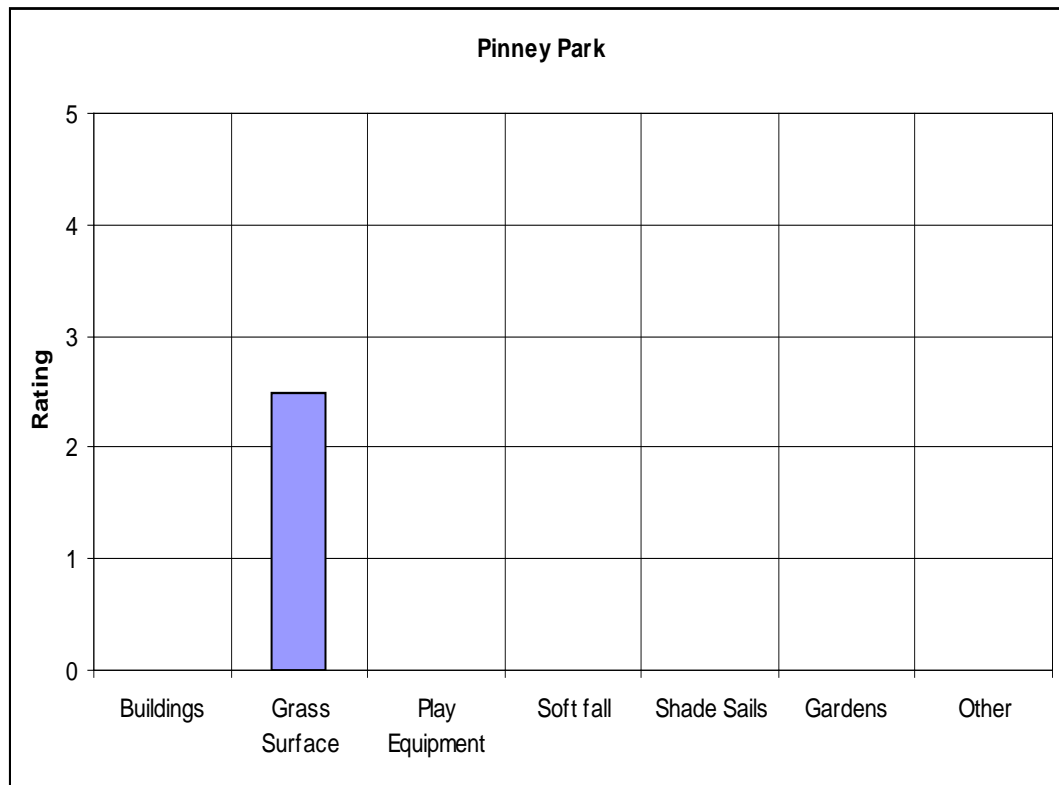


Figure 5.17 Pinney Park Condition Assessment

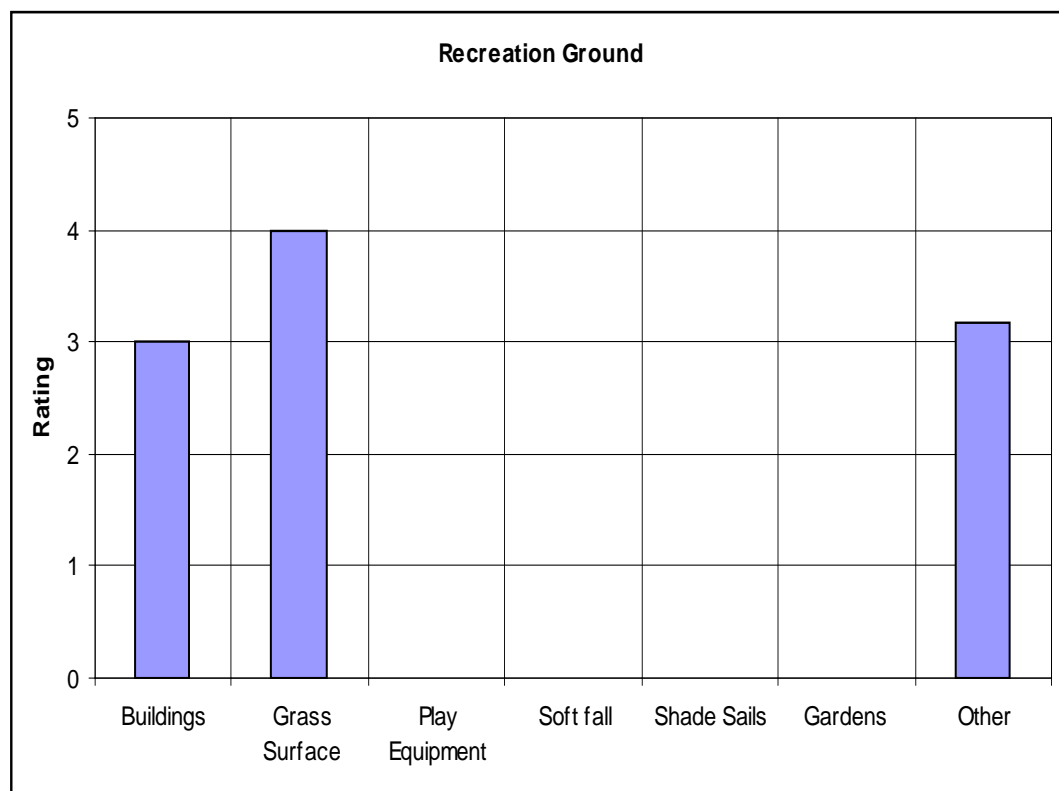


Figure 5.18 Recreation Reserve Condition Assessment

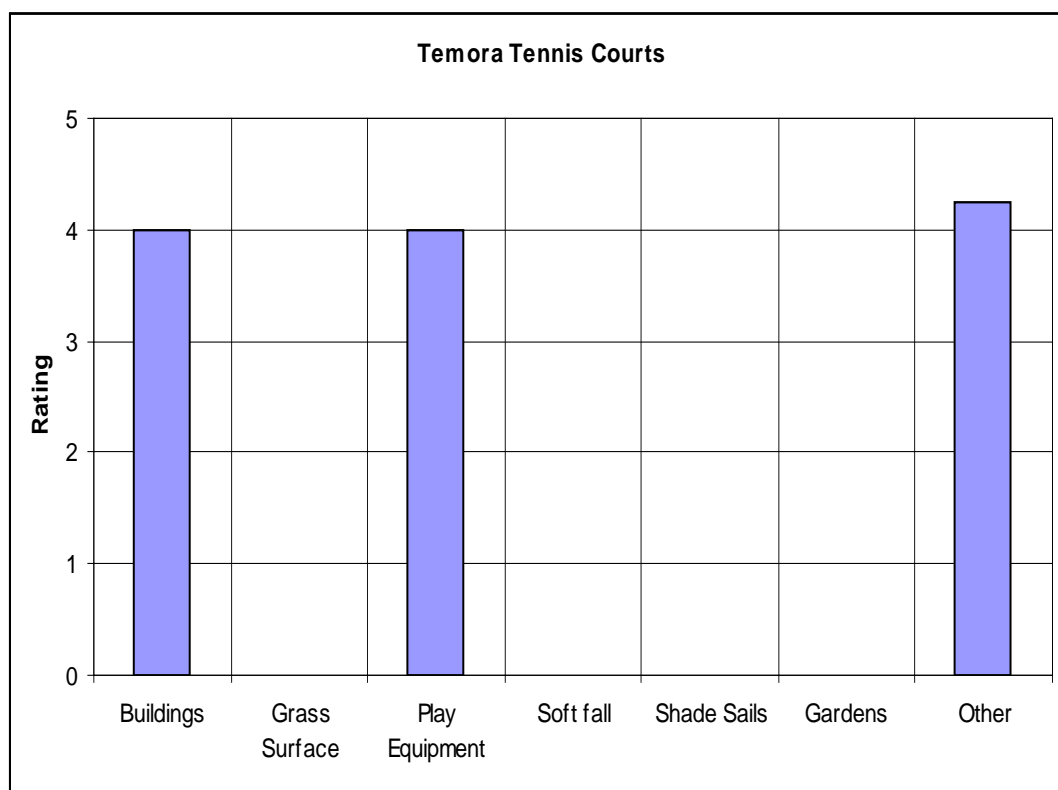


Figure 5.19 *Temora Tennis Club*

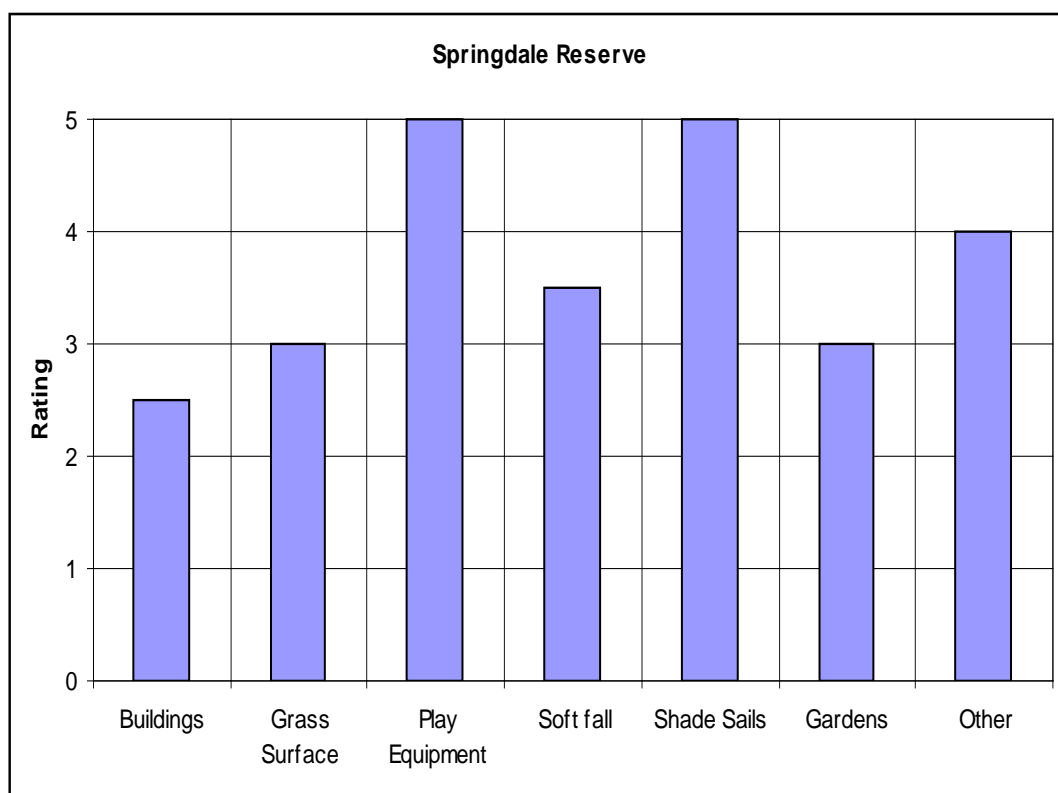


Figure 5.20 *Springdale Reserve Condition Assessment*

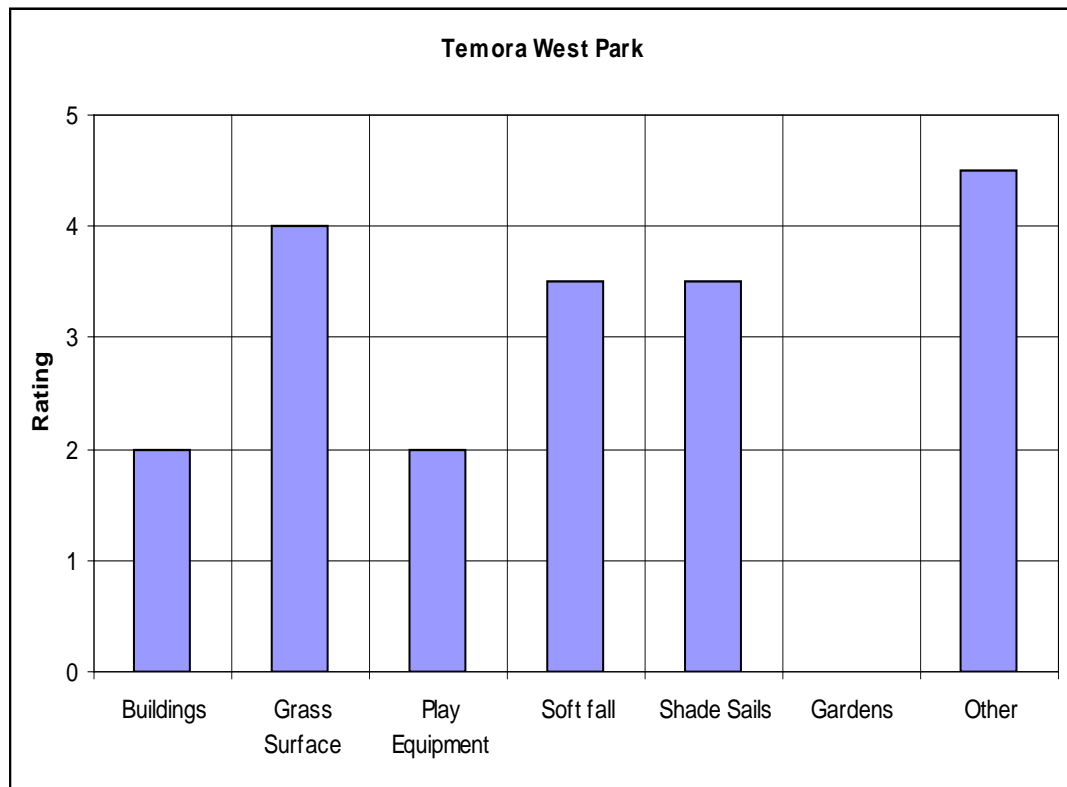


Figure 5.21 *Temora West Park Condition Assessment*

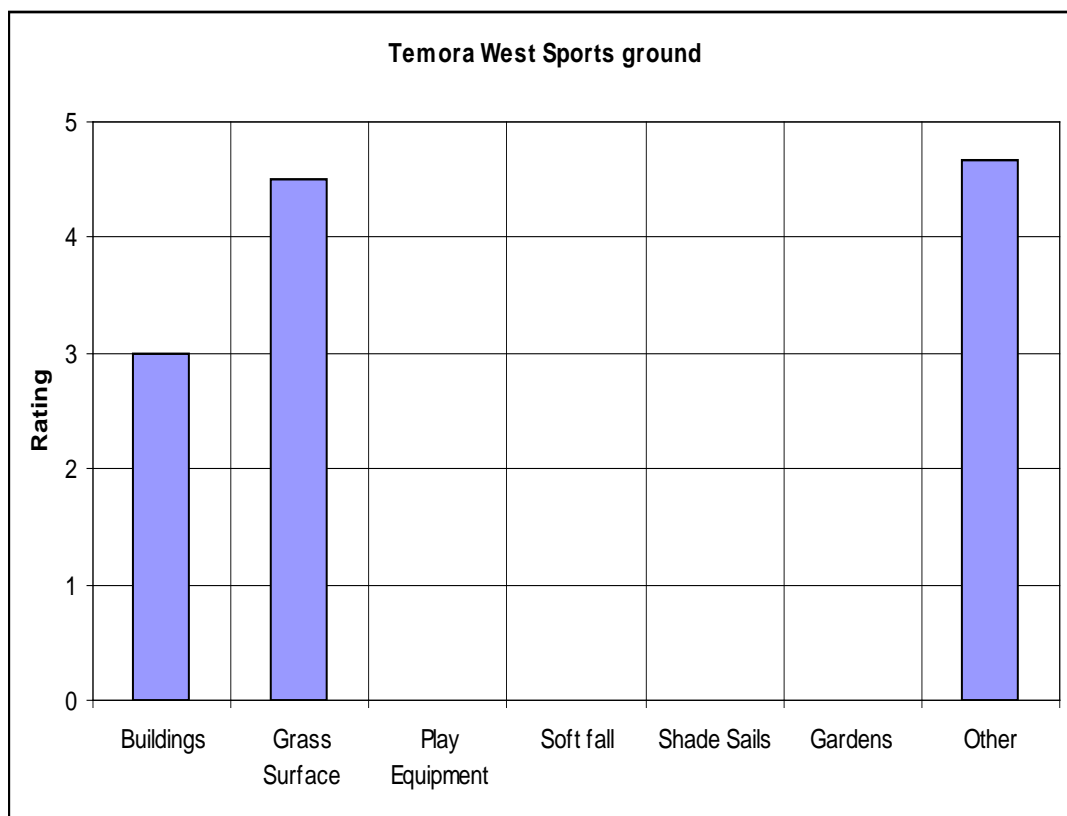


Figure 5.22 *Temora West Sports Ground Condition Assessment*

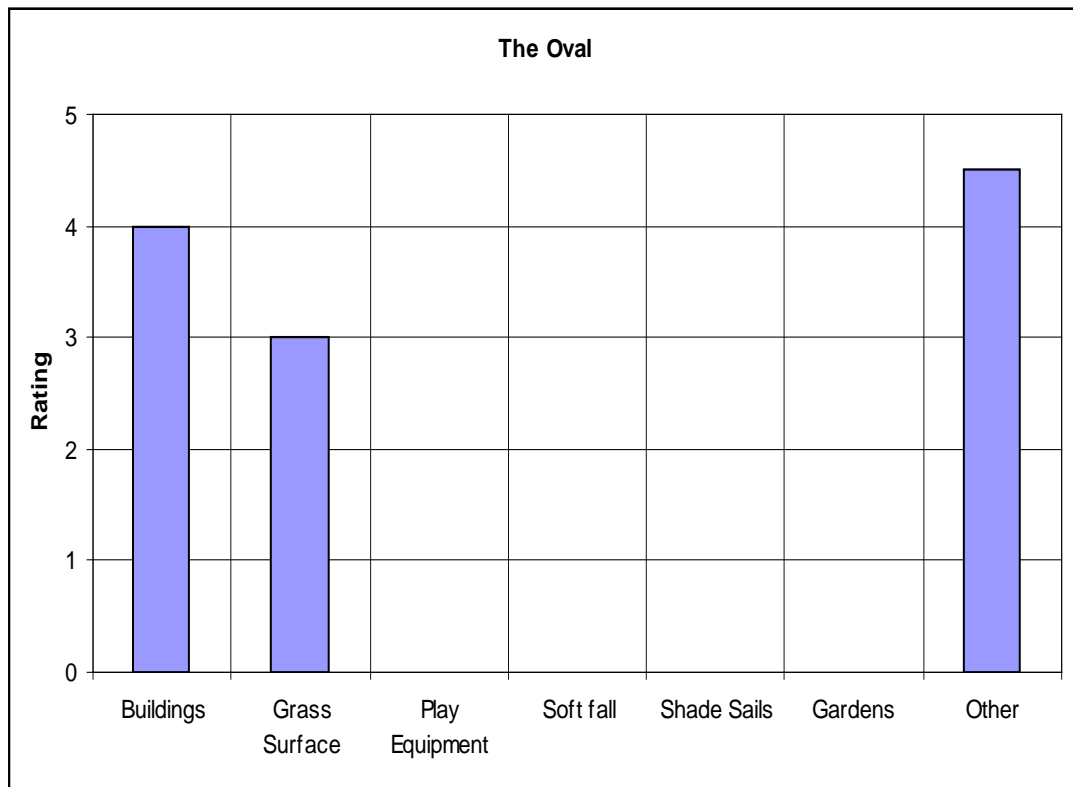


Figure 5.23 *The Oval Condition Assessment*

Figure 5.24 *Condition Rating for Public Buildings and Operational Land*

5.1.4 Asset valuations

The value of assets as at 30th June 2008 covered by this asset management plan (WDV excluding land value) is summarised below. Assets were last revalued at 30th June 2008 and were valued at greenfield rates. Table 5.7 lists current asset values

Table 5.7 Current Asset Values

Asset category	Land Value	Replacement Value	Annual Depreciation	Accumulated Depreciation	Written Down Value
Parks and Gardens					
Apex Park	1,650	7,875	394	0	7,875
Aerodrome Park	0	208,717	4,175	4,175	204,543
Bradley Park	7,000	1,828	183	332	1,496
Brophy Place	0	0	0	0	TBD
Callaghan Park	6030+	103,308	3,608	28,412	74,896
Davey Park	3,000	5,745	389	3,872	1,873
Edis Park	0	29,650	1,977	29,650	0
Federal Park	0	250,000	5,000	40,000	210,000
Gloucester Park	37,500	137,365	2,747	72,413	64,952
Golden Gate Reserve	10,000		0	0	10,000
Harper Park	4,050	55,000	1,100	47,300	7,700
Hillview Park	32,500	33,328	391	391	32,937
Lake Centenary	159,041	294,620	63,220	150,936	143,684
Main Street Gardens	0	0	0	0	0
The Pines	8,700	0	0	0	8,700
Paleface Park	40,000	137,771	1,692	34,205	103,566
Pinney Park	5,000	0	0	0	5,000
Springdale Reserve	9,000	48,851	3,285	21,128	27,723
Temora West Park	20,800	46,859	1,404	37,048	9,811
Town Hall Gardens	0	8,750	175	1,400	7,350
Sporting Fields					
Ariah Park Recreational Ground	15,000	315,364	8,038	129,558	185,806
Bob Aldridge Park	44,300	188,864	1,166	104,248	84,616
Father Hannan Oval	0	0	0	0	0
Temora West Sports Ground	57,000	165,304	3,449	48,866	116,438
Tennis Courts	0	0	0	0	0
The Oval	35,000	50,000	1,600	12,800	37,200
Recreation Ground	102,300	206,005	4,120	113,685	92,320
Nixon Park	148,143	1,290,782	26,812	629,927	660,855
Other Open Space					
Ariah Park Golf Course	25,000				
Temora Golf Course	54,000				
TOTAL	810,334	2,841,498	134,925	1,510,346	1,885,427

Asset category	Land Value	Replacement Value	Annual Depreciation	Accumulated Depreciation	Written Down Value
Public Buildings					
Ariah Park Council Depot	\$17,500	\$102,500	2,050	26,550	75,850
Ariah Park Swimming Pool	\$600	\$536,500	536,500	8,705	113,050
Ariah Park Golf course	\$25,000	\$80,000	1,000	73,000	7,000
Ariah Park Tip	\$7,500	\$4,450	89	1,267	3,183
Council Chambers	\$35,000	\$3,330,091	18,953	792,343	3,311,138
Peppers Village Ariah Park	0	\$56,000	933	1,867	54,133
Polaris Street Depot	\$35,000	\$1,020,000	20,867	636,200	383,800
Recreation Centre	\$6,030	\$2,900,000	17,343	525,428	2,378,000
Temora Cemetery	\$10,000	\$51,214	1,024	7,437	42,777
Town Hall and Cinema	\$60,000	\$3,417,095	22,274	974,056	2,446,039
Temora Library	\$120,000	\$4,081,601	24,000	1,065,606	3,015,995
Temora Rural Museum	\$188,945	\$1,565,489	13,280	399,396	1,166,093
Temora Swimming Pool	\$34,090	\$348,746	9,038	108,053	244,770
Temora Tip	\$7,500	\$12,240	245	3,915	65,355
Temora Saleyards	\$40,000	\$118,937	3,994	98,879	99,794
TOTAL	\$587,165	\$17,624,863	671,590	4,722,702	13,406,977

Council's sustainability reporting reports the rate of annual asset consumption and compares this to asset renewal and asset upgrade and expansion. Table 5.8 below

	Parks Gardens and Sporting Fields	Buildings and Operational Land
Asset Consumption rate	0.37	0.034
Asset Renewal Rate	0.06	0.1
Annual Upgrade/expansion	1.04	

5.2 Risk Management Plan

An assessment of risks associated with service delivery from infrastructure assets has identified critical risks to Council. The risk assessment process identifies credible risks, the likelihood of the risk event occurring, the consequences should the event occur, develops a risk rating, evaluates the risk and develops a risk treatment plan for non-acceptable risks.

Critical risks, being those assessed as 'Very High' - requiring immediate corrective action and 'High' – requiring prioritised corrective action identified in the infrastructure risk management plan are summarised in Table 5.8

Table 5.8 Critical Risks and Treatment Plans

Asset at Risk	What can Happen	Risk Rating (VH, H)	Risk Treatment Plan
Playgrounds	Structural failure caused by the age and condition of equipment	M	Maintain playgrounds to Australian Standards through regular inspection and maintenance
	Vandalism and or misuse of equipment, potentially making playground unsafe for usage	M	Regular inspections and respond to CSR
	Soft fall or matting not meeting the minimum requirements under the Australian Standards, potential injury problem	L	Regular inspections and respond to CSR
	Discarded syringes left in the vicinity of playgrounds causing potential injury to users	H	Regular inspections and respond to CSR
Parks, Gardens and Sporting Fields Surface	Undulating or rough/clumps of grass increase trip hazards	H	Monitor grass conditions remedial action required prior to normal intervention level
Irrigation	Vandalism to sprinklers, controllers	M	Regular inspections and respond to CSR
	Effluent spray drift onto play equipment	H	Ensure only potable water sprinklers surround play equipment. Automatic Monitoring of wind velocity and regulate controllers not to spray effluent
	Pump failure	L	Maintain planned inspections of pumps
Parks and Sporting Field Infrastructure	Vandalism	L	Regular inspections and respond to CSR
Footpaths	Trip hazards resulting in litigation claims	H	Increase inspection frequency for Parks and Sporting Fields and increase maintenance to repair hazards.
Cycleways	Environmental cracking in asphalt can become severe enough to affect cyclist safety	H	Inspect off Parks, Gardens and Sporting Fields paths regularly and crack seal or repair as required
Carparks	Damage due to tree roots	H	New plantings to have root barrier installed, with existing trees cut problem root or remove tree if required
Buildings	Restricted access and egress	H	Review internal layout of buildings and consider modifications .

5.3 Routine Maintenance Plan

Routine maintenance is the regular on-going work that is necessary to keep assets operating, including instances where portions of the asset fail and need immediate repair to make the asset operational again.

Routine maintenance work includes:

X Mowing of lawns

X Whipper Snipping edges

- X Weeding garden beds
- X Pruning trees and roses
- X Cleaning of toilets
- X Cleaning BBQs
- X Raking soft fall under play equipment

5.3.1 Maintenance and improvement plan

Maintenance includes reactive, planned and cyclic maintenance work activities.

Reactive maintenance is unplanned repair work carried out in response to service requests and management/supervisory directions. Assessment and prioritisation of reactive maintenance is undertaken by Council staff using experience and judgement. **Reactive** maintenance work has been determined as being typically 20% of total maintenance expenditure.

Planned improvement is repair work that is identified and managed through a maintenance management system (MMS). MMS activities include inspection, assessing the condition against failure/breakdown, experience, prioritising, scheduling, actioning the work and reporting what was done to develop a maintenance history and improve maintenance and service delivery performance. Planned maintenance work is approximately 70% of total expenditure on Parks, Gardens and Sporting Fields.

Cyclic maintenance is replacement of higher value components/sub-components of assets that are undertaken on a regular cycle including repainting of Parks, Gardens and Sporting Fields markings. Expenditure trends are shown in Table 5.9

Table 5.9. Expenditure Trends for Parks and Gardens

Year	Expenditure Dollars		
	Reactive	Planned	Cyclic
2005/06	\$34,352	\$120,233	\$17,176
2006/07	\$44,269	\$154,942	\$22,135
2007/08	\$43,184	\$151,144	\$21,592
2008/09	\$62,269	\$217,942	\$31,135

Table 5.10. Expenditure Trends for Sporting Fields

Year	Expenditure Dollars)		
	Reactive	Planned	Cyclic
2005/06	\$40,991	\$143,467	\$20,495
2006/07	\$43,509	\$152,283	\$21,755
2007/08	\$57,098	\$199,842	\$28,549
2008/09	\$51,758	\$181,152	\$25,879

Table 5.11 Expenditure Trends Combined Parks and Sporting Fields

Year	Expenditure Dollars		
	Reactive	Planned	Cyclic
2005/06	\$75,343	\$263,700	\$37,671
2006/07	\$87,778	\$307,225	\$43,890
2007/08	\$100,282	\$350,986	\$50,141
2008/09	\$114,027	\$399,094	\$57,014

Table 5.12 Expenditure Trends for Buildings and Operational Land

Year	Expenditure Dollars		
	Reactive	Planned	Cyclic
Ariah Park Swimming Pool	\$5,077	\$5,923	\$5,923
Ariah Park Tip	\$2,418	\$2,418	0
Ariah Park Cemetery	\$338	\$253	\$253
Council Chambers	\$11,170	\$8,377	\$8,377
Polaris Street Depot	\$89,877	\$29,959	\$29,959
Recreation Centre	\$34,980	\$26,235	\$26,235
Temora Cemetery	\$41,761	\$20,880	\$20,880
Town Hall and Cinema	0	\$26,023	\$26,023
Temora Library	\$81,997	\$61,498	\$61,498
Temora Rural Museum	\$6,495	\$12,991	\$12,991
Temora Swimming Pool	\$25,494	\$50,988	\$50,988
Temora Tip	\$55,179	\$41,384	\$41,384
Temora Saleyards	\$10,238	\$20,478	\$20,478
TOTAL	\$365,024	\$307,407	\$304,989
RATIO	37%	32%	31%

Expenditure levels are considered to be inadequate to meet required service levels. Future revision of this asset management plan will look at maintenance expenditures compared to the level of service.

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

5.3.2 Standards and specifications

Maintenance work is carried out in accordance with the following Standards and Specifications.

- X AS1924 – Safety requirements and Test Methods
- X AS4685 – Current safety requirements and Test Methods
- X ASNZ4422:1996 – Impact attenuating surfaces
- X Code of Practice for irrigated Open Space
- X Natural Resources Management Act 2004
- X Local government Act
- X Occupational Health and Safety Act and Regulations
- X Disability Discrimination Act 1992

5.3.3 Summary of future maintenance expenditures

Future maintenance expenditure is forecast to trend in line with the value of the asset stock as shown in Fig 5.25.1 to 5.28

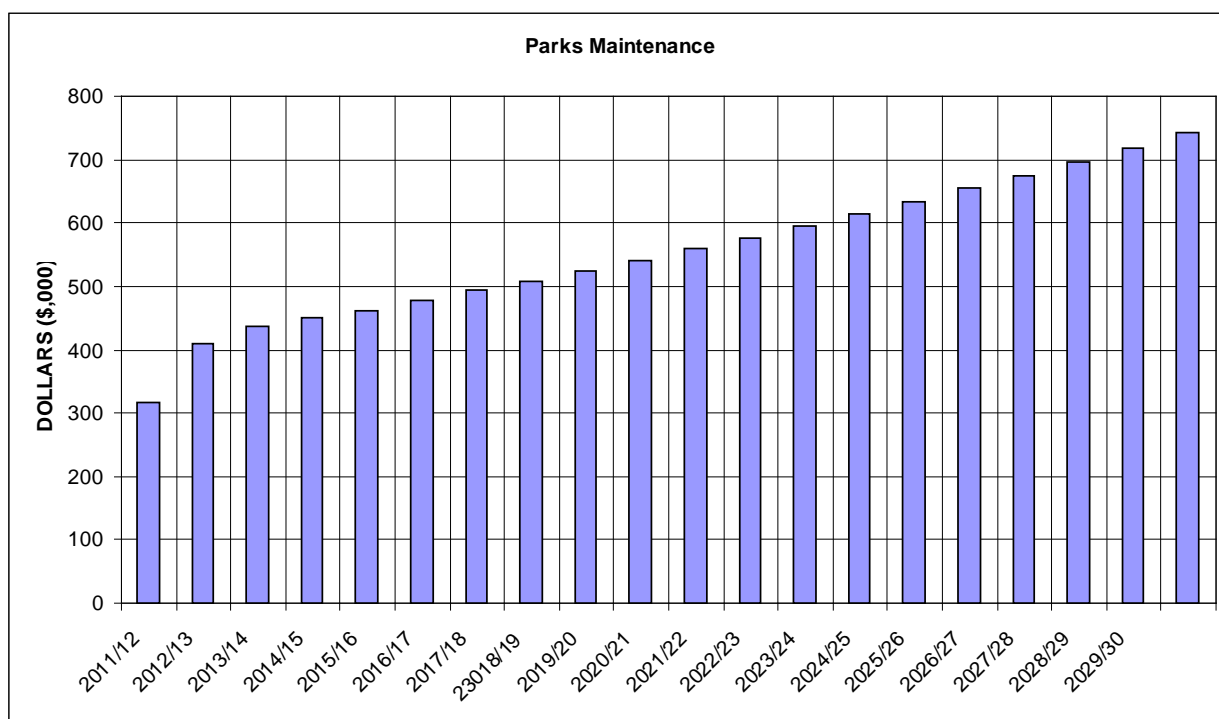


Fig 5.25 Predicted Expenditure on Parks and Gardens

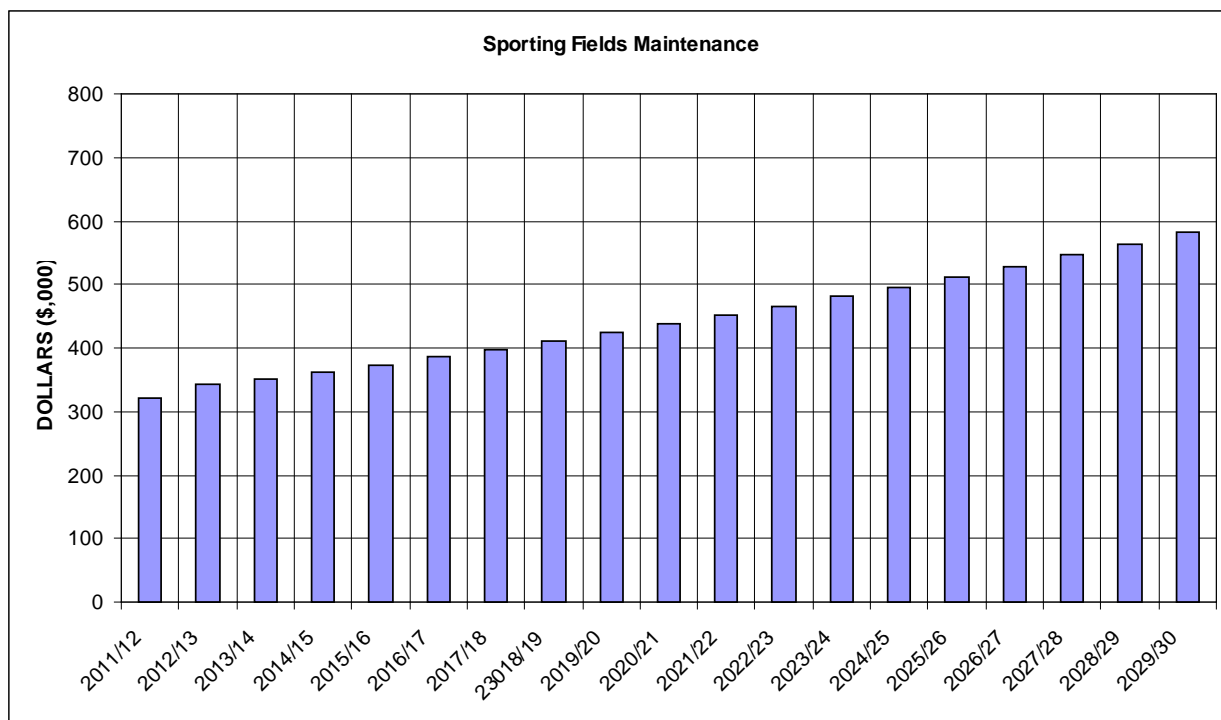


Fig 5.26 Predicted Expenditure on Sporting Fields

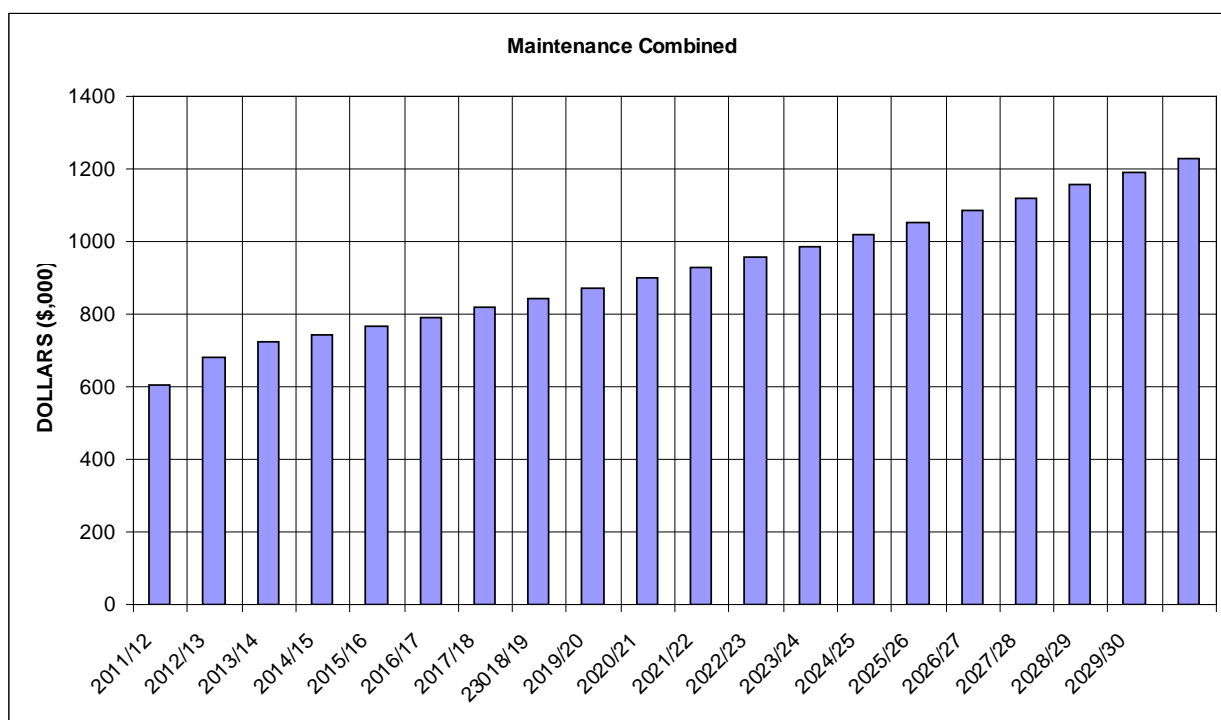


Figure 5.27 Predicted Expenditure on Parks Gardens and Sporting Fields Combined

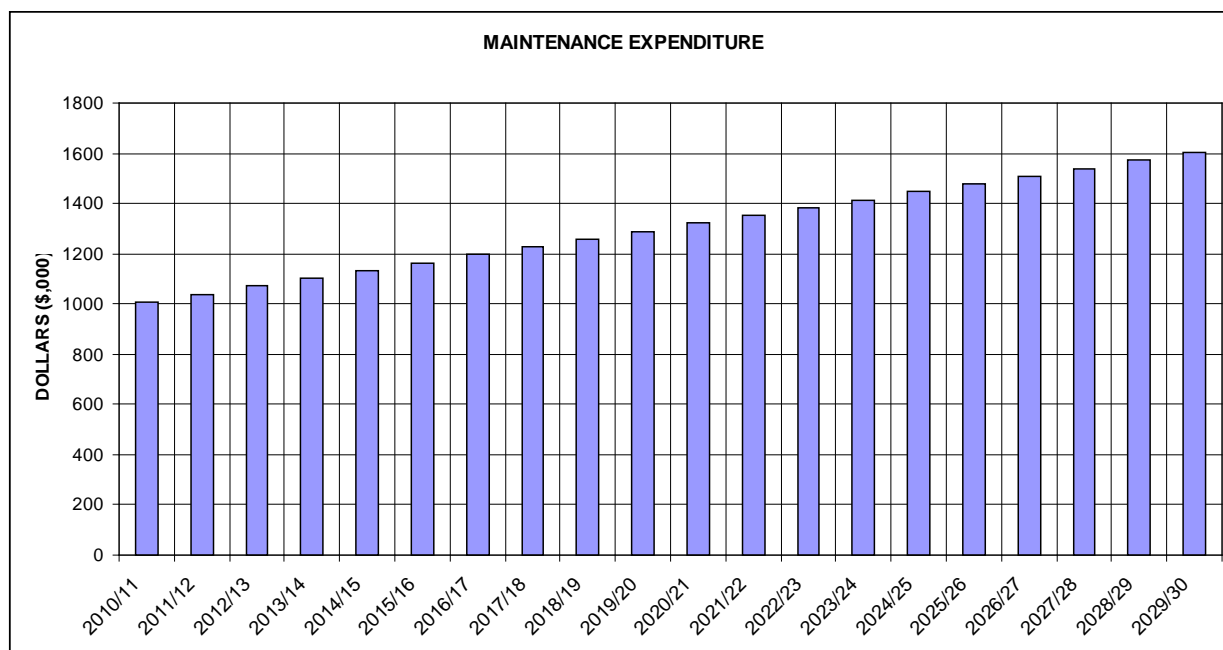


Figure 5.28 Predicted Expenditure on Buildings and Operational Land

Maintenance refers to works undertaken to address minor defects such as pothole patching, edge breaks repair, minor kerb and gutter repair works or footpath grinding. These works are undertaken to keep Council's assets in a safe and operational condition, but not necessarily to improve the overall condition of these assets.

It should be noted that when undertaking the lifecycle modelling, these type of costs are taken into consideration by assuming that each year, a percentage of these distresses, such as potholes, footpath trip hazards, will be repaired as part of Council's routine maintenance. If these assets are left to deteriorate, by not allocating sufficient capital, then the amount of deterioration not being fixed under routine maintenance will increase. Equally if the condition of these assets improves then the routine maintenance expenditure required will decrease.

The prediction model are forecasting a proportional increase in future maintenance with the current levels of capital funding.

Deferred maintenance, i.e. works that are identified for maintenance and unable to be funded are to be included in the risk assessment process in the infrastructure risk management plan.

Maintenance is funded from Council's operating budget and grants where available. This is discussed in Section 6.2.

5.4 Renewal/Replacement Plan

Renewal expenditure is major work which does not increase the asset's design capacity 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 upgrade/expansion or new works expenditure.

Table 5.10 shows the past renewal expenditure that has been spent on Council Parks, Gardens and Sporting Fields, with Table 5.11 showing the renewal expenditure for Buildings and Operational Land

Table 5.10 Historical Capital Renewal Expenditure Parks and Sporting Fields

Year	Expenditure
2005/06	\$87,390
2006/07	\$121,137
2007/08	\$62,833
2008/09	\$123,427
Average	\$98,447

Table 5.11 Historical Capital Renewal Expenditure Buildings and Operational Land

Year	Expenditure
2005/06	
2006/07	
2007/08	\$110,894
2008/09	\$395,048
2009/10	\$765,925
Average	\$423,956

5.4.1 Renewal plan

Council's maintenance and renewal plan is currently incorporated into a 10 year Capital Works Program (Appendix C)..

Assets identified for renewal are inspected to verify the accuracy of the estimated remaining life obtained and develop a preliminary renewal estimate. Verified proposals are ranked by priority and available funds and scheduled in future works programmes. The priority ranking criteria is detailed in Table 5.29.

Urban Parks, Gardens and Sporting Fields Criteria	Weighting
1. Parks, Gardens and Sporting Fields Usage	10
2. Parks, Gardens and Sporting Fields Hierarchy	18
3. Parks, Gardens and Sporting Fields Condition	50
4. Cost Effectiveness	12
5. Safety	10
Total	100%

Table 5.29 Renewal Priority Ranking Criteria for Buildings and Operational Land

Asset Class	Criteria
Buildings	Building has serious identified defects, resulting in unacceptable appearance, user comfort and/or safety. Urgent work is required, with safety issues to be addressed urgently

Table 5.30 Renewal Priority Ranking Criteria for Buildings

Renewal will be undertaken using 'low-cost' renewal methods where practical. The aim of 'low-cost' renewals is to restore the service potential or future economic benefits of the asset by renewing the assets at a cost less than replacement cost. An example of low cost renewal, in lieu of full pavement reconstruction, is pavement rehabilitation work or spraying an enrichment seal.

5.4.2 Renewal standards

Renewal work is carried out in accordance in accordance with the standards and specifications noted in Section 5.3.1.

5.4.3 Summary of future renewal expenditure

Figure 5.31 has the projected future renewal expenditure increase over time as the asset ages.

The projected capital renewal program is shown in Appendix C.

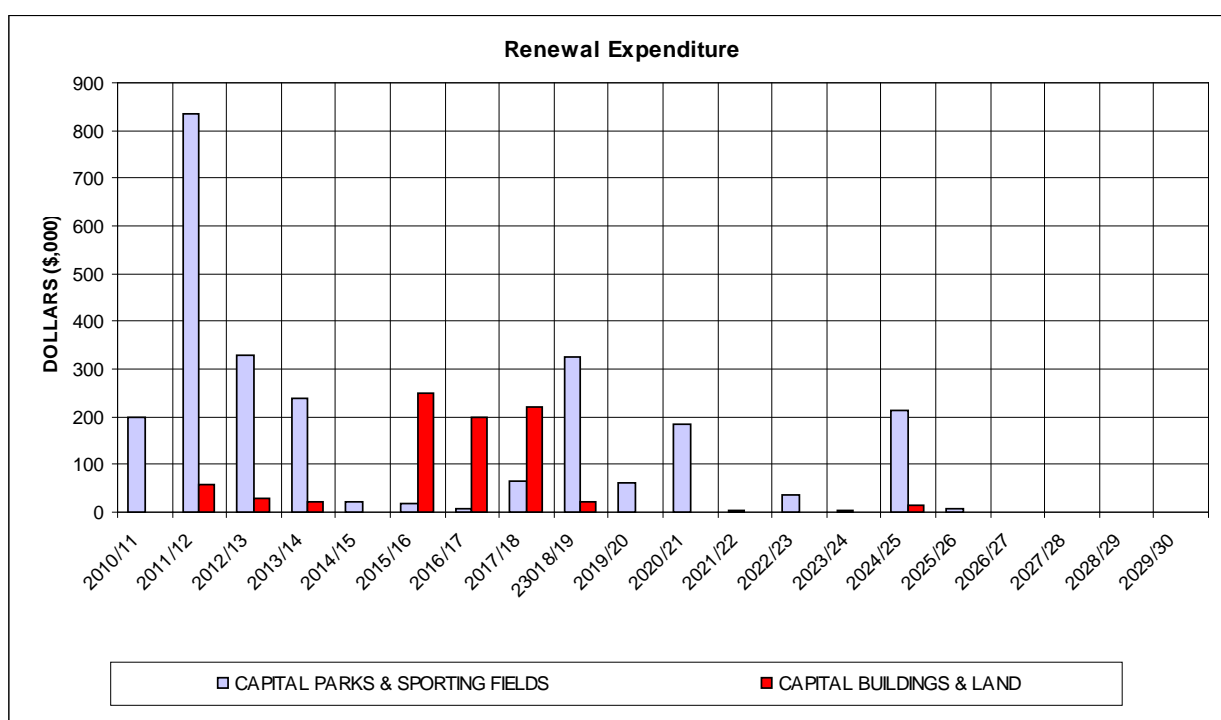


Fig 5.31 Predicted Capital Renewal for Parks, Gardens, Sporting Fields, Buildings & Land

Deferred renewal, i.e. those assets identified for renewal and not scheduled for renewal in capital works programs are to be included in the risk assessment process in the risk management plan.

Renewals are to be funded from Council's capital works program and grants where available. This is further discussed in Section 6.2.

5.5 Creation/Acquisition/Upgrade Plan

New works are those works that create a new asset that did not previously exist, or works, which upgrade or improve an existing asset beyond its existing capacity. They may result from growth, social or environmental needs. Assets may also be acquired at no cost to the Council from land development. These assets from growth are considered in Section 4.4.

5.5.1 Selection criteria

New assets and upgrade/expansion of existing assets are identified from various sources such as Councillor or community requests, proposals identified by strategic plans or partnerships with other organisations. Proposals are inspected to verify need and to develop a preliminary renewal estimate.

Verified proposals are ranked by priority and available funds and scheduled in future works programmes.

The priority ranking is the same as that used for assets requiring renewal, see figure 5.4.1

5.5.2 Standards and specifications

Standards and specifications for new assets and for upgrade/expansion of existing assets are the same as those for maintenance and renewal see Section 5.3.2.

5.5.3 Summary of future upgrade/new assets expenditure

New assets and services are to be funded from Council's capital works program and grants where available. This is further discussed in Section 6.2. Council's 20 year Capital Works Program is shown in Figure 5.32 and Appendix C

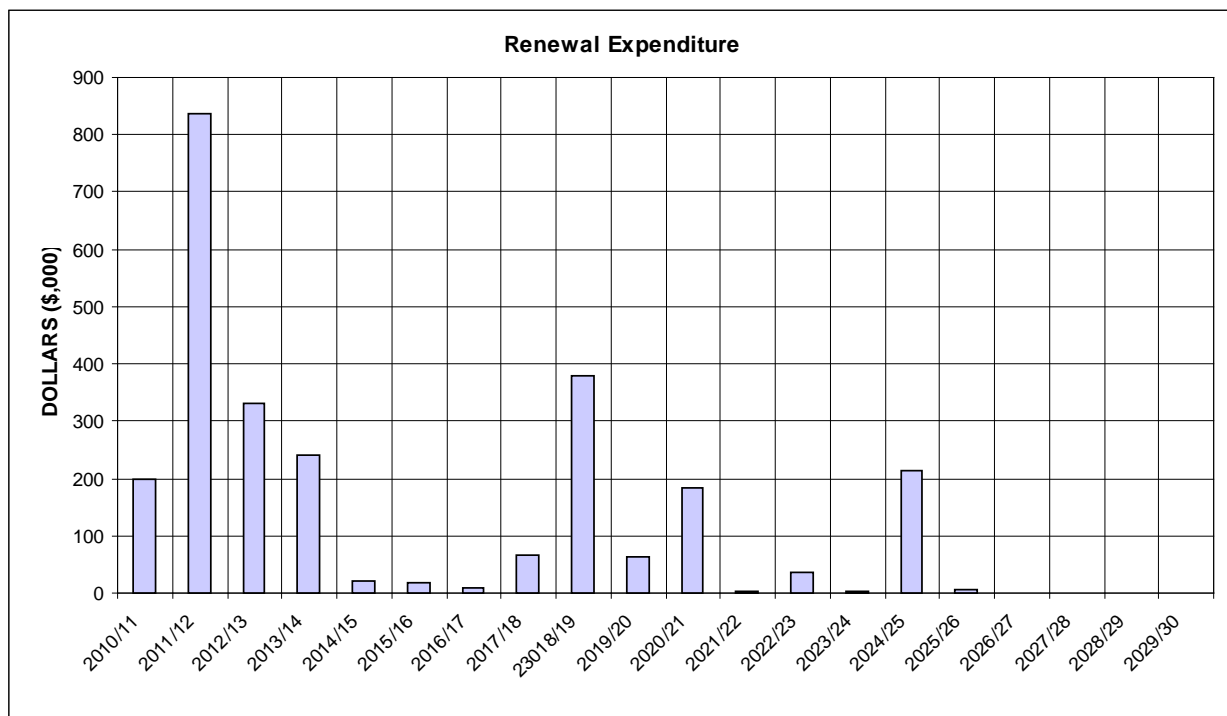


Fig 5.32. Planned Capital Upgrade/New Asset Expenditure

5.6 Disposal Plan

Disposal includes any activity associated with disposal of a decommissioned asset including sale, demolition or relocation. It is unlikely that any Parks, Gardens or Sporting Fields would be disposed of while still in service. It may be possible that if a Park, Garden or Sporting Field is underutilised that it may be subdivided for residential dwellings (e.g. land such as The Pines), but this would be a last resort and only after it is shown that the maintenance costs are unjustified.

There are no plans to dispose of any Park, Garden, Sporting Field or Public Land assets at the present and Council has rejected the notion when a report on "The Pines" was previously submitted.

Operational Land such as the Polaris street depot may at some future date be viable to sell. At present Council is receiving a modest return by leasing out individual buildings.

6. FINANCIAL SUMMARY

This section contains the financial requirements resulting from all the information presented in the previous sections of this asset management plan. The financial projections will be improved as further information becomes available on desired levels of service, current and projected future asset performance and grant funding.

6.1 Financial Statements and Projections

The financial projections are shown in Fig 6.1 for planned operating (operations and maintenance) and capital expenditure (renewal and upgrade/expansion/new assets).

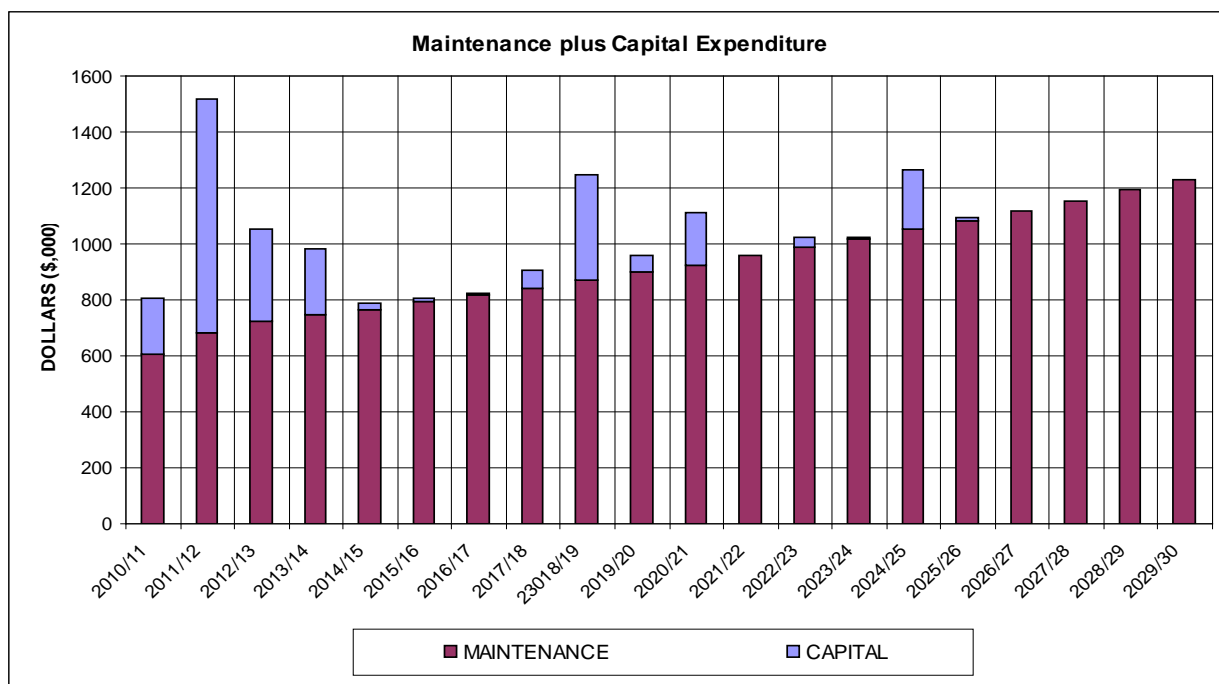


Fig 6.1 Planned Maintenance and Capital Expenditure Parks, Gardens and Sporting Fields

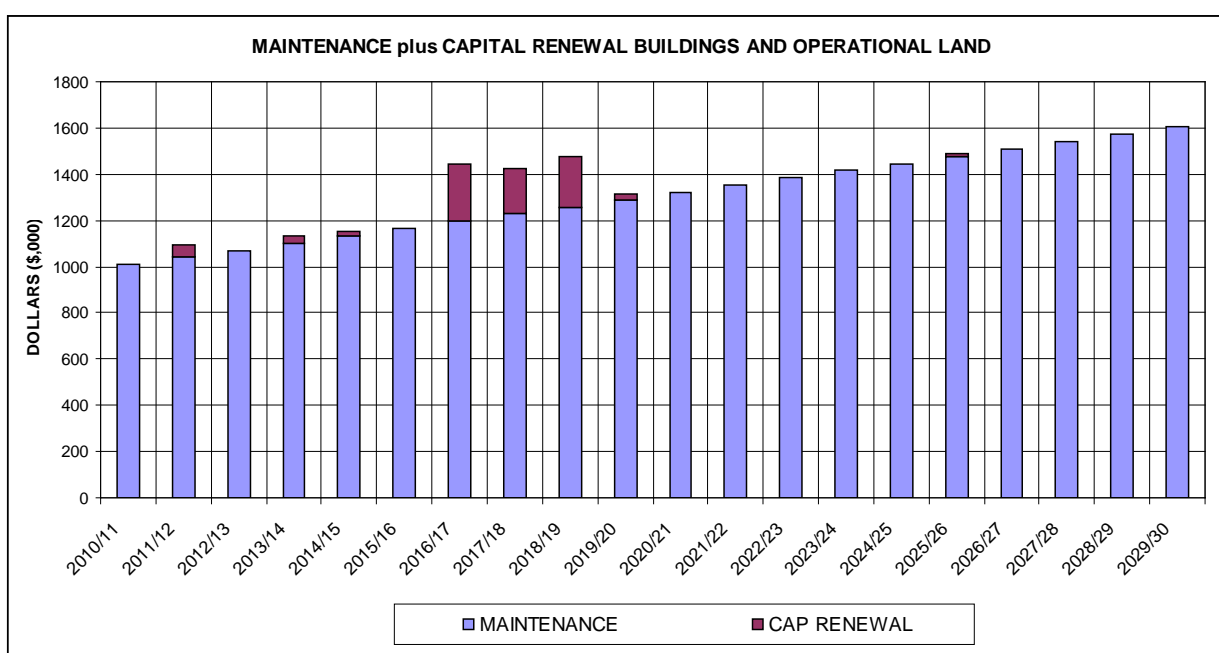


Fig 6.2 Planned Maintenance and Capital Expenditure Buildings and Operational Land

6.1.1 Sustainability of service delivery

There are two key indicators for financial sustainability that have been considered in the analysis of the services provided by this asset category, these being long-term life cycle costs and medium term costs over the 10-year financial planning period.

Long term - Life Cycle Cost

The ratio of lifecycle costs to lifecycle expenditure gives an indicator of sustainability of service provision. Life cycle costs include maintenance and renewal expenditure. The life cycle cost for the services covered in this asset management plan for a 20 year period is \$31.333 million. In past years Council has funded both the maintenance and capital renewal costs for Parks, Gardens and Sporting Fields, hence there has been no disparity between the funding and expenditure.

Table 6.1 illustrates the future life cycle costs.

Asset	Annual Average Lifecycle Cost \$,000	Average Lifecycle Expenditure \$,000	Average Annual Disparity \$,000
Parks Gardens and Sporting Fields	\$509.9	\$620.5	+\$110.6
Buildings Operational Land	\$1,505.8	\$1,640.9	+\$135.1

It is expected that this trend will continue at least for the next four to five years, when this plan will be reviewed. The life cycle sustainability index is greater than 1.0

A gap between life cycle costs and life cycle expenditure gives an indication as to whether present consumers are paying their share of the assets they are consuming each year. The purpose of this Parks, Gardens and Sporting Field Asset Management Plan is to identify levels of service that the community needs and can afford and develop the necessary long-term financial plans to provide the service in a sustainable manner.

Medium term – 10 year financial planning period

This asset management plan identifies the estimated maintenance and capital expenditures required to

provide an agreed level of service to the community over a 20-year period for input into a 10-year financial plan and funding plan (see Appendix E) to provide the service in a sustainable manner.

The financial planning in this asset management plan, will need to be revised at least every four years. To assume that grants will continue indefinitely may lead to a false expectation that levels of service can be maintained.

An asset management plan needs to compare the existing or planned expenditures in the 10-year period to identify monetary gaps. In a core asset management plan, a gap is generally due to increasing asset renewals, increased costs or demand etc.

Council has provided services in a sustainable manner, by matching projected asset renewals to meet agreed service levels with planned capital works programs to available revenue.

This has eliminated the gap between projected asset renewals, planned asset renewals and funding. Further work is required to manage the required service levels and funding to ensure that there is no funding gap.

If upon review of this Plan a gap begins to emerge, then it will be managed by:

- ☒ Reducing the level of service
- ☒ Reduce customer satisfaction levels
- ☒ Increased risk/safety
- ☒ Greater proportion of assets in poor condition

The total maintenance and capital renewal expenditure required over the 10 years is \$5.937 million.

This is an average expenditure of \$593,657 per year. Estimated maintenance and capital renewal expenditure in year 1 is \$539,783. The 10 year sustainability index for the first year is 0.91

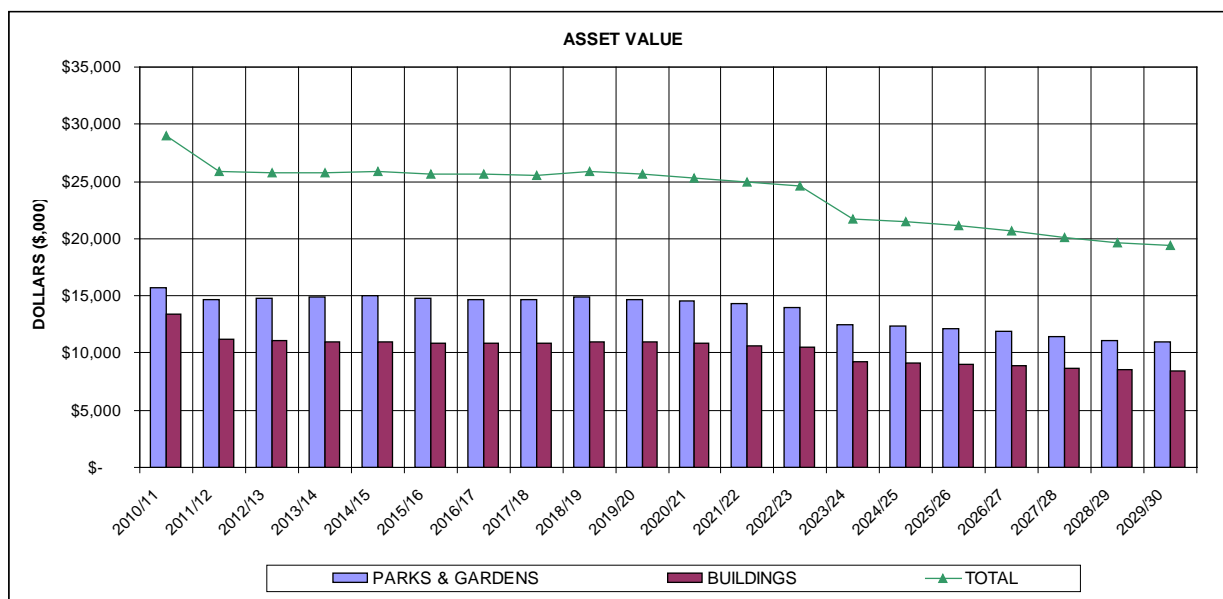
6.2 Funding Strategy

Projected expenditure identified in Section 6.1 is to be funded from Council's operating and capital budgets. The funding strategy is detailed in the Council's 10 year long term financial plan. Achieving the financial strategy will require:

- ☒ Increasing rates
- ☒ Receiving larger amounts of Federal and State grants
- ☒ Disposing of assets to reduce maintenance costs
- ☒ Accepting a lower level of service.

6.3 Valuation Forecasts

Asset values are forecast to increase as additional assets are added to the asset stock from construction and acquisition by Council and from assets constructed by developers and others and donated to Council. Fig 6.4 shows the projected replacement cost asset values over the planning period in current 2011 dollar values.



.Fig 6.4 . Projected Asset Values

Depreciation expense values are forecast in line with asset values as shown in Fig 6.5.

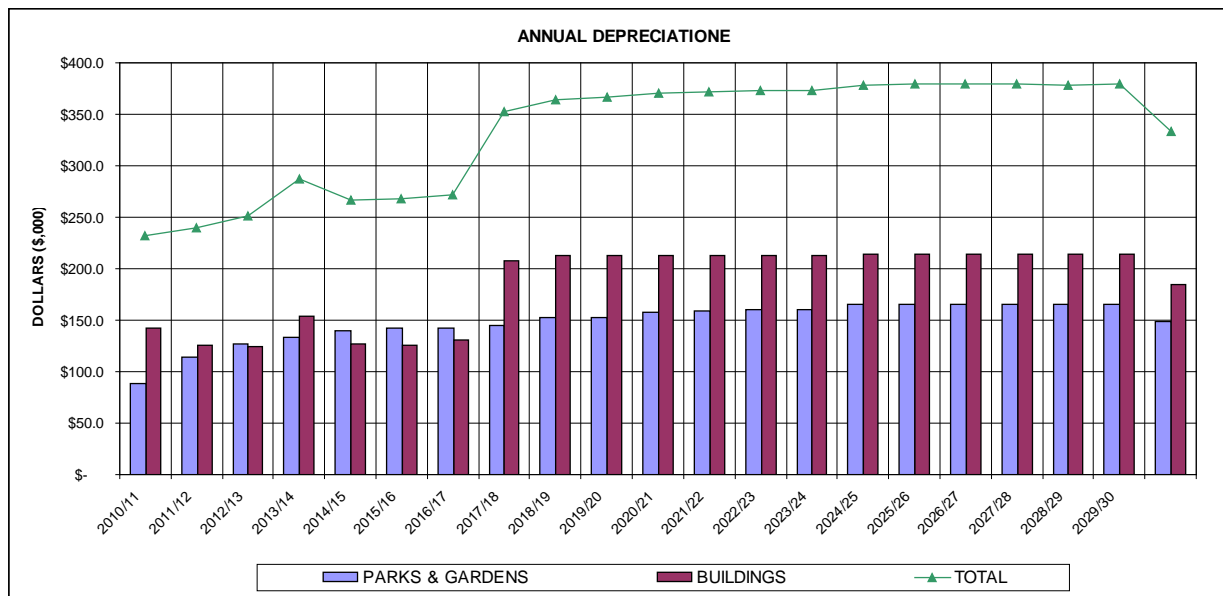


Fig 6.5 . Projected Depreciation Expense

The depreciated replacement cost (current replacement cost less accumulated depreciation) will vary over the forecast period depending on the rates of addition of new assets, disposal of old assets and consumption and renewal of existing assets. Forecast of the Written Down Capital Value is shown in Fig 6.6

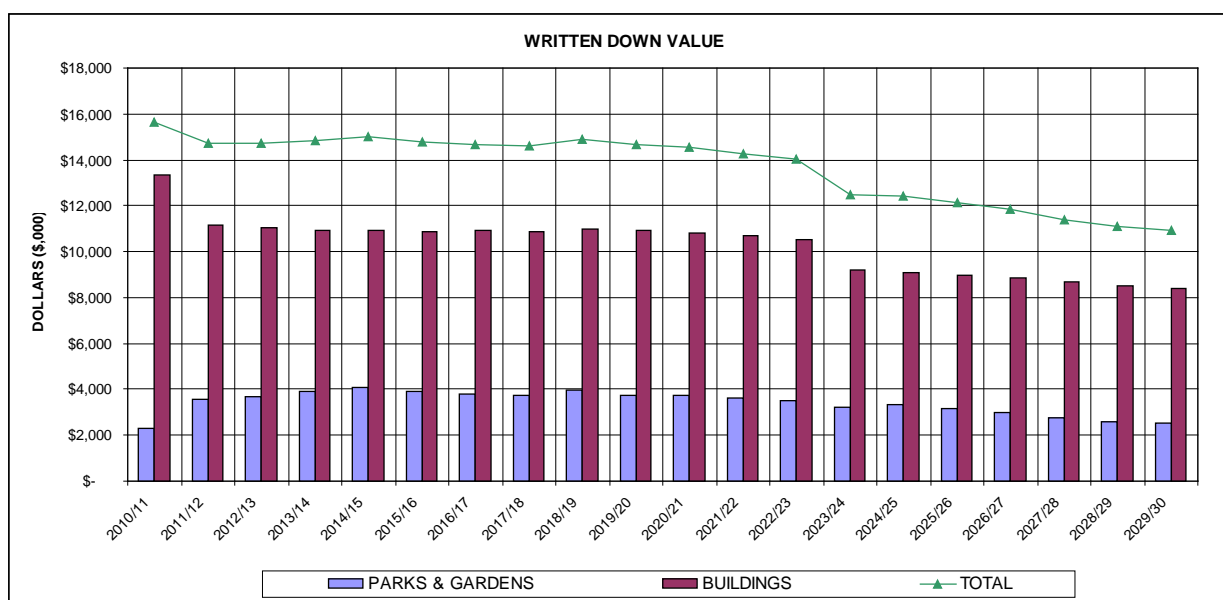


Fig 6.6. Projected Depreciated Replacement Cost

6.4 Key Assumptions made in Financial Forecasts

This section details the key assumptions made in presenting the information contained in this asset management plan and in preparing forecasts of required operating and capital expenditure and asset

values, depreciation expense and carrying amount estimates. It is presented to enable readers to gain an understanding of the levels of confidence in the data behind the financial forecasts.

Key assumptions made in this asset management plan are:

- X The current levels of service will be maintained over the life of this asset management plan
- X The treatment and maintenance costs are based on Council's current schedule of rates
- X All predicted financial figures are based on 2010/11 rates and have been adjusted for an inflation rate of 3.5%
- X Accuracy of future financial forecasts may be improved in future revisions of this asset management plan by the following actions.
- X Consult with the community and other stakeholders to finalise the levels of service currently being delivered
- X Refine and improve the prediction modelling (life cycle paths and decision matrices)

7. ASSET MANAGEMENT PRACTICES

7.1 Accounting/Financial Systems

Council uses CIVICA Authority as its corporate accounting system. Authority has a suite of accounting/financial modules to meet all day to day operational and reporting requirements

The Director of Administration is delegated the statutory responsibility as Council's Responsible Accounting Officer. The Responsible Accounting Officer is to ensure that Council has adequate control systems, processes and procedures in place and these are being applied to meet all financial operating and reporting requirements.

The Local Government Act 1993, Chapter 13 sets out the requirements for management reporting, accounting, auditing, and financial reporting for Councils. The NSW division of Local Government also issues the Local Government Code of Accounting Practice and Financial Reporting, which assists in the interpretation and application of the act and the application of Australian Accounting Standards to the audit financial reporting functions.

The Government Code of Accounting Practice and Financial Reporting also provides a mechanism which ensures appropriate accounting policies and practices are adopted. For infrastructure, significant accounting policies are detailed in the annual financial reports. These include policies on the acquisition of assets, initial asset recognition, subsequent costs, asset revaluation, capitalisation thresholds, depreciation and disposal and de-recognition.

It is possible that changes will be required to accounting policies and practices resulting from this asset management plan. These will be assessed and implemented as soon as practical.

7.2 Asset Management Systems

Council's adopted Asset Management System is "AIM" (Asset and Infrastructure Management) a component of CIVICA's "Authority System.

AIM links to the Authority accounting system through the use of Work Orders and Tasks. Asset Valuations can be stored in AIM but are also stored in the Capital Value Record (CVR) component of Authority.

The Director of Administration (and the Administration staff) are responsible for maintaining the Asset Management Systems in conjunction with the Director of Engineering to update information.

The development of AIM hierarchy for all Parks, Gardens and Sporting Fields assets is practically complete. The Director of Engineering revalued the Parks, Gardens and Sporting Fields assets, by using Fair Value rates from current projects. Part of the asset revaluation has been to split into categories such as playground, soft fall , shade sails etc. These categories have been imported into AIM

7.3 Information Flow Requirements and Processes

The key information flows *into* this asset management plan are:

- X The asset register data on size, age, value, remaining life of the item;
- X The unit price for the categories;
- X The adopted service levels;
- X Projections of various factors affecting future demand for services;

- X Correlations between maintenance and renewal, including decay models;
- X Data on new assets acquired by council.

7.4 Key Assumptions made in Financial Forecasts

This section details the key assumptions made in presenting the information contained in this asset management plan and in preparing forecasts of required operating and capital expenditure and asset values, depreciation expense and amount estimates. It is presented to enable readers to gain an understanding of the levels of confidence in the data behind the financial forecasts.

The key assumptions made in this asset management plan are:

- X The current levels of service will remain constant for the life of this plan
- X The treatment and maintenance costs are based on Council's current schedule of rates.
- X All financial figures are based on 2010/11 values and are adjusted for a 3.5% inflation rate, whereas income has been based on Council meeting the maintenance expenditure.
- X The useful life analysis

These will impact the Long Term Financial Plan, Strategic Business Plan, annual budget and departmental business plans and budgets.

7.4 Standards and Guidelines

Refer to Section 5.3.2

8. PLAN IMPROVEMENT AND MONITORING

8.1 Performance Measures

The effectiveness of the asset management plan can be measured in the following ways:

- X The degree to which the required cashflows identified in this asset management plan are incorporated into council's long term financial plan and Strategic Management Plan;
- X The degree to which 1-5 year detailed works programs, budgets, business plans and organisational structures take into account the 'global' works program trends provided by the asset management plan;

8.2 Improvement Plan

The asset management improvement plan generated from this asset management plan is shown in Table 8.21

Table 8.1 Improvement Plan

Task No	Task	Responsibility	Resources Required	Timeline
1.	Valuation Unit Costs – review unit rates, derivations on a greenfield basis	DE	Staff	May 2011
2.	Asset Information System – implement software package, providing asset deterioration and other tools	DAF	Staff	Jul 2011
3.	Risk Management – Refine, expand and document the risk management plan	DE	Staff	Jul 2011
4.	Job costing system – develop system, incorporating current unit rates	DAF/DE	Staff	Dec 2011
5.	Document mythology and procedures for asset useful lives, condition rating and scoring and depreciation calculations.	DE	Staff	June 2010
6.	Population predictions – review projects based on latest available Census	DE	Staff	May 2011
7.	Community Consultation – undertake targeted engagement with the community to resolve acceptable and achievable levels of service	GM	Staff	Aug 2012
8.	Condition Rating – refine data collected and analysis processes including inspection and condition rating	PGS	Staff	Dec 2011
9.	Consider limiting the AMP time framework to 10 years, to coincide with the Long term financial plan	DAF/DE	Staff	May 2011
10	Develop processes for capturing new and disposed assets, to ensure they are recorded in the AIM system	DES/DAF	Staff	June 2011

Task No	Task	Responsibility	Resources Required	Timeline
11	Develop a Corporate process to determine a ranking system across all Parks and Sporting Fields, to assist in prioritising renewal expenditure	Council	Staff	June 2011

Monitoring and Review Procedures

This asset management plan will be reviewed during annual budget preparation and amended to recognise any changes in service levels and/or resources available to provide those services as a result of the budget decision process.

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

9 REFERENCES

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6. Temora Shire Parks, Gardens and Sporting Fields Hierarchy Policy 2007
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APPENDICES

- Appendix A Abbreviations
- Appendix B Glossary
- Appendix C 10 Year Maintenance and Capital Works Program
- Appendix D Maintenance response Levels of Service
- Appendix E Expenditure and Income Comparison

Appendix A ABBREVIATIONS

AAAC	Average annual asset consumption
AMP	Asset management plan
ARI	Average recurrence interval
BOD	Biochemical (biological) oxygen demand
CRC	Current replacement cost
CWMS	Community wastewater management systems
DA	Depreciable amount
DAF	Director of Administration and Finance
DES	Director of Engineering
DoH	Department of Health
EF	Earthworks/formation
GM	General Manager
IRMP	Infrastructure risk management plan
LCC	Life Cycle cost
LCE	Life cycle expenditure
MMS	Maintenance management system
PGS	Parks and Gardens Supervisor
PCI	Pavement condition index
PSAMP	Parks, Garden and Sporting Field Asset Management Plan
RV	Residual value
SS	Suspended solids
vph	Vehicles per hour

Appendix B GLOSSARY

Annual service cost (ASC)

An estimate of the cost that would be tendered, per annum, if tenders were called for the supply of a service to a performance specification for a fixed term. The Annual Service Cost includes operating, maintenance, depreciation, finance/ opportunity and disposal costs, less revenue.

Asset class

Grouping of assets of a similar nature and use in an entity's operations (AASB 166.37).

Asset condition assessment

The process of continuous or periodic inspection, assessment, measurement and interpretation of the resultant data to indicate the condition of a specific asset so as to determine the need for some preventative or remedial action.

Asset management

The combination of management, financial, economic, engineering and other practices applied to physical assets with the objective of providing the required level of service in the most cost effective manner.

Assets

Future economic benefits controlled by the entity as a result of past transactions or other past events (AAS27.12).

Property, plant and equipment including infrastructure and other assets (such as furniture and fittings) with benefits expected to last more than 12 month.

Average annual asset consumption (AAAC)*

The amount of a local government's asset base consumed during a year. This may be calculated by dividing the Depreciable Amount (DA) by the Useful Life and totalled for each and every asset OR by dividing the Fair Value (Depreciated Replacement Cost) by the Remaining Life and totalled for each and every asset in an asset category or class.

Brownfield asset values**

Asset (re)valuation values based on the cost to replace the asset including demolition and restoration costs.

Capital expansion expenditure

Expenditure that extends an existing asset, at the same standard as is currently enjoyed by residents, to a new group of users. It is discretionary expenditure, which increases future operating, and maintenance costs, because it increases council's asset base, but may be associated with additional revenue from the new user group, eg. extending a drainage or Parks, Gardens and Sporting Fields network, the provision of an oval or park in a new suburb for new residents.

Capital expenditure

Relatively large (material) expenditure, which has benefits, expected to last for more than 12 months. Capital expenditure includes renewal, expansion and upgrade. Where capital projects involve a combination of renewal, expansion and/or upgrade expenditures, the total project cost needs to be allocated accordingly.

Capital funding

Funding to pay for capital expenditure.

Capital grants

Monies received generally tied to the specific projects for which they are granted, which are often upgrade and/or expansion or new investment proposals.

Capital investment expenditure

See capital expenditure definition

Capital new expenditure

Expenditure which creates a new asset providing a new service to the community that did not exist beforehand. As it increases service potential it may impact revenue and will increase future operating and maintenance expenditure.

Capital renewal expenditure

Expenditure on an existing asset, which returns the service potential or the life of the asset up to that which it had originally. It is periodically required expenditure, relatively large (material) in value compared with the value of the components or sub-components of the asset being renewed. As it reinstates existing service potential, it has no impact on revenue, but may reduce future operating and maintenance expenditure if completed at the optimum time, eg. resurfacing or resheeting a material part of a Parks, Gardens and Sporting Fields network, replacing a material section of a drainage network with pipes of the same capacity, resurfacing an oval. Where capital projects involve a combination of renewal, expansion and/or upgrade expenditures, the total project cost needs to be allocated accordingly.

Capital upgrade expenditure

Expenditure, which enhances an existing asset to provide a higher level of service or expenditure that will increase the life of the asset beyond that which it had originally. Upgrade expenditure is discretionary and often does not result in additional revenue unless direct user charges apply. It will increase operating and maintenance expenditure in the future because of the increase in the council's asset base, eg. widening the sealed area of an existing Parks, Gardens and Sporting Fields, replacing drainage pipes with pipes of a greater capacity, enlarging a grandstand at a sporting facility. Where capital projects involve a combination of renewal, expansion and/or upgrade expenditures, the total project cost needs to be allocated accordingly.

Carrying amount

The amount at which an asset is recognised after deducting any accumulated depreciation / amortisation and accumulated impairment losses thereon.

Class of assets

See asset class definition

Component

An individual part of an asset which contributes to the composition of the whole and can be separated from or attached to an asset or a system.

Cost of an asset

The amount of cash or cash equivalents paid or the fair value of the consideration given to acquire an asset at the time of its acquisition or construction, plus any costs necessary to place the asset into service. This includes one-off design and project management costs.

Current replacement cost (CRC)

The cost the entity would incur to acquire the asset on the reporting date. The cost is measured by reference to the lowest cost at which the gross future economic benefits could be obtained in the normal course of business or the minimum it would cost, to replace the existing asset with a technologically modern equivalent new asset (not a second hand one) with the same economic benefits (gross service potential) allowing for any differences in the quantity and quality of output and in operating costs.

Current replacement cost "As New" (CRC)

The current cost of replacing the original service potential of an existing asset, with a similar modern equivalent asset, i.e. the total cost of replacing an existing asset with an as NEW or similar asset expressed in current dollar values.

Cyclic Maintenance**

Replacement of higher value components/sub-components of assets that is undertaken on a regular cycle including repainting, building roof replacement, cycle, replacement of air conditioning equipment, etc. This work generally falls below the capital/ maintenance threshold and needs to be identified in a specific maintenance budget allocation.

Depreciable amount

The cost of an asset, or other amount substituted for its cost, less its residual value (AASB 116.6)

Depreciated replacement cost (DRC)

The current replacement cost (CRC) of an asset less, where applicable, accumulated depreciation calculated on the basis of such cost to reflect the already consumed or expired future economic benefits of the asset

Depreciation / amortisation

The systematic allocation of the depreciable amount (service potential) of an asset over its useful life.

Economic life

See useful life definition.

Expenditure

The spending of money on goods and services. Expenditure includes recurrent and capital.

Fair value

The amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties, in an arms length transaction.

Greenfield asset values **

Asset (re)valuation values based on the cost to initially acquire the asset.

Heritage asset

An asset with historic, artistic, scientific, technological, geographical or environmental qualities that is held and maintained principally for its contribution to knowledge and culture and this purpose is central to the objectives of the entity holding it.

Impairment Loss

The amount by which the carrying amount of an asset exceeds its recoverable amount.

Infrastructure assets

Physical assets of the entity or of another entity that contribute to meeting the public's need for access to major economic and social facilities and services, eg. Parks, Gardens and Sporting Fields, drainage, footpaths and cycleways. These are typically large, interconnected networks or portfolios of composite assets. The components of these assets may be separately maintained, renewed or replaced individually so that the required level and standard of service from the network of assets is continuously sustained. Generally the components and hence the assets have long lives. They are fixed in place and are often have no market value.

Investment property

Property held to earn rentals or for capital appreciation or both, rather than for:

- (a) use in the production or supply of goods or services or for administrative purposes; or
- (b) sale in the ordinary course of business (AASB 140.5)

Level of service

The defined service quality for a particular service against which service performance may be measured. Service levels usually relate to quality, quantity, reliability, responsiveness, environmental, acceptability and cost).

Life Cycle Cost **

The life cycle cost (LCC) is average cost to provide the service over the longest asset life cycle. It comprises annual maintenance and asset consumption expense, represented by depreciation expense. The Life Cycle Cost does not indicate the funds required to provide the service in a particular year.

Life Cycle Expenditure **

The Life Cycle Expenditure (LCE) is the actual or planned annual maintenance and capital renewal expenditure incurred in providing the service in a particular year. Life Cycle Expenditure may be compared to Life Cycle Expenditure to give an initial indicator of life cycle sustainability.

Loans / borrowings

Loans result in funds being received which are then repaid over a period of time with interest (an additional cost). Their primary benefit is in 'spreading the burden' of capital expenditure over time. Although loans enable works to be completed sooner, they are only ultimately cost effective where the capital works funded (generally renewals) result in operating and maintenance cost savings, which are greater than the cost of the loan (interest and charges).

Maintenance and renewal gap

Difference between estimated budgets and projected expenditures for maintenance and renewal of assets, totalled over a defined time (eg 5, 10 and 15 years).

Maintenance and renewal sustainability index

Ratio of estimated budget to projected expenditure for maintenance and renewal of assets over a defined time (eg 5, 10 and 15 years).

Maintenance expenditure

Recurrent expenditure, which is periodically or regularly required as part of the anticipated schedule of works required to ensure that the asset achieves its useful life and provides the required level of service. It is expenditure, which was anticipated in determining the asset's useful life.

Materiality

An item is material if its omission or misstatement could influence the economic decisions of users taken on the basis of the financial report. Materiality depends on the size and nature of the omission or misstatement judged in the surrounding circumstances.

Modern equivalent asset.

A structure similar to an existing structure and having the equivalent productive capacity, which could be built using modern materials, techniques and design. Replacement cost is the basis used to estimate the cost of constructing a modern equivalent asset.

Non-revenue generating investments

Investments for the provision of goods and services to sustain or improve services to the community that are not expected to generate any savings or revenue to the Council, eg. parks and playgrounds, footpaths, Parks, Gardens and Sporting Fields and bridges, libraries, etc.

Operating expenditure

Recurrent expenditure, which is continuously required excluding maintenance and depreciation, eg power, fuel, staff, plant equipment, on-costs and overheads.

Pavement management system

A systematic process for measuring and predicting the condition of Parks, Gardens and Sporting Fields pavements and wearing surfaces over time and recommending corrective actions.

Planned Maintenance**

Repair work that is identified and managed through a maintenance management system (MMS). MMS activities include inspection, assessing the condition against failure/breakdown criteria/experience, prioritising scheduling, actioning the work and reporting what was done to develop a maintenance history and improve maintenance and service delivery performance.

PMS Score

A measure of condition of a Parks, Gardens and Sporting Fields segment determined from a Pavement Management System.

Rate of annual asset consumption*

A measure of average annual consumption of assets (AAAC) expressed as a percentage of the depreciable amount (AAAC/DA). Depreciation may be used for AAAC.

Rate of annual asset renewal*

A measure of the rate at which assets are being renewed per annum expressed as a percentage of depreciable amount (capital renewal expenditure/DA).

Rate of annual asset upgrade*

A measure of the rate at which assets are being upgraded and expanded per annum expressed as a percentage of depreciable amount (capital upgrade/expansion expenditure/DA).

Reactive maintenance

Unplanned repair work that carried out in response to service requests and management/supervisory directions.

Recoverable amount

The higher of an asset's fair value, less costs to sell and its value in use.

Recurrent expenditure

Relatively small (immaterial) expenditure or that which has benefits expected to last less than 12 months. Recurrent expenditure includes operating and maintenance expenditure.

Recurrent funding

Funding to pay for recurrent expenditure.

Rehabilitation

See capital renewal expenditure definition above.

Remaining life

The time remaining until an asset ceases to provide the required service level or economic usefulness. Age plus remaining life is economic life.

Renewal

See capital renewal expenditure definition above.

Residual value

The net amount which an entity expects to obtain for an asset at the end of its useful life after deducting the expected costs of disposal.

Revenue generating investments

Investments for the provision of goods and services to sustain or improve services to the community that are expected to generate some savings or revenue to offset operating costs, eg public halls and theatres, childcare centres, sporting and recreation facilities, tourist information centres, etc.

Risk management

The application of a formal process to the range of possible values relating to key factors associated with a risk in order to determine the resultant ranges of outcomes and their probability of occurrence.

Section or segment

A self-contained part or piece of an infrastructure asset.

Service potential

The capacity to provide goods and services in accordance with the entity's objectives, whether those objectives are the generation of net cash inflows or the provision of goods and services of a particular volume and quantity to the beneficiaries thereof.

Service potential remaining*

A measure of the remaining life of assets expressed as a percentage of economic life. It is also a measure of the percentage of the asset's potential to provide services that is still available for use in providing services (DRC/DA).

Strategic Management Plan (SA)**

Documents Council objectives for a specified period (3-5 yrs), the principle activities to achieve the objectives, the means by which that will be carried out, estimated income and expenditure, measures to assess performance and how rating policy relates to the Council's objectives and activities.

Sub-component

Smaller individual parts that make up a component part.

Useful life

Either:

- (a) the period over which an asset is expected to be available for use by an entity, or
- (b) the number of production or similar units expected to be obtained from the asset by the entity.

It is estimated or expected time between placing the asset into service and removing it from service, or the estimated period of time over which the future economic benefits embodied in a depreciable asset, are expected to be consumed by the council. It is the same as the economic life.

Value in Use

The present value of estimated future cash flows expected to arise from the continuing use of an asset and from its disposal at the end of its useful life. It is deemed to be depreciated replacement cost (DRC) for those assets whose future economic

benefits are not primarily dependent on the asset's ability to generate new cash flows, where if deprived of the asset its future economic benefits would be replaced.

Appendix C PARKS, GARDENS AND SPORTING FIELDS FOOTPATH AND KERB AND GUTTER PROGRAM

10 YEAR PARKS, GARDENS AND SPORTING FIELDSS CAPITAL WORKS PROGRAM

As part of Council's Asset Management Plan process, and to develop a 10 Year Financial Plan for Council, a 10 Year Parks, Gardens and Sporting Fields Capital Works Program has been developed. This plan is designed to address ratepayers requirements for Parks, Gardens and Sporting Fields to provide open space that meets the needs of the community, within a 10-year span and that the Parks, Gardens and Sporting Fields network is both affordable and sustainable for the community.

Careful consideration has been given to any new capital works and to consider them in terms of "asset management" principles and "whole of life" costs. Generally a more expensive asset means a more expensive maintenance and replacement cost. This also applies to the Parks, Gardens and Sporting Fields network, however it has to be recognised that the higher use Parks, Gardens and Sporting Fields get to the point where it is more economical address deficiencies immediately rather than allow them to become worse.

The 10 year program is to be a guideline for Council in adopting its Annual Business Plan. Council will reserve the right to review the program as situations and circumstances change over time. An annual update of the plan will need to be undertaken and a review of the full plan undertaken after 5 years.

Appendix D MAINTENANCE RESPONSE LEVELS OF SERVICE (Draft)

Table D1 Category Types

Category 1	Category 2	Category 3
Ariah Park Recreation Reserve Bob Aldridge Callaghan Park Federal Park Gloucester Park Lake Centenary Nixon Park Paleface Park Temora Tennis Courts Temora West Sports Ground	Airport Park Apex Park Bradley Park Davey Park Edis Park Harper Park Hillview Park Recreation Grounds Temora West Park The Oval	Brophy Park Father Hannan Oval Golden Gate Reserve The Pines Pinney Park Springdale Reserve

Table D2 Defects Record

Grassed Surface	Play Equipment	Soft Fall	Buildings/Structure	Signs
Unevenness Clumps of grass Bare surfaces Weeds (catheads etc.)	Damaged Broken Excessively worn	Uneven Holes Foreign matter	Graffiti Breakages Overhanging tree limbs Leaning trees	Damaged Faded Missing

Table D3 Resources

Grassed Surface	Play Equipment	Soft Fall	Buildings/Structure	Signs
Backhoe Grader Water cart Skid steer Contractor Tree Contractor Vegetation Control Trucks	Backhoe Tree Contractor Vegetation control	Day labour Skid steer contractor Tree Contractor Trucks	Day labour Paving Contractor Skid steer contractor Tree Contractor	Sign Crew

Table D4 Response Times

Parks, Gardens and Sporting Fields					
Category 1	Days	Category 2	Days	Category 3	Days
Unevenness	21	Unevenness	21	Unevenness	28
Clumps of grass	21	Clumps of grass	21	Clumps of grass	28
Bare Surfaces	60	Bare Surfaces	60	Bare Surfaces	90
Weeds	7	Weeds	14	Weeds	21
Damaged play equipment	7	Damaged play equipment	7	Damaged play equipment	14
Broken Play equipment	21	Broken Play equipment	21	Broken Play equipment	28
Worn Play equipment	60	Worn Play equipment	60	Worn Play equipment	60
Uneven soft fall	7	Uneven soft fall	7	Uneven soft fall	14
Holes in soft fall	2	Holes in soft fall	7	Holes in soft fall	14
Foreign Matter in soft fall	1	Foreign Matter in soft fall	1	Foreign Matter in soft fall	1
Graffiti	7	Graffiti	14	Graffiti	21
Breakages	14	Breakages	21	Breakages	28
Overhanging limbs	7	Overhanging limbs	14	Overhanging limbs	21
Leaning trees	21	Leaning trees	21	Leaning trees	28
Damaged Signs	7	Damaged Signs	14	Damaged Signs	21
Faded Signs	28	Faded Signs	60	Faded Signs	90
Missing Signs	7	Missing Signs	7	Missing Signs	14

TEMORA SHIRE COUNCIL



BRIDGES and STORMWATER MANAGEMENT

ASSET MANAGEMENT PLAN

PART 6




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1. EXECUTIVE SUMMARY

1.1 Infrastructure and Asset Management Plans

Council provides a stormwater and drainage system to protect assets such as roads and to channel stormwater away from residences.

The Assets assessed in this plan include:

- U Stormwater Pipes.
- U Stormwater Pits / Head Walls.
- U Gross Pollutant Traps.
- U Open channels
- U Stormwater retention dams
- U Other drainage structures

1.2 What does it Cost?

There are two key indicators of cost to provide the service at the stormwater drainage.

- U The life cycle cost being the average cost over the life cycle of the asset, and
- U The total maintenance and capital renewal expenditure required to deliver existing service levels in the next 10 years covered by Council's long-term financial plan.

The life cycle cost for the stormwater drainage asset is estimated at \$192.654 per annum averaged over a 10-year period. Council's planned life cycle expenditure for year 1 of the asset management plan is \$183,199 million which gives a life cycle sustainability index of 0.95.

The large anomaly between the lifecycle and medium term costing reported i.e. an apparent under funding of the long term costs and close to breaking even on the medium term costs results from the stage the stormwater assets are in their lifecycle at the moment. i.e. with a lengthy useful life no substantial renewals are predicted for the term of the Asset Management Plan.

1.3 Plans for the Future

Council plans to operate and maintain the stormwater drainage to achieve the following strategic objectives.

- U Ensure the stormwater drainage is maintained at a safe and functional standard as set out in this asset management plan.
- U Ensure that capital renewal funding for stormwater drainage are maintained
- U Provide rapid response to stormwater problems.
- U Protect flood-prone habitable buildings and receiving environments.

- U Ensure the stormwater network will compliment Council's strategy of harvesting water, and perform in areas where there is links to land developments.
- U Condition assessment of stormwater
- U Ensure that capital upgrade funding is available as per Council's 10-year management plan

Modelling in this report assumes the population is growing at a rate of 0.3 % per annum (based on historical growth statistics and the impact of growth of neighbouring shires and the airpark estate). While increased residents at the subdivision will result in an increase in general rates income collected it will also result in higher landing and takeoff volumes which will result in reduced pavement lives and the possibility of increased level of service demands

1.4 Lifecycle Management

The model for management of the stormwater drainage relates particularly to the maintenance and renewal stages of asset life. Early in the life of an asset, its condition deteriorates slowly and maintenance is generally not required. This is often referred to the **"Do Nothing"** phase of an asset's life. As the asset ages, it moves into what is known as the **"Maintain"** phase. Maintenance activities will need to be performed to minimise continued deterioration. As the asset moves towards the end of its life, activities are undertaken that restore the asset to a condition close to that of the original. This is referred to as the **"Renewal"** phase.

The importance of the time for intervention for renewal is paramount. If renewal activities are not undertaken in a timely manner, the condition of the asset will deteriorate rapidly to failure, and the cost of reconstruction may be many times that of renewal activities.

1.5 Financial Summary

A 10-year analysis of existing drainage conditions and costs has been undertaken to determine funding implications for the asset condition of the stormwater drainage pavements. Annual adjustment for increases in the cost of construction materials and services would need to be made to accurately represent long-term results.

Modelling indicates that an annual average renewal allocation of \$71,000 is insufficient to keep the stormwater drainage in the current overall condition. The average annual allocation for renewals, plus an average of \$51,772 in normal maintenance is funded by Council to maintain the current overall condition of the stormwater drainage over the next 20-year period.

1.6 Measuring our Performance

An asset management plan is a dynamic document, reflecting and responding to changes over time. Monitoring of this Stormwater drainage Asset Management Plan is required to:

- U Ensure compliance with the proposed improvement program milestones.
- U Ensure compliance with adopted standards and procedures for condition and performance.

A full review of this asset management plan should be undertaken every three to five years to document progress and set out proposals for the next five years. The recommendations below summarise the Improvement Program contained in Section 8 of this document.

1.7 Recommendations

This actions resulting from this asset management plan are:

- U Obtain Council approval of this asset management plan.

- U Review data management quality procedures.
- U Maintain Geographic Information System data regarding stormwater drainage assets
- U Develop criteria for risk treatment
- U Assess asset capacity and condition rating.
- U On-going water quality and flow monitoring.
- U Develop an education and consultation framework.
- U Communicate public responsibilities with respect to environmental care
- U Research international best practice.

2. INTRODUCTION

2.1 Background

The fundamental purpose of this Stormwater Drainage Asset Management Plan (SDAMP) is to improve Council's long-term strategic management of its stormwater drainage assets in order to cater for the community's desired levels of service in the future. This will be undertaken in accordance with Council's key strategic documents and demonstrates reasonable management in the context of Council's available financial and human resources.

The RAMP achieves this by setting standards, service levels and programmes that Council will develop and deliver. The standards and service levels have been set in accordance with user needs, regulations, industry practice and legislative codes of practice.

The asset management plan is to be read with the following associated planning documents:

- U Integrated Stormwater Management Plan (under completion)
- U Temora Shire Council Management Plan 2011/12 – 2015
- U Temora Shire Council Community Strategic Plan 2011— 2020
- U Temora Shire Council 2008 Resident Satisfaction Survey Result

This RAMP covers the following infrastructure assets which are summarised in Table 2.1

Table 2.1. Assets covered by this Plan

Asset category	Number	Replacement Value
Stormwater Pipes	668	\$4,117,780
Box Culverts	65	\$18,735,905
Open Channel	2225	\$1,688,750
Causeways	144	\$2,813,068
Gross Pollutant Trap	1	\$112,250
Bridges	8	\$5,600,609
TOTAL		\$33,068,362.00

2.2 Asset Management Framework Applicable to AAMP

2.2.1 National Framework for Local Government Financial Sustainability

In March 2007, the Local Government and Planning Ministers' Council (LGPMC) agreed to a nationally consistent approach to asset planning and management, financial planning and reporting and assessing financial sustainability. Each State Minister endorsed the National Frameworks for Financial Sustainability in Local Government for implementation in the context of their relationships with their local government sectors.

The National Frameworks consist of three main components as follows:

1. Asset Planning and Management

This framework consists of seven elements which each State and Territory is expected to adopt as follows:

- U Development of an **Asset Management Policy** - Each state/territory is expected to develop an asset management policy, which provides high-level guidance to assist councils in developing their own asset management policy.
- U Strategy and Planning — Councils should be provided with guidance from the State on developing an **Asset Management Strategy**, which is designed to support and implement its asset management policy;
- U **Governance and Management Arrangements** — Councils should be encouraged to apply and effect good governance and management arrangements which link asset management to service delivery and include assigning roles and responsibility for asset management between the CEO, the Council and senior managers;
- U **Defining Levels of Service** — mechanisms should be established that include community consultation to define the levels of service councils are expected to provide from their asset base;
- U **Data and Systems** — a framework for collection of asset management data should be established;
- U **Skills and Processes** — the asset management framework should contain a continuous improvement program;
- U Evaluation — the asset management framework should contain a **mechanism to measure its effectiveness**.

2. Financial Planning and Reporting

Focuses on Local Government's financial management at both the strategic and operational levels. The framework requires the preparation of:

- U A long term strategic plan which includes a financial component, demonstrating how the outcomes of the plan will be funded.
- U An annual budget format comparable with the audited financial statements, linked to strategic objectives, which at a minimum should include:
 - § Estimates of revenue and expenditure
 - § An explanation of how revenue will be applied
 - § An explanation of the financial performance and position of the council.
- U Annual financial statements and annual report, which should include:
 - § A report on council's operations during the financial year
 - § An explanation to the community on variations between the budget and the actual results and how this may impact on the strategic plan
 - § Audited financial statements for the financial year (prepared and audited in accordance with Australian Accounting and Auditing Standards).

3. Criteria for Assessing Financial Sustainability.

The National Frameworks define a council's long-term financial performance and position as sustainable when planned long term services and infrastructure standards are met without unplanned increases in rates and charges, or disruptive cuts to services.

The frameworks provide a range of financial sustainability indicators. However, they stress that the usefulness of indicators is not in the numbers themselves but the analysis of what is driving the indicator.

2.2.2 The NSW Department of Local Government - DIG Model

The DLG framework is to reshape the existing framework in some way to strengthen strategic focus, streamline the planning and reporting processes and encourage integration between the various council's strategic documents/plans. The proposed model is designed as a continuous framework, rather than a static planning model.

The recommendations provided through this Plan are essentially equipping Council to take a strategic approach to comply with this framework.

It is designed to allow councils more autonomy in responding to their community's various needs, and encourages elected representatives to play a leading role in developing long term plans.



Source – NSW Department of Local Government – Asset Management Planning for NSW Local Government – page 15

Fig 2.1 NSW LG DIG Model

Why mandate strategic planning?

This model includes a mandatory requirement for a long-term asset management plans. One of the recurrent themes emerging from the review is that councils need to develop a stronger strategic focus.

How is planning and reporting integrated?

The diagram below shows how the objectives from the Community Strategic Plan may be cascaded through the system.



For example, a Council's Community Strategic Plan might identify the objective of "A safe and healthy community" and nominate key strategies for achieving this. These strategies might include a wide variety of approaches, such as ensuring quality water supply and safe operation of sewerage services, ensuring efficient collection of domestic and commercial waste, promoting health education programs, lobbying for more aged care services in the area, developing crime prevention strategies for the community, and improving stormwater drainage system to prevent/reduce flooding.

These intentions would be translated into the Delivery Program in the following way, for example:

Plan:

Improving stormwater drainage Delivery Methods:

- ⌚ Undertake a review of the condition of the stormwater drainage.
- ⌚ Update Council's 10-year Stormwater Maintenance and Capital Plan.
- ⌚ Identify funding options for stormwater drainages management.
- Ω Identify key user concerns with stormwater drainage
- Ω Develop an Integrated Stormwater Management Plan with other stakeholders.
- Ω The Operational Plan would then focus on what Council would do towards achieving each of these goals in the coming year. For example:

Develop Integrated Stormwater Management Plan: Actions for 2011-21

- ⌚ Optimised maintenance programs

Ensure continued consultation with users.

In this way, the objectives of the Stormwater drainage Strategic Plan are cascaded down through Council's planning framework, so that general directions and objectives for the users are translated into plans, then into programs and finally, individual actions.

The Integrated Planning and Reporting project aims to improve Councils' capacity for long-term planning and should help to identify resourcing needs earlier in the planning cycle. The requirement to consider resourcing over the 10-year period of the plan will help Councils to take a wider view of their needs, considering not only finances, but also human resources and asset requirements. They will be able to identify the additional resources that could be raised through borrowings, rate variations or grants and will be in a better position to take maximum advantage of funding opportunities, resource sharing options and strategic alliances.

2.3 Key stakeholders

The key stakeholders are internal custodians as well as external individuals, companies, service authorities, government authorities and community groups who have a vested interest in management of stormwater drainages. The following groups have been identified as key stakeholders in the management and use of the stormwater drainage network and stormwater drainage related assets:

Elected Members	Endorsement of the asset management policy, strategy and plans. Set high level direction through the development of asset management principles in the Community Strategic Plan.
Senior Management	Endorse the development of asset management plans and provide the resources required to complete this task. Set high level priorities for asset management development in Council and raise the awareness of this function among Council staff and contractors. Support the implementation of actions resulting from this plan and prepared to make changes to a better way of managing assets and delivering services. Support for an asset management driven budget and Long Term Financial Plan (LTFP).
Corporate Services	Consolidating the asset register and ensuring the asset valuations are accurate. Development of supporting policies such as capitalisation and depreciation. Preparation of asset sustainability and financial reports incorporating asset depreciation in compliance with current Australian accounting standards. Asset Management and GIS support and admin.
Field Services Staff	Provide local knowledge level detail on all stormwater drainage assets. They verify the size, location and condition of assets. They can describe the maintenance standards deployed and Council's ability to meet technical and customer levels of service.
External Bodies	Developers; contribute to design and construction of new assets, which on completion become Council assets

2.4 Goals and Objectives of Asset Management

The Council exists to provide services to its community. Some of these services are provided by infrastructure assets. Council has acquired infrastructure assets by 'purchase', through construction by Council staff and by donation of assets constructed by developers and others to meet increased levels of service.

Council's goal in managing infrastructure assets is to meet the required level of service in the most cost effective manner for present and future consumers. The key elements of infrastructure asset management are:

- U **Taking a life cycle approach,**
 - § Have precise knowledge of what Council owns or has responsibility for or is legal liable for;
 - § Record and extract information on these assets in a register, down to an acceptable level which can be maintained and updated easily;
 - § Report on our annual depreciations and asset consumption at an asset component level;
 - § Develop cost-effective management strategies for the long term,
- U **Developing cost-effective management strategies for the long term,**
 - § Understand the long term (10-20 years) funding needs of the stormwater drainage to meet strategic expectations in both capital and maintenance expenditure;
- U **Providing a defined level of service and monitoring performance,**
 - § Measure and monitor the condition, performance, utilisation and costs of assets down to the managed component level and aggregate this data up to give outputs of cost and performance at the master level;
 - § Understand and record the current levels of service in terms of responsiveness and performance;
 - § Understand the likely future levels of service required based on population growth, demographic changes and community expectations;
- U **Understanding and meeting the demands of growth** through demand management and infrastructure investment,
- U **Managing risks** associated with asset failures,
- U **Sustainable** use of physical resources,

Continuous improvement in asset management practices.¹

- § Have uniform processes across our whole organisation for the evaluation of any investment in:
 - (a) Renewal, upgrades and expansions of existing assets;
 - (b) Creation of new assets;
 - (c) Maintenance of existing assets; and
 - (d) Operational expenditure to deliver services.

¹ IIMM 2006 Sec 1.1.3, p 1.3

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

Council's vision is:

To sustain and grow the Temora Shire as a rural community of choice for current and future residents, being united in our heritage yet open to growth and diversity

To celebrate our past achievements in sport, culture and enterprise whilst maintaining our commitment to the future in providing a safe, happy and healthy environment for all

Success through determination and inspiration

Council's mission is:

To achieve the best possible outcomes for our community

Council Values relevant to this asset management plan are:



Users:

In partnership with the Users, respond to needs and aspirations in a caring, fair and accountable manner through the provision of quality services.



Governments:

We encourage an open, productive relationship with all spheres of government and other organisations in the best interests of our community.



Customers and Suppliers:

Conduct our business with integrity and respect, ensuring consistency and accountability in all our dealings.



Environment

Conserve, enhance and develop our environment in an equitable and sustainable manner, acting as custodians for future generations.

2.5 Plan Framework

Key elements of the plan are



Levels of service – specifies the services and levels of service to be provided by council.



Future demand – how this will impact on future service delivery and how this is to be met.



Life cycle management – how Council will manage its existing and future assets to provide the required services



Financial summary – what funds are required to provide the required services.



Asset management practices



Monitoring – how the plan will be monitored to ensure it is meeting Council's objectives.

Asset management improvement plan

A road map for preparing an asset management plan is shown below in Fig 2.2

2.6 Core and Advanced Asset Management

This Stormwater Drainage Asset Management Plan is prepared as a 'core' asset management plan in accordance with the International Infrastructure Management Manual. It is prepared to meet minimum legislative and organisational requirements for sustainable service delivery and long term financial planning and reporting. Core asset management is a 'top down' approach where analysis is applied at the 'system' or 'network' level.

Future revisions of this asset management plan will move towards 'advanced' asset management using a 'bottom up' approach for gathering asset information for individual assets to support the optimisation of activities and programs to meet agreed service levels.

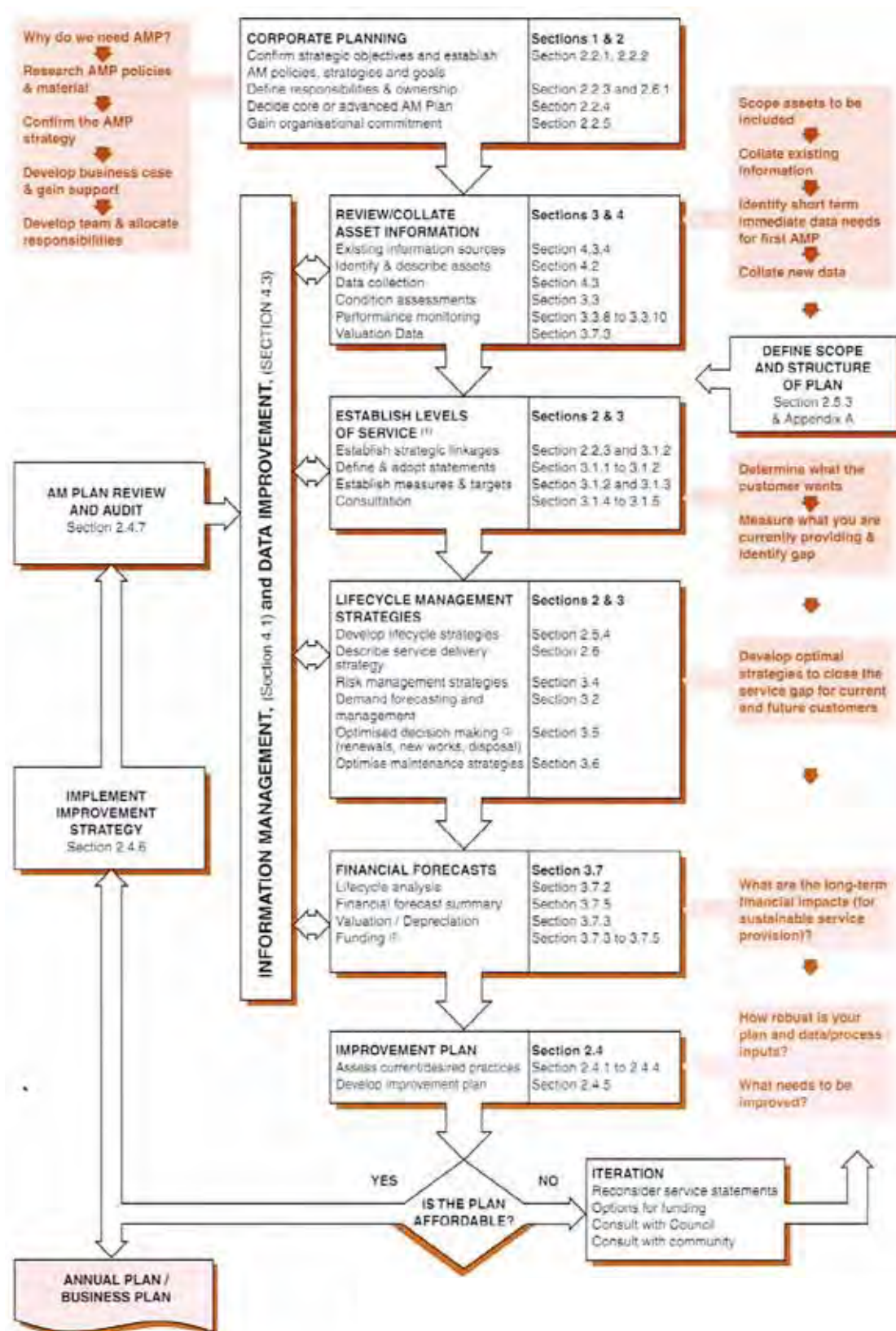


Fig 2.2 Stormwater drainage Map for Preparing an Asset Management Plan
Source: IIMM Fig 1.5.1, p1.111

3. LEVELS OF SERVICE

Levels of Service relate to outcomes the customer receives in terms of quality, quantity, responsiveness and performance as provided by the asset. To achieve and sustain acceptable standards of service for Council's stormwater drainage asset, requires Council to commit to an annual maintenance and capital program.

These funds provide for regular and responsive maintenance and for timely renewal or replacement of the asset. The provision of adequate financial resources ensures that the stormwater drainage is appropriately managed and preserved. Financial provisions below requirements impacts directly on community development and if prolonged, results in substantial needs for "catch up" expenditure imposed on ratepayers in the future. Additionally, deferred renewal results in increased and escalating reactive maintenance as aged assets deteriorate at increasing rates.

In developing the levels of service as documented in this AAMP, Council has given due regard to the strategic goals and objectives in the 2011-2015 Strategic Plan which sets out the strategic direction of Council to implement its Management Plan over the following four years. Council has also given due regard to Legislative requirements and Australian Standards and stakeholder expectations in the form of customer research and expectation surveys.

The levels of service documented in this AAMP therefore reflect the best assumptions of current levels of service provided by Council, for the benefit of the community, in the context of Council's financial and human resources.

Councils current Level of Service are set out in Appendix D of this Asset Management Plan.

3.1 Customer Research and Expectations

Council participates in a Performance Measure Customer Satisfaction survey every four years in August prior to the Council election. This survey is distributed to all residents, requesting their level of satisfaction with Council's services. The most recent customer satisfaction survey (2008). Stormwater drainage improved from the previous 2004 survey. This could be related to the lack of rain in the preceding years.

The results of the survey are shown in Figure 3.1.

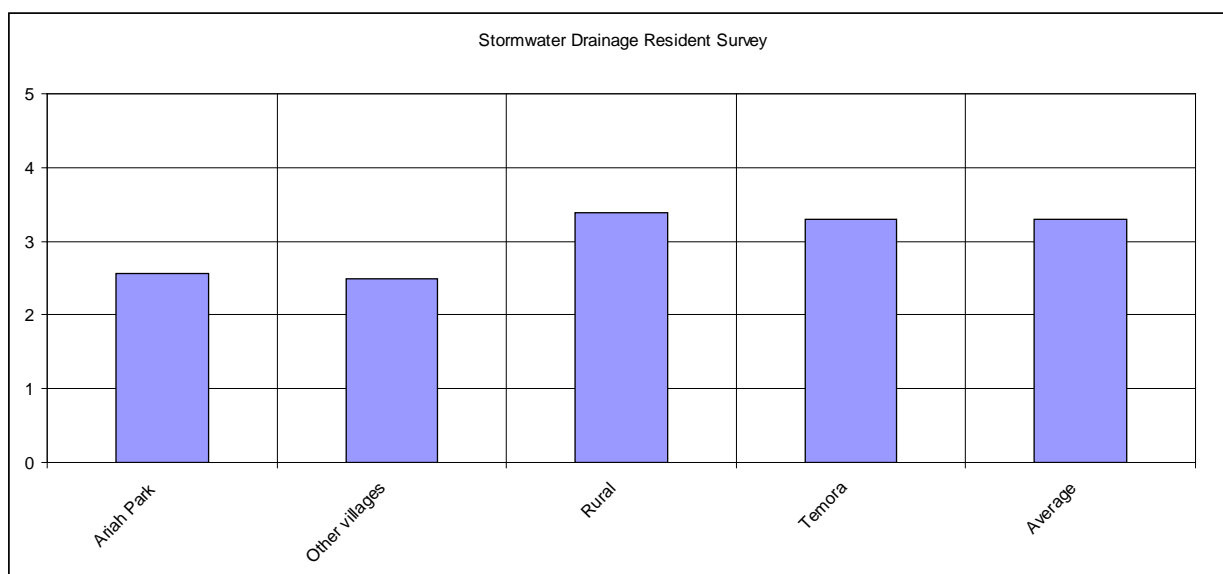


Fig 3.1 Stormwater Drainage Resident Survey

3.2 Legislative Requirements

Council has to meet many legislative requirements including Australian and State legislation and State regulations. These include:

Table 3.2. Legislative Requirements

Legislation	Requirement
National Asset Management Framework Legislation 2010	Focuses on long term financial sustainability and provides a mandate to have long term strategy, financial statements and annual reporting mechanisms. AM plans are likely to be audited.
DLG Integrated Planning NSW	Key requirement is to integrated community plans with operational and delivery plans.
Local Government Act 1993	Sets out role, purpose, responsibilities and powers of local governments including the preparation of a long term financial plan supported by asset management plans for sustainable service delivery.
Occupational Health and Safety Act 2000	Aims to secure the health, safety and welfare of people at work. It lays down general requirements which must be met at places of work in New South Wales. The provisions of the Act cover every place of work in New South Wales. The Act covers self employed people as well as employees, employers, students, contractors and other visitors.
Occupational Health and Safety Regulation 2001	Regulations on the control and management of risk in the work place.
The Protection of the Environment Operations Act 1997 (POEO Act)	Is the key piece of environment protection legislation administered by Department of the Environment and Climate Change (DECC). The POEO Act enables the Government to set out explicit protection of the environment policies (PEPs) and adopt more innovative approaches to reducing pollution.
Disability Discrimination Act	Sets out the responsibilities of Council and staff in dealing with access and use of public infrastructure.

Table 3.3. Legislative Requirements

Standards and Specifications	Requirements
Australian Accounting Standards.	<p>Sets out the financial reporting standards relating to infrastructure assets. Standards of particular relevance to Infrastructure Assets include:</p> <ul style="list-style-type: none"> • AASB116 Property, Plant & Equipment — prescribes requirements for recognition and depreciation of property, plant and equipment assets • AASB136 Impairment of Assets — aims to ensure that assets are carried at amounts that are not in excess of their recoverable amounts • AASB1021 Depreciation of Non-Current Assets — specifies how depreciation is to be calculated • AAS1001 Accounting Policies — specifies the policies that Council is to have for recognition of assets and

Standards and Specifications	Requirements
	<p>depreciation</p> <ul style="list-style-type: none"> AASB1041 Accounting for the reduction of Non-Current Assets — specifies the frequency and basis of calculating depreciation and revaluation basis used for assets AAS1015 Accounting for acquisition of assets — method of allocating the value to new assets on acquisition
Temora Shire Stormwater drainage Hierarchy Policy	Sets out the criteria for maintenance , capital renewal and capital upgrade for the stormwater drainage network
Temora Shire Footpath Hierarchy Policy	Sets out the priority for maintaining and upgrading of footpaths
Australian Standards	<p>Including:</p> <ul style="list-style-type: none"> AS3500.3-1990 National Plumbing Drainage Code – Stormwater Drainage AS/NZS 4360:2004 Risk Management HB 4360:2004 Risk Management Guidelines — Companion to AS/NZS 4360:2004

3.3 Current Levels of Service

Council has defined a two tier level of service.

Community Levels of Service relates to how the community receives the service in terms of safety, quality, quantity, reliability, responsiveness, cost/efficiency and legislative compliance.

Supporting the community service levels are operational or technical measures of performance developed to ensure that the minimum community levels of service are met. These technical measures relate to service criteria such as:

Service Criteria

Quality
Function
Effectiveness
Safety

Technical measures may relate to

Provision of a well maintained service
Does the asset meet functional standards
Prevention of flooding
Number of injury/accidents

Council's current service levels are summarised in Table 3.3 and detailed in Appendix D

Table 3.3. Current Service Levels

Key Performance Measure	Level of Service	Performance Measure Process	Performance Target	Current Performance
COMMUNITY LEVELS OF SERVICE				
Quality	To provide a well maintained and suitable stormwater drainage service	Customer requests in regards to flooding or stormwater nuisance	<25 per month	Not current measure
	Minimal disruption to road network access due to bridge or major culvert maintenance. Efficient system of collection, disposal & management of stormwater	Customer Survey Customer Request System	> 80% satisfaction level	65%

Key Performance Measure	Level of Service	Performance Measure Process	Performance Target	Current Performance
	Satisfactory provision of waterway crossings to minimise distance of travel to and from properties for the community. Optimal levels of 'hard' & 'green' infrastructure to meet design levels of flooding protection and water quality	Periodic analysis & review Customer Survey	< 5% of network under-performing > 80% satisfaction level	
Function	Adequate capacity to accommodate flow rates generated by 1 in 5 years storms.	Customer Requests Service Australian Rainfall Runoff technical specifications and guidelines.	< 20 stormwater blockages per 100 km pipe per annum. Less than 10 routine repairs to stormwater pipes per 100 km pipe per annum. Compliance with current standards and specs	No current measure
	Bridges & major culverts available at all times & free of mass limits. Drain & inlet blockages. GPT, trash racks & basins free of restrictions. Property flooding & risk of injury.	Periodic bridge & major culvert audit	Audit undertaken every 3 to 5 years > 80% satisfaction < 20 requests, pa < 10 notifiable actions, pa	
Safety	Provide safe & appropriate bridges, major culverts, and stormwater drainage systems free from preventable	Reported hazards from Customer Service Requests Number of injuries or property damage claims	< 20 reported hazards, pa Zero injury or property damage claims, pa	
	Minimise risk for the public from drowning, pollution and spread of diseases.	Accident reports, Customer Requests	No current measure	No current measure
TECHNICAL LEVELS OF SERVICE				
Condition	Minimum blockage, cracks, deformation / damage and / or system deficiencies.	Length of pipes / reconstructed per annum Condition rating. Average age of structures	1% of drainage infrastructure pa	No current measure
	Condition Structural & hydraulic defects	Visual assessment CCTV survey	< 2% at-surface covers faulty < 2% drain defects in network	
Function	Adequate capacity and structural strength.	Number of properties experiencing inundation events	< 25 per year	No current measure
Cost Effectiveness	Proactive scheduled maintenance. Re-use of materials. Use highly productive drainage construction machinery and innovative design, materials and techniques.	Percent of maintenance done by proactive repairs	70% of maintenance budget spent on pro-active maintenance	No current measure

3.4 Desired Levels of Service

At present, indications of desired levels of service obtained from various sources including the Customer Satisfaction survey, residents' feedback to Councillors and staff, service requests, and correspondence.

Council has quantified the desired levels of service when formulating the 20-year maintenance and capital works plan. The plan determines the stormwater drainage maintenance requirements for each year plus capital upgraded are to be carried out.

4. FUTURE DEMAND

4.1 Demand Forecast

Council's fundamental role is to provide services to the community and the stormwater drainage assets is a means to support this. Consequently, future demand for stormwater drainage are tied to the demand for Council's services and this is a more complex than just consideration population growth alone..

Stormwater drainage Asset Management Plans are critically driven by the needs of the services to be delivered and therefore meaningful strategies cannot be developed in isolation or in absence of comprehensive service strategies. Maintaining Council's stormwater drainage assets without adequate regard for service needs may result in a well-maintained portfolio of assets, but it may also result in an asset portfolio which does not meet the needs of staff that provide services to the community.

Factors affecting demand include population change, changes in demographics, seasonal factors, aircraft ownership, consumer preferences and expectations, economic factors, agricultural practices, environmental awareness, etc. Demand factor trends and impacts on service delivery are summarised in Table 4.1.

Table 4.1. Demand Factors, Projections and Impact on Services

Demand factor	Present position	Projection	Impact on services
Population	5,914 (2006 census). The population increased by 1.05% between the 2001 and 2006 censuses. 57.1% of the population live in the urban area, 36.8% in the rural area and 6.1% in the surrounding villages	Temora's population is expected to grow over the next 10 years Future growth is likely to occur as a result of Council initiatives such as the airpark estate, Continued attraction to rural lifestyle	Additional subdivisions in farmlands, will increase stormwater discharge by the increase of non permeable areas, e.g. roads,
Demographics	Increase in ageing population 65+ represents 16.8% of the population and has increased by 3.3% since 1981. Whereas the overall population is static to a 0.27% increase	Temora TAFE and Charles Sturt University at Wagga will play a vital role in retaining and/or attracting young people to Temora. The number of aged over 65 will continue to increase. This is consistent with the national trend towards an ageing population and longer life expectancy	Increase in demand for life style retirees interested in aviation

In determining the need for construction or upgrading of bridge and stormwater infrastructure, the following aspects have been considered:



Providing satisfactory protection of properties from flooding.



To enable fair and planned distribution of funding throughout the Council area, some of the factors influencing the Prioritising of works are:

- Changing community expectations and demographics.
- Known areas of drainage under-supply.
- Bridges and stormwater systems with high maintenance demands.
- Known development areas and Planning Review outcomes.

Bridge upgrade and stormwater drainage expansion programs have been developed spanning 3 to 10 years. In the relevant asset classes, some issues which may influence future asset provision are:

- U A significant percentage of new land division will employ acceptable principles for stormwater management.
- U Resident expectations will be raised in the established suburbs and townships for kerb and stormwater management provision matching those enjoyed by the newer areas.
- U There will be an increased need to renew kerb in older land divisions and townships.
- U More concentration on water quality initiatives will occur such as gross pollutant traps and siltation basins in land divisions and litter/pollutant traps leading into Lake Centenary
- U Strong moves towards water re-use.
- U Reduced dependency on pumped systems for stormwater disposal.
- U Upgrade of open drain along boundary of Nixon Park and Greyhound Track

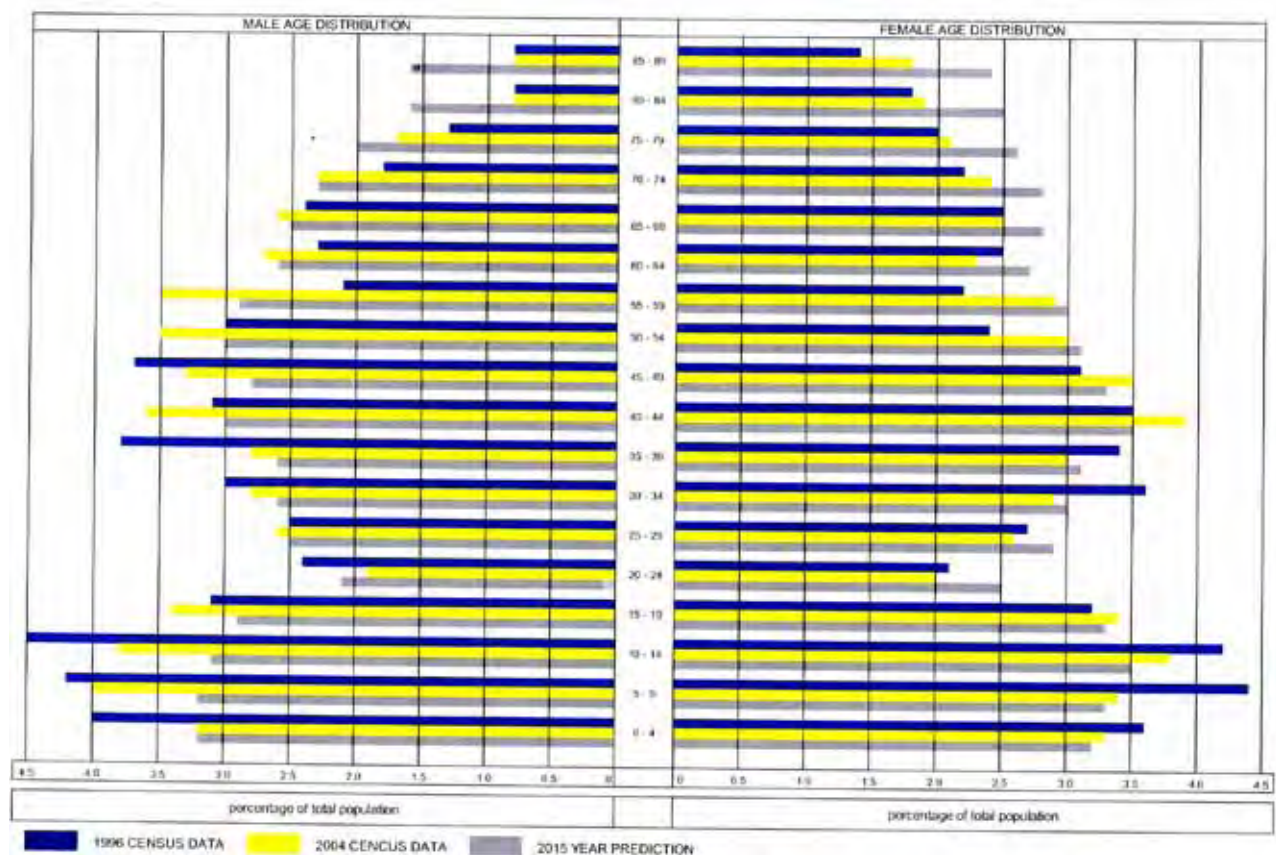


Figure 4.1 1996 and 2004 LGA Population by Age and Sex

4.2 Changes in Technology

Technological changes (as distinct from changes to installations brought about by external, e.g. environmental, forces) will impact on the asset classes in this Asset Management Plan over the next 20 years.

Bridges and Major Culverts

Most of the bridges under Council's care and control are relatively small 1 or 2 – span, 2 – lane structures. Emerging construction practice will see these replaced by pre-cast components to minimise community disruption. Major culverts will likely be replaced 'like-for-like', with improved headwalls and erosion projection.

Further development of Geographic Information Systems (GIS) will improve the management of drainage infrastructure, particularly the coordination of maintenance activities, through enhanced data collection, analysis and dissemination systems.

Stormwater Infrastructure

Underground drains – As noted elsewhere, drain renewal is an unlikely scenario, as ‘failed’ drains are likely to need upsizing (upgrading). Where drains are renewed in-situ rehabilitation / replacement without surface disturbance is, and will become more, feasible. The incorporation of more recycled material into new products will increase also.

Detention / retention / wetland basins – Again, as per underground drains, with enhanced water quality and re-use capabilities.

Inlets and pits – It is anticipated that concrete structures will be replaced ‘like-for-like’ with current technology. Some 50% of road inlets will be upgraded from single to double inlets and the time of renewal.

Water conservation measures have forced the practice of jetting underground drains to be limited or suspended. Replacement, ‘dry’, or minimal water-use, methods may need to be developed.

4.3 Demand Management Plan

Demand for new services will be managed through a combination of managing existing assets, upgrading of existing assets and providing new assets to meet demand and demand management. Demand management is defined here as the management of stormwater drainage assets by the manipulation of demand for stormwater drainage services and practices including non-asset solutions, insuring against risks and managing failures.

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

Table 4.3. Demand Management Plan Summary

Service Activity	Demand Management Plan
Stormwater Maintenance and Upgrades	Upgrade systems to meet population growth demand and changes identified in review reports and planning studies.
Flood zones / Safety Improvement Plan	Upgrade network to improve user safety (to be developed further within the next review period).
Drainage Catchment Review	Review of current plans and Strategic Plan to incorporate planned works. Preparation of district-wide Catchment Management Plans and Urban Stormwater Master Plans..
Development of new residential and commercial	Requirements of various township development plans to be met.
Kerb Maintenance and Upgrades	Upgrades to meet population growth demand, changes identified in review reports and planning studies, and to meet community expectations.

4.4 New Assets from Growth

The new assets required to meet growth will be acquired from land developments and constructed by Council. Acquiring these new assets will commit Council to fund ongoing operations and maintenance costs for the period that the service provided from the new asset is required. Given the long term life-cycle of stormwater drainage assets, the impact of this growth (future renewal costs) is only likely to be material after ten years. For the purpose of considering this core asset management plan the impacts of these future costs are not considered to be highly significant and are excluded in developing forecasts of future operating and maintenance costs.

Future versions of this asset management plan will consider the impacts of growth in greater detail. This activity has been included as a priority in the improvement plan. The valuation models in the financial summary section of this report use a rate of growth of 0.25%

5. LIFECYCLE MANAGEMENT PLAN

The Lifecycle Management Plan details how Council plans to manage and operate the stormwater drainage at the agreed levels of service (defined in section 3) while optimising life cycle costs. To undertake life cycle asset management, means considering all management options and strategies as part of the asset lifecycle, from planning to disposal. The objective of managing the assets in this manner is to look at long- term cost impacts (or savings) when making asset management decisions. Fig 5.1 below provides a graphical representation of the asset lifecycle including each of the stages an asset passes through during its life.



Figure 5.1 Asset Lifecycle

A model for the lifecycle of stormwater drainage pavements is presented later in this section. The model relates particularly to the maintenance and renewal stages of asset life, Refer to figure 5.2, which in principle is relevant also for stormwater management.

In the “**Do Nothing**” phase, the asset deteriorates slowly and maintenance is generally not required. In the “**Maintain**” phase, these activities will need to be performed to minimise continued deterioration. In the “**Rehabilitate**” or “**Renewal**” stage, activities are undertaken that restore the asset to a condition close to that of the original.

The importance of the time for intervention for renewal is paramount. If renewal activities are not undertaken in a timely manner, the condition of the asset will deteriorate rapidly to failure, and the cost of reconstruction may be many times that of the renewal cost.

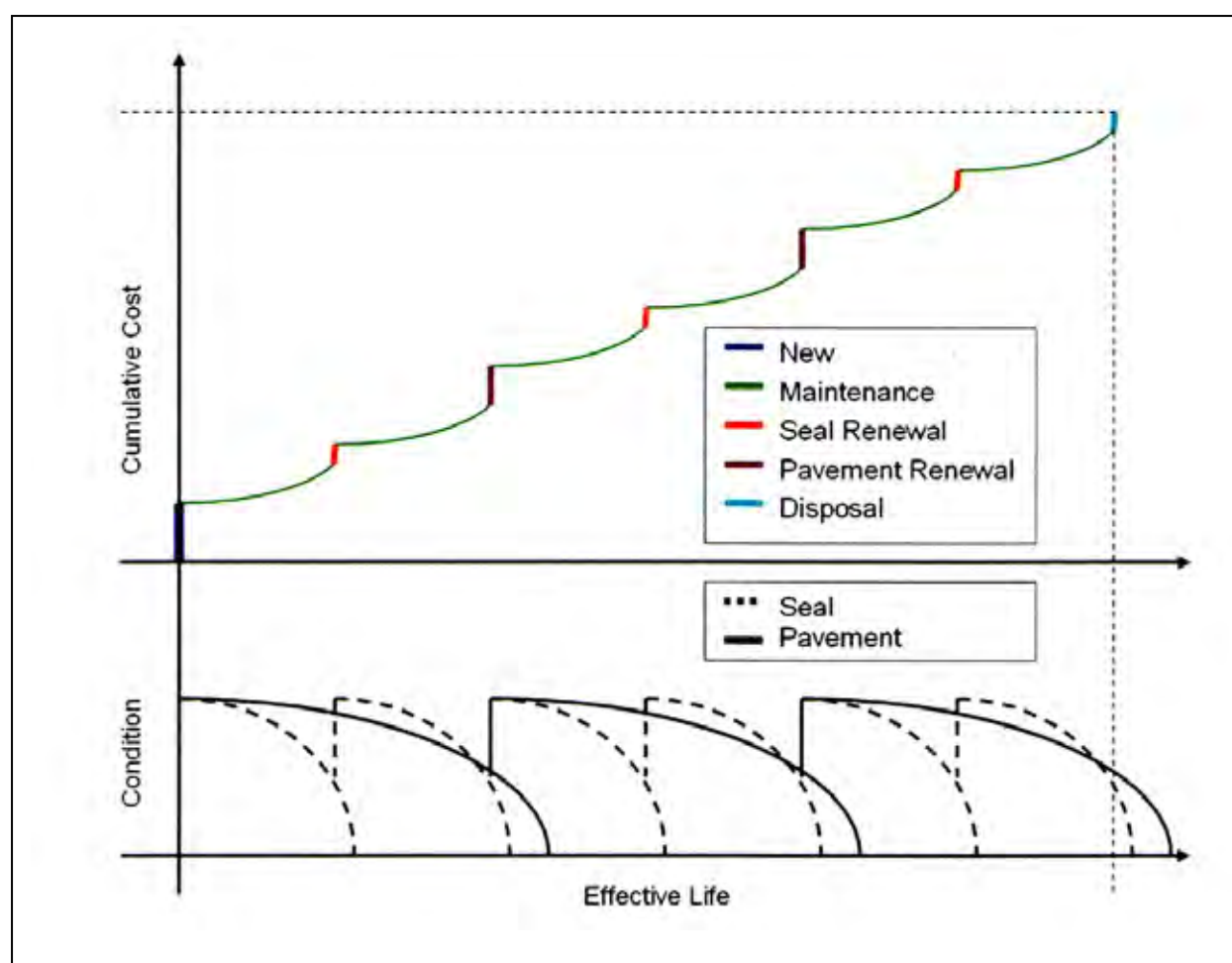


Figure 5.2 Stormwater Drainage Lifecycle

5.1 Background Data

5.1.1 Physical parameters

The assets covered by this Asset Management Plan are listed below in Tables 5.1

Table 5.1 Characteristics of Stormwater drainage Inventory

Asset	Description
Headwalls	Concrete End / Head Walls
Stormwater Pipes	Concrete Pipes Rib-loc Pipes Corrugated Iron Pipes
Stormwater Pits	Side Entry Pits (SEP) Junction pits Maintenance Pits Gross Pollutant Traps
Stormwater and Effluent Dams	Dams for stormwater harvesting

The Class of assets and quantities are shown in Table 5.2

Table 5.2 Physical Quantity of Stormwater drainage Assets

Asset	Number	Length (m)
150mm concrete pipe	1	4
300mm concrete pipe	84	631
350mm concrete pipe	1	9
375mm concrete pipe	81	657
450mm concrete pipe	344	2,398
525mm concrete pipe	11	78
600mm concrete pipe	84	78
675mm concrete pipe	1	9
750mm concrete pipe	10	57
825mm concrete pipe	1	10
900mm concrete pipe	46	265
1200mm concrete pipe	4	32
375 x 600 box culvert	6	60
450 x 900 box culvert	3	26
450 x 1200 box culvert	8	78.4
450 x 1600 box culvert	1	9.8
600 x 1000 box culvert	1	8
750 x 1800 box culvert	1	9.8
900 x 1200 box culvert	7	49.7
1000 x 1800 box culvert	7	19.0
2000 x 1800 box culvert	1	9
2400 x 1800 box culvert	11	37
2400 x 3300 box culvert	2	9.0
1200 x 1800 box culvert	5	38.5
1200 x 2000 box culvert	2	9.0
2000 x 3000 box culvert	10	26.6
900 x 2400 concrete drain	1	2,225
Bitumen causeway	6	
Concrete causeway	138	
Concrete Bridges	8	287

5.1.2 Asset Capacity and Performance

Council's services are generally provided to meet design standards where these are available. Locations where deficiencies in service performance are known are detailed in Table 5.3. These deficiencies were identified by Council staff

Table 5.3 Known Service Performance Deficiencies

Location	Service Deficiency
Headwalls	Erosion and degradation of soil undermine headwalls and cause malfunction and costly repair to the system
Stormwater Pipes	Collapse due to overloaded vehicles
Stormwater Pipes	Blockages, chemical erosion, movement of soil and overloading the system reduce useful life and design capacity of the pipes. Increase land divisions, which increase the load and the volumes on existing drainage infrastructure.
Stormwater Pits	Vandalised and damaged pits reduce the capacity of the system and put pressure on downstream components, which cause ageing of the entire system.
Bridges and major culverts	Inadequate fencing and substructure maintenance, generally, as identified in audits and inspections.
Stormwater Pits	Vandalised and damaged pits reduce the capacity of the system and put pressure on downstream components, which cause ageing of the entire system.

The above service deficiencies were identified from the results of inspections undertaken in the preparation of this plan

5.1.3 Asset condition

A simple number rating system has been adopted for this plan to describe asset condition. Condition is measured using a 1 to 5 rating system as described in Table 5.6 below:

Table 5.6. Stormwater Drainages, Condition Rating Description

Condition Index	Rating Scale	Condition Description
1	Excellent	Providing a very high level of service
2	Good	Good condition with no indication of any major failures and providing a good level of service.
3	Fair	Aged and in fair condition providing an adequate level of service. No signs of immediate obsolescence.
4	Poor	Will need to renew, upgrade or dispose of in the future and is included in the five year Capital Works Program
5	Very Poor	Below an acceptable level of service. Requires renewal/upgrade immediately within the following year or so.

Fig 5.3 Asset Condition of Stormwater Drainage Structures

The condition rating for the various major assets in class is given in Table 5.7 below. The table indicates that the majority of the network is in a Fair condition.

Table 5.7 Condition Rating for Bridges and Stormwater Components

Asset	Excellent	Good	Fair	Poor	Very Poor
Box Culverts		25	40		
Open Drain		1			
Concrete pipes		130	534		
Causeways	4	140			
Gross Pollutant Trap	1				
Narraburra Creek Bridge			ü		
Grogan Bridge				ü	
Narraburra Creek 2		ü			
Morangarell Bridge	ü				
Duck Creek			ü		
Mirrool Creek			ü		
Trigalong Creek	ü				
Narraburra Creek 1	ü				

The condition profiles of bridge and stormwater infrastructure assets are based on a variety of numeric and other scales, as they were derived from different sources. Further work on stormwater infrastructure, asset condition will be undertaken to get a more accurately represented in future Asset Management Plans

Bridges and major culverts – good construction date information is available. Useful life estimates were reviewed, with notional values of 100 years for bridges and 50 years for major culverts. Condition was measured using a five-point descriptor scale ; 'excellent', 'very good', 'good', 'poor' and 'very poor'.. The five condition descriptors are based on the performance of each structure relative to its design criteria at the time of construction. This scale is intended only as a broad brush overview, with considerable detail provided in the audit of required, planned maintenance and estimates of remaining useful life of individual structures.

Stormwater infrastructure – some work has been done, using a default construction date of 1985. After 2000, actual construction dates were recorded. No reliable data exist at the present time on which to base an assessment of network condition.

The condition profiles of bridges and major culverts are shown in Figure 5.1 below:

5.1.4 Asset valuations

The value of assets as at 30th June 2010 covered by this asset management plan is summarised below. Assets were last revalued at 30th June 2010 and were valued at greenfield rates. Table 5.7 lists current asset values

Table 5.8 Current Asset Values

Asset category	Replacement Value (\$)	Annual Depreciation (\$)	Accumulated Depreciation (\$)	Written Down Value (\$)
150mm concrete pipe	607	1	4	603
300mm concrete pipe	218,264	2,183	116,116	102,148
350mm concrete pipe	3,135	31	2,007	1,129
375mm concrete pipe	246,847	2,502	154,555	92,292
450mm concrete pipe	1,891,476	19,218	1,148,842	742,834
525mm concrete pipe	62,902	629	36,940	25,962
600mm concrete pipe	637,888	6,509	387,400	250,420
675mm concrete pipe	6,974	70	4,463	2,511
750mm concrete pipe	131,674	1,317	78,003	53,671
825mm concrete pipe	11,519	115	7,372	4,147
900mm concrete pipe	825,332	8,235	470,699	354,633
1200mm concrete pipe	81,162	812	61,943	29,219
375 x 600 box culvert	68,630	688	41,757	27,073
450 x 900 box culvert	41,788	418	26,738	15,040
450 x 1200 box culvert	199,958	3,999	99,979	99,979
450 x 1600 box culvert	45,480	910	22,740	22,740
600 x 1000 box culvert	14,825	148	6,523	8,302
750 x 1800 box culvert	42,804	428	27,395	15,409
900 x 1200 box culvert	173,066	1,731	101,388	18,460
1000 x 1800 box culvert	758,298	7,283	320,451	437,847
2000 x 1800 box culvert	51,278	513	32,818	18,460
2400 x 1800 box culvert	2,908,081	29,081	1,837,525	1,070,556
2400 x 3300 box culvert	277,690	2,777	1,837,525	1,070,556
1200 x 1800 box culvert	326,684	3,267	209,078	117,606
1200 x 2000 box culvert	13,795,305	143,208	8,264,191	5,531,114
2000 x 3000 box culvert	31,819	318	14,000	17,818
900 x 2400 concrete drain	1,668,750	16,688	1,068,000	600,750
Bitumen causeway	41,272	2,751	13,757	27,515
Concrete causeway	2,771,796	27,718	1,749,689	1,022,107
Concrete Bridges	9,989,688	99,897	2,573,937	7,415,751
TOTAL	37,324,992	383,445	20,715,835	19,196,652

Council's sustainability reporting reports the rate of annual asset consumption and compares this to asset renewal and asset upgrade and expansion.

Asset Consumption	1.68
Asset renewal	1.8
Annual Upgrade/expansion	N/A

5.2 Risk Management Plan

An assessment of risks associated with service delivery from infrastructure assets has identified critical risks to Council. The risk assessment process identifies credible risks, the likelihood of the risk event occurring, the consequences should the event occur, develops a risk rating, evaluates the risk and develops a risk treatment plan for non-acceptable risks.

Critical risks, being those assessed as 'Very High' - requiring immediate corrective action and 'High' – requiring prioritised corrective action identified in the infrastructure risk management plan are summarised in Table 5.9

Table 5.9 Critical Risks and Treatment Plans

Asset at Risk	What can Happen	Risk Rating (VH, H)	Risk Treatment Plan
Headwalls	Soil erosion may cause an element to collapse injuring people or other species.	M	Continue current practices with CRS, Maintenance, erosion protection and stabilisation.
Stormwater pipes	Subside trenches are likely to cause injuries and property damage. Collapsed pipes or heavy rain events cause upstream overflowing with potential health and environmental impact.	H H	Proactive maintenance, strict quality control of materials and workmanship during the installation / repairing and conformance with the specifications is essential. Percentage of flooding incidents or blocked drains and watercourse erosion incidents, are responded to within 8 hours or less.
Stormwater pits	Cracks lids and covers are major hazard for traffic and pedestrians.	H	Continue current practices with CRS
Gross Pollutant Traps	The failure of stormwater quality control devices.	H	Proactive maintenance
Stormwater Drainage Design	The accuracy of catchment modelling.	H	Review current design procedures

5.3 Routine Maintenance Plan

Routine maintenance is the regular on-going work that is necessary to keep assets operating, including instances where portions of the asset fail and need immediate repair to make the asset operational again.

Routine maintenance work includes:

- U Drainage inspections
- U Vegetation control on stormwater drainage channels

De-silting of pits and stormwater pipes

5.3.1 Maintenance and improvement plan

Maintenance includes reactive, planned and cyclic maintenance work activities.

Historic maintenance expenditure patterns across the asset category are shown in Table 5.10. Note that a break-down of maintenance into reactive, planned and cyclic is unobtainable from the present Annual Budget account lines.

Amounts shown have been extracted from Council's Annual Budget for each year and are stated in that year's dollars. Thus, unless the maintenance expenditures show a progressive increase in line with construction inflation (commonly 5 or more % pa), then actual expenditures are not keeping pace.

Table 5.10. Expenditure Trends

Year	Maintenance Expenditure
2005/06	\$26,531
2006/07	\$10,975
2007/08	\$41,186
2008/09	\$44,105





Planned maintenance work is work based upon outcomes of routine inspections. Maintenance expenditure levels are considered to be inadequate to meet required service levels. Future revision of this Asset Management Plan will link required maintenance expenditures with required service levels.

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

5.3.2 Standards and specifications

Maintenance work is carried out in accordance with sound industry practices and requirements set down by manufacturers of proprietary products, and in particular the good practice guidelines set out in the ARRB 'Local Road Bridge Management Manual

Maintenance work is carried out in accordance with the following Standards and Specifications.

-  Temora Shire Council Stormwater drainage maintenance and capital plan
-  OH&S Legislative requirements
-  AS/NZS 3500.3.2003 Plumbing and Drainage Part 3: Stormwater Drainage
-  Australian Rainfall Runoff - 4th Edition

5.3.3 Summary of future maintenance expenditures

Future maintenance expenditure is forecast to trend in line with the value of the asset stock as shown in Fig 5.3.1. Note that all costs have been indexed from the current 2010/11 dollar values, as shown in Table 5.10.

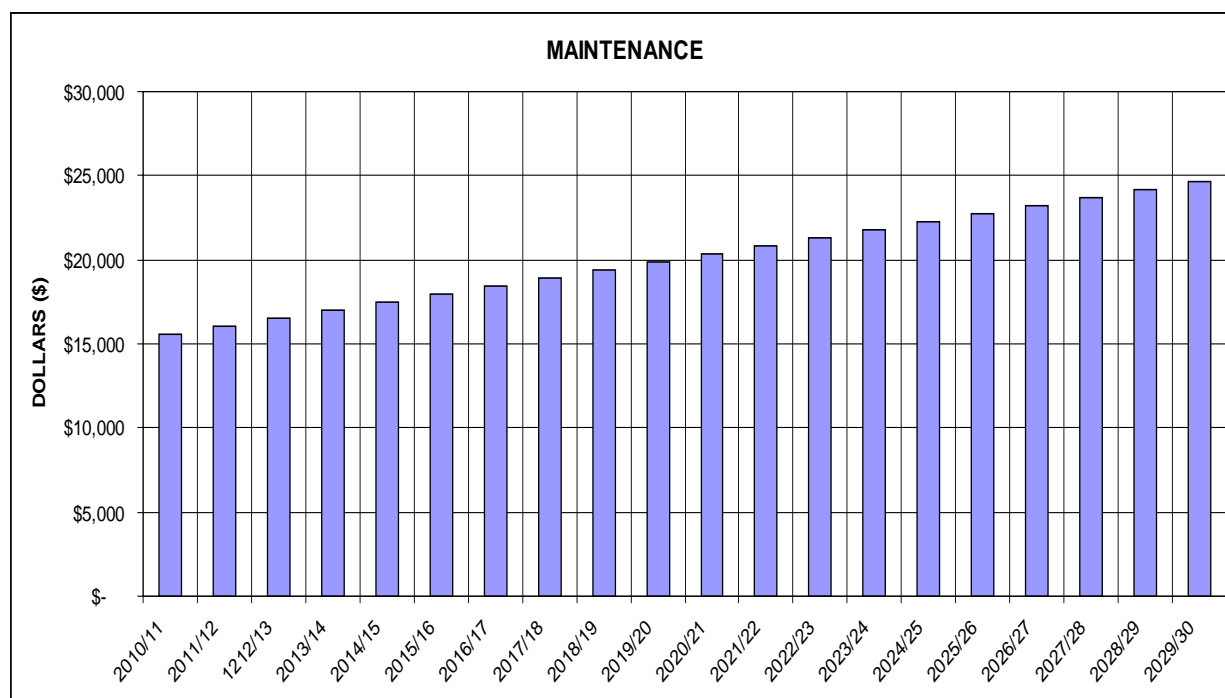


Fig 5.3 Predicted Maintenance Expenditure

Maintenance refers to works undertaken to address minor defects. These works are undertaken to keep Council's assets in a safe and operational condition, but not necessarily to improve the overall condition of these assets.

It should be noted that when undertaking the lifecycle modelling, these type of costs are taken into consideration by assuming that each year, a percentage of these distresses, will be repaired as part of Council's routine maintenance. If these assets are left to deteriorate, by not allocating sufficient capital, then the amount of deterioration not being fixed under routine maintenance will increase. Equally if the condition of these assets improves then the routine maintenance expenditure required will decrease.

The prediction model are forecasting a proportional increase in future maintenance with the current levels of capital funding.

Deferred maintenance, i.e. works that are identified for maintenance and unable to be funded are to be included in the risk assessment process in the infrastructure risk management plan.

Maintenance is funded from Council's operating budget and Capital project through grants where available. This is discussed in Section 6.2.

5.4 Renewal/Replacement Plan

Renewal expenditure is major work which does not increase the asset's design capacity 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 upgrade/expansion or new works expenditure.

5.4.1 Renewal plan

Council's maintenance and renewal plan is currently incorporated into a 20 year Capital Works Program (Appendix C)..

Assets identified for renewal are inspected to verify the accuracy of the estimated remaining life obtained and develop a preliminary renewal estimate. Verified proposals are ranked by priority and available funds and scheduled in future works programmes. The priority ranking criteria is detailed in Table 5.11.

Table 5.11 Renewal Priority Ranking Criteria

Stormwater drainage Criteria	Weighting
Renewal and maintenance of stormwater drainage infrastructure serving high density housing developments	No current weighting
Maintaining stormwater quality by minimising pollution and contamination of runoff	No current weighting
Erosion and sedimentation control and treatment	No current weighting
Stormwater harvesting facilities (retention basins, tanks, reservoirs)	No current weighting
Total	TBD

Renewal will be undertaken using 'low-cost' renewal methods where practical. The aim of 'low-cost' renewals is to restore the service potential or future economic benefits of the asset by renewing the assets at a cost less than replacement cost.

5.4.2 Renewal standards

Renewal work is carried out in accordance with the following Standards and Specifications:

- U Urban Stormwater-*Best Practice Environmental Management Guidelines*.
- U AS/NZS 3500.3.2003 Plumbing and Drainage Part 3: Stormwater Drainage.
- U AS2436-1981 Guide to noise control on construction maintenance and demolition sites.
- U National Capital Planning Authority 1993, *Designing Subdivisions to Save and Manage Water*.
- U AS4919-2003 General Conditions of Contract for the provision of asset maintenance and services.
- U Australian Rainfall Runoff-4th Edition.
- U Environment Protection Authority (EPA), 1991 *Construction Techniques for Sediment Pollution Control*.

5.4.3 Summary of future renewal expenditure

Figure 5.4 has the projected future renewal expenditure increase over time as the asset ages.

The projected capital renewal program is shown in Appendix C.

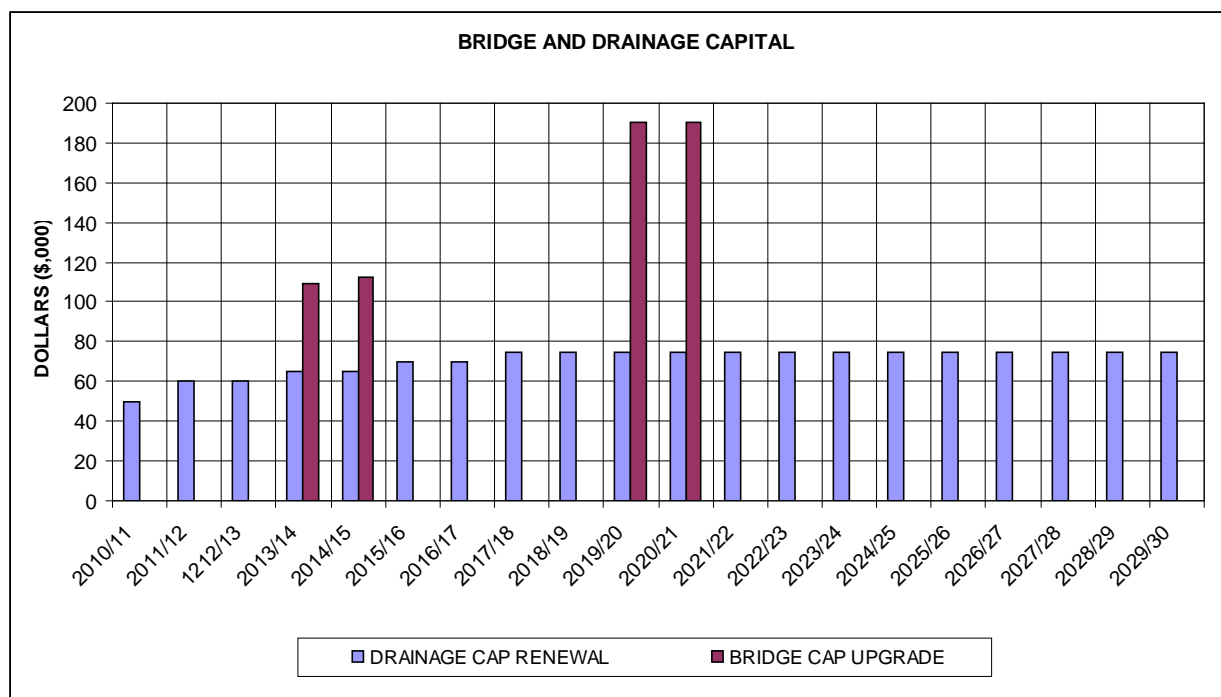


Fig 5.4 Predicted Capital Renewal and Upgrade for Stormwater drainage

Note that an average annual renewal expenditure for this category is meaningless. For bridges only two bridges= renewals are predicted in the reporting period to 2030. The replacement of these will also depend on receiving grants, or funded from the Regional Block Grant, Roads to Recovery or a combination.

For major culverts the main project is the repair of the scoured open drain along Nixon Park and the Greyhound Track, which may take two years to complete.

Deferred renewal, i.e. those assets identified for renewal and not scheduled for renewal in capital works programs, are to be included in the risk assessment process. Renewals will be funded from Council's capital works program and grants where available. This is further discussed in Section 6.

5.5 Creation/Acquisition/Upgrade Plan

New works are those works that create a new asset that did not previously exist, or works which upgrade or improve an existing asset beyond its existing capacity. They may result from growth, social or environmental needs. Assets may also be acquired at no cost to the Council from land development. These assets from growth are considered in Section 4.4.

5.5.1 Selection criteria

New assets and upgrade/expansion of existing assets are identified from various sources such as Councillor or community requests, proposals identified by strategic plans or partnerships with other organisations. Candidate proposals are inspected to verify need and to develop a preliminary renewal estimate. Verified proposals are ranked by priority and available funds and scheduled in future works programmes. The priority ranking criteria is detailed below.

The selection criteria is the same as that used for assets requiring renewal, see figure 5.4.1 and needs to be further developed.

5.5.2 Standards and specifications

Standards and specifications for new assets and for upgrade/expansion of existing assets are the same as those for maintenance and renewal see Section 5.3.2.

5.5.3 Summary of future upgrade/new assets expenditure

New assets and services are to be funded from Council's capital works program and grants where available. This is further discussed in Section 6.2. Council's 20 year Capital Works Program is shown in Appendix C

5.6 Disposal Plan

Disposal includes any activity associated with disposal of a decommissioned asset including sale, demolition or relocation. It is unlikely that any sealed stormwater drainage would be disposed of while still in service. It may be possible that if a sealed stormwater drainage is underutilised that it may be reverted back to gravel, but this would be a last resort and only after it is shown that the maintenance costs are unjustified.

There are no plans to dispose of any stormwater drainage assets.

6. FINANCIAL SUMMARY

This section contains the financial requirements resulting from all the information presented in the previous sections of this asset management plan. The financial projections will be improved as further information becomes available on desired levels of service, current and projected future asset performance and grant funding.

6.1 Financial Statements and Projections

The financial projections are shown in Table 6.1 and Fig 6.1 for planned operating (operations and maintenance) and capital expenditure (renewal and upgrade/expansion/new assets).

Activity	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)
Drainage Maintenance	39.99	41.23	42.47	43.71	44.95	46.19	47.43	48.67	49.91	51.15
Bridge Maintenance	11.29	11.64	11.99	12.34	12.69	13.04	13.39	13.73	14.09	14.44
Subtotal	51.28	52.87	54.46	56.05	57.64	59.23	60.82	62.4	64.00	65.59
Drainage Renewal	50.00	60.00	60.00	65.00	65.00	70.00	70.00	75.00	75.00	75.00
Subtotal	50.00	60.00	60.00	65.00	65.00	70.00	70.00	75.00	75.00	75.00
Bridge Upgrade	0	0	0	109.4	112.1	0	0	0	0	190
Subtotal	0	0	0	109.4	112.1	0	0	0	0	190.0
TOTAL	90.0	101.2	102.5	218.1	222.1	116.2	117.4	123.7	127.9	316.2

Table 6.1 *Planned Operating and Capital Expenditure*

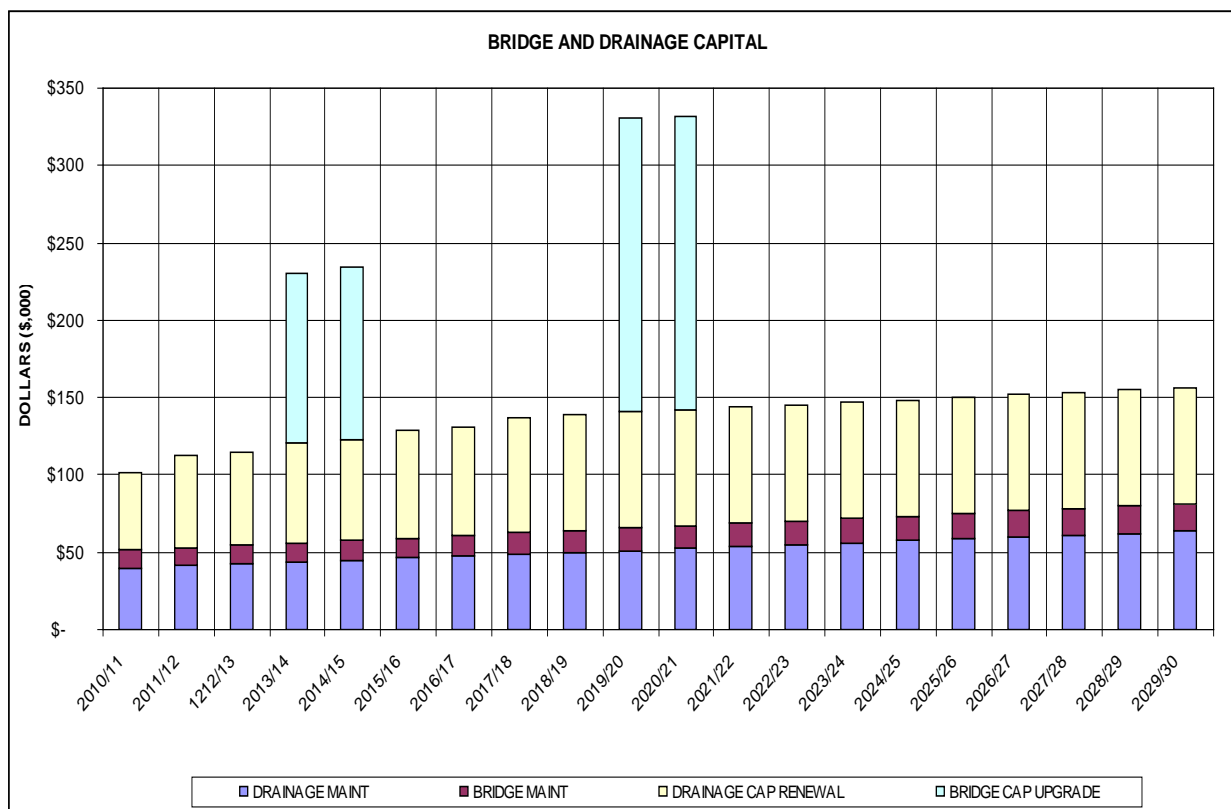


Fig 6.1 *Planned Maintenance and Capital Renewal Only*

6.1.1 Sustainability of service delivery

There are two key indicators for financial sustainability that have been considered in the analysis of the services provided by this asset category, these being long term life cycle costs and medium term costs over the 10 year financial planning period.

In reporting the financial sustainability in this Asset Management Plan, it has been assumed that Council will fund the capital renewal component, so that the asset remains at the required level of service.

Long term - Life Cycle Cost

The ratio of lifecycle costs to lifecycle expenditure gives an indicator of sustainability of service provision. Life cycle costs include maintenance and asset consumption (depreciation expense). The annual average life cycle cost for the services covered in this asset management plan for a 20 year period is \$3.33 million. Table 6.2.

Annual Average Lifecycle Cost \$,000	Average Lifecycle Expenditure \$,000	Average Annual Disparity \$,000
159.9	60	-99.9

Table 6.2 Lifecycle Costs vs. Expenditure – Bridges & Stormwater

A gap between life cycle costs and life cycle expenditure gives an indication as to whether present consumers are paying their share of the assets they are consuming each year. The purpose of this Asset Management Plan is to identify levels of service that the community needs and can afford and develop the necessary Long Term Financial Plans to provide the service in a sustainable manner.

The life cycle sustainability index is 0.4. Further condition analysis and service level reviews will provide improved information for future planning.

Medium term – 10 year financial planning period

This asset management plan identifies the estimated maintenance and capital expenditures required to provide an agreed level of service to the community over a 20-year period for input into a 10-year financial plan and funding plan (see Appendix E) to provide the service in a sustainable manner.

10 Year Maintenance and Renewal Expenditure \$000	Average Annual Maintenance & Renewal Expenditure \$000	Year 1 Maintenance & Renewal Expenditure \$000
1,120.72	1,077	89.99

Table 6.3 Maintenance and Capital Sustainability

The financial planning in this asset management plan, will need to be revised at least every five years. An asset management plan needs to compare the existing or planned expenditures in the 10-year period to identify monetary gaps. In a core asset management plan, a gap is generally due to increasing asset renewals, increased costs etc.

Providing services in a sustainable manner will require matching of projected asset renewals to meet agreed service levels with planned capital works programs and available revenue.

A gap between projected asset renewals, planned asset renewals and funding indicates that further work is required to manage required service levels and funding to eliminate any funding gap.

Council will manage the 'gap' by developing this asset management plan to provide guidance on future service levels and resources required to provide these services, and determine what will be the result if the gap is not funded such as:

- U Reduce level of service (difficult given risk involved)
- U Reduce customer satisfaction levels (again difficult)
- U Increased risk
- U Greater proportion of assets in poor condition

Council's long-term financial plan covers the first 10-years of the 20-year planning period, requires to meet the maintenance costs and at least the capital renewal costs. The total maintenance and capital renewal expenditure required over the 10 years is \$202,453.

6.2 Funding Strategy

Projected expenditure identified in Section 6.1 is to be funded from Council's operating and capital budgets. The funding strategy is detailed in the Council's 10 year long term financial plan. Achieving the financial strategy will require:

- U Increasing rates
- U Receiving larger amounts of Federal and State grants
- U Disposing of assets to reduce maintenance costs
- U Accepting a lower level of service.

6.3 Valuation Forecasts

Asset values are forecast to increase as additional assets are added to the asset stock from construction and acquisition by Council and from assets constructed by developers and others and donated to Council, However in general due to the age of the infrastructure the depreciation cost will lower the asset value.

Fig 6.2 shows the projected replacement cost asset values over the planning period in current 2011 dollar values.

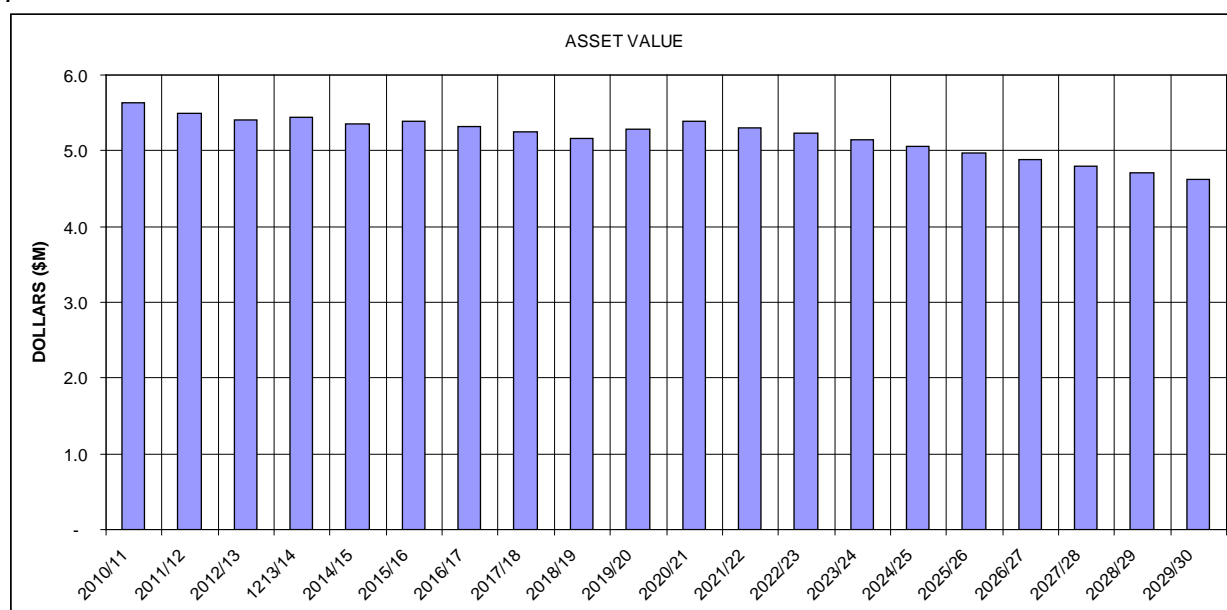


Fig 6.2 . Projected Asset Values

Depreciation expense values are forecast in line with asset values as shown in Fig 6.3.

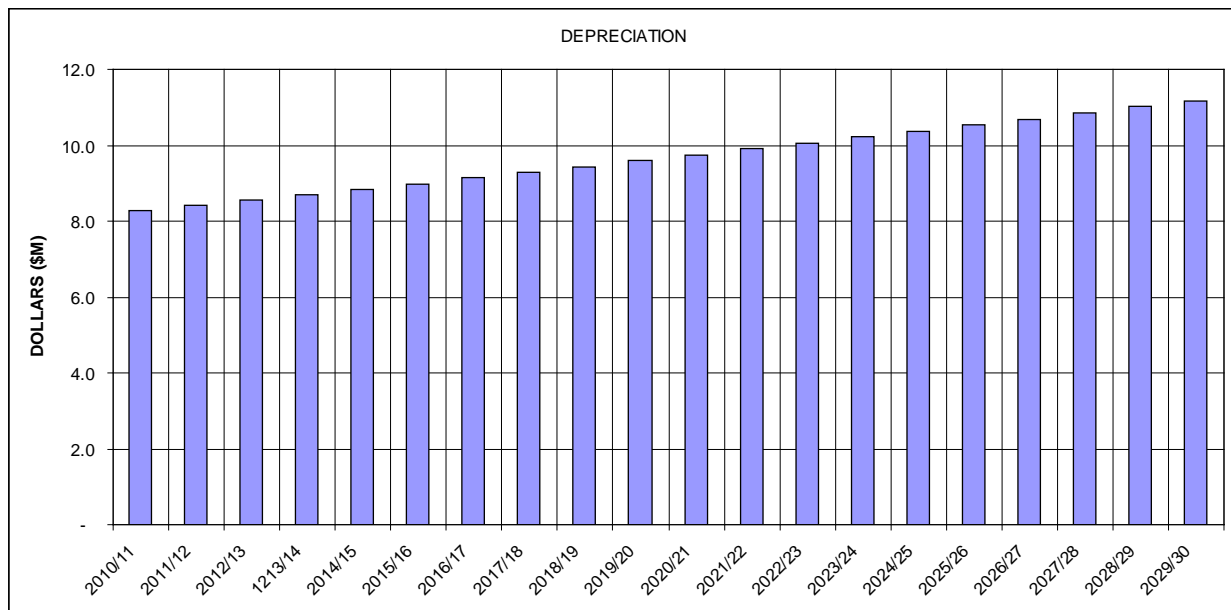


Fig 6.3 . Projected Depreciation Expense

The depreciated replacement cost (current replacement cost less accumulated depreciation) will vary over the forecast period depending on the rates of addition of new assets, disposal of old assets and consumption and renewal of existing assets. Forecast of the Written Down Capital Value is shown in Fig 6.4

6.4 Key Assumptions made in Financial Forecasts

This section details the key assumptions made in presenting the information contained in this asset management plan and in preparing forecasts of required operating and capital renewal expenditure and asset values, depreciation expense and carrying amount estimates. It is presented to enable readers to gain an understanding of the levels of confidence in the data behind the financial forecasts.

Key assumptions made in this asset management plan are:

- U The current levels of service will be maintained over the life of this asset management plan
- U Assumption that expected and adopted useful life of pipes, pits and headwalls will be achieved
- U Assumption of a steady state condition of drainage network and meets current service levels.
- U The treatment and maintenance costs are based on Council's current schedule of rates
- U All predicted financial figures are based on 2010/11 rates and have been adjusted for an inflation rate of 3.5%
- U Accuracy of future financial forecasts may be improved in future revisions of this asset management plan by the following actions.
- U Consult with the community and other stakeholders to finalise the levels of service currently being delivered
- U Refine and improve the prediction modelling (life cycle paths and decision matrices)

Accuracy of future financial forecasts may be improved in future revisions of this Asset Management Plan by the following actions:

- Ū Monitoring of the useful life of the existing pipe network via CCTV inspection.
- Ū Undertaking regular defect surveys on the stormwater drainage pipes.
- Ū Undertaking regular defect surveys on drainage pits / headwalls.
- Ū Undertake analysis of the increase of defects with time, and build this into future revisions of this Asset Management Plan.

7. ASSET MANAGEMENT PRACTICES

7.1 Accounting/Financial Systems

Council uses CIVICA Authority as its corporate accounting system. Authority has a suite of accounting/financial modules to meet all day to day operational and reporting requirements

The Director of Administration is delegated the statutory responsibility as Council's Responsible Accounting Officer. The Responsible Accounting Officer is to ensure that Council has adequate control systems, processes and procedures in place and these are being applied to meet all financial operating and reporting requirements.

The Local Government Act 1993, Chapter 13 sets out the requirements for management reporting, accounting, auditing, and financial reporting for Councils. The NSW division of Local Government also issues the Local Government Code of Accounting Practice and Financial Reporting, which assists in the interpretation and application of the act and the application of Australian Accounting Standards to the audit financial reporting functions.

The Government Code of Accounting Practice and Financial Reporting also provides a mechanism which ensures appropriate accounting policies and practices are adopted. For infrastructure, significant accounting policies are detailed in the annual financial reports. These include policies on the acquisition of assets, initial asset recognition, subsequent costs, asset revaluation, capitalisation thresholds, depreciation and disposal and de-recognition.

It is possible that changes will be required to accounting policies and practices resulting from this asset management plan. These will be assessed and implemented as soon as practical.

7.2 Asset Management Systems

Council's adopted Asset Management System is "AIM" (Asset and Infrastructure Management) a component of CIVICA's "Authority System".

AIM links to the Authority accounting system through the use of Work Orders and Tasks. Asset Valuations can be stored in AIM but are also stored in the Capital Value Record (CVR) component of Authority.

The Director of Administration (and the Administration staff) is responsible for maintaining the Asset Management Systems in conjunction with the Director of Engineering to update information.

The development of AIM hierarchy for all stormwater drainage assets is practically complete. The Director of Engineering revalued the stormwater drainage assets, by using Fair Value rates from current projects. Part of the asset revaluation has been to split stormwater drainages into segments. For sealed stormwater drainages these segments related to sealed segments. Capacity, condition and valuation data relating to these segments were then imported into AIM.

7.3 Information Flow Requirements and Processes

The key information flows *into* this asset management plan are:

- U The asset register data on size, age, value, remaining life of the network;
- U The unit rates for categories of work/material;
- U The adopted service levels;
- U Projections of various factors affecting future demand for services;

- U Correlations between maintenance and renewal, including decay models;
- U Data on new assets acquired by council.

7.4 Key Assumptions made in Financial Forecasts

This section details the key assumptions made in presenting the information contained in this asset management plan and in preparing forecasts of required operating and capital expenditure and asset values, depreciation expense and amount estimates. It is presented to enable readers to gain an understanding of the levels of confidence in the data behind the financial forecasts.

The key assumptions made in this asset management plan are:

- U The current levels of service will remain constant for the life of this plan
- U The treatment and maintenance costs are based on Council's current schedule of rates.
- U All financial figures are based on 2010/11 values and are adjusted for a 3.5% inflation rate, whereas income and grants are based on a 2% increase.
- U The useful life analysis

These will impact the Long Term Financial Plan, Strategic Business Plan, annual budget and departmental business plans and budgets.

7.5 Standards and Guidelines

- U Local Government Act 1993.
- U Australian Accounting Standards (AASB 116).
- U IPWEA, 2006 "International Infrastructure Management Manual".
- U Long Term Financial Plan Economic Prosperity Plan.

8. PLAN IMPROVEMENT AND MONITORING

8.1 Performance Measures

The effectiveness of the asset management plan can be measured in the following ways:

- U The degree to which the required cashflows identified in this asset management plan are incorporated into council's long term financial plan and Strategic Management Plan;
- U The degree to which 1-5 year detailed works programs, budgets, business plans and organisational structures take into account the 'global' works program trends provided by the asset management plan;

8.2 Improvement Plan

The asset management improvement plan generated from this asset management plan is shown in Table 8.21

Table 8.1 Improvement Plan

Task No	Task	Responsibility	Resources Required	Timeline
1.	Valuation Unit Costs – review unit rates, derivations on a greenfield basis	DE	Staff	May 2011
2.	Asset Information System – implement software package, providing asset deterioration and other tools	DAF	Staff	Jul 2011
3.	Risk Management – Refine, expand and document the risk management plan	DE	Staff	Jul 2011
4.	Job costing system – develop system, incorporating current unit rates	DAF/DE	Staff	Dec 2011
5.	Document procedures for asset useful lives, unit rates, condition rating and scoring and depreciation calculations.	DE	Staff	June 2010
6.	Population predictions – review projects based on latest available Census	DE	Staff	May 2011
7.	Community Consultation – undertake targeted engagement with the community to resolve acceptable and achievable levels of service	GM	Staff	Aug 2012
8.	Condition Rating – refine data collected and analysis processes, including greater levels of componentisation and achievable levels of service. Use CCTV inspections	DE	Staff	Dec 2011
9.	Consider limiting the AMP time framework to 10 years, to coincide with the Long term financial plan	DAF/DE	Staff	May 2011

8.3 Monitoring and Review Procedures

This asset management plan will be reviewed during annual budget preparation and amended to recognise any changes in service levels and/or resources available to provide those services as a result of the budget decision process.

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

9 REFERENCES

1. Council 2010/10 Annual Management Plan and Budget.
2. AS27, Financial Reporting by Local Government Australian Accounting Standards, June 1996
3. AASB1031, Materiality, Australian Accounting Standard Board July 2004
4. AASB116 Property, Plant and Equipment, Australian Accounting Standards Board July 2007
5. Temora Shire Council Asset Valuation 2010
6. Temora Shire 20-year Stormwater drainage Maintenance Plan
7. International Infrastructure Management Manual, Institute of Public Works Engineering Australia, Sydney 2006 www.ipwea.org.au
8. Statistical snapshot Temora Shire ABS 2006 Census data
9. Temora Shire Resident Satisfaction Survey

APPENDICES

- Appendix A Abbreviations
- Appendix B Glossary
- Appendix C 10 Year Maintenance and Capital Works Program
- Appendix D Maintenance response Levels of Service
- Appendix E Expenditure and Income Comparison

Appendix A ABBREVIATIONS

AAAC	Average annual asset consumption
AMP	Asset management plan
ARI	Average recurrence interval
BOD	Biochemical (biological) oxygen demand
CRC	Current replacement cost
CWMS	Community wastewater management systems
DA	Depreciable amount
DoH	Department of Health
EF	Earthworks/formation
IRMP	Infrastructure risk management plan
LCC	Life Cycle cost
LCE	Life cycle expenditure
MMS	Maintenance management system
PCI	Pavement condition index
RV	Residual value
SS	Suspended solids
vph	Vehicles per hour
GM	General Manager
DAF	Director of Administration and Finance
DE	Director of Engineering

Appendix B GLOSSARY

Annual service cost (ASC)

An estimate of the cost that would be tendered, per annum, if tenders were called for the supply of a service to a performance specification for a fixed term. The Annual Service Cost includes operating, maintenance, depreciation, finance/ opportunity and disposal costs, less revenue.

Asset class

Grouping of assets of a similar nature and use in an entity's operations (AASB 166.37).

Asset condition assessment

The process of continuous or periodic inspection, assessment, measurement and interpretation of the resultant data to indicate the condition of a specific asset so as to determine the need for some preventative or remedial action.

Asset management

The combination of management, financial, economic, engineering and other practices applied to physical assets with the objective of providing the required level of service in the most cost effective manner.

Assets

Future economic benefits controlled by the entity as a result of past transactions or other past events (AAS27.12).

Property, plant and equipment including infrastructure and other assets (such as furniture and fittings) with benefits expected to last more than 12 month.

Average annual asset consumption (AAAC)*

The amount of a local government's asset base consumed during a year. This may be calculated by dividing the Depreciable Amount (DA) by the Useful Life and totalled for each and every asset OR by dividing the Fair Value (Depreciated Replacement Cost) by the Remaining Life and totalled for each and every asset in an asset category or class.

Brownfield asset values**

Asset (re)valuation values based on the cost to replace the asset including demolition and restoration costs.

Capital expansion expenditure

Expenditure that extends an existing asset, at the same standard as is currently enjoyed by residents, to a new group of users. It is discretionary expenditure, which increases future operating, and maintenance costs, because it increases council's asset base, but may be associated with additional revenue from the new user group, eg. extending a drainage or stormwater drainage network, the provision of an oval or park in a new suburb for new residents.

Capital expenditure

Relatively large (material) expenditure, which has benefits, expected to last for more than 12 months. Capital expenditure includes renewal, expansion and upgrade. Where capital projects involve a combination of renewal, expansion and/or upgrade expenditures, the total project cost needs to be allocated accordingly.

Capital funding

Funding to pay for capital expenditure.

Capital grants

Monies received generally tied to the specific projects for which they are granted, which are often upgrade and/or expansion or new investment proposals.

Capital investment expenditure

See capital expenditure definition

Capital new expenditure

Expenditure which creates a new asset providing a new service to the community that did not exist beforehand. As it increases service potential it may impact revenue and will increase future operating and maintenance expenditure.

Capital renewal expenditure

Expenditure on an existing asset, which returns the service potential or the life of the asset up to that which it had originally. It is periodically required expenditure, relatively large (material) in value compared with the value of the components or sub-

components of the asset being renewed. As it reinstates existing service potential, it has no impact on revenue, but may reduce future operating and maintenance expenditure if completed at the optimum time, eg. resurfacing or resheeting a material part of a stormwater drainage network, replacing a material section of a drainage network with pipes of the same capacity, resurfacing an oval. Where capital projects involve a combination of renewal, expansion and/or upgrade expenditures, the total project cost needs to be allocated accordingly.

Capital upgrade expenditure

Expenditure, which enhances an existing asset to provide a higher level of service or expenditure that will increase the life of the asset beyond that which it had originally. Upgrade expenditure is discretionary and often does not result in additional revenue unless direct user charges apply. It will increase operating and maintenance expenditure in the future because of the increase in the council's asset base, eg. widening the sealed area of an existing stormwater drainage, replacing drainage pipes with pipes of a greater capacity, enlarging a grandstand at a sporting facility. Where capital projects involve a combination of renewal, expansion and/or upgrade expenditures, the total project cost needs to be allocated accordingly.

Carrying amount

The amount at which an asset is recognised after deducting any accumulated depreciation / amortisation and accumulated impairment losses thereon.

Class of assets

See asset class definition

Component

An individual part of an asset which contributes to the composition of the whole and can be separated from or attached to an asset or a system.

Cost of an asset

The amount of cash or cash equivalents paid or the fair value of the consideration given to acquire an asset at the time of its acquisition or construction, plus any costs necessary to place the asset into service. This includes one-off design and project management costs.

Current replacement cost (CRC)

The cost the entity would incur to acquire the asset on the reporting date. The cost is measured by reference to the lowest cost at which the gross future economic benefits could be obtained in the normal course of business or the minimum it would cost, to replace the existing asset with a technologically modern equivalent new asset (not a second hand one) with the same economic benefits (gross service potential) allowing for any differences in the quantity and quality of output and in operating costs.

Current replacement cost "As New" (CRC)

The current cost of replacing the original service potential of an existing asset, with a similar modern equivalent asset, i.e. the total cost of replacing an existing asset with an as NEW or similar asset expressed in current dollar values.

Cyclic Maintenance**

Replacement of higher value components/sub-components of assets that is undertaken on a regular cycle including repainting, building roof replacement, cycle, replacement of air conditioning equipment, etc. This work generally falls below the capital/maintenance threshold and needs to be identified in a specific maintenance budget allocation.

Depreciable amount

The cost of an asset, or other amount substituted for its cost, less its residual value (AASB 116.6)

Depreciated replacement cost (DRC)

The current replacement cost (CRC) of an asset less, where applicable, accumulated depreciation calculated on the basis of such cost to reflect the already consumed or expired future economic benefits of the asset

Depreciation / amortisation

The systematic allocation of the depreciable amount (service potential) of an asset over its useful life.

Economic life

See useful life definition.

Expenditure

The spending of money on goods and services. Expenditure includes recurrent and capital.

Fair value

The amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties, in an arms length transaction.

Greenfield asset values **

Asset (re)valuation values based on the cost to initially acquire the asset.

Heritage asset

An asset with historic, artistic, scientific, technological, geographical or environmental qualities that is held and maintained principally for its contribution to knowledge and culture and this purpose is central to the objectives of the entity holding it.

Impairment Loss

The amount by which the carrying amount of an asset exceeds its recoverable amount.

Infrastructure assets

Physical assets of the entity or of another entity that contribute to meeting the public's need for access to major economic and social facilities and services, eg. stormwater drainages, drainage, footpaths and cycleways. These are typically large, interconnected networks or portfolios of composite assets. The components of these assets may be separately maintained, renewed or replaced individually so that the required level and standard of service from the network of assets is continuously sustained. Generally the components and hence the assets have long lives. They are fixed in place and are often have no market value.

Investment property

Property held to earn rentals or for capital appreciation or both, rather than for:

- (a) use in the production or supply of goods or services or for administrative purposes; or
- (b) sale in the ordinary course of business (AASB 140.5)

Level of service

The defined service quality for a particular service against which service performance may be measured. Service levels usually relate to quality, quantity, reliability, responsiveness, environmental, acceptability and cost).

Life Cycle Cost **

The life cycle cost (LCC) is average cost to provide the service over the longest asset life cycle. It comprises annual maintenance and asset consumption expense, represented by depreciation expense. The Life Cycle Cost does not indicate the funds required to provide the service in a particular year.

Life Cycle Expenditure **

The Life Cycle Expenditure (LCE) is the actual or planned annual maintenance and capital renewal expenditure incurred in providing the service in a particular year. Life Cycle Expenditure may be compared to Life Cycle Expenditure to give an initial indicator of life cycle sustainability.

Loans / borrowings

Loans result in funds being received which are then repaid over a period of time with interest (an additional cost). Their primary benefit is in 'spreading the burden' of capital expenditure over time. Although loans enable works to be completed sooner, they are only ultimately cost effective where the capital works funded (generally renewals) result in operating and maintenance cost savings, which are greater than the cost of the loan (interest and charges).

Maintenance and renewal gap

Difference between estimated budgets and projected expenditures for maintenance and renewal of assets, totalled over a defined time (eg 5, 10 and 15 years).

Maintenance and renewal sustainability index

Ratio of estimated budget to projected expenditure for maintenance and renewal of assets over a defined time (eg 5, 10 and 15 years).

Maintenance expenditure

Recurrent expenditure, which is periodically or regularly required as part of the anticipated schedule of works required to ensure that the asset achieves its useful life and provides the required level of service. It is expenditure, which was anticipated in determining the asset's useful life.

Materiality

An item is material if its omission or misstatement could influence the economic decisions of users taken on the basis of the financial report. Materiality depends on the size and nature of the omission or misstatement judged in the surrounding circumstances.

Modern equivalent asset.

A structure similar to an existing structure and having the equivalent productive capacity, which could be built using modern materials, techniques and design. Replacement cost is the basis used to estimate the cost of constructing a modern equivalent asset.

Non-revenue generating investments

Investments for the provision of goods and services to sustain or improve services to the community that are not expected to generate any savings or revenue to the Council, eg. parks and playgrounds, footpaths, stormwater drainages and bridges, libraries, etc.

Operating expenditure

Recurrent expenditure, which is continuously required excluding maintenance and depreciation, eg power, fuel, staff, plant equipment, on-costs and overheads.

Pavement management system

A systematic process for measuring and predicting the condition of stormwater drainage pavements and wearing surfaces over time and recommending corrective actions.

Planned Maintenance**

Repair work that is identified and managed through a maintenance management system (MMS). MMS activities include inspection, assessing the condition against failure/breakdown criteria/experience, prioritising scheduling, actioning the work and reporting what was done to develop a maintenance history and improve maintenance and service delivery performance.

PMS Score

A measure of condition of a stormwater drainage segment determined from a Pavement Management System.

Rate of annual asset consumption*

A measure of average annual consumption of assets (AAAC) expressed as a percentage of the depreciable amount (AAAC/DA). Depreciation may be used for AAAC.

Rate of annual asset renewal*

A measure of the rate at which assets are being renewed per annum expressed as a percentage of depreciable amount (capital renewal expenditure/DA).

Rate of annual asset upgrade*

A measure of the rate at which assets are being upgraded and expanded per annum expressed as a percentage of depreciable amount (capital upgrade/expansion expenditure/DA).

Reactive maintenance

Unplanned repair work that carried out in response to service requests and management/supervisory directions.

Recoverable amount

The higher of an asset's fair value, less costs to sell and its value in use.

Recurrent expenditure

Relatively small (immaterial) expenditure or that which has benefits expected to last less than 12 months. Recurrent expenditure includes operating and maintenance expenditure.

Recurrent funding

Funding to pay for recurrent expenditure.

Rehabilitation

See capital renewal expenditure definition above.

Remaining life

The time remaining until an asset ceases to provide the required service level or economic usefulness. Age plus remaining life is economic life.

Renewal

See capital renewal expenditure definition above.

Residual value

The net amount which an entity expects to obtain for an asset at the end of its useful life after deducting the expected costs of disposal.

Revenue generating investments

Investments for the provision of goods and services to sustain or improve services to the community that are expected to generate some savings or revenue to offset operating costs, eg public halls and theatres, childcare centres, sporting and recreation facilities, tourist information centres, etc.

Risk management

The application of a formal process to the range of possible values relating to key factors associated with a risk in order to determine the resultant ranges of outcomes and their probability of occurrence.

Section or segment

A self-contained part or piece of an infrastructure asset.

Service potential

The capacity to provide goods and services in accordance with the entity's objectives, whether those objectives are the generation of net cash inflows or the provision of goods and services of a particular volume and quantity to the beneficiaries thereof.

Service potential remaining*

A measure of the remaining life of assets expressed as a percentage of economic life. It is also a measure of the percentage of the asset's potential to provide services that is still available for use in providing services (DRC/DA).

Strategic Management Plan (SA)**

Documents Council objectives for a specified period (3-5 yrs), the principle activities to achieve the objectives, the means by which that will be carried out, estimated income and expenditure, measures to assess performance and how rating policy relates to the Council's objectives and activities.

Sub-component

Smaller individual parts that make up a component part.

Useful life

Either:

- (a) the period over which an asset is expected to be available for use by an entity, or
- (b) the number of production or similar units expected to be obtained from the asset by the entity.

It is estimated or expected time between placing the asset into service and removing it from service, or the estimated period of time over which the future economic benefits embodied in a depreciable asset, are expected to be consumed by the council. It is the same as the economic life.

Value in Use

The present value of estimated future cash flows expected to arise from the continuing use of an asset and from its disposal at the end of its useful life. It is deemed to be depreciated replacement cost (DRC) for those assets whose future economic benefits are not primarily dependent on the asset's ability to generate new cash flows, where if deprived of the asset its future economic benefits would be replaced.

Appendix C Stormwater drainage Maintenance and Capital Program

10 YEAR STORMWATER DRAINAGES CAPITAL WORKS PROGRAM

As part of Council's Asset Management Plan process, and to develop a 10 Year Financial Plan for Council, 10-year Stormwater drainages Capital Works Program has been developed. This plan is designed to address ratepayer's requirements for urban and rural stormwater drainages to provide a stormwater drainage network that meets the needs of the community and industry, within a 10-year span and that the stormwater drainage network is both affordable and sustainable for the community.

Careful consideration has been given to any new capital works and to consider them in terms of "asset management" principles and "whole of life" costs. Generally a more expensive asset means a more expensive maintenance and replacement cost. This also applies to the stormwater drainage network,

The 10 year program is to be a guideline for Council in adopting its Annual Business Plan. Council will reserve the right to review the program as situations and circumstances change over time. An annual update of the plan will need to be undertaken and a review of the full plan undertaken after 5 years.

Bridges that are scheduled for replacement are:

Asset	Year Planned for Replacement	Condition	
Narraburra Creek Bridge	2019/20/21	Fair	
Grogan Bridge	2013/14/15	Fair	
Narraburra Creek 2		Good	
Morangarell Bridge		Excellent	
Duck Creek		Fair	
Mirrool Creek		Fair	
Trigalong Creek		Excellent	
Narraburra Creek 1		Excellent	

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TEMORA SHIRE COUNCIL



PLANT REPLACEMENT

ASSET MANAGEMENT PLAN

PART 7


Document Control					
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1. EXECUTIVE SUMMARY

1.1 Infrastructure and Asset Management Plans

Council provides a Plant Asset. Replacement program to ensure that it has an efficient asset, fit for the purpose which it is needed, to ensure reliable field operation and improve productivity. This Plant Asset Management Plan (PAMP) will assist the decision making process for purchasing, holding and replacing plant and equipment and also the costs associated with operating and maintaining the fleet.

The Mechanical workshop performance is assessed through a combination of establishing benchmarks, service standards and measuring performance in an environment where all hours must be allocated. Sound asset management is a key to the financial sustainability of the Council. The Council has an obligation to ensure that current assets are managed efficiently and effectively and that decisions regarding the acquisition of new assets and the sale and maintenance of current assets are undertaken in an open and transparent fashion. The management of assets cannot be done in isolation and needs to consider financial, social and environmental factors in decision making. Temora is currently developing an Asset Management Framework which will direct the decision making process in the construction, maintenance, acquisition and disposal of assets.

The Temora Plant Asset encompasses the following assets:

- z Cars
- z Light Utilities
- z Graders
- z 12 Tonne Tippers and Trailers
- z Small Trucks
- z Tractors
- z Rollers
- z Water Carts
- z Mowers Slashers
- z Miscellaneous Equipment

1.2 What does it Cost?

There are two key indicators of cost to provide the service at the Plant Asset.

- z The life cycle cost being the average cost over the life cycle of the asset, and
- z The total maintenance and capital renewal expenditure required to deliver existing service levels in the next 10 years covered by Council's long-term financial plan.

The life cycle cost for the Plant Asset is estimated at \$1,509,484 per annum averaged over a 10-year period. Council's planned life cycle expenditure for year 1 of the asset management plan is \$1,946,266 million which gives a life cycle sustainability index of 1.29.

The total maintenance and capital renewal required to provide the funding for the Plant Asset in the next 10 years is estimated at \$25,044,120

1.3 Plans for the Future

Council plans to operate and maintain the Plant Asset to achieve the following strategic objectives.

- z Ensure the Plant Asset is maintained at a safe and functional standard as set out in this asset management plan.
- z Ensure that capital upgrade funding is available as per Council's 10-year management plan.

- z Ensure that the plant hire rates are set to maintain the plant replacement program.
- z Efficient use of Council Resources.
- z Assess the plant retention period to ensure that funds are available to replace plant.

Modelling in this report assumes the population is growing at a rate of 0.3 % per annum (based on historical growth statistics and the impact of growth of neighbouring shires and the airpark estate). While increased residents at the subdivision will result in an increase in general rates income collected it will also result in higher usage of Council assets, which will result in reduced the asset life and the possibility of increased level of service demands

1.4 Lifecycle Management

The model for management of the Plant Asset relates particularly to the maintenance and renewal stages of asset life. Early in the life of an asset, its condition deteriorates slowly and maintenance is generally not required. This is often referred to the “**Do Nothing**” phase of an asset’s life. As the asset ages, it moves into what is known as the “**Maintain**” phase. Maintenance activities will need to be performed to minimise continued deterioration. As the asset moves towards the end of its life, activities are undertaken that restore the asset to a condition close to that of the original. This is referred to as the “**Renewal**” phase.

The importance of the time for intervention for renewal is paramount. If renewal activities are not undertaken in a timely manner, the condition of the asset will deteriorate rapidly to failure, and the cost of reconstruction may be many times that of renewal activities.

1.5 Financial Summary

A ten-year analysis of existing pavement conditions and costs has been undertaken to determine funding implications for the asset condition of the Plant Asset Annual adjustment for increases in the cost of construction materials and services would need to be made to accurately represent long-term results.

Modelling indicates that the average annual replacement allocation of \$1,509,484 is sufficient to keep the Plant Asset renewal as predicted in this plan. The average annual allocation of \$1,509,484 for replacements, plus an average of \$950,080 in maintenance is funded from the plant income gained from internal and external works.

Appendix C, indicates that the income generated and the trade-in received, maintains the fund in a positive balance.

1.6 Measuring our Performance

An asset management plan is a dynamic document, reflecting and responding to changes over time. Monitoring of this Plant Asset Management Plan is required to:

- z Ensure compliance with the proposed improvement program milestones.
- z Ensure compliance with adopted standards and procedures for condition and performance.

A full review of this asset management plan should be undertaken every three to five years to document progress and set out proposals for the next five years. The recommendations below summarise the Improvement Program contained in Section 8 of this document.

1.7 Recommendations

This actions resulting from this asset management plan are:

- z Obtain Council approval of this asset management plan.
- z Investigate utilisation and develop benchmarks.
- z Develop knowledge management systems that, house and provide reports on emissions and carbon footprint of fleet
- z Review the level of service for routine maintenance response times.
- z Further Investigate and improve change over periods for high value plant such as graders and large tippers.
- z Improve the delineation between planned, cyclic and reactive maintenance.
- z Develop data collection models to ensure repeatability and ongoing improvement of condition data collection and modelling processes.
- z Assess the structure and resources within council, to ensure that the asset management plan can be implemented.

2. INTRODUCTION

2.1 Background

The fundamental purpose of this Plant Asset Management Plan (AAMP) is to improve Council's long-term strategic management of its Plant Asset assets in order to cater for the community's desired levels of service in the future. This will be undertaken in accordance with Council's key strategic documents and demonstrates reasonable management in the context of Council's available financial and human resources.

The RAMP achieves this by setting standards, service levels and programmes that Council will develop and deliver. The standards and service levels have been set in accordance with user needs, regulations, industry practice and legislative codes of practice.

The asset management plan is to be read with the following associated planning documents:

- z Plant Asset Management Plan
- z DLG Integrated Planning Mandates 2009
- z Temora Shire Council Management Plan 2011/12 – 2030
- z Temora Shire Council Community Strategic Plan 2011— 2020
- z Temora Shire Council 2008 Resident Satisfaction Survey Result
- z This PAMP covers the following infrastructure assets which are summarised in Table 2.1

Table 2.1. Assets covered by this Plan

Asset category	Items	Replacement Value
Graders	3	\$1,005,000
Loaders & Backhoe	4	\$1,203,000
Tractors	3	\$271,000
12 Tonne Tipper Trucks	4	\$813,000
Large Trailers	5	\$388,000
Small Trucks	10	\$828,500
Light Utilities	14	\$449,000
Rollers	5	\$538,000
Miscellaneous Equipment	Various	\$1,092,600
TOTAL	48 plus	\$6,588,100.00

2.2 Asset Management Framework Applicable to AAMP

2.2.1 National Framework for Local Government Financial Sustainability

In March 2007, the Local Government and Planning Ministers' Council (LGPMC) agreed to a nationally consistent approach to asset planning and management, financial planning and reporting and assessing financial sustainability. Each State Minister endorsed the National Frameworks for Financial Sustainability in Local Government for implementation in the context of their relationships with their local government sectors.

The National Frameworks consist of three main components as follows:

1. Asset Planning and Management

This framework consists of seven elements which each State and Territory is expected to adopt as follows:

- z Development of an **Asset Management Policy** - Each state/territory is expected to develop an asset management policy, which provides high-level guidance to assist councils in developing their own asset management policy.
- z Strategy and Planning — Councils should be provided with guidance from the State on developing an **Asset Management Strategy**, which is designed to support and implement its asset management policy;
- z **Governance and Management Arrangements** — Councils should be encouraged to apply and effect good governance and management arrangements which link asset management to service delivery and include assigning roles and responsibility for asset management between the CEO, the Council and senior managers;
- z **Defining Levels of Service** — mechanisms should be established that include community consultation to define the levels of service councils are expected to provide from their asset base;
- z **Data and Systems** — a framework for collection of asset management data should be established;
- z **Skills and Processes** — the asset management framework should contain a continuous improvement program;
- z Evaluation — the asset management framework should contain a **mechanism to measure its effectiveness**.

2. Financial Planning and Reporting

Focuses on Local Government's financial management at both the strategic and operational levels. The framework requires the preparation of:

- z A long term strategic plan which includes a financial component, demonstrating how the outcomes of the plan will be funded.
- z An annual budget format comparable with the audited financial statements, linked to strategic objectives, which at a minimum should include:
 - § Estimates of revenue and expenditure
 - § An explanation of how revenue will be applied
 - § An explanation of the financial performance and position of the Council.
- z Annual financial statements and annual report, which should include:
 - § A report on Council's operations during the financial year
 - § An explanation to the community on variations between the budget and the actual results and how this may impact on the strategic plan
 - § Audited financial statements for the financial year (prepared and audited in accordance with Australian Accounting and Auditing Standards).

3. Criteria for Assessing Financial Sustainability.

The National Frameworks define a council's long-term financial performance and position as sustainable when planned long term services and infrastructure standards are met without unplanned increases in rates and charges, or disruptive cuts to services.

The frameworks provide a range of financial sustainability indicators. However, they stress that the usefulness of indicators is not in the numbers themselves but the analysis of what is driving the indicator.

2.2.2 The NSW Department of Local Government - DIG Model

The DLG framework is to reshape the existing framework in some way to strengthen strategic focus, streamline the planning and reporting processes and encourage integration between the various council's strategic documents/plans. The proposed model is designed as a continuous framework, rather than a static planning model.

The recommendations provided through this Plan are essentially equipping Council to take a strategic approach to comply with this framework.

It is designed to allow councils more autonomy in responding to their community's various needs, and encourages elected representatives to play a leading role in developing long term plans.



Source – NSW Department of Local Government – Asset Management Planning for NSW Local Government – page 15

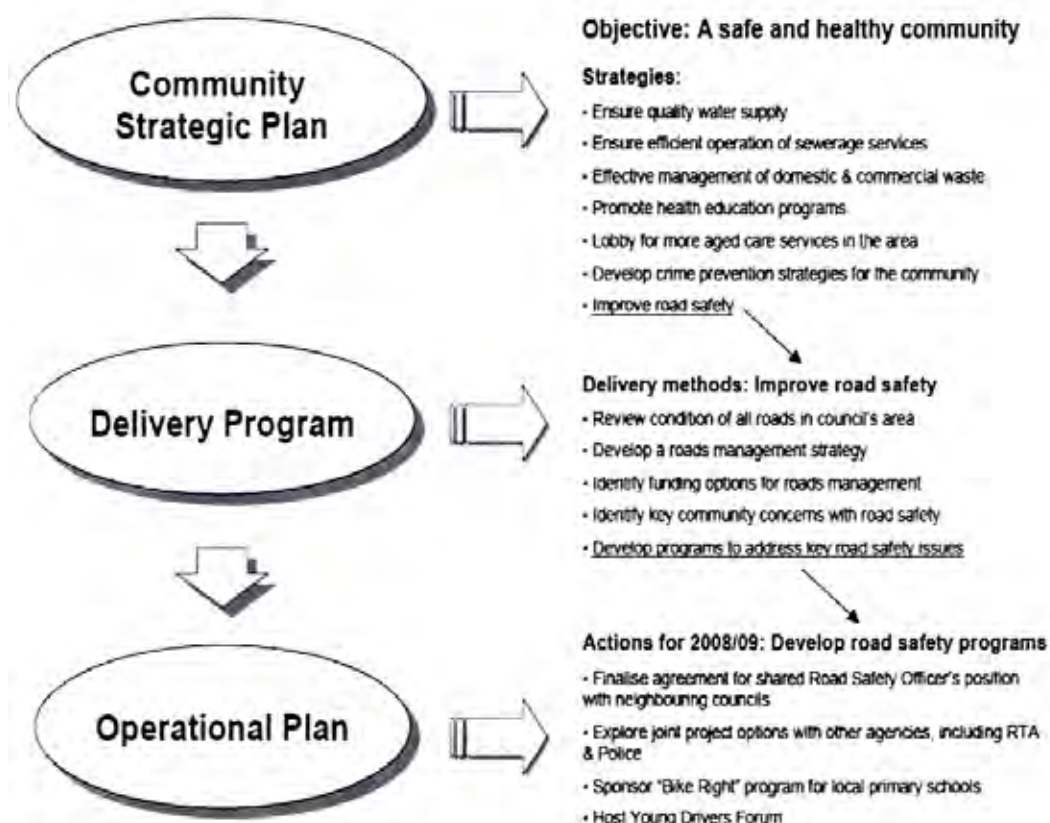
Fig 2.1 NSW LG DIG Model

Why mandate strategic planning?

This model includes a mandatory requirement for a long-term asset management plans. One of the recurrent themes emerging from the review is that councils need to develop a stronger strategic focus.

How is planning and reporting integrated?

The diagram below shows how the objectives from the Community Strategic Plan may be cascaded through the system.



For example, a Council's Community Strategic Plan might identify the objective of "A safe and healthy community" and nominate key strategies for achieving this. These strategies might include a wide variety of approaches, such as ensuring quality water supply and safe operation of sewerage services, ensuring efficient collection of domestic and commercial waste, promoting health education programs, lobbying for more aged care services in the area, developing crime prevention strategies for the community, and improving the quality of roads.

These intentions would be translated into the Delivery Program in the following way, for example:

Plan:

Improving Plant Asset Delivery Methods:

- z Undertake a review of the condition of the Plant Asset.
- z Update Councils 10-year Plant Asset Maintenance and Capital Plan.
- z Identify funding options for Plant Assets management.
- z Identify key user concerns with Plant Asset replacement and safety.

- z Develop programs to address key Plant Asset replacement and safety issues.

The Operational Plan would then focus on what Council would do towards achieving each of these goals in the coming year. For example:

Develop Plant Asset replacement programs: Actions for 2011-21

- z Optimised plant usage
- z Ensure sufficient staff are trained as plant operators.
- z Ensure continued consultation with operators by the Plant Foreman on plant replacement

In this way, the objectives of the Plant Replacement Strategic Plan are cascaded down through Council's planning framework, so that general directions and objectives for the users are translated into plans, then into programs and finally, individual actions.

The Integrated Planning and Reporting project aims to improve Councils' capacity for long-term planning and should help to identify resourcing needs earlier in the planning cycle. The requirement to consider resourcing over the 10-year period of the plan will help Councils to take a wider view of their needs, considering not only finances, but also human resources and asset requirements. They will be able to identify the additional resources that could be raised through borrowings, rate variations or grants and will be in a better position to take maximum advantage of funding opportunities, resource sharing options and strategic alliances.

2.3 Key stakeholders

The key stakeholders are internal custodians as well as external individuals, companies, service authorities, government authorities and community groups who have a vested interest in management of Plant Assets. The following groups have been identified as key stakeholders in the management and use of the Plant Asset network and Plant Asset related assets:

Elected Members	Endorsement of the asset management policy, strategy and plans. Adopt the plant replacement program on a yearly basis. Set high level direction through the development of asset management principles in the Community Strategic Plan.
Senior Management	Endorse the development of asset management plans and provide the resources required to complete this task. Set high level priorities for asset management development in Council and raise the awareness of this function among Council staff and contractors. Support the implementation of actions resulting from this plan and prepared to make changes to a better way of managing assets and delivering services. Support for an asset management driven budget and Long Term Financial Plan (LTFP).

Corporate Services	Consolidating the asset register and ensuring the asset valuations are accurate. Development of supporting policies such as capitalisation and depreciation. Preparation of asset sustainability and financial reports incorporating asset depreciation in compliance with current Australian accounting standards. Asset Management and GIS support and admin.
Field Services Staff	Provide local knowledge level detail on all Plant assets. They verify the condition of assets and type of assets that best suit the task.

2.4 Goals and Objectives of Asset Management

The Council exists to provide services to its community. Some of these services are provided by infrastructure assets. Council has acquired infrastructure assets by 'purchase', through construction by Council staff to meet increased levels of service.

Council's goal in managing infrastructure assets is to meet the required level of service in the most cost effective manner for present and future consumers. The key elements of infrastructure asset management are:

- z **Taking a life cycle approach,**
 - § Have precise knowledge of what Council owns or has responsibility for or is legal liable for;
 - § Record and extract information on these assets in a register, down to an acceptable level which can be maintained and updated easily;
 - § Report on our annual depreciations and asset consumption at an asset component level;
- z **Developing cost-effective management strategies for the long term,**
 - § Understand the long term (10-20 years) funding needs of the Plant Asset to meet strategic expectations in both capital and maintenance expenditure;
- z **Providing a defined level of service and monitoring performance,**
 - § Measure and monitor the condition, performance, utilisation and costs of assets down to the managed component level and aggregate this data up to give outputs of cost and performance at the master level;
 - § Understand and record the current levels of service in terms of responsiveness and performance;
 - § Understand the likely future levels of service required based on population growth, demographic changes and community expectations;
- z **Understanding and meeting the demands of growth** through demand management and infrastructure investment,
- z **Managing risks** associated with asset failures,
- z **Sustainable** use of physical resources,
- z **Continuous improvement** in asset management practices.¹
 - § Have uniform processes across our whole organisation for the evaluation of any investment in:

¹ IIMM 2006 Sec 1.1.3, p 1.3

- (a) Renewal, upgrades and expansions of existing assets;
- (b) Creation of new assets;
- (c) Maintenance of existing assets; and
- (d) Operational expenditure to deliver services.

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

Council's vision is:

To sustain and grow the Temora Shire as a rural community of choice for current and future residents, being united in our heritage yet open to growth and diversity

To celebrate our past achievements in sport, culture and enterprise whilst maintaining our commitment to the future in providing a safe, happy and healthy environment for all

Council's mission is:

To achieve the best possible outcomes for our community

Council Values relevant to this asset management plan are:

- z **Users:**
In partnership with the users, respond to needs and aspirations in a caring, fair and accountable manner through the provision of quality services.
- z **Governments:**
We encourage an open, productive relationship with all spheres of government and other organisations in the best interests of our community.
- z **Customers and Suppliers:**
Conduct our business with integrity and respect, ensuring consistency and accountability in all our dealings.
- z **Environment**
Conserve, enhance and develop our environment in an equitable and sustainable manner, acting as custodians for future generations.

2.5 Plan Framework

Key elements of the plan are

- z **Levels of service** – specifies the services and levels of service to be provided by Council.
 - z **Future demand** – how this will impact on future service delivery and how this is to be met.
 - z Life cycle management – how Council will manage its existing and future assets to provide the required services
 - z **Financial summary** – what funds are required to provide the required services.
 - z **Asset management practices**
-

- z **Monitoring** – how the plan will be monitored to ensure it is meeting Council's objectives.
- z **Asset management improvement plan**

A road map for preparing an asset management plan is shown below in Fig 2.2

2.6 Core and Advanced Asset Management

This Plant Assets Asset Management Plan is prepared as a 'core' asset management plan in accordance with the International Infrastructure Management Manual. It is prepared to meet minimum legislative and organisational requirements for sustainable service delivery and long term financial planning and reporting. Core asset management is a 'top down' approach where analysis is applied at the 'system' or 'network' level.

Future revisions of this asset management plan will move towards 'advanced' asset management using a 'bottom up' approach for gathering asset information for individual assets to support the optimisation of activities and programs to meet agreed service levels.

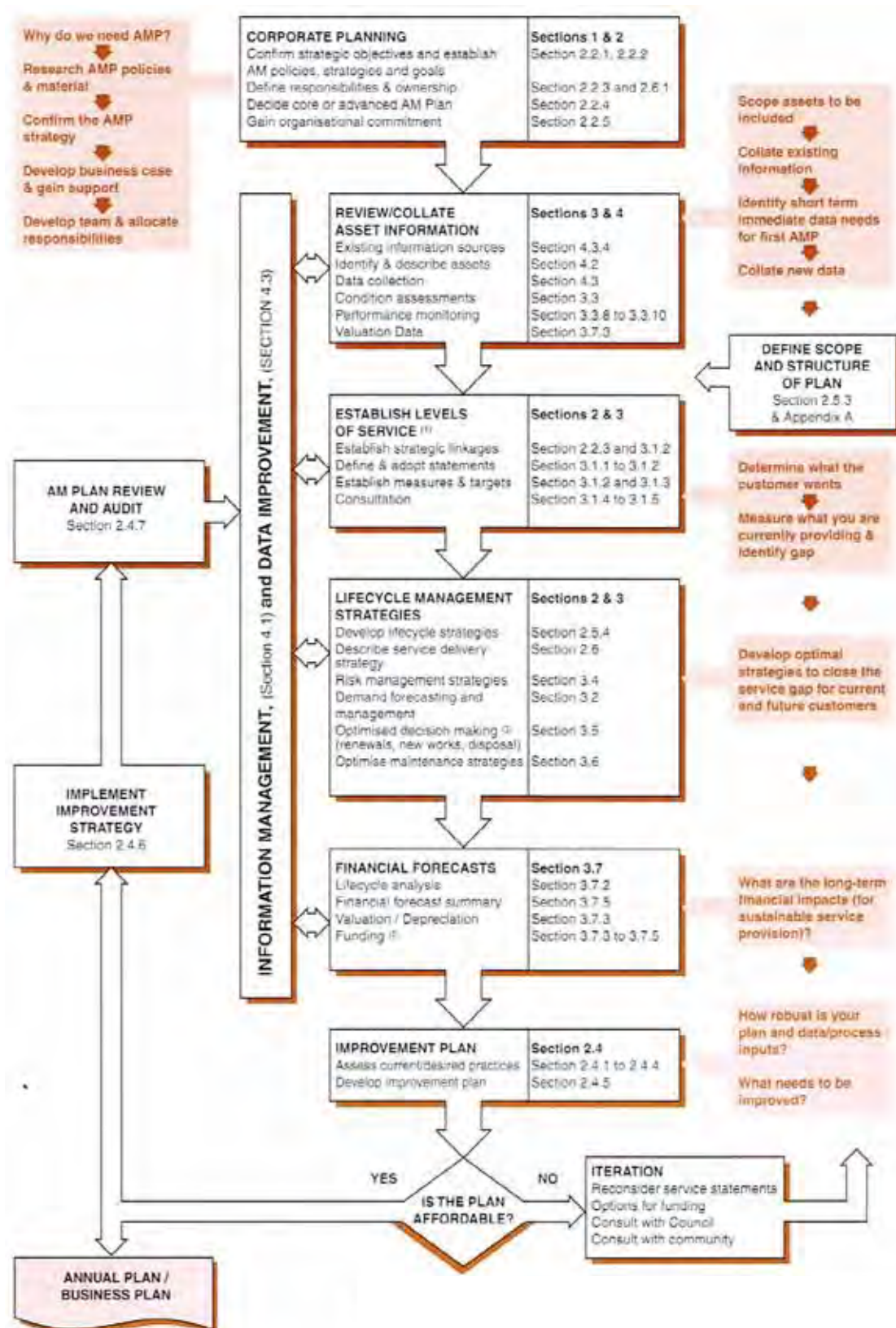


Fig 2.2 Plant Asset Map for Preparing an Asset Management Plan
Source: IIMM Fig 1.5.1, p1.111

3. LEVELS OF SERVICE

Levels of Service relate to outcomes that the customer receives in terms of quality, quantity, responsiveness and performance as provided by the asset. To achieve and sustain acceptable standards of service for Council's Plant Assets requires Council to commit to an annual maintenance and capital program, through the plant hire rates that ensure that the fund is self-sustaining.

These funds provide for regular and responsive maintenance and for timely renewal or replacement of the asset. The provision of adequate financial resources ensures that the Plant Asset is appropriately managed and preserved. Financial provisions below requirements impacts directly on community development and if prolonged, results in substantial needs for "catch up" expenditure imposed on ratepayers in the future. Additionally, deferred renewal results in increased and escalating reactive maintenance as aged assets deteriorate at increasing rates.

In developing the levels of service as documented in this PAMP, Council has given due regard to the strategic goals and objectives in the 2011-2030 Strategic Plan which sets out the strategic direction of Council to implement its Management Plan over the following twenty years. Council has also given due regard to Legislative requirements and Australian Standards and stakeholder expectations in the form of customer research and expectation surveys.

The levels of service documented in this PAMP therefore reflect the best assumptions of current levels of service provided by Council, for the benefit of the community, in the context of Council's financial and human resources.

Councils current Level of Service are set out in Appendix D of this Asset Management Plan.

3.1 Customer Research and Expectations

Council participates in a Performance Measure Customer Satisfaction survey every four years in August prior to the Council election. This survey is distributed to all residents, requesting their level of satisfaction with Council's services.

The most recent customer satisfaction survey was in 2008. Although plant assets are not a category in the survey, the efficiency of the plant can be determined in the satisfaction of Roads, Parks, and Sporting Fields.

Table 3.1 Satisfaction Survey

Performance Measure	Satisfaction Level (1 to 5)				
	Very Satisfied	Fairly Satisfied	Satisfied	Somewhat satisfied	Not satisfied
Bus Shelters				3.83	
Car Parking				2.80	
Drainage				3.29	
Footpaths				2.76	
Road Network		3.45			
Street Lighting				2.83	
Street Signage		3.64			
Street Cleaning		3.60			
Street Trees				3.23	
Parks & Gardens	4.06				
Sporting Fields	4.10				

The above results are presented graphically below in figure 3.1

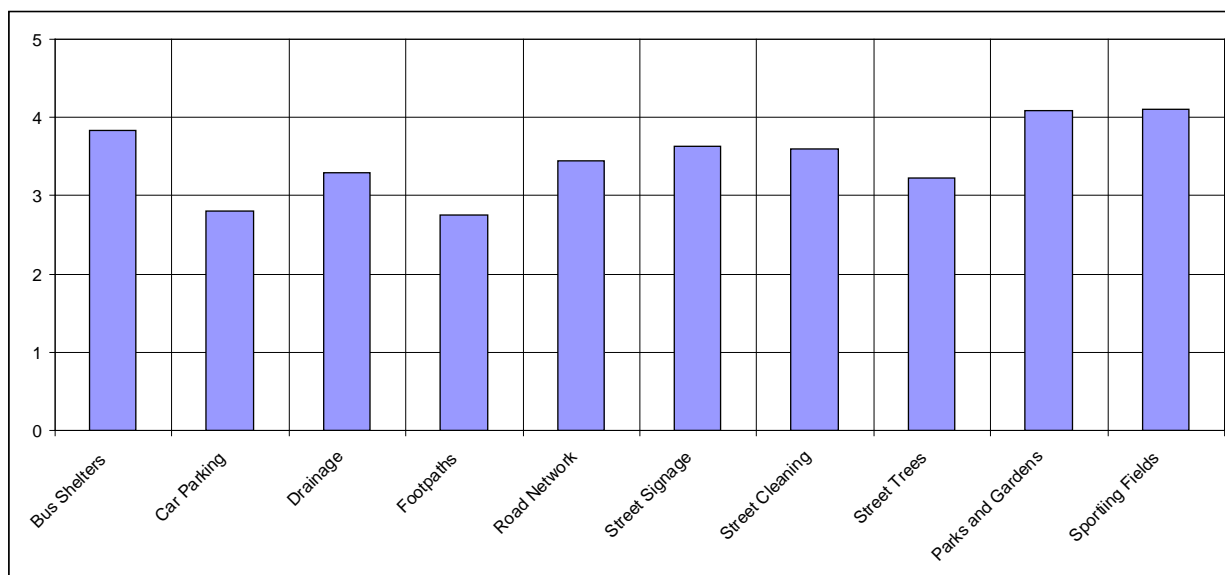


Fig 3.1 *Satisfaction Survey*

3.2 Legislative Requirements

Council has to meet many legislative requirements including Australian and State legislation and State regulations. These include:

Table 3.2. Legislative Requirements

Legislation	Requirement
National Asset Management Framework Legislation 2010	Focuses on long term financial sustainability and provides a mandate to have long term strategy, financial statements and annual reporting mechanisms. AM plans are likely to be audited.
DLG Integrated Planning NSW	Key requirement is to integrated community plans with operational and delivery plans.
Local Government Act 1993	Sets out role, purpose, responsibilities and powers of local governments including the preparation of a long term financial plan supported by asset management plans for sustainable service delivery.
Occupational Health and Safety Act 2000	Aims to secure the health, safety and welfare of people at work. It lays down general requirements which must be met at places of work in New South Wales. The provisions of the Act cover every place of work in New South Wales. The Act covers self employed people as well as employees, employers, students, contractors and other visitors.
Occupational Health and Safety Regulation 2001	Regulations on the control and management of risk in the work place.
Australian Design Rules	National Australian standards for vehicle safety, anti-theft system and emission standards

Table 3.3. Legislative Requirements

Standards and Specifications	Requirements
Australian Accounting Standards.	<p>Sets out the financial reporting standards relating to infrastructure assets. Standards of particular relevance to Infrastructure Assets include:</p> <ul style="list-style-type: none"> • AASB116 Property, Plant & Equipment — prescribes requirements for recognition and depreciation of property, plant and equipment assets • AASB136 Impairment of Assets — aims to ensure that assets are carried at amounts that are not in excess of their recoverable amounts • AASB1021 Depreciation of Non-Current Assets — specifies how depreciation is to be calculated • AAS1001 Accounting Policies — specifies the policies that Council is to have for recognition of assets and depreciation • AASB1041 Accounting for the reduction of Non-Current Assets — specifies the frequency and basis of calculating depreciation and revaluation basis used for assets • AAS1015 Accounting for acquisition of assets — method of allocating the value to new assets on acquisition

3.3 Current Levels of Service

Council has defined a two tier level of service.

Community Levels of Service relates to how the community receives the service in terms of safety, quality, quantity, reliability, responsiveness, cost/efficiency and legislative compliance.

Supporting the community service levels are operational or technical measures of performance developed to ensure that the minimum community levels of service are met. These technical measures relate to service criteria such as:

Service Criteria

Quality
Function
Accessibility
Safety
Risk

Technical measures may relate to

Provision of a well maintained service
Does the asset meet functional standards
Meeting future needs
Number of injury/accidents
Capital renewal undertaken when required

Council's current service levels are summarised in Table 3.3 and detailed in Appendix D

Table 3.3. Current Service Levels

Key Performance Measure	Level of Service	Performance Measure Process	Performance Target	Current Performance
Function	Modern equipment that meet the user requirements	Consultation with end users when renewal is due	100% satisfaction that end user is happy with fleet design and selection process	100% satisfaction that end users are happy with fleet design and selection process
Sustainability	Cost effective fleet, will low whole of life costs.	Proactive replacement program. Forecasted whole of life costs. Policy on renewal and selection criteria.	Replacement as per long term financial plan and replacement policy	Forecasted replacement plan for Asset Management, operational and long term financial plan.
Condition	Fleet Plant and Equipment are maintained to Manufactures specification	Scheduled maintenance, Reactive repairs, regular inspection by operator and fleet staff	Compliant with manufactures recommendations	Compliant with manufactures recommendations. Planned maintenance. Equipment available for operational and designed use
Resource allocation	Plant fund to be self sustaining	Plant replacements when necessary	Plant replacement to be self funding	100% self funding\
Safety	Asset Compliance	Roadworthy Compliance Inspections during scheduled and non scheduled maintenance and repairs Operators inspections and reporting defects and faults	100% Compliant with Legislation	100% Inspections during scheduled and non scheduled maintenance and repairs Operators inspections and reporting defects
Condition	Fleet Plant and Equipment are maintained to Manufactures specification	Scheduled maintenance, Reactive repairs, regular inspection by operator and fleet staff	Compliant with manufactures recommendations	Compliant with manufactures recommendations. Planned maintenance. Equipment available for operational and designed use

3.4 Desired Levels of Service

At present, indications of desired levels of service are obtained from various sources including the Customer Satisfaction survey, residents' feedback to Councillors and staff, service requests, correspondence and through discussions with plant operators.

Council has quantified the desired levels of service when formulating the 10-year maintenance and capital works plan. The plan determines the Plant Asset requirements for each year plus which item of plant will be replaced.

4. FUTURE DEMAND

4.1 Demand Forecast

Council's fundamental role is to provide services to the community and the PAMP is a means to support this. Consequently, future demand for Plant Asset are tied to the demand for Council's services and this is a more complex than just consideration the works program alone. Issues such as changing demands from residents, increase plant hire rates effect the Plant Asset Replacement Program,

Plant Asset Management Plans are critically driven by the needs of the services to be delivered and therefore meaningful strategies cannot be developed in isolation or in absence of comprehensive service strategies. Maintaining Council's Plant Asset without adequate regard for service needs may result in a well-maintained portfolio of assets, but it may also result in an asset portfolio which does not meet the needs of staff that provide services to the community.

Factors affecting demand include population change, changes in demographics, seasonal factors, consumer preferences and expectations, economic factors, agricultural practices, environmental awareness, etc. Demand factor trends and impacts on service delivery are summarised in Table 4.1.

Table 4.1. Demand Factors, Projections and Impact on Services

Demand factor	Present position	Projection	Impact on services
Population	5,914 (2006 census). The population increased by 1.05% between the 2001 and 2006 censuses. 57.1% of the population live in the urban area, 36.8% in the rural area and 6.1% in the surrounding villages	Temora's population is expected to grow over the next 10 years Future growth is likely to occur as a result of Council initiatives such as the airpark estate, Continued attraction to rural lifestyle	Changes in rural residential premises numbers may be proportional to the change in population;
Demographics	Increase in ageing population 65+ represents 16.8% of the population and has increased by 3.3% since 1981. Whereas the overall population is static to a 0.27% increase	Temora TAFE and Charles Sturt University at Wagga will play a vital role in retaining and/or attracting young people to Temora. The number of aged over 65 will continue to increase. This is consistent with the national trend towards an ageing population and longer life expectancy	Increase in demand for life style retirees interested in rural residential lifestyle.

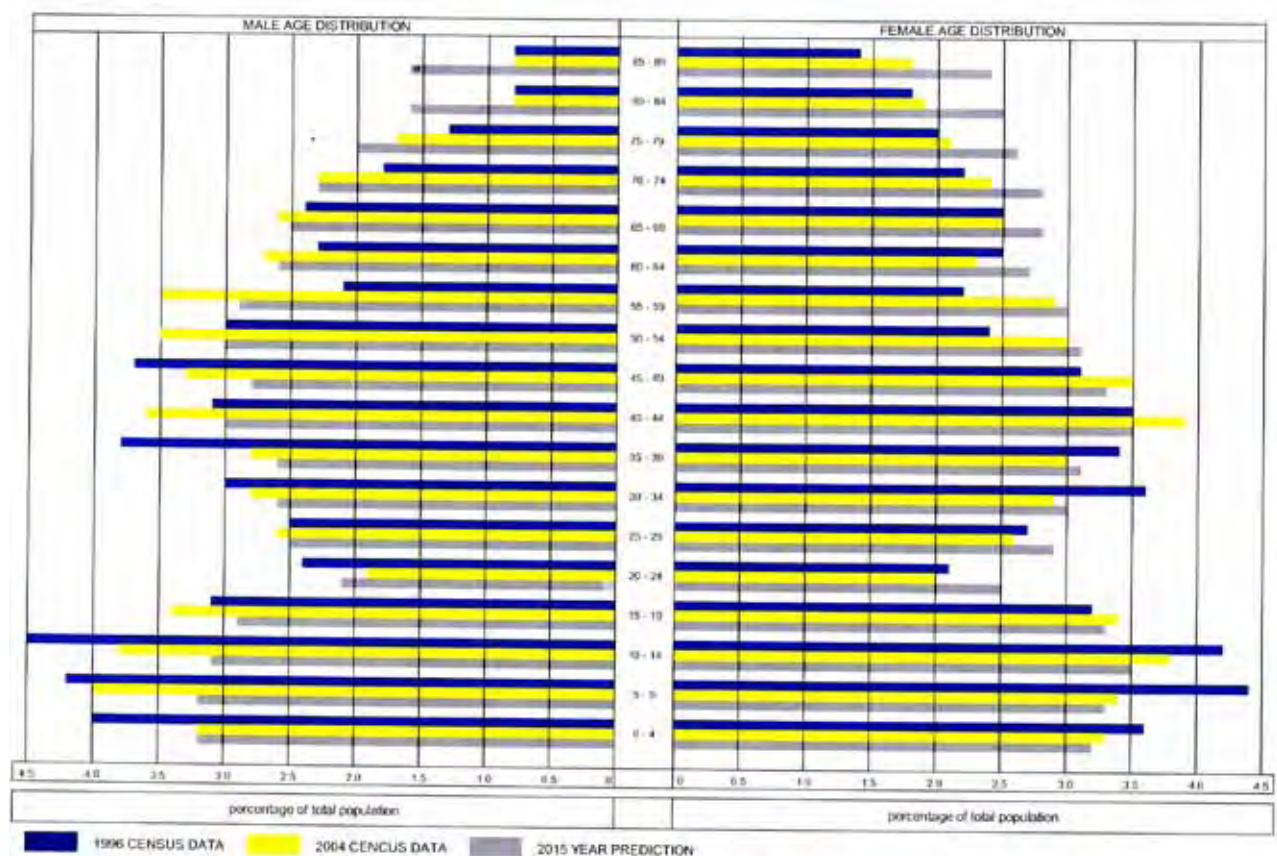


Figure 4.1 1996 and 2004 LGA Population by Age and Sex

4.2 Changes in Technology

Technology changes are forecast to have little effect on the delivery of services covered by this plan. However changes may effect the following areas.

Table 4.2. Changes in Technology and Forecast effect on Service Delivery

Technology Change	Effect on Service Delivery
Specialised Fleet Equipment	Improve efficiency in service delivery, and reduce costs.
Alternative Fuel and Hybrid Vehicles	No effect on service delivery but reduction of emission

4.3 Demand Management Plan

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

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

Table 4.3. Demand Management Plan Summary

Service Activity	Demand Management Plan
Financial	Developing long-term financial plan to ensure financial sustainability. Ensure Plant Hire Rates are sufficient to allow plant fund to be self generating.
Service Delivery	To ensure services required and Utilisation is driving demand for Fleet Assets.
Environmental	Many government bodies and utilities now include environmental impact statements within their published policies. Ford claims that using its dedicated LPG vehicle saves up to 20% lower global warming potential, 15% lower carbon dioxide emissions, 20% lower ozone (smog) forming potential, and 80% less harmful air toxic emissions compared to petrol. If we assume a vehicle travels 30,000 kilometres per annum, switching the vehicle from Petrol to LPG can reduce Global Warming Potential gases (CO ₂ equivalent) by 2.03 tonnes or 1,780 cubic metres.

4.4 New Assets from Growth

Changes to the size and scope of the Plant Fleet is an ongoing issue that can be driven by changes in work practices, technology, staffing or increasing work loads due to a number of factors. Current strategies to address this are triggered when the item of fleet is due for renewal and consultation with the plant operator is taken into account.

At this time the fleet is relatively stable with further assessment and analysis being required to shape future cost projections associated with growth. The plant utilisation also needs to be addressed in future plans where low utilisation plant sold off.

Future versions of this asset management plan will consider the impacts of growth in greater detail. This activity has been included as a priority in the improvement plan. The valuation models in the financial summary section of this report use a rate of growth of 0.25%

5. LIFECYCLE MANAGEMENT PLAN

The Lifecycle Management Plan details how Council plans to manage and operate the Plant Asset at the agreed levels of service (defined in section 3) while optimising life cycle costs. To undertake life cycle asset management, means considering all management options and strategies as part of the asset lifecycle, from planning to disposal. The objective of managing the assets in this manner is to look at long- term cost impacts (or savings) when making asset management decisions. Fig 5.1 below provides a graphical representation of the asset lifecycle including each of the stages an asset passes through during its life.

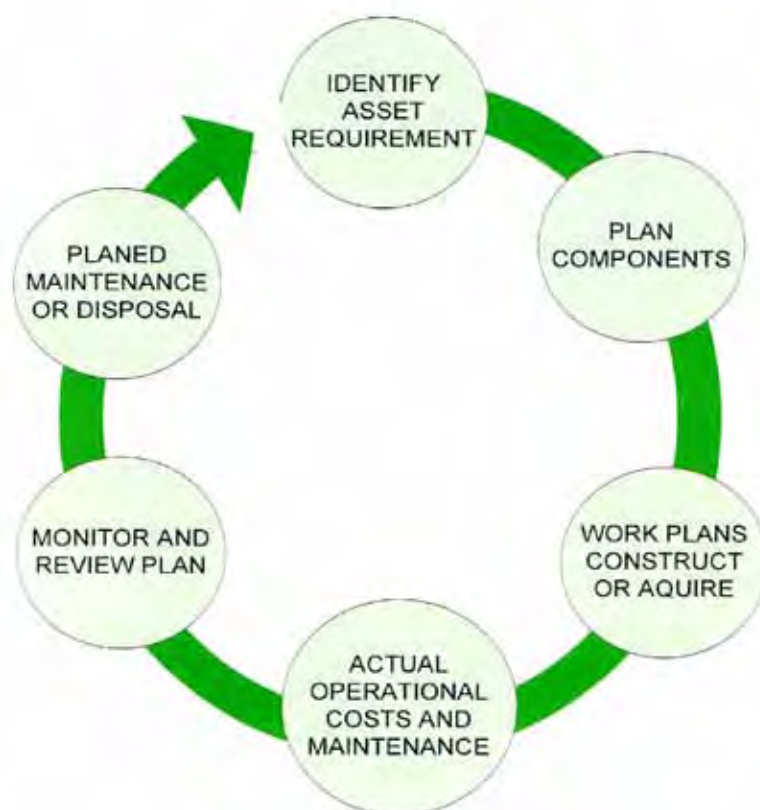


Figure 5.1 Asset Lifecycle

A model for the lifecycle of Plant Assets is presented later in this section. The model relates particularly to the maintenance and renewal stages of asset life (refer to figure 5.2.)

In the “**Do Nothing**” phase, the asset deteriorates slowly and maintenance is generally not required. In the “**Maintain**” phase, these activities will need to be performed to minimise continued deterioration. In the “**Rehabilitate**” or “**Renewal**” stage, activities are undertaken that restore the asset to a condition close to that of the original.

The importance of the time for intervention for renewal is paramount. If renewal activities are not undertaken in a timely manner, the condition of the asset will deteriorate rapidly to failure, and the cost of replacement will be greater than that of the renewal cost.

Figure 5.2, demonstrates the life cycle for roads, but the same assumptions also relate to items of plant.

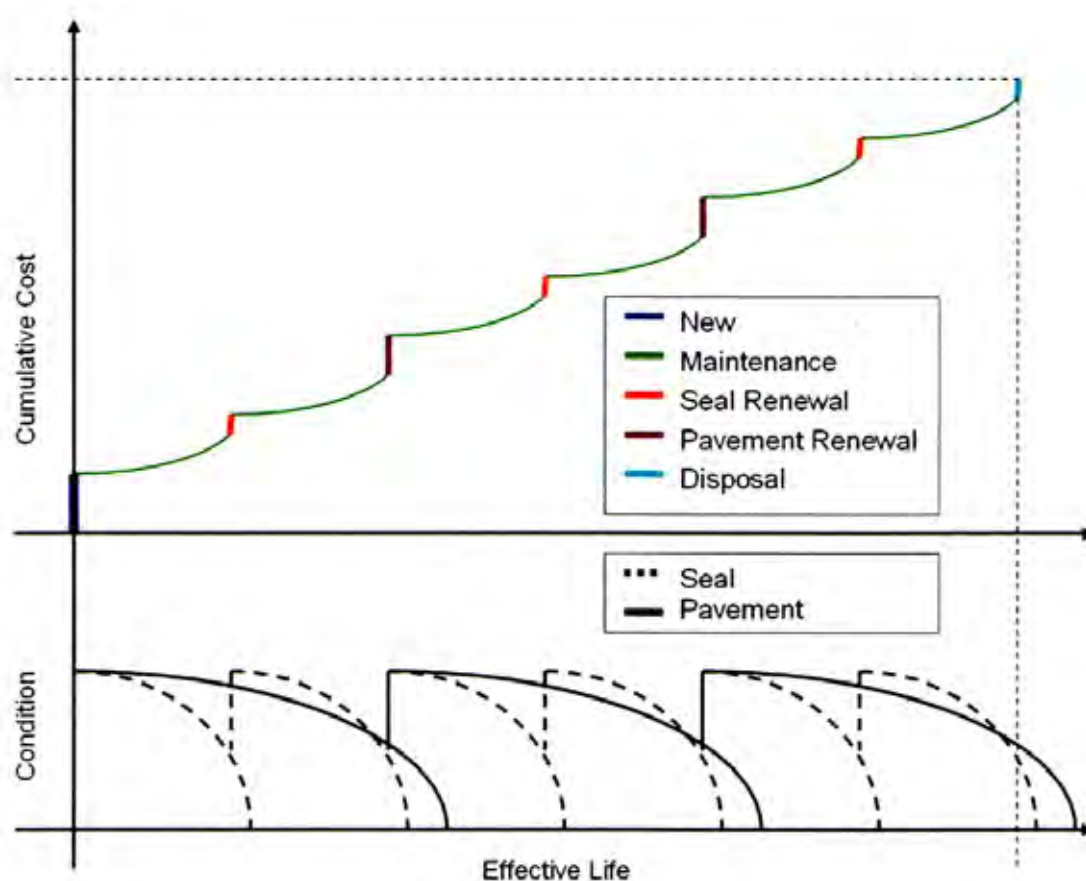


Figure 5.2 Plant Asset Lifecycle

5.1 Background Data

5.1.1 Physical parameters

The assets covered by this Asset Management Plan is shown below. The characterises are given in Tables 5.1

Table 5.1 Characteristics of Plant Asset Inventory

Asset Category	Number
Graders	3
Loaders & Backhoe	4
Tractors	3
12 Tonne Tipper Trucks	4
Large Trailers	5
Small Trucks	10
Light Utilities	14
Rollers	5
Miscellaneous Equipment	Various

The age profile of Council's assets is shown in figure 5.3 below.

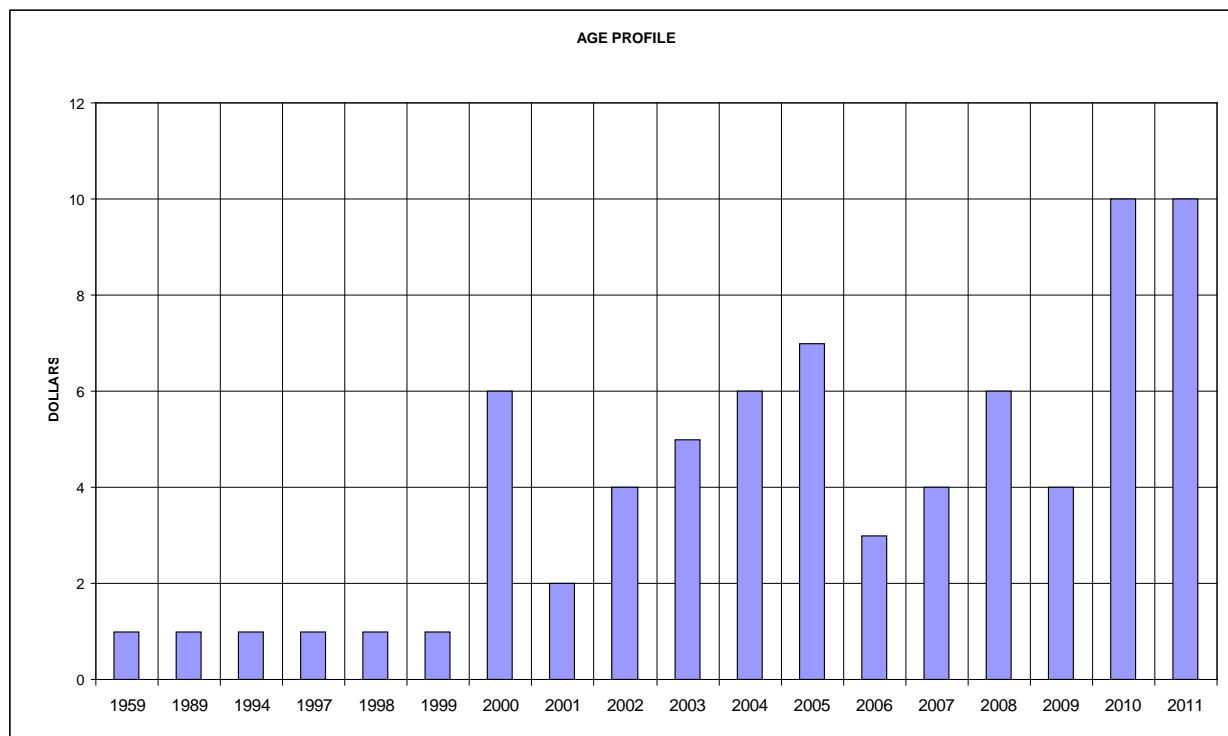


Figure 5.3 Asset Profile

5.1.2 Asset Capacity and Performance

Council's services are generally provided to meet design standards where these are available. Locations where deficiencies in service performance are known are detailed in Table 5.3. These deficiencies were identified by Council staff

Table 5.3 Known Service Performance Deficiencies

Item	Service Deficiency
Operator damage	Operator damage to Fleet equipment which has a significant effect on scheduled maintenance, recourses and availability of equipment which effect service delivery and customer satisfaction.
Utilisation	Under utilised equipment that are a result of staffing, seasonal weather and communication across departments.

The above service deficiencies were identified from the results of inspections undertaken in the preparation of this plan

5.1.3 Asset condition

Due to relative short life of Fleet assets condition is not a key driver for renewal, whole of life costs, policies and service drive requirements is the performance measure. Future revision of this document will contain a table showing percentage distribution of fleet assets according to condition rating

Table 5.6. Plant Asset, Condition Rating Description

Condition Index	Rating Scale	Condition Description
1	Excellent	Providing a very high level of service
2	Good	Good condition with no indication of any major failures and providing a good level of service.
3	Fair	Aged and in fair condition providing an adequate level of service. No signs of immediate obsolescence.
4	Poor	Will need to renew, upgrade or dispose of in the future and is included in the five year Capital Works Program
5	Very Poor	Below an acceptable level of service. Requires renewal/upgrade immediately within the following year or so.

<u>Type</u>	<u>Frequency of Replacement</u>
Sedans and Station Wagons	2 years or 60,000 kilometres whichever occurs first.
Utes	2 years or 60,000 kilometres whichever occurs first.
Vans	2 years or 60,000 kilometres whichever occurs first.
Trucks	7 years or 150,000 kilometres whichever occurs first.
Compactor	7 years or 150,000 kilometres whichever occurs first.
Road Sweeper	5 years or 110,000 kilometres whichever occurs first
Tractors	7 years or 4,000 hours whichever occurs first
Front End Loader and Backhoe	5 years or 3,000 hours
Graders	10 years or 10,000 hours whichever occurs first
Mowers – Ride on Mowers	4 years
Other Plant	As required

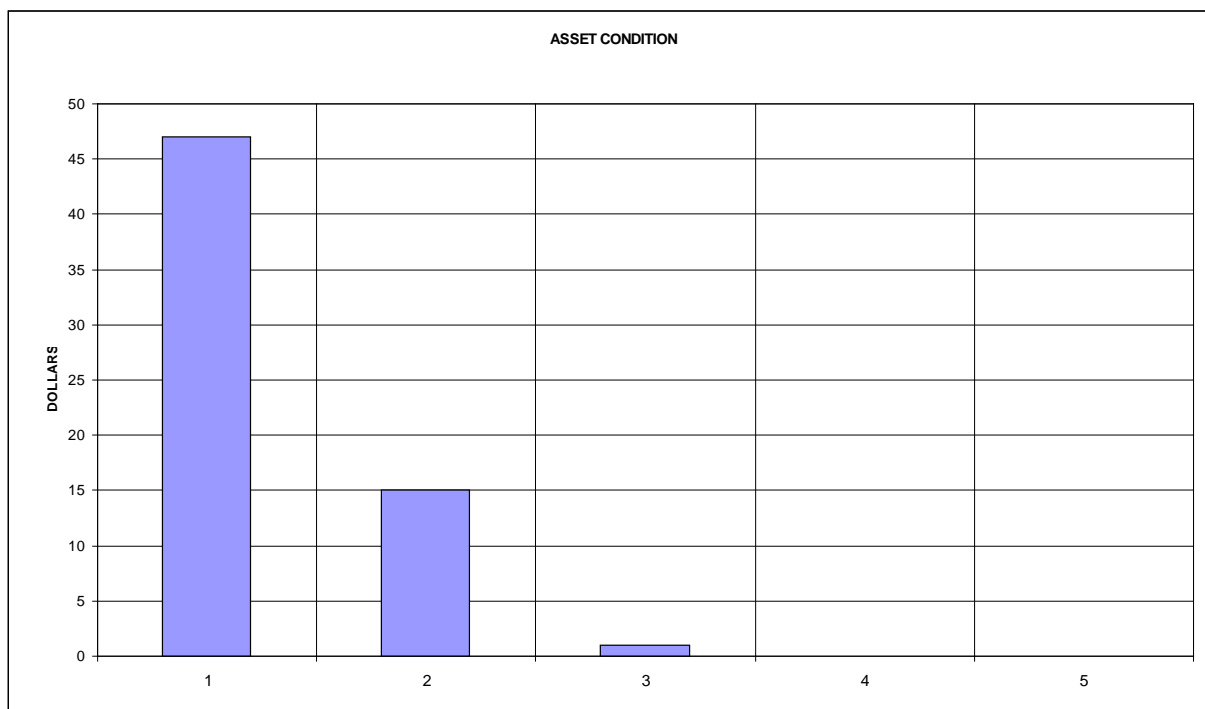


Fig 5.3 Plant Asset Condition

5.1.4 Asset valuations

The value of assets as at 30th June 2010 covered by this asset management plan is summarised below. Assets were last revalued at 30th June 2010 and were valued at greenfield rates. Table 5.7 lists current asset values

Table 5.7 Current Asset Values

Asset category	Replacement Value (\$M)	Annual Depreciation (\$M)	Accumulated Depreciation (\$M)	Written Down Value (\$M)
Graders	\$1,005,000	\$49,705	\$374,079	\$481,974
Loaders and Backhoes	\$1,203,000	\$50,171	\$192,178	\$605,304
Tractors	\$271,000	\$15,138	\$51,697	\$165,009
12 Tonne Tipper Trucks	\$813,000	\$56,316	\$170,159	\$547,869
Large Trailers and Float	\$388,000	\$17,581	\$84,693	\$194,593
Small Trucks	\$828,500	\$65,176	\$280,029	\$244,433
Light Utilities	\$449,000	\$22,299	\$103,896	\$108,152
Rollers	\$538,000	\$29,372	\$212,461	\$144,723
Water Carts	\$930,000	\$28,416	\$279,576	\$264,745
Miscellaneous	\$1,092,600	\$69,010	\$317,559	\$298,384
TOTAL	\$7,518,100.00	\$403,184.00	\$2,066,327.00	\$3,055,186.00

Council's sustainability reporting reports the rate of annual asset consumption (annual depreciation plus maintenance/ asset replacement value) and compares this to asset renewal (plant replacement cost/Replacement value).

Asset Consumption	16.3%
Asset renewal	12.4%

The asset renewal as a percentage is less than the asset consumption.

5.2 Risk Management Plan

An assessment of risks associated with service delivery from infrastructure assets has identified critical risks to Council. The risk assessment process identifies credible risks, the likelihood of the risk event occurring, the consequences should the event occur, develops a risk rating, evaluates the risk and develops a risk treatment plan for non-acceptable risks.

Critical risks, being those assessed as 'Very High' - requiring immediate corrective action and 'High' – requiring prioritised corrective action identified in the infrastructure risk management plan are summarised in Table 5.8

Table 5.8 Critical Risks and Treatment Plans

Asset at Risk	What can Happen	Risk Rating (VH, H)	Risk Treatment Plan
Fleet	Physical injury to staff, public or assets	M	Safety Inspections, signage, engineering, personal protective equipment and training
Fleet	Excessive downtime for repairs effecting user productivity and increase whole of life costs	M	A change in the use of the machine. Operator training, communication between Fleet Department and Users
Fleet	Inadequate or unsuitable plant and equipment	L	Consultation process to ensure provision of plant matches the needs of the user and is of design and standard that is fit for the purpose of intended use

5.3 Routine Maintenance Plan

Routine maintenance is the regular on-going work that is necessary to keep assets operating, including instances where portions of the asset fail and need immediate repair to make the asset operational again.

Routine maintenance work includes:

- z Routine service

5.3.1 Maintenance and improvement plan

Maintenance includes reactive, planned and cyclic maintenance work activities.

Reactive maintenance is unplanned repair work carried out in response to service requests and management/supervisory directions. Assessment and prioritisation of reactive maintenance is undertaken by Council staff using experience and judgement.

Reactive maintenance work is has been determined as being typically 20% of total maintenance expenditure.

Planned improvement is repair work that is identified and managed through a maintenance management system (MMS). MMS activities include inspection, assessing the condition against failure/breakdown, experience, prioritising, scheduling, actioning the work and reporting what was done to develop a maintenance history and improve maintenance and service delivery performance. Planned maintenance work is approximately 70% of total expenditure on Plant Assets.

Cyclic maintenance is replacement of higher value components/sub-components of assets that are undertaken on a regular cycle including replacing batteries, tyres etc., This work generally falls below the capital/ maintenance threshold.

Expenditure trends are shown in Table 5.9 and Figure 5.4

Table 5.9. Expenditure Trends

Year	Expenditure Dollars		
	Reactive	Planned	Cyclic
2005/06	\$115,139	\$402,987	\$57,570
2006/07	\$163,029	\$570,603	\$81,515
2007/08	\$183,105	\$640,866	\$91,515
2008/09	\$145,787	\$510,253	\$72,863

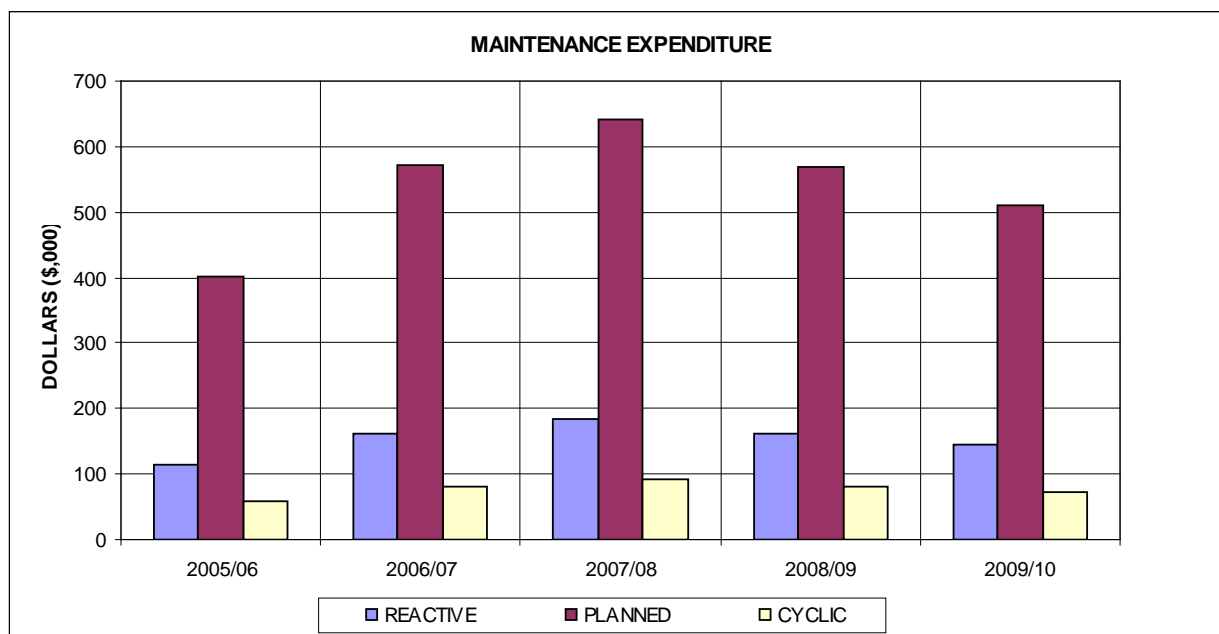


Figure 5.4 Expenditure Trends

Maintenance expenditure levels are considered to be adequate to meet required service levels. Future revision of this asset management plan will look at maintenance expenditures compared to the level of service.

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

5.3.2 Standards and specifications

Maintenance work is carried out in accordance with the following Standards and Specifications.

All plant assets are provided with fuel cards and odometer reading must be supplied to the service station attendant, whenever the vehicle is refuelled. Drivers must also check the oil and coolant levels and tyre pressure each morning or prior to when the plant is being used.

Periodic servicing of vehicles is in accordance with the manufacturer specifications or lease agreement specifications for the particular vehicle. The driver of the vehicle is responsible to notify and book in the vehicle for servicing with the Plant Manager. The plant operator, in collaboration with the workshop, is responsible for ensuring that the service schedule is maintained.

Accidents must be reported promptly using the appropriate accident report form. Any damage, malfunction or incorrect operation of equipment within the vehicle must be reported and rectified as soon as practicable.

5.3.3 Summary of future maintenance expenditures

Future maintenance expenditure is forecast to trend in line with the value of the asset stock as shown in Fig 5.5. Note that all costs have been indexed from the current 2010/11 dollar values.

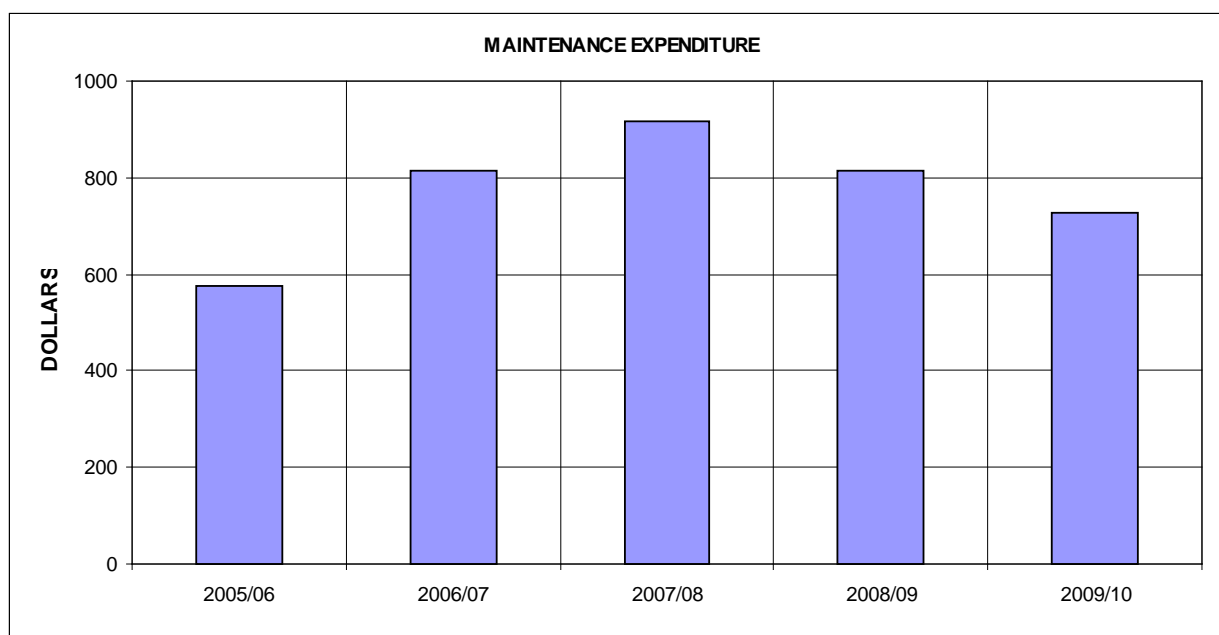


Fig 5.5 Predicted Maintenance Expenditure

Maintenance refers to works undertaken to address minor defects or servicing. These works are undertaken to keep Council's assets in a safe and operational condition, but not necessarily to improve the overall condition of these assets.

It should be noted that when undertaking the lifecycle modelling, these type of costs are taken into consideration by assuming that each year, a percentage of these distresses, will be repaired as part of Council's routine maintenance. If these assets are left to deteriorate, by not allocating sufficient capital, then the amount of deterioration not being fixed under routine maintenance will increase. Equally if the condition of these assets improves then the routine maintenance expenditure required will decrease.

The prediction model are forecasting a proportional increase in future maintenance with the current levels of capital funding.

Deferred maintenance, i.e. works that are identified for maintenance and unable to be funded are to be included in the risk assessment process in the infrastructure risk management plan.

Maintenance is funded from Council's plant reserve, which is funded from the plant hire rates charged to works. This is discussed in Section 6.2.

5.4 Renewal Plan

Renewal expenditure in the case of plant assets increases the asset's design capacity, by replacing the asset to its original or better service potential..

Table 5.10 shows the past renewal expenditure that has been spent on Council Plant Assets.

Table 5.10 Historical Capital Renewal Expenditure

Year	Expenditure
2005/06	\$455,998
2006/07	\$739,021
2007/08	\$726,800
2008/09	\$912,600

5.4.1 Renewal plan

Council's maintenance and renewal plan is currently incorporated into a 10 year Capital Works Program (Appendix C)..

Assets identified for renewal are inspected to verify the accuracy of the estimated remaining life obtained and develop a preliminary renewal estimate. Verified proposals are ranked by priority and available funds and scheduled in future works programmes. The priority ranking criteria is detailed in Table 5.11.

Table 5.11 Renewal Priority Ranking Criteria

Plant Asset Criteria	Weighting
Alignment with Councils priorities	No Current weighting or ranking against other Asset Classes
Funding within 10 Year Financial Plan	No Current weighting or ranking against other Asset Classes
Current Service Level	No Current weighting or ranking against other Asset Classes
Legislative OHS&W	No Current weighting or ranking against other Asset Classes

Renewal will be undertaken using 'low-cost' renewal methods where practical. The aim of 'low-cost' renewals is to restore the service potential or future economic benefits of the asset by renewing the assets at a cost less than replacement cost.

5.4.2 Renewal standards

Renewal work is carried out in accordance in accordance with the standards and specifications.

Council's vehicles and plant are to be replaced in accordance with the Schedule set out below. In the event of special circumstances, the General Manger, may replace vehicles and plant at a time earlier or later than is set out in the Schedule (e.g. damage by accident, higher than expected usage), provided that such replacement complies with the current sales tax laws and regulations.

Type	Frequency of Replacement
Sedans and Station Wagons	2 years or 60,000 kilometres whichever occurs first
Utes	2 years or 60,000 kilometres whichever occurs first
Vans	2 years or 60,000 kilometres whichever occurs first
Mowers – Ride on Mowers	4 years
Earth moving Plant (Grader, Loader, Roller)	10 years or 10,000 hours whichever occurs first
Other Plant	As required
Road Sweeper	5 years or 110,000 kilometres whichever occurs first
Compactor	7 years or 150,000 kilometres whichever occurs first
Trucks	7 years or 150,000 kilometres whichever occurs first

5.4.3 Summary of future renewal expenditure

Projected future renewal expenditures are forecast to increase over time as the asset stock ages. The costs are summarised in Figure 5. Note that all costs are shown in current 2009 dollar values. Figure 5.6 has the projected future renewal expenditure increase over time as the asset ages.

The projected capital renewal program is shown in Appendix C.

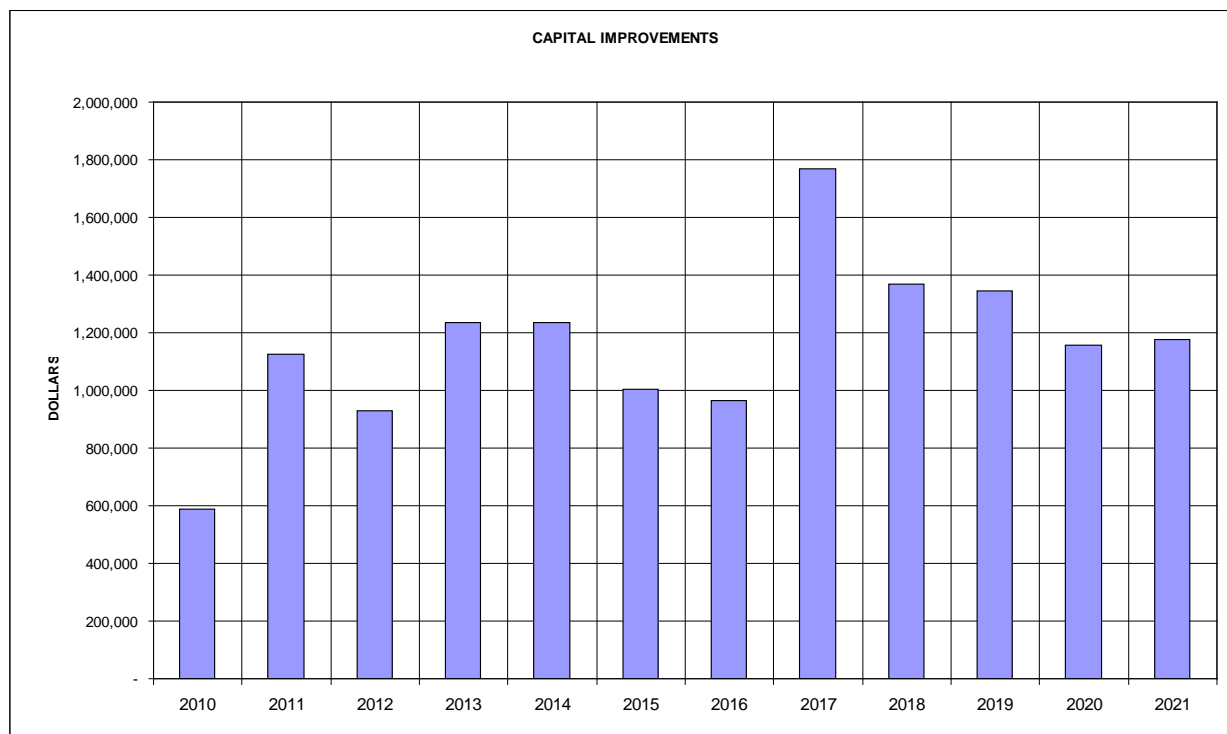


Fig 5.6 Predicted Capital Renewal and Upgrade for Plant Asset

Deferred renewal, i.e. those assets identified for renewal and not scheduled for renewal in capital works programs are to be included in the risk assessment process in the risk management plan.

Renewals are to be funded from Council's capital works program. This is further discussed in Section 6.2.

5.5 Creation/Acquisition/Upgrade Plan

New works are those works that create a new asset that did not previously exist, or works which upgrade or improve an existing asset beyond its existing capacity. They may result from growth, social or environmental needs. Assets may also be acquired at no cost to the Council from donations. These assets from growth are considered in Section 4.4.

5.5.1 Selection criteria

New assets and upgrade/expansion of existing assets are identified from various sources such as Councillor or community requests, proposals identified by strategic plans or partnerships with other organisations. Candidate proposals are inspected to verify need and to develop a preliminary renewal estimate. Verified proposals are ranked by priority and available funds and scheduled in future works programmes. The priority ranking criteria is detailed below.

The selection criteria is the same as that used for assets requiring renewal, see figure 5.4.1

Criteria	Weighting
Service Review Process	No Current Weighting
Goal Plan	No Current Weighting
Council plant replacement plan	No Current Weighting
Long Term Financial Plan	No Current Weighting

5.5.2 Standards and specifications

Standards and specifications for new assets and for upgrade/expansion of existing assets are the same as those for maintenance and renewal see Section 5.4.2.

5.5.3 Summary of future upgrade/new assets expenditure

New assets and services are to be funded from Council's capital works program and grants where available. This is further discussed in Section 6.2. Council's 10 year Capital Works Program is shown in Appendix C

5.6 Disposal Plan

Disposal includes any activity associated with disposal of a decommissioned asset including sale, demolition or relocation. Assets identified for possible decommissioning and disposal are shown in Appendix C. These assets will be further reinvestigated to determine the required levels of service and see what options are available for alternate service delivery, if any

6. FINANCIAL SUMMARY

This section contains the financial requirements resulting from all the information presented in the previous sections of this asset management plan. The financial projections will be improved as further information becomes available on desired levels of service, current and projected future asset performance and grant funding.

6.1 Financial Statements and Projections

The financial projections are shown in Fig 6.1 for planned operating (operations and maintenance) and capital expenditure (renewal and upgrade/expansion/new assets).

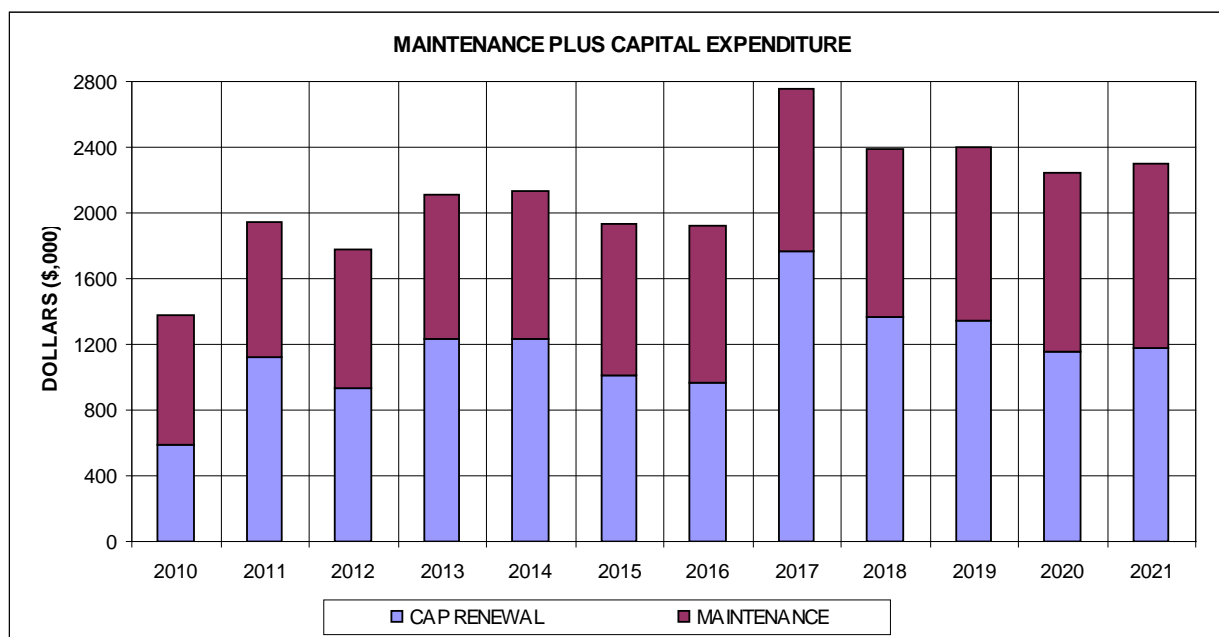


Fig 6.1 Planned Maintenance and Capital Renewal Only

6.1.1 Sustainability of service delivery

There has only been one key indicators for financial sustainability that has been considered in the analysis of the services provided by this asset category, that being medium term costs over the 10 year financial planning period.

Medium term - Life Cycle Cost

The ratio of lifecycle costs to lifecycle expenditure gives an indicator of sustainability of service provision. Life cycle costs include maintenance and asset consumption (depreciation expense). The annual average life cycle cost for the services covered in this asset management plan for a 10 year period is \$1,509,484.

Life cycle costs can be compared to life cycle expenditure to give an indicator of sustainability in service provision. Life cycle expenditure includes maintenance plus capital renewal expenditure. Life cycle expenditure will vary depending on the timing of asset renewals. The life cycle expenditure at the start of the plan is \$1,946,266.

A gap between life cycle costs and life cycle expenditure gives an indication as to whether present consumers are paying their share of the assets they are consuming each year. The purpose of this PAMP is to identify levels of service that the community needs and can afford and develop the necessary strategy to provide the service in a sustainable manner.

The life cycle sustainability index is 1.29

Annual Average lifecycle Costs,	Average Lifecycle Expenditure	Average annual Disparity
\$1,509,484	\$1,946,266	+436,782

Table 6.2 Lifecycle Costs vs. Expenditure – Plant Assets

Council will manage any future 'gap' by developing this asset management plan to provide guidance on future service levels and resources required to provide these services, and determine what will be the result if the gap is not funded such as:

- z Reduce level of service
- z Reduce user satisfaction levels
- z Increased risk
- z Greater proportion of assets in poor condition

6.2 Funding Strategy

Projected expenditure identified in Section 6.1 is to be funded from Council's operating and capital budgets. The funding strategy is detailed in the Council's 10 year long term financial plan. Achieving the financial strategy will require:

- z Increasing internal and external plant hire rates
- z Increase plant usage
- z Reducing size of plant fleet
- z Accepting a lower level of service.

6.3 Valuation Forecasts

Asset values are forecast to increase as additional assets are added to the asset stock from construction and acquisition by Council and from assets constructed by developers and others and donated to Council. Fig 6.2 shows the projected replacement cost asset values over the planning period in current 2011 dollar values.

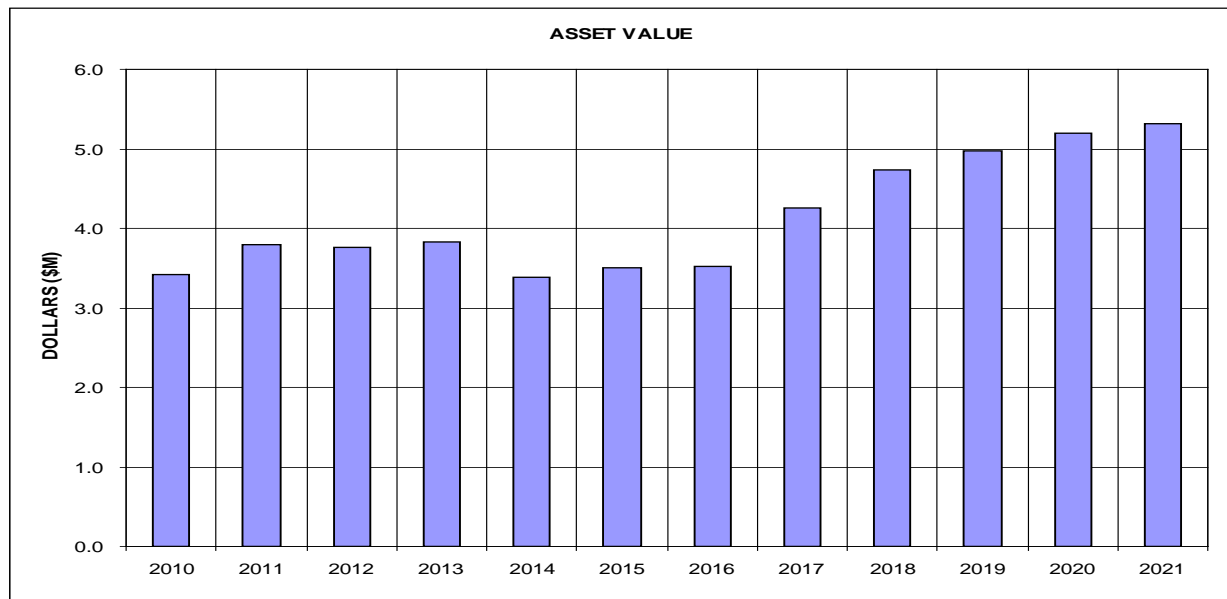


Figure 6.2 . Projected Asset Values
Annual depreciation expense values are forecast in line with asset values as shown in Fig 6.3.

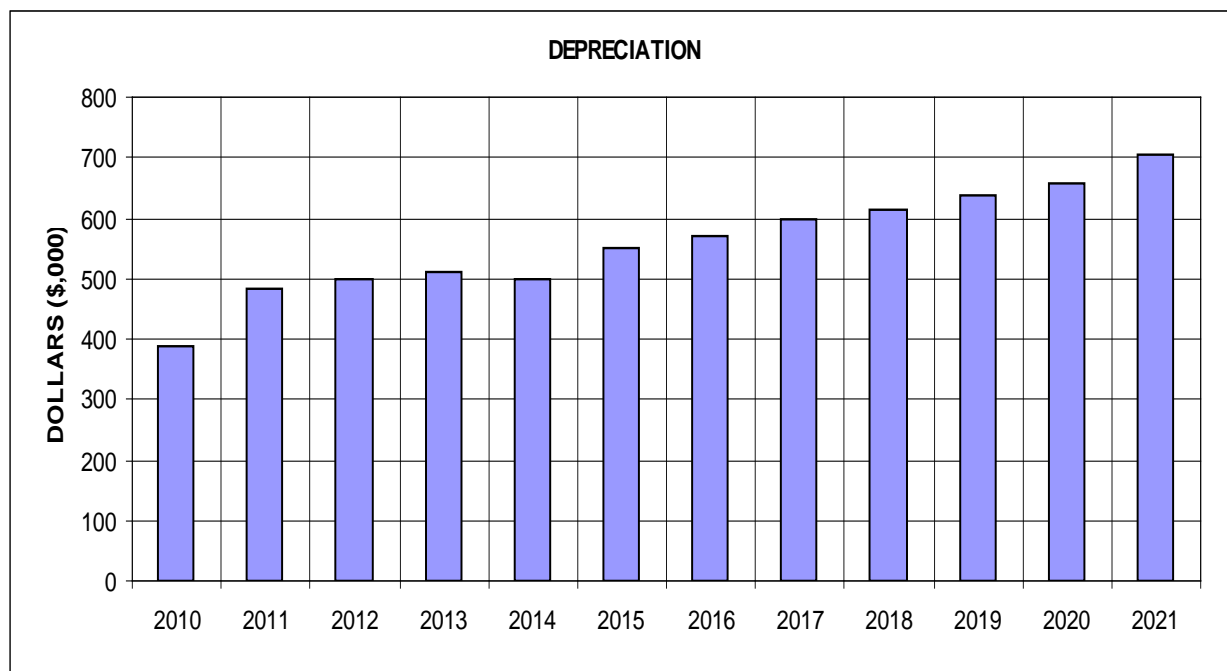


Figure 6.3 . Projected Annual Depreciation Expense

The depreciated replacement cost (current replacement cost less accumulated depreciation) will vary over the forecast period depending on the rates of addition of new assets, disposal of old assets and consumption and renewal of existing assets. Forecast of the Written Down Capital Value is shown in Fig 6.4

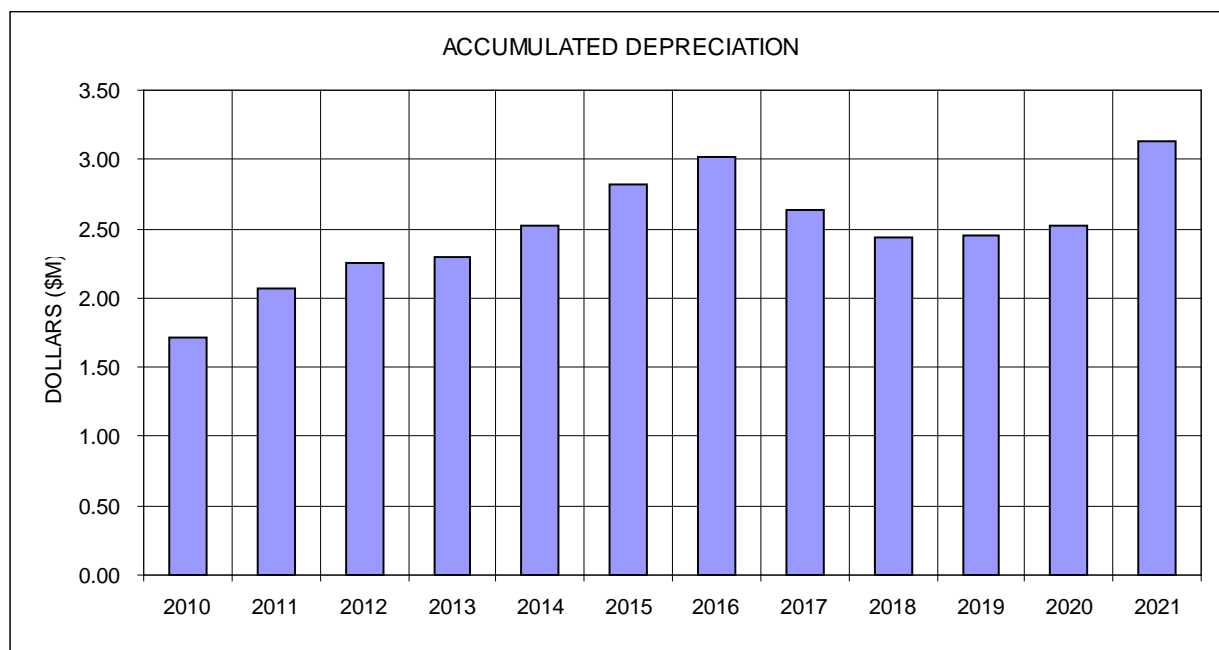


Figure 6.4. *Projected Depreciated Replacement Cost*

6.4 Key Assumptions made in Financial Forecasts

This section details the key assumptions made in presenting the information contained in this asset management plan and in preparing forecasts of required operating and capital renewal expenditure and asset values and depreciation expense. It is presented to enable readers to gain an understanding of the levels of confidence in the data behind the financial forecasts.

Key assumptions made in this asset management plan are:

- z The current levels of service will be maintained over the life of this asset management plan
- z That Trade-in of plant items is approximately 33.7% of the current replacement costs of the item identified for replacement.
- z That our current plant replacement program is based on replacement of existing fleet, within 4 to 10 years depending on the plant item. i.e., larger plant items such as graders have a longer retention life.
- z That our current plant activities are our current service level.

Accuracy of future financial forecasts may be improved with revisions of this plan by the following actions:

- z Undertaking regular inspections and evaluation of conditions, and utilisation of plant.
- z Undertake analysis of the growth, and build this into future revisions of this Asset Management Plan.
- z Improved information systems on maintenance and operating expenditures.
- z Assumptions have been made as to the average useful lives and remaining lives of the asset groups based on current local knowledge and experience and historical trends. These need to be reviewed and the accuracy improved based on real time assessment of asset deterioration.

- z Review of the effective economic life, which has the potential for greatest variance in cost predictions.
- z Changes in the desired level of service and service standards from those identified in this plan.

7. ASSET MANAGEMENT PRACTICES

7.1 Accounting/Financial Systems

Council uses CIVICA Authority as its corporate accounting system. Authority has a suite of accounting/financial modules to meet all day to day operational and reporting requirements

The Director of Administration is delegated the statutory responsibility as Council's Responsible Accounting Officer. The Responsible Accounting Officer is to ensure that Council has adequate control systems, processes and procedures in place and these are being applied to meet all financial operating and reporting requirements.

The Local Government Act 1993, Chapter 13 sets out the requirements for management reporting, accounting, auditing, and financial reporting for Councils. The NSW division of Local Government also issues the Local Government Code of Accounting Practice and Financial Reporting, which assists in the interpretation and application of the act and the application of Australian Accounting Standards to the audit financial reporting functions.

The Government Code of Accounting Practice and Financial Reporting also provides a mechanism which ensures appropriate accounting policies and practices are adopted. For infrastructure, significant accounting policies are detailed in the annual financial reports. These include policies on the acquisition of assets, initial asset recognition, subsequent costs, asset revaluation, capitalisation thresholds, depreciation and disposal and de-recognition.

It is possible that changes will be required to accounting policies and practices resulting from this asset management plan. These will be assessed and implemented as soon as practical.

7.2 Asset Management Systems

Council's adopted Asset Management System is "AIM" (Asset and Infrastructure Management) a component of CIVICA's "Authority System.

AIM links to the Authority accounting system through the use of Work Orders and Tasks. Asset Valuations can be stored in AIM but are also stored in the Capital Value Record (CVR) component of Authority.

The Director of Administration (and the Administration staff) is responsible for maintaining the Asset Management Systems in conjunction with the Director of Engineering to update information.

The development of AIM hierarchy for all Plant Asset assets is practically complete. The Director of Engineering revalued the Plant Asset assets, by using Fair Value rates from current projects. Part of the asset revaluation has been to split Plant Assets into segments. For sealed Plant Assets these segments related to sealed segments. Capacity, condition and valuation data relating to these segments were then imported into AIM.

7.3 Information Flow Requirements and Processes

The key information flows *into* this asset management plan are:

- z The asset register data on age, value, remaining life of the plant;
 - z The unit rates for categories of work/material;
 - z The adopted service levels;
 - z Projections of various factors affecting future demand for services;
-

- z Correlations between maintenance and renewal, including decay models;
- z Data on new assets acquired by Council.

7.4 Key Assumptions made in Financial Forecasts

This section details the key assumptions made in presenting the information contained in this asset management plan and in preparing forecasts of required operating and capital expenditure and asset values, depreciation expense and amount estimates. It is presented to enable readers to gain an understanding of the levels of confidence in the data behind the financial forecasts.

The key assumptions made in this asset management plan are:

- z The current levels of service will remain constant for the life of this plan
- z The treatment and maintenance costs are based on Council's current schedule of rates.
- z All financial figures are based on 2010/11 values and are adjusted for a 3.2% inflation rate, whereas income and grants are based on a 2% increase.
- z The useful life analysis varies between different plant items.

These will impact on the Long Term Financial Plan, Strategic Business Plan, annual budget and departmental business plans and budgets.

7.5 Standards and Guidelines

- z Fleet Management Policies.
- z Service Levels.
- z Manufacturers' recommendations and specifications.
- z Local Government Act 1993.
- z Australian Accounting Standards (AASB 116).
- z IPWEA, 2006 "International Infrastructure Management Manual".
- z Long Term Financial Plan.

8. PLAN IMPROVEMENT AND MONITORING

8.1 Performance Measures

The effectiveness of the asset management plan can be measured in the following ways:

- z The degree to which the required cashflows identified in this asset management plan is incorporated into Council's long term financial plan and Strategic Management Plan;
- z The degree to which 1-5 year detailed plant replacement programs, budgets, business plans and organisational structures take into account the 'global' works program trends provided by the asset management plan;

8.2 Improvement Plan

The asset management improvement plan generated from this asset management plan is shown in Table 8.1

Table 8.1 Improvement Plan

Task No	Task	Responsibility	Resources Required	Timeline
1.	Investigate Utilisation and develop benchmarks.	PF	Staff	May 2011
2.	Develop modelling associated to Growth	DE	Staff	Jul 2011
3.	Develop knowledge management systems that house and provide reports on emissions and carbon footprint of fleet.	PF	Staff	Jul 2011
4.	Undertake a major review of this Asset management plan on a 2-year cycle.	DAF/DE	Staff	Dec 2011
5.	Review of risk management plan detailed in Section 5.2.	DE	Staff	June 2010

8.3 Monitoring and Review Procedures

This asset management plan will be reviewed during annual budget preparation and amended to recognise any changes in service levels and/or resources available to provide those services as a result of the budget decision process.

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

9 REFERENCES

1. Council 2010/10 Annual Management Plan and Budget.
2. AS27, Financial Reporting by Local Government Australian Accounting Standards, June 1996
3. AASB1031, Materiality, Australian Accounting Standard Board July 2004
4. AASB116 Property, Plant and Equipment, Australian Accounting Standards Board July 2007
5. Temora Shire Council Asset Valuation 2010
6. Temora Shire 20-year Plant Asset Maintenance Plan
7. International Infrastructure Management Manual, Institute of Public Works Engineering Australia, Sydney 2006 www.ipwea.org.au
8. Statistical snapshot Temora Shire ABS 2006 Census data

APPENDICES

Appendix A Abbreviations

Appendix B Glossary

Appendix C 10 Year Maintenance and Capital Works Program

Appendix A ABBREVIATIONS

AAAC	Average annual asset consumption
AMP	Asset management plan
ARI	Average recurrence interval
BOD	Biochemical (biological) oxygen demand
CRC	Current replacement cost
CWMS	Community wastewater management systems
DA	Depreciable amount
DoH	Department of Health
EF	Earthworks/formation
IRMP	Infrastructure risk management plan
LCC	Life Cycle cost
LCE	Life cycle expenditure
MMS	Maintenance management system
PCI	Pavement condition index
RV	Residual value
SS	Suspended solids
vph	Vehicles per hour
GM	General Manager
DAF	Director of Administration and Finance
DE	Director of Engineering
PF	Plant Foreman

Appendix B GLOSSARY

Annual service cost (ASC)

An estimate of the cost that would be tendered, per annum, if tenders were called for the supply of a service to a performance specification for a fixed term. The Annual Service Cost includes operating, maintenance, depreciation, finance/ opportunity and disposal costs, less revenue.

Asset class

Grouping of assets of a similar nature and use in an entity's operations (AASB 166.37).

Asset condition assessment

The process of continuous or periodic inspection, assessment, measurement and interpretation of the resultant data to indicate the condition of a specific asset so as to determine the need for some preventative or remedial action.

Asset management

The combination of management, financial, economic, engineering and other practices applied to physical assets with the objective of providing the required level of service in the most cost effective manner.

Assets

Future economic benefits controlled by the entity as a result of past transactions or other past events (AAS27.12).

Property, plant and equipment including infrastructure and other assets (such as furniture and fittings) with benefits expected to last more than 12 month.

Average annual asset consumption (AAAC)*

The amount of a local government's asset base consumed during a year. This may be calculated by dividing the Depreciable Amount (DA) by the Useful Life and totalled for each and every asset OR by dividing the Fair Value (Depreciated Replacement Cost) by the Remaining Life and totalled for each and every asset in an asset category or class.

Brownfield asset values**

Asset (re)valuation values based on the cost to replace the asset including demolition and restoration costs.

Capital expansion expenditure

Expenditure that extends an existing asset, at the same standard as is currently enjoyed by residents, to a new group of users. It is discretionary expenditure, which increases future operating, and maintenance costs, because it increases council's asset base, but may be associated with additional revenue from the new user group, eg. extending a drainage or Plant Asset network, the provision of an oval or park in a new suburb for new residents.

Capital expenditure

Relatively large (material) expenditure, which has benefits, expected to last for more than 12 months. Capital expenditure includes renewal, expansion and upgrade. Where capital projects involve a combination of renewal, expansion and/or upgrade expenditures, the total project cost needs to be allocated accordingly.

Capital funding

Funding to pay for capital expenditure.

Capital grants

Monies received generally tied to the specific projects for which they are granted, which are often upgrade and/or expansion or new investment proposals.

Capital investment expenditure

See capital expenditure definition

Capital new expenditure

Expenditure which creates a new asset providing a new service to the community that did not exist beforehand. As it increases service potential it may impact revenue and will increase future operating and maintenance expenditure.

Capital renewal expenditure

Expenditure on an existing asset, which returns the service potential or the life of the asset up to that which it had originally. It is periodically required expenditure, relatively large (material) in value compared with the value of the components or sub-components of the asset being renewed. As it reinstates existing service potential, it has no impact on revenue, but may reduce future operating and maintenance expenditure if completed at the optimum time, eg. resurfacing or resheeting a material part of a Plant Asset network, replacing a material section of a drainage network with pipes of the same capacity, resurfacing an oval. Where capital projects involve a combination of renewal, expansion and/or upgrade expenditures, the total project cost needs to be allocated accordingly.

Capital upgrade expenditure

Expenditure, which enhances an existing asset to provide a higher level of service or expenditure that will increase the life of the asset beyond that which it had originally. Upgrade expenditure is discretionary and often does not result in additional revenue unless direct user charges apply. It will increase operating and maintenance expenditure in the future because of the increase in the council's asset base, eg. widening the sealed area of an existing Plant Asset, replacing drainage pipes with pipes of a greater capacity, enlarging a grandstand at a sporting facility. Where capital projects involve a combination of renewal, expansion and/or upgrade expenditures, the total project cost needs to be allocated accordingly.

Carrying amount

The amount at which an asset is recognised after deducting any accumulated depreciation / amortisation and accumulated impairment losses thereon.

Class of assets

See asset class definition

Component

An individual part of an asset which contributes to the composition of the whole and can be separated from or attached to an asset or a system.

Cost of an asset

The amount of cash or cash equivalents paid or the fair value of the consideration given to acquire an asset at the time of its acquisition or construction, plus any costs necessary to place the asset into service. This includes one-off design and project management costs.

Current replacement cost (CRC)

The cost the entity would incur to acquire the asset on the reporting date. The cost is measured by reference to the lowest cost at which the gross future economic benefits could be obtained in the normal course of business or the minimum it would cost, to replace the existing asset with a technologically modern equivalent new asset (not a second hand one) with the same economic benefits (gross service potential) allowing for any differences in the quantity and quality of output and in operating costs.

Current replacement cost "As New" (CRC)

The current cost of replacing the original service potential of an existing asset, with a similar modern equivalent asset, i.e. the total cost of replacing an existing asset with an as NEW or similar asset expressed in current dollar values.

Cyclic Maintenance**

Replacement of higher value components/sub-components of assets that is undertaken on a regular cycle including repainting, building roof replacement, cycle, replacement of air conditioning equipment, etc. This work generally falls below the capital/ maintenance threshold and needs to be identified in a specific maintenance budget allocation.

Depreciable amount

The cost of an asset, or other amount substituted for its cost, less its residual value (AASB 116.6)

Depreciated replacement cost (DRC)

The current replacement cost (CRC) of an asset less, where applicable, accumulated depreciation calculated on the basis of such cost to reflect the already consumed or expired future economic benefits of the asset

Depreciation / amortisation

The systematic allocation of the depreciable amount (service potential) of an asset over its useful life.

Economic life

See useful life definition.

Expenditure

The spending of money on goods and services. Expenditure includes recurrent and capital.

Fair value

The amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties, in an arms length transaction.

Greenfield asset values **

Asset (re)valuation values based on the cost to initially acquire the asset.

Heritage asset

An asset with historic, artistic, scientific, technological, geographical or environmental qualities that is held and maintained principally for its contribution to knowledge and culture and this purpose is central to the objectives of the entity holding it.

Impairment Loss

The amount by which the carrying amount of an asset exceeds its recoverable amount.

Infrastructure assets

Physical assets of the entity or of another entity that contribute to meeting the public's need for access to major economic and social facilities and services, eg. Plant Assets, drainage, footpaths and cycleways. These are typically large, interconnected networks or portfolios of composite assets. The components of these assets may be separately maintained, renewed or replaced individually so that the required level and standard of service from the network of assets is continuously sustained. Generally the components and hence the assets have long lives. They are fixed in place and are often have no market value.

Investment property

Property held to earn rentals or for capital appreciation or both, rather than for:

- (a) use in the production or supply of goods or services or for administrative purposes; or
- (b) sale in the ordinary course of business (AASB 140.5)

Level of service

The defined service quality for a particular service against which service performance may be measured. Service levels usually relate to quality, quantity, reliability, responsiveness, environmental, acceptability and cost).

Life Cycle Cost **

The life cycle cost (LCC) is average cost to provide the service over the longest asset life cycle. It comprises annual maintenance and asset consumption expense, represented by depreciation expense. The Life Cycle Cost does not indicate the funds required to provide the service in a particular year.

Life Cycle Expenditure **

The Life Cycle Expenditure (LCE) is the actual or planned annual maintenance and capital renewal expenditure incurred in providing the service in a particular year. Life Cycle Expenditure may be compared to Life Cycle Expenditure to give an initial indicator of life cycle sustainability.

Loans / borrowings

Loans result in funds being received which are then repaid over a period of time with interest (an additional cost). Their primary benefit is in 'spreading the burden' of capital expenditure over time. Although loans enable works to be completed sooner, they are only ultimately cost effective where the capital works funded (generally renewals) result in operating and maintenance cost savings, which are greater than the cost of the loan (interest and charges).

Maintenance and renewal gap

Difference between estimated budgets and projected expenditures for maintenance and renewal of assets, totalled over a defined time (eg 5, 10 and 15 years).

Maintenance and renewal sustainability index

Ratio of estimated budget to projected expenditure for maintenance and renewal of assets over a defined time (eg 5, 10 and 15 years).

Maintenance expenditure

Recurrent expenditure, which is periodically or regularly required as part of the anticipated schedule of works required to ensure that the asset achieves its useful life and provides the required level of service. It is expenditure, which was anticipated in determining the asset's useful life.

Materiality

An item is material if its omission or misstatement could influence the economic decisions of users taken on the basis of the financial report. Materiality depends on the size and nature of the omission or misstatement judged in the surrounding circumstances.

Modern equivalent asset.

A structure similar to an existing structure and having the equivalent productive capacity, which could be built using modern materials, techniques and design. Replacement cost is the basis used to estimate the cost of constructing a modern equivalent asset.

Non-revenue generating investments

Investments for the provision of goods and services to sustain or improve services to the community that are not expected to generate any savings or revenue to the Council, eg. parks and playgrounds, footpaths, Plant Assets and bridges, libraries, etc.

Operating expenditure

Recurrent expenditure, which is continuously required excluding maintenance and depreciation, eg power, fuel, staff, plant equipment, on-costs and overheads.

Pavement management system

A systematic process for measuring and predicting the condition of Plant Asset pavements and wearing surfaces over time and recommending corrective actions.

Planned Maintenance**

Repair work that is identified and managed through a maintenance management system (MMS). MMS activities include inspection, assessing the condition against failure/breakdown criteria/experience, prioritising scheduling, actioning the work and reporting what was done to develop a maintenance history and improve maintenance and service delivery performance.

PMS Score

A measure of condition of a Plant Asset segment determined from a Pavement Management System.

Rate of annual asset consumption*

A measure of average annual consumption of assets (AAAC) expressed as a percentage of the depreciable amount (AAAC/DA). Depreciation may be used for AAAC.

Rate of annual asset renewal*

A measure of the rate at which assets are being renewed per annum expressed as a percentage of depreciable amount (capital renewal expenditure/DA).

Rate of annual asset upgrade*

A measure of the rate at which assets are being upgraded and expanded per annum expressed as a percentage of depreciable amount (capital upgrade/expansion expenditure/DA).

Reactive maintenance

Unplanned repair work that carried out in response to service requests and management/supervisory directions.

Recoverable amount

The higher of an asset's fair value, less costs to sell and its value in use.

Recurrent expenditure

Relatively small (immaterial) expenditure or that which has benefits expected to last less than 12 months. Recurrent expenditure includes operating and maintenance expenditure.

Recurrent funding

Funding to pay for recurrent expenditure.

Rehabilitation

See capital renewal expenditure definition above.

Remaining life

The time remaining until an asset ceases to provide the required service level or economic usefulness. Age plus remaining life is economic life.

Renewal

See capital renewal expenditure definition above.

Residual value

The net amount which an entity expects to obtain for an asset at the end of its useful life after deducting the expected costs of disposal.

Revenue generating investments

Investments for the provision of goods and services to sustain or improve services to the community that are expected to generate some savings or revenue to offset operating costs, eg public halls and theatres, childcare centres, sporting and recreation facilities, tourist information centres, etc.

Risk management

The application of a formal process to the range of possible values relating to key factors associated with a risk in order to determine the resultant ranges of outcomes and their probability of occurrence.

Section or segment

A self-contained part or piece of an infrastructure asset.

Service potential

The capacity to provide goods and services in accordance with the entity's objectives, whether those objectives are the generation of net cash inflows or the provision of goods and services of a particular volume and quantity to the beneficiaries thereof.

Service potential remaining*

A measure of the remaining life of assets expressed as a percentage of economic life. It is also a measure of the percentage of the asset's potential to provide services that is still available for use in providing services (DRC/DA).

Strategic Management Plan (SA)**

Documents Council objectives for a specified period (3-5 yrs), the principle activities to achieve the objectives, the means by which that will be carried out, estimated income and expenditure, measures to assess performance and how rating policy relates to the Council's objectives and activities.

Sub-component

Smaller individual parts that make up a component part.

Useful life

Either:

- (a) the period over which an asset is expected to be available for use by an entity, or
- (b) the number of production or similar units expected to be obtained from the asset by the entity.

It is estimated or expected time between placing the asset into service and removing it from service, or the estimated period of time over which the future economic benefits embodied in a depreciable asset, are expected to be consumed by the council. It is the same as the economic life.

Value in Use

The present value of estimated future cash flows expected to arise from the continuing use of an asset and from its disposal at the end of its useful life. It is deemed to be depreciated replacement cost (DRC) for those assets whose future economic benefits are not primarily dependent on the asset's ability to generate new cash flows, where if deprived of the asset its future economic benefits would be replaced.

Appendix C Plant Asset Maintenance and Capital Program

10 YEAR PLANT ASSETS CAPITAL WORKS PROGRAM

As part of Council's Asset Management Plan process, and to develop a 10 Year Financial Plan for Council, a 10 Year Plant Assets Capital Works Program has been developed. This plan is designed to address requirements for plant to provide a Plant Asset Replacement Program that meets the needs of the community and industry, within a 10-year span and that the Plant Asset is both affordable and sustainable for the Council.

Careful consideration has been given to any new plant purchases and to consider them in terms of "asset management" principles and "whole of life" costs. Generally a more expensive asset means a more expensive maintenance and replacement cost. This also applies to the Plant, however it has to be recognised that the higher used plant get to the point where it is more economical to sell the plant rather than to maintain it. Council Plant Replacement Policy addresses this issue and should be read in conjunction with this Asset Management Plan

The 10 year program is to be a guideline for Council in adopting its Annual Business Plan. Council will reserve the right to review the program as situations and circumstances change over time. An annual update of the plan will need to be undertaken and a review of the full plan undertaken after 5 year

TEMORA SHIRE COUNCIL 10 YEAR PLANT REPLACEMENT PROGRAM

PLANT ITEM	Description	Responsible Officer	Plant No	Year of Purchase	Target Replace Age	Purchase Price Ex Gst	Current Replace Cost 11 Ex Gst	End of Life trade 2011 Inc Gst	2010/11		2011/12		2012/13		2013/14		2014/15		2015/16		2016/17		2017/2018		2018/2019		2019/2020		2020/2021	
									New 0	Trade Inc GST	New 0	Trade Inc GST	New 1	Trade Inc GST	New 2	Trade Inc GST	New 3	Trade Inc GST	New 4	Trade Inc GST	New 5	Trade Inc GST	New 6	Trade Inc GST	New 7	Trade Inc GST	New 8	Trade Inc GST	New 9	Trade Inc GST
Graders	Cat 12H	I Bent	7004	2006	10	322,587	335,000	129,000												402,000	141,900									
	Cat 12H	A Doolan	7003	2001	10	287,565	335,000	115,000					348,400	117,300																
	Cat 12H	M Mannion	7005	2003	10	245,901	335,000	115,000							361,800	119,600														
Loaders Backhoes	Case 721E	J Collins	7027	2009	8	238,000	255,000	83,000																	326,400	94,620				
	Cat 963B	Landfill/D Breust	7007	2001	16	241,078	553,000	80,000												Second Hand	342,860	44,800								
	Cat 924G	Spare	7017	2004	10	153,363	225,000	78,000								252,000	87,360													
	JCB 3CX	I Block	7024	2011	8	165,041	170,000	59,500	165,041	41,800															217,600	67,830				
Tractors	Case MXU110 Pro	F Oglesby	7028	2009	8	89,823	98,000	40,000																			129,360	52,800		
	Case MXU110 Pro	F Oglesby	7026	2007	8	96,883	98,000	40,000											113,680	43,200										
	JD 6200	A/Park	7025	2005	10	30,000	75,000	12,000											87,000	12,960										
Large Trucks/ Trailers	Nissan UD470	J Collins	7039	2010	8	195,000	195,000	60,500														241,800	67,760							
	Hino	K Jennings	7043	2008	8	187,566	206,000	75,000																						
	Fuso FV51	C Dale	7041	2005	8	147,896	206,000	55,000						222,480	57,200						247,200	82,500								
	Hino	M Tutill	7045	2008	8	187,566	206,000	77,000														247,200	84,700							
	Dog Trailer	K Jennings	7143	2008	8	71,081	76,000	18,000																						
	Dog Trailer	M Tutill	7145	2008	8	71,081	76,000	27,000																						
	Hamlex Trailer	J Collins	7139	2000	15	45,630	76,000	18,000											88,160	19,440										
	Pig Trailer	C Dale	7123	2005	9	32,774	50,000	12,000							54,000	12,480														
	Brentwood Float	J Collins	7150	2000	20	58,720	110,000	33,000																				149,600	44,880	
	Small Trucks	Isuzu FSR700	A Deep	7037	2000	10	96,224	110,000	20,000								118,800	20,800												
IsuzuNPR300C/C		Spare	7071	2003	8	35,571	60,000	12,000								64,800	12,480													
Fuso Crew Cab		J Collins	7065	2009	10	58,866	62,000	10,000																		81,840	11,600			
Isuzu NPR300		G Scott	7031	2000	10	49,063	58,000	10,000									64,960	10,600												
Isuzu NPR300		A Deep	7038	2000	14	44,298	58,000	8,000									64,960	8,480												
Mitsubishi Canter		Parks/Gardens	7069	2002	10	46,551	29,500	8,000					30,680	8,160	(replace with tipper ute)							36,580	8,960							
Hino Dutro tipper		H Alchin	7047	2002	10	46,712	265,000	15,000	265,000	15,000																	360,400	20,400		
Foso Crew Cab		A Doolan	7063	2008	10	56,542	62,000	10,000																	79,360	11,400				
Fuso Crew Cab		I Bent	7066	2010	10	37,845	62,000	10,000		52,790	12,558																84,320	11,800		
Foso Crew Cab		M Mannion	7062	2007	10	52,790	62,000	10,000														62,000	11,200							
Light Utes	Holden Rodeo Utility	Plumber	7078	2006	6	22,500	26,000	11,000						27,040	11,220								31,200	12,320						
	Ford Courier Utility	Rec Centre	7075	2005	6	19,435	25,000	6,000						27,040	6,120								31,000	6,720						
	Ford Ranger Tipper	A/Park/A Bliss	7081	2010	6	24,895	27,000	8,000	29,447	9,689											32,400	8,800								
	Holden Rodeo	Workshop	7058	2002	8	42,575	52,000	8,000									58,240	8,480												
	Mitsubishi Triton Utility	D Block	7073	2004	10	20,191	50,000	6,500				50,000	6,500	(Replace with Light Truck)																
	Holden Rodeo Tipper	Park/Gardens	7076	2005	6	22,214	29,500	6,500				29,500	6,500																	
	Ford Courier Tipper	landfill D Breust	7088	2007	6	23,133	25,000	10,000							27,000	10,400											33,000	11,600		
	Ford Ranger Tipper	Park/Gardens	7089	2010	6		29,500	10,000	29,500																					
	Ford Ranger Crew cab	T Hingerty	7081	2010	4	34,000	34,000	15,000	33,932	15,469							38,080	15,900							43,520	17,100				
	Ford Utility	G Oglesby	V81	2010	2	27,824	29,000	14,000	25,651	10,059				30,160	14,280		32,480	14,840			34,800	15,400			37,120	15,960			39,440	16,520
	Holden Utility	K Wallace	V6	2010	3	27,921	29,000	14,500	25,733	10,069						31,320	15,080													
	Holden Colarado Crew Cab	P Gilchrist	V17	2010	4	35,714	36,500	25,000	33,349	23,469							40,880	26,500									48,180	29,000		
	Holden Rodeo Crew Cab	R Fisher	V8	2004	6	27,108	29,000	8,000				29,000	8,000																	
	Ford Ranger Space cab	R Gillard	V70	2007	4	27,882	27,000	9,500				27,000	9,500																	