June 2011

Southern Grampians Council

Asset Management Plan

Southern Grampians
SHIRE COUNCIL

Schedule of Changes & Amendments

Version	Date	Changes/Amendments
1.0	May 2011	Draft Version
V1.00	8th June 2011	Council Adoption

NB: Prime number changes to Versions will be made when the document undergoes its regular review in accordance with the Regulations or at intermediate periods when significant changes are made to standards and guidelines for inspections, intervention levels or work. Point number changes will apply to minor amendments that do not materially impact the document and are intended only to clarify or update issues.

CONTENTS

1 EXECUTIVE SUMMARY

The Southern Grampians Shire Council is responsible for the provision of many community focussed services and, in doing so, must ensure that its infrastructure assets and community facilities are maintained in accordance with well-developed asset management programs and strategic forward Plans to enable these services to meet the community needs. Asset management is seen as a practical and financially responsible means of managing Council's assets by ensuring that the assets continue to provide a specified level of service delivery to defined standards over their entire life.

Asset Management Plans (AMP) forms the centre piece of Council's business planning framework. The aim of an asset management plan is to set out how the local government delivers service to the community on a long term sustainable basis and the assets required underpinning the service delivery.

The Asset Management Plan (AMP) is the best place to capture and document corporate knowledge about assets and importantly service delivery. It influences the future Operational and Maintenance Strategy, Renewal and Replacement Strategy and Capital Investment (New, Upgrade and Disposal) Strategy which, in turn, then influences and comprises the Service Delivery model.

The prime guidance used for development of Council's AMP is the framework set out in the Institute of Public Works Engineering Australia's (IPWEA) International Infrastructure Management Manual (IIMM). The IIMM Framework basically sets out how the Council's assets are managed from a Strategic, Tactical and Operational point of view.

1.1 Introduction

Southern Grampians Shire Council is located in the centre of the Western District of Victoria, 290 kilometres west of Melbourne and 500 kilometres south east of Adelaide. It has a population of 17,348 and covers an area of 6,652 square kilometres. Hamilton is the main retail and service centre supported by the nine smaller towns of Balmoral, Branxholme, Byaduk, Cavendish, Coleraine, Dunkeld, Glenthompson, Penshurst and Tarrington.

1.2 Levels of Service

Level of Service (LOS) is the defined quality of service of an asset. Understanding the required level of service is vital for lifecycle management, as this largely determines an asset's development, operation, maintenance, replacement and ultimate disposal.

Levels of service are pivotal in asset management as they have a direct financial impact due to their importance in both operational and risk-based prioritisation.

An objective of asset management planning is to match the level of service provided by an asset with the expectations of its customers. Asset management Planning will enable a relationship between level of service and cost of service to be determined. This relationship can then be evaluated in consultation with customers to determine the optimum level of service customers are willing to pay for.

1.3 Future Demand

Data sources examined indicate that growth in the Shire is static. It is anticipated however that over the next 20 years the demographic will change through the reduction of the under 55 age groups and an increase in the over 55 age group (hence the population is getting older).

There will be increased demand for services targeted at seniors. In terms of the building network, greater accessibility for people with impairment and mobility issues will become more of a priority than at present.

A report *"Infrastructure and Climate Change Risk Assessment for Victoria"* was prepared by the CSIRO for the Victorian Government in 2007. The report raises issues relating to infrastructure that may well be at risk due to climate change. Increased frequency and intensity of extreme rainfall, wind and lightning events is likely to cause significant damage to buildings and urban facilities.

The resulting accelerated degradation of materials may reduce the life expectancy of buildings, structures and facilities, increasing the maintenance costs and leading to potential structural failure during extreme events.

To enable council to give consideration to elements of its buildings and facilities stock that may be at risk, a checklist has been included in this Plan to be used to undertake this preliminary risk assessment. If a risk of concern is identified, a more detailed risk assessment is required. Where any element, or the structure overall, is at risk suitable response or remedial measures need to be investigated and implemented.

1.4 Risk Management

The Shire's Risk Management Process complies with the requirements of the Australian Risk Management Standard 4360:2004 and the Southern Grampians Shire Council's Risk Management Policy.

Like most local authorities, Southern Grampians Shire Council doesn't have unlimited resources to manage its assets. Therefore the Shire must develop systems that ensure its resources are directed to the areas of most need and with the greatest benefit in order to ensure that resources are allocated wisely. Adverse consequences of poor management practices in relation to the asset network can range from insignificant to catastrophic.

An updated Risk Management Standard AS/NZS ISO 31000:2009 has been introduced for Australia and the Council Risk Management Policy and Process will be reviewed in accordance with this.

1.5 Lifecycle Management Plan

Assets are created and acquired to deliver the required services desired by the community. These assets are operated and maintained throughout their useful life, and their

performance and condition are monitored to ensure they deliver the necessary service. Over the life of the asset, there will come a point where the asset is no longer performing at a satisfactory level and may be rehabilitated or improved. This can be repeated several times, however eventually the asset will be disposed of and potentially replaced.

The recurrent costs of operations and maintenance, the capital expenditure for rehabilitation, and the one-off cost of replacement all form part of the asset's lifecycle costs. The Lifecycle Management Plan outlines the management strategies, including operating strategies, maintenance strategies and capital investment strategies, for the entire life of the relevant service asset.

Southern Grampians is the owner and custodian of a large number of assets including, roads, drains, buildings, trees and swimming pools. Typically these assets have a long life expectancy and are valued in excess of $399 million ($246 million net of depreciation), with an $8.6 million consumption rate per annum or $983 per hour. To ensure the effective management of these assets, Council has entered into the MAV's STEP Asset Management Improvement Program, which provides a strategic approach to the improvement of Council's asset management function. Council's Asset Management performance is reviewed annually through the Department of Victorian Communities Asset Management Performance Measures Survey.

1.6 Financial Summary

Financial forecast models assist in predicting the future financial requirements based upon the presumption that the building assets and associated infrastructure will be replaced when the condition ratings reach a predetermined condition.

Preceding the use of such a model for accurate future forecasting, discussion needs to be held about what conditions will be acceptable, and for what level of the functional hierarchy will the condition ratings and intervention levels differ. Decisions will also need to be made about affordable levels of service in order to use the predictive model of financial requirements with a greater degree of accuracy.

1.7 Asset Management Practices

Asset management practices are defined as the processes, analysis and evaluation techniques needed to support lifecycle asset management. This includes the following asset management functions:

- Knowledge of assets;
- Levels of service;
- Condition assessments;
- Asset accounting - valuation, revaluation, depreciation;
- Lifecycle planning;
- Asset operations and maintenance;
- Asset creation and disposal;
- Performance monitoring;

- Quality assurance and continuous improvement;
- Risk management;
- Design and project management; and
- Reviews and audit processes.

It is important that asset management practices for the full lifecycle of each asset group are documented and assigned responsibility to the relevant Officer (via Position Description) and this has been listed in the current version of Council's Asset Management Improvement Strategy.

1.8 Plan Improvement & Monitoring

There is a requirement from the Department of Infrastructure for Local Government to report annually on the following Infrastructure indicators:

- **Renewal Gap** – i.e. the ratio of current spending on renewal to the long term Average Annual Asset Consumption, AAAC.
- **Renewal & Maintenance Gap** – i.e. the ratio of current spending on renewal plus maintenance to AAAC plus maintenance.

The AAAC is the amount of the Council's asset base consumed during a year based on current replacement cost; divided by useful life; and totalled for each and every infrastructure asset.

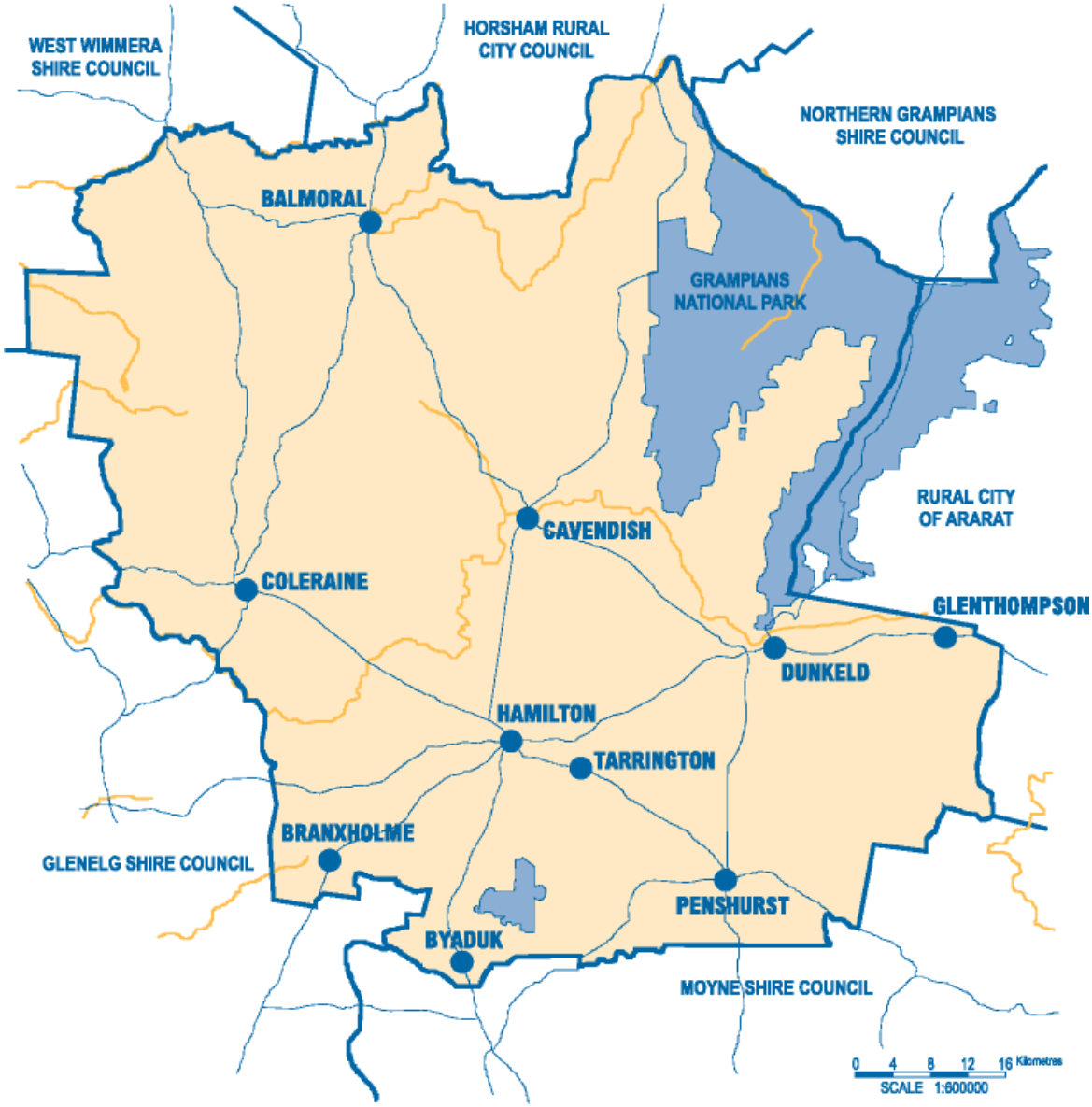
2 INTRODUCTION

2.1 Southern Grampians Shire – In Brief

Southern Grampians Shire is located in the centre of the Western District of Victoria, 290 kilometres west of Melbourne and 500 kilometres south east of Adelaide.

With a population of 17,348, the Shire covers an area of 6,807 square kilometres which includes part of the Grampians National Park.

Hamilton is the main retail and service centre supported by the smaller towns of Balmoral, Branxholme, Byaduk Cavendish, Coleraine, Dunkeld, Glenthompson, Penshurst and Tarrington.



2.2 Background

Council's Asset Management Plans are developed in distinct parts. This Plan is the General Asset Management Plan which details Council's general Asset Management Principals. Underpinning this Plan, are several sub-plans. These sub-plans contain the detailed information about individual asset classes as set out below.

2.2.1 Plan Format

The plan is sectioned into separate parts based on Asset Class:

- General Information: Background or information common to all assets.
- Road Infrastructure (including Kerb & Channel)
- Bridges & Major Culverts
- Buildings & Other Structures
- Pathways
- Drainage
- Playgrounds
- Recreation & Open Space

Each of these Sub-Plans will have their own Executive Summary to highlight issues specific to that asset group. Most importantly, the AMP is intended to provide advice to Council on the financial requirements for long-term sustainability of each asset group. This means understanding the impact of any funding 'gap' and a plan to manage that gap where it exists.

In addition, each Plan will provide outcomes of financial modelling used to determine long-term funding requirements for asset renewal and maintenance.

Section 7 of this Plan will provide a summary of the strategic long-term financial needs of the individual asset group requirements.

2.2.2 Purpose of the plan

The aim of this plan is to identify current policies, standards, strengths and weaknesses of current asset management processes, and identify priorities for future plan development. It is based on current inventory data, condition inspections, and council staff and experience.

The outcomes of the Asset Management Plan will identify the future funding requirements of service delivery accounting for the following factors:

- Adopted Levels of Service;
- Future demand for infrastructure;
- Current asset performance;
- Asset Failure;
- Risk;
- Required works; and
- Funding constraints.

Council's performance in providing the funding necessary to meet lifecycle renewal needs through asset depreciation will be measured.

2.2.3 Relationship with other planning documents

The following charts outline the linkages between the various components involved in Council's strategic planning process and progression of development of the Asset Management Plan.

Figure 1 shows that Asset Management Strategy provides guidance to Council's Financial Strategy and to the Council Plan. The Asset Management Plan in turn provides input to the Financial Management Plan and the Annual Business Plan & Budget. From this the Annual Works Programs for asset maintenance and renewals are developed.

Figure 1: Asset Management Plan Relationship to the Business Planning Framework

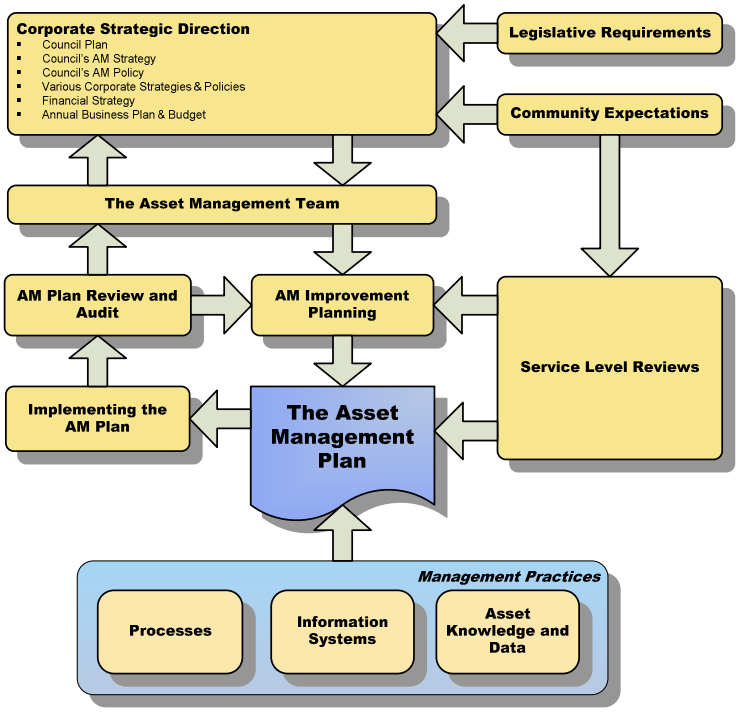
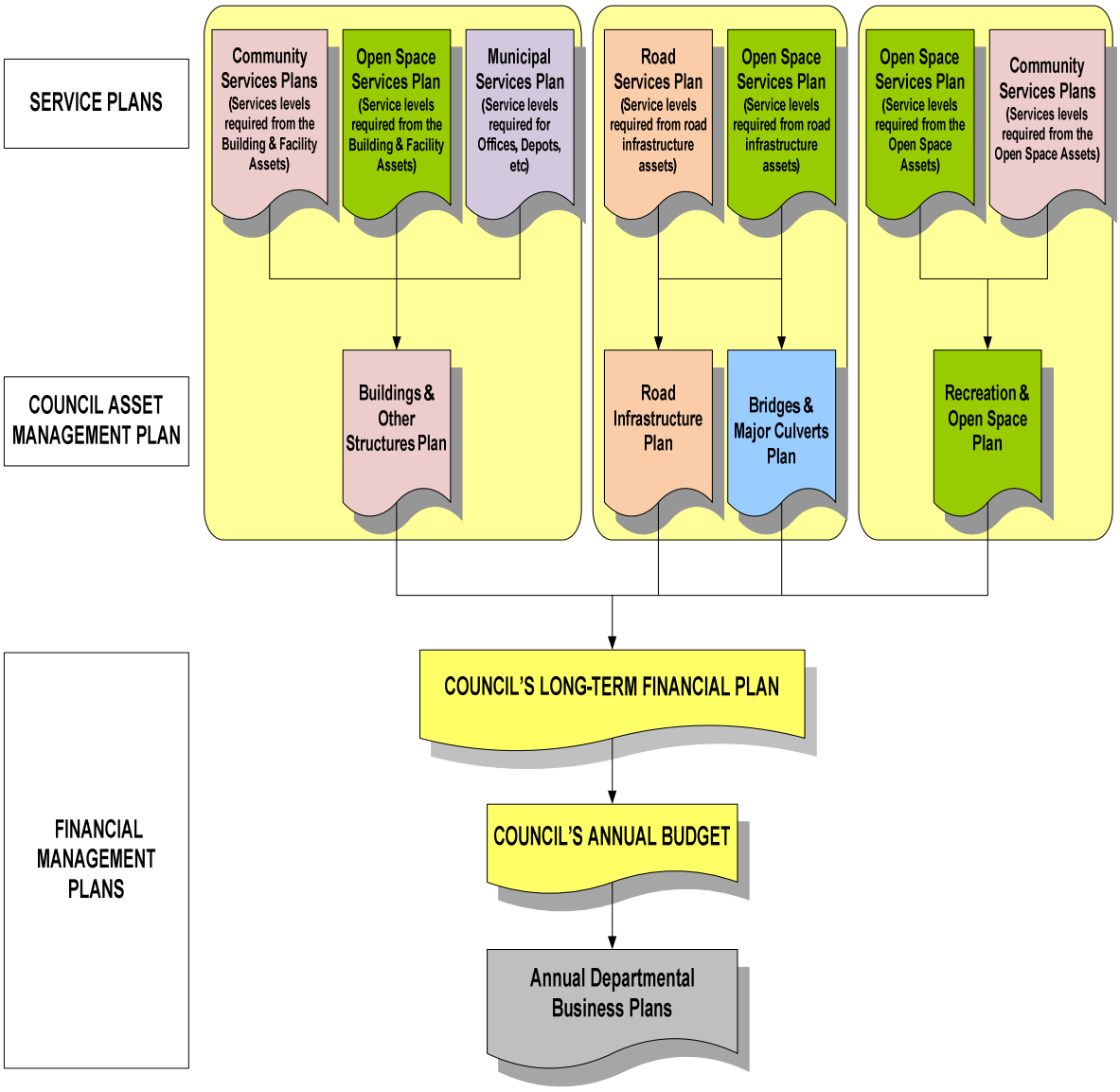


Figure 2 below provides an example of typical linkages between the various Service Plans, the Asset Management Plans and Financial Management Plans. Asset Management Plans are determined by the levels of service required from Service Plans for infrastructure assets used in providing those services. In turn, the long-term financial plan needs to sustain the assets at the required levels of service; operational and maintenance costs as well as the cost for renewals, upgrades and any new assets to meet service demands help formulate the strategic long-term financial management plan (LTFP). The LTFP then provides the basis for the Council's annual budget and subsequent annual Departmental Business Plans.

Figure 2: Linkages between Service Plans, Asset Management Plans and Financial Management Plans



Specifically linkages include:

- The Council Plan 2009-13 - This outlines the various challenges which have an impact on Council's Assets.
- Annual Budget – Detailed action plan on projects and finances for each particular year. The works identified in the AM Plan form the basis on which future annual plans are prepared.
- Contracts – The service levels, strategies and information requirements contained in the AM plans are translated into contract specifications and reporting requirements.
- By-Laws, standards and policies – These tools for asset creation and subsequent management are needed to support AM tactics.
- Business Plans – These service levels policies, processes and budgets defined in AM plans are incorporated into business plans as activity budgets, management strategies and performance measures.
- Asset Management Policy and Strategy.

A strategic objective of the Council Plan is to develop asset management plans for the ongoing management of Council's assets. In conjunction with the asset management strategy, this asset management plan is being developed to focus on the strategic replacement of Council assets to ensure that risks are minimised, and that the best cost/benefit outcomes are achieved for the community.

Council's Asset Management Improvement Strategy identifies its future vision of asset management. This vision encompasses the creation of asset management plans as part of a comprehensive asset management practice. This asset management plan is a key component of this strategy, and will be developed with regard to the key actions identified in the asset management strategy.

Other documents with a direct relationship with the assets included in the AMP are listed in the plan.

2.2.4 Asset Classification and Assets Included in the Plan

Council's assets are classified under a system which provides a conceptual relationship between assets that helps to define how individual assets are organised in corporate systems and how they are managed (with respect to new construction, upgrade, renewal, or maintenance). The asset classification is divided into asset classes, asset categories and asset components. Whereby:

Asset Classification: A conceptual relationship between assets that helps to define how individual assets are organised in corporate systems and how they are managed (with respect to new construction, upgrade, renewal, or maintenance). Assets are classified into asset classes, asset categories and asset components. Classifications are a 'horizontal' separation framework for segmenting an asset portfolio into like assets.

Asset Class: The top level grouping of assets used by the Council for the purposes of Asset Management and Accounting; for example, road assets, building assets, open space and

recreation assets. Asset classes are further subdivided into asset categories. Asset Management Plans are developed at asset class level.

Asset Category: The sub-division of the Asset Class. For example, the road asset class might be sub-divided into sealed roads, unsealed roads, car parks etc.

Asset Component: The sub-division of the Asset Category. For example, the sealed road category might be further sub-divided into earthworks & formation, pavement and wearing course. Condition rating, renewal modelling and asset capitalisation will be considered at this level.

Council's asset classification is described below:

Asset Class	Asset Category	Asset Component	Assets Included
General Information			
Roads	Sealed Roads Unsealed Roads Pavement	Urban Sealed Pavement,	Car park pavement
		Urban Sealed surface	Car park seal
		Kerb & channel	
		Road Formation	
		Rural Sealed Pavement	Minor culverts, aerodrome
		Rural Sealed surface	
		Shoulders	
		Unsealed Road Pavement	
		Traffic control	Signs, rails, line marking, rail crossings
Bridges & Major Culverts	Bridges & Major Culverts	Bridges & Major Culverts	Footbridges
Buildings & other structures	Buildings	Structure	Minor buildings Towers, retaining walls, Sheds memorials, shelters, bus shelters
		Roof	
		Mechanical	
		Fit-out	
Pathways	Footpaths & Trails	Footpaths	Surface, ramps signs
Drainage	Drainage	Pits	Retention basins litter traps
		Pipes	open drains
Playgrounds	Playgrounds		Equipment, under surfacing
Recreation and Open Space	Pools	Pools	Tank, concourse, fixtures, filtration
	Sporting fields	Sports surface	Fence, posts, coaches boxes, scoreboards? Sports lighting reticulation drainage
	Open Space	Street & Park Fixtures	Reserves Seats, bins, fixtures, signs
		Parks & Gardens *	Trees, street trees, garden beds

2.2.5 Assets Not Included in this Plan

The AMP shall list assets specifically excluded from the plan. This may include:

- Non-council assets,
- Assets not capitalized in accordance with Council's Financial Policy 'Recognition and Valuation of Assets'.

2.2.6 Key Stakeholders

Assets are provided to support the services Council delivers to the community.

The Community may be defined by:

- Geographic location (may not be restricted to the municipal boundary), or
- Community of affiliation or
- Identity such as industry or sporting club

With the community consisting of:

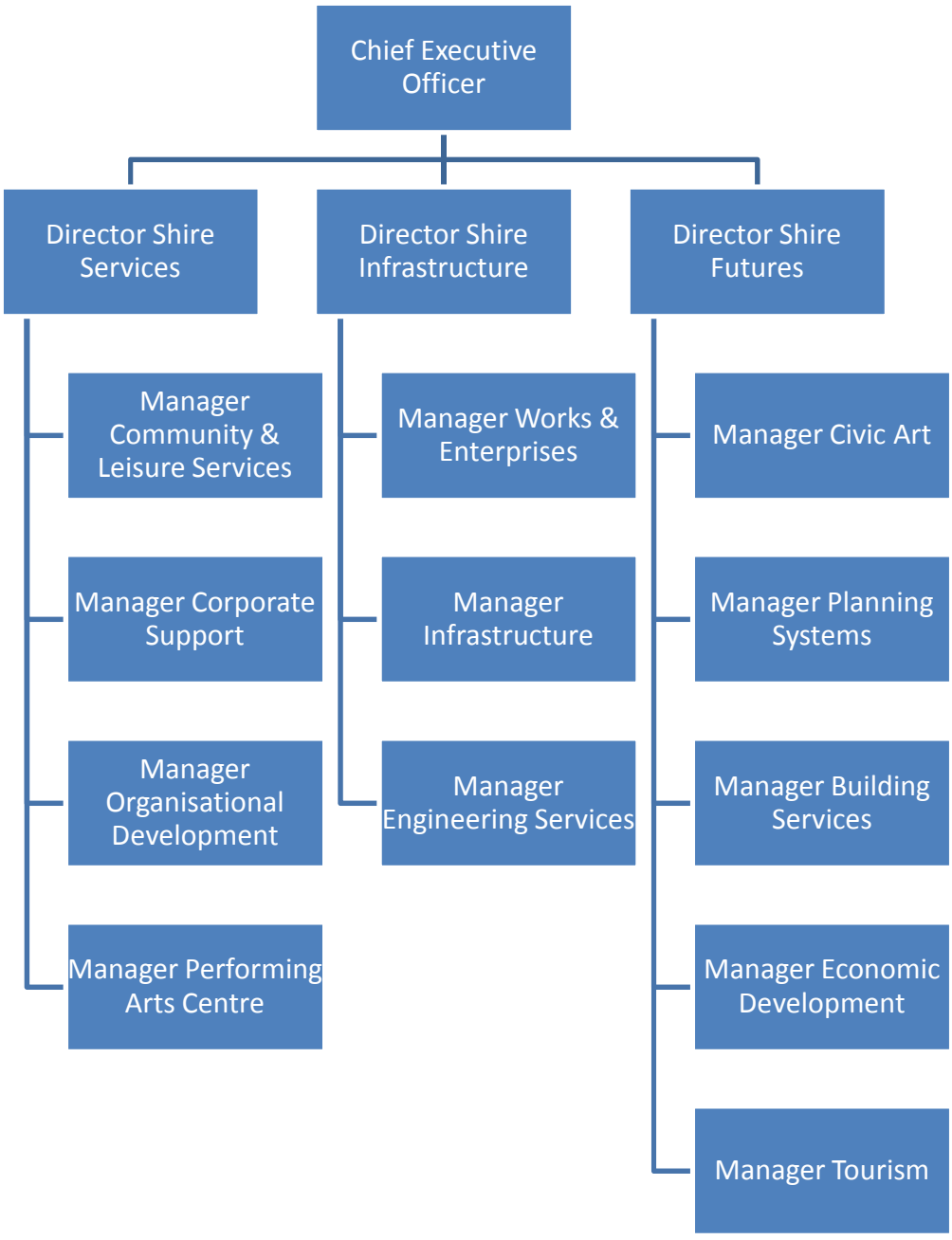
- Stakeholders: Consisting of customers being current or potential users of the service or asset and other parties or individuals with an interest in the service or asset, and
- Non-Stakeholders

Stakeholders with an involvement with the assets included in an AMP are listed.

2.2.7 Organisation structure

2.2.7.1 Organisational Chart

The organisational chart details the relationship and lines of authority within Council.



2.2.7.2 AM Asset and Service Responsibility Matrix

Council has defined the roles of Asset Owner, Asset Manager, Maintenance Provider and Service Manager. The responsibilities and allocation of the roles are listed in the Asset Management Policy/Strategy.

Service Manager: Is responsible for the delivery of the service, liaison with users, stakeholders and customers and responsible for the analysis of the current and future approach to service delivery.

Asset Owner: Is responsible for the Coordination of the physical assets(s) and to monitor the maintenance and performance of the physical assets so they continue to function and meet the needs of the service

Maintenance Provider: Is responsible for the planning and undertaking of the day-to-day maintenance of the asset.

Asset Management Steering Committee: The Shire has implemented an Asset Management Steering Committee to overview and to provide input to the development of all Asset Management Plans.

The steering committee will also develop an asset management improvement strategy that considers:

- Corporate responsibility and the need for resources
- Management of assets is undertaken in a structured and coordinated way
- Council's Risk Management Strategy
- Financial, social and environmental sustainability
- Best value principles
- Compliance with legislative and regulatory requirements

Refer to the 'Asset Management Steering Committee Terms of Reference'

2.3 Goals & Objectives of Asset Ownership

2.3.1 Reasons and justification for Asset Ownership

Authorities such as municipal Council's exist principally to supply various core and non-core services that meet the needs of their communities. The type of services provided and how they are provided depends on the level of service required by the community. The provision of the road network is one of the core services to be provided to a community.

In non-capital city areas, the prime means for service delivery for road assets is through Council ownership of them, although maybe at some time in the future Council may be able to support private sector developers/landowners in the provision of infrastructure through development of various components of the road network in accordance with engineering standards and planning objectives.

2.3.2 Policy and Budgetary Framework

The traditional local government method for determining the annual budget allocations has been to view the budget expenditure items as either recurrent operational costs generally treated as 'non-discretionary' or capital expenditures, generally 'discretionary'.

The following table illustrates this:

Table 2.4.1 – Traditional Budget Process

Recurrent Funding	Capital Funding
Maintenance & Operations	**Refurbishment, Renewal, Upgrade and New**
· Potholes, grading of roads · Footpath repairs · Bridge repairs · Cost of street lighting · Building leakages · Playground repairs	· Road pavement widening · K&C/footpath replacement · Bridge replacement · Building Fit out · Roof replacement · Playground replacement
"Non-Discretionary"	**"Discretionary"**

If asset management practices are to ensure the ability to sustain Council's infrastructure asset base into the future, which is the basis of strategic financial planning, then a new perspective is required.

This process, shown in the following table 2.4.2, creates four rather than the traditional two key funding areas. The first two "Non-Discretionary" areas are in recurrent and capital. The capital commitment is to fund the ongoing asset refurbishment and renewal requirements to ensure longevity of council's assets.

Table 2.4.2 – Asset Management Budget Process

Recurrent Funding	Asset Management	Capital	Consequential Recurrent Costs
Maintenance & Operations	**Refurbishment and Renewal**	**New/Upgrade**	**Upgrade and New**
· Potholes, grading of roads · Footpath repairs · Bridge repairs · Cost of street lighting · Building leakages · Playground repairs	· Road reconstruction · K&C/footpath replacement · Bridge replacement · Roof replacement · Playground replacement	· Road pavement widening · New footpaths · Bridge upgrade · Roof upgrade · New Playground	**New assets** · Additional maintenance load **Upgrades** · More or less maintenance
"Non-Discretionary" Recurrent	**"Non-Discretionary" Capital**	**"Discretionary" Capital**	**"Non-Discretionary" Recurrent**

What is essential, when council considers its discretionary capital expenditures for new and upgraded assets is the consequential imposition of recurring operational and maintenance costs that will occur once the new or upgraded asset becomes operational.

For instance new urban streets may well require immediate costs for street sweeping. A row of new street lights will incur ongoing electricity costs for operations immediately they are brought into use. This consequential additional cost is "non-discretionary" as it will be incurred if the new asset is provided.

As new and upgraded projects are brought forward for consideration with the annual budget, they will also have an assessment of these ongoing operational (recurrent) costs presented to Council as part of the overall project cost projections.

The process for arriving at the Annual Council Budget is for the **Council Plan** strategies and actions to feed into the Budget.

The **Strategic Resource Plan** is contained within the Council Plan. The Council Plan contains Council's broad directions and goals for the coming four years (2009-2013), with strategies to be achieved over several years. The Strategic Resource Plan (SRP) outlines the resources – financial and non-financial - required to achieve the Council Plan.

This document is a strategic level document and is "long-term" forward looking.

The **Council Budget** sets out in detail the objectives contained in the Strategic Resource Plan, for the financial year.

This document is a management level document and is "short to medium-term" forward looking. It also provides a basis for management to prepare reports to Council to monitor achievement of performance targets.

2.3.3 Links to organisation vision, goals and objectives

2.3.3.1 Corporate Policy

The Organisation's Vision is:

To Be Australia's Most Liveable Provincial Community.

The Organisation's Goals:

This Council Plan contains Council's broad directions and goals for the coming four years, with strategies to be achieved over several years.

This plan identifies the key new or changed initiatives and continuing strategic goals for the next four years and does not detail the day to day services of Council.

This plan also provides a vehicle by which Council's performance can be measured, builds on the community's current strengths, and establishes new initiatives for a better future.

It is essential that Council takes a strategic approach when planning its activities to enable competing demands to be balanced and priorities set in the best interests of the community as a whole. Council must also comply with Federal and State legislation and policy.

The Annual Community Satisfaction Survey also provides Council with information on community priorities and areas for improvement. This Council Plan seeks to address these

priorities within the resources available to Council. One of these priorities is to address Council's Asset Management Practices.

2.3.3.2 Council Plan 2009-2013 Asset Management Strategy:

Sound asset management is a core function of Council. Council maintains an Asset Management Policy (No. 108) to provide a framework for effective asset management and has developed an Asset Management Strategy to guide the process. Council is the owner and custodian of a large number of assets including, roads, drains, buildings, trees and swimming pools.

Typically these assets have a long life expectancy. To ensure the effective management of these assets Council has entered into the STEP Asset Management Improvement Program, which provides a strategic approach to the improvement of Council's asset management function.

The Asset Management Strategy contains a Strategic Improvement Plan which sets out a timetable for the creation and implementation of Asset Management Plans for each asset category. The Asset Management Plans will be developed to account for the assets in each category, monitor the condition of those assets and forecast expenditure requirements for maintenance in the short term and capital replacement in the long term.

Council currently controls assets valued in excess of $399 million ($246 million net of depreciation), with a $8.6 million consumption rate per annum or $983 per hour.
Council will ensure that the assets provided support a range of services that are appropriate, accessible and sustainable for the community.

Asset Management Plans are currently being developed to address Council's Corporate Objectives by establishing levels of service and cost standards for each area of service provision. The assets required to meet these expectations will be identified.

For each asset category, Council maintains a reliable database of assets managed by Council, develops asset management strategies and conducts regular inspections to ascertain the condition of each asset group. From this information maintenance and capital works programs are developed.

Council's Asset Management performance is reviewed annually through the Department of Victorian Communities Asset Management Performance Measures Survey.

2.3.3.3 Asset Management Policy

The purpose of the Council's Asset Management Policy (Policy Number 108) is to compliment and build upon the Council Plan, provide a more formalised approach to asset management principles and methodology, and to bring benefits including:

- clear direction and ownership of asset management
- a guide to better and more informed decision-making by Council, staff and community
- integration of resources and knowledge
- a framework to implement continuous improvement in asset management
- meet community needs and expectations
- identification of appropriate risk avoidance and risk control in line with Council's risk management policy
- greater resource efficiency through the use of integrated systems
- effective use of Council resources
- compliance with state and federal legislation
- ability to plan for the present and future generations, and the long term financial viability of Council.

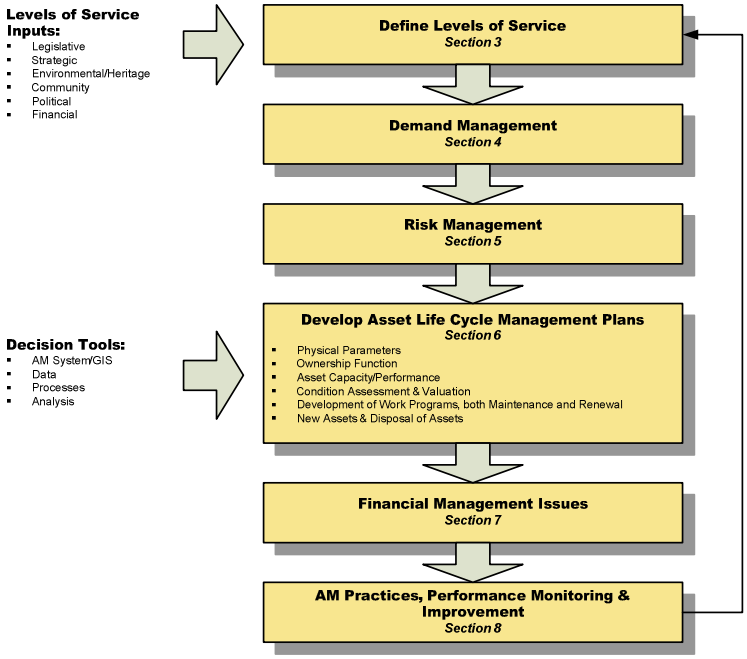
The objectives of this policy are:

- To ensure that asset management is clearly recognised by Council and the community, in accordance with the primary objectives of the Local Government Act 1989.
- to ensure recognition of the importance of managing Council's assets for present and future generations

2.4 Plan framework

2.4.1 Key Elements to the Plan

The prime guidance used for development of Council's Asset Management Plans is the International Infrastructure Management Manual (IIMM) developed jointly by the NZ National Asset Management Steering Group and the Institute of Public Works Engineering of Australia. This manual is highly recognised around the world as one of, if not the leading Infrastructure Management Manual for public works authorities such as municipal Councils.



The IIMM recommended structure for an Infrastructure AM Plan is the basis for the Infrastructure Asset Management Plan. While this structure has been adopted by many AM organisations in Australia and New Zealand, and is recommended by the Municipal Association of Victoria it is noted that there is no ideal structure. The preceding Diagram 2.3 illustrates the Plan's structure.

2.5 Basic and Advanced AM

2.5.1 Basic to advanced approach

Guidance in the development process of this Plan has been taken from the International Infrastructure Management Manual (IIMM), as well as participation in the Municipal Association of Victoria's STEP Program.

The International Infrastructure Management Manual defines *Basic Asset Management* as: asset management which relies primarily on the use of an asset register, maintenance management systems, job/resource management, inventory control, condition assessment and defined levels of service, in order to establish alternative treatment options and long-term cash flow predictions. Priorities are usually established on the basis of community benefit/financial return gained by carrying out the work (rather than risk analysis and optimised decision-making).

Advanced Asset Management (AAM): Asset Management which employs predictive modelling, risk management and optimised decision-making techniques to establish life-cycle treatment options and related long term cash flow predictions.

2.5.2 Sophistications/limitations to the plan

For the purposes of developing this initial AMP, Council has adopted a basic approach to its asset management. This is due to some limitations in the available information and systems utilised. However, this plan will provide recommendations for staged improvement in Council's Asset management practices.

3 LEVELS OF SERVICE

The 'level of service' is the defined service quality for a particular activity or service area against which service performance can be measured. They provide the basis for the life cycle management strategies and works programme identified within the AMP.

The levels of service will be used:

- *to inform customers of the proposed type and level of service to be offered;*
- *to identify the costs and benefits of the services offered;*
- *to enable customers to assess suitability, affordability and equity of the services offered;*
- *as a measure of the effectiveness of the AM Plan, and;*
- *as a focus for the AM strategies developed to deliver the required level of service*

Levels of Service are determined from the public consultation process and customer satisfaction surveys. They reflect the strategic objectives of Council and are based on:

- *Customer expectations for quality of service and willingness to pay*
- *Legislative requirements; environmental standards, regulations and legislation that impacts the way assets are managed*
- *Council's vision and objectives as stated in the corporate plan*
- *Available resources, particularly financial constraints*
- *Organisational delivery mechanisms*
- *Design Standards and Codes of Practice*
- *Australian Design Standards also provide the minimum design parameters for infrastructure delivery by the Professional Engineer.*

The levels of service provide guidance for the scope of current and future services offered, the manner of the service delivery and define the specific levels of service, which Council wishes to achieve.

The following diagram shows the relationship between the Asset Management Plan, Levels of Service and organisational objectives as outlined in the Council Plan.

3.1 Community Engagement and Expectations

The Council will engage with the community in regard to service delivery.

In the first instance community engagement shall be undertaken as part of the development of a service strategy. Additional community engagement may also focus on the development of asset based service levels. The AMP shall document the audience and techniques to be used to undertake community engagement. These outcomes shall be referred back to service delivery to ensure they are compatible.

3.1.1 Background and Customer Engagement Undertaken.

3.1.1.1 Community Satisfaction Survey

Council participates in the sample telephone satisfaction survey. Results applicable to the AMP are detailed.

The last community satisfaction survey was undertaken by the Wallis consulting group on behalf of the Department for Victorian Communities and local government.

The survey was conducted by telephone. In order to complete the survey, a random sample of telephone numbers was selected from postcodes known to be in the Southern Grampians Shire Council area. These numbers were called and a 'head of household' was selected for interview at that dwelling. The sample size was 350 interviews within the Shire area.

The survey was last undertaken in 2010.

3.1.1.2 Current and Previous Community Engagement Undertaken

The AMP shall provide details of any current or previous community engagement undertaken.

3.1.1.3 Community Engagement Policy

Council has adopted a Community Engagement Policy (Policy Number 118).

3.1.1.4 Community Engagement Guidelines

The Community Engagement guidelines are available from Council's intranet website for all staff to use when planning community engagement projects. It includes practical resources, templates, examples and checklists to assist Council officers when implementing their community engagement projects

3.1.1.5 Community Engagement Plan

The individual Asset Management Plans shall document any additional engagement to be undertaken. The plan shall include detail in a Community Engagement Plan, the audience and engagement methods proposed and the results of the engagement process.

3.1.2 Details of How Engagement Translates into Levels of Service.

The key outcomes resulting from community engagement will:

- Establish the key customer expectations in regards to the performance of the asset, and
- To reach an agreement on the level of service

The AMP shall list the outcomes resulting from the engagement process.

3.2 Legislative Requirements

Background legislation of regulations which impacts on the asset operation and performance or specifies a certain level of service is listed, including a brief explanation of the requirement.

3.3 Current Level of Service

3.3.1 Asset Functional Hierarchy

Assets may be further differentiated by an Asset Hierarchy. The AMP will provide a description of any adopted hierarchy.

Asset Functional Hierarchy: A system that differentiates like assets by relevant priority or importance. It is a 'vertical' separation and commonly applied to levels of service. E.g. link/collector/access, high/medium/low, regional/district/neighbourhood.

A hierarchy may be applied at Asset Class, Asset Category or Asset Component level.

3.3.2 Community and Technical Levels of Service and Performance Measures

Current levels of service have been based on what it is assumed that the customer expects and these assumptions in part have been tested through various community consultation processes.

With the tightening of the rural economy over recent decades, levels of service are driven by available budget funding and based on historic practices rather than looking to the future.

The levels of service will be refined over a period of time to match the expectation of customers, which requires a clear understanding of customer needs, expectations, preference and most importantly their willingness to pay for any increase in the levels of service that they require.

The service levels are divided into two types:

- Community requirements; and
- Technical requirements

Community based levels of service relate to the function of the service provided and how the customer receives the service in terms of:

- Appearance;
- Availability;
- Comfort;
- Safety for the community using the service;
- Responsiveness to requests & issues;
- Empathy for the customer (understanding, individual attention); and
- Assurance (knowledge, courtesy, trust, confidence)

Operations based levels of service relate to the technical measures and the outputs/outcomes the customer receives in terms of:

- Quality;
- Quantity;
- Meeting Legislative Requirements;
- Maintainability;
- Safety;
- Reliability and Performance;
- Capacity;
- Environmental Impacts; and
- Cost/affordability.

An explanation on how levels of service are developed is included in Council's Levels of Service Framework document.

Council's current levels of service for asset based indicators are detailed in each AMP.

3.4 Desired level of Service

Changes to the current level of service targets to a desired level will be instigated by the development of a service plan and the community engagement process and / or an annual service review.

4 FUTURE DEMAND

4.1 Demand Forecast

This section provides details of municipal population and growth forecasts which may affect the management and utilization of assets.

Key factors that directly impact the demand for services and related infrastructure include:

- Population growth;
- Demographic changes;
- Development (Residential, Commercial and/or Industrial).

All these factors are interrelated. As well as the growth in the asset base, future demand also impacts on the resources required for on-going maintenance activities.

Each separate Asset Management Plan will identify specific demands that impact that particular asset group.

4.1.1 Municipal Population Forecasts

The original inhabitants of the Southern Grampians area were the Bunganditj, Gunditjmara and Tjapwurong Aboriginal people. European settlement dates from 1837, with land used mainly for grazing.

Growth was minimal until the 1850s when several townships were established. Substantial expansion took place from the 1880s into the early 1900s, aided by the construction of the railway line and the opening up of land. The most significant development occurred in the immediate post-war years.

The population slowly declined from the late 1970's until increasing marginally between 2001 and 2006. As a rural municipality, primary production has historically been the predominant income earning activity however this has changed in recent times to encompass agricultural diversification, tourism, service and retail industry development as well as the mineral sands processing facility, all resulting in new dwellings being added to the area.

4.1.2 Estimated Resident Population (ERP)

The following statistical data showing growth projections;

Growth Projections	2006	2011	2016	2021	2026
Estimated Resident Population*	17,187	17,348	17,423	17,563	17,709

Southern Grampians is projected to experience slow and steady population growth throughout the next 20 years. Although projections from the 2006 survey showed a slow decline in population the survey has recorded the population as steady with a small increase in numbers overall within the shire.

There are also a number of subdivisions in Hamilton under development, creating new road infrastructure, community buildings, playgrounds, parks & open spaces etc. VicUrban is one such development and has the potential to create in excess of 300 new dwellings. This increase in urban population will create additional demand on the asset infrastructure within the shire.

*Source – dpcd.vic.gov.au – Victoria in future 2008

4.1.3 Municipal Demographic Changes

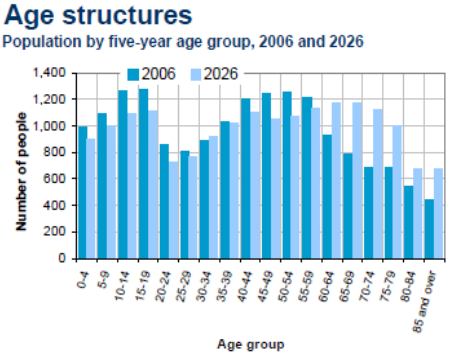
The ageing of the population in Southern Grampians is driven both by the ageing of the adult population who already live in the Shire and more so by the ongoing loss of younger people and declining birth rates over the twenty years to 2026.

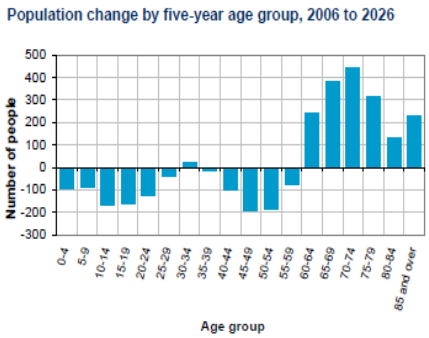
	2006		2011		2016		2021		2026	
Age Group	No.	%	No.	%	No.	%	No.	%	No.	%
0-4	991	5.8	944	5.4	952	5.5	935	5.3	898	5.1
5-14	2,355	13.7	2,207	12.7	2,113	12.1	2,090	11.9	2,096	11.8
15-24	2,126	12.4	2,175	12.5	2,025	11.6	1,897	10.8	1,840	10.4
25-34	1,701	9.9	1,769	10.2	1,838	10.6	1,799	10.2	1,682	9.5
35-49	3,473	20.2	3,277	18.9	3,084	17.7	3,081	17.5	3,164	17.9
50-59	2,462	14.3	2,485	14.3	2,478	14.2	2,377	13.5	2,205	12.5
60-69	1,718	10.0	2,042	11.8	2,284	13.1	2,327	13.3	2,344	13.2
70-84	1,914	11.1	1,886	10.9	2,021	11.6	2,426	13.8	2,805	15.8
85+	447	2.6	564	3.3	629	3.6	630	3.6	676	3.8
Total	17,187	100.0	17,348	100.0	17,423	100.0	17,563	100.0	17,709	100.0

Change in Population

	2006-2026	2006-2011	2011-2016	2016-2021	2021-2026
Net Change in Population	522	161	75	140	146
Average	0.1%	0.2%	0.1%	0.2%	0.2%

Age Structures





4.1.4 Factors influencing demand

Each separate AMP may detail factors influencing the growth or decline in demand and potential changes in customer expectation and utilisation.

4.2 Demand Management Plan

The objective of demand management is to actively seek to modify customer demands for services in order to:

- Optimise the utilisation / performance of existing assets;
- Reduce or defer the need for new assets;
- Meet the organisation's strategic objectives;
- Deliver a more sustainable service; and
- Respond to customer needs.

It is vital to the success of the Asset Management Plan that demand factors be analysed comprehensively, and their impact quantified in terms of the following:

- The effect of the growth of the asset network;
- Any possible future need to increase or decrease infrastructure; and
- The implementation of non-asset solutions, such as managing demand.

4.2.1 The Need to Manage Demand

Council has to be able to sustain the level of maintenance & renewals of the asset over the long term if it is to provide the community with the asset suite that the community desires. A commitment to providing a level of service has a consequential funding obligation.

Opportunities for funding are generally limited to income from Government Grants, User Contributions and from Council rates. However there are others such as to reduce maintenance costs. Reductions can result from use of improved work techniques and practices, new technology & materials, and also by reducing the level of service being provided.

If there is little opportunity to improve funding through the various sources, then the only practical option is to reduce levels of service.

Where new development or redevelopment is proposed within the Shire, any impacts that they may have on Council's assets are considered with the development process, including application of appropriate infrastructure design standards.

External factors can also impact maintenance of Council operations such as changing environmental standards, community safety standards, OH&S, etc. These can all add to the cost of maintaining and operating Council assets and must be accounted for in the annual budget process.

4.2.2 Demand Management Strategies

Demand management strategies provide alternatives to the creation of new assets through modifying customer demands. A key long term strategy is to manage demand so that future services can be provided at a reasonable cost without a negative impact on delivery. It is expected that proper demand management strategies will allow for the deferral of the construction of key infrastructure.

Effective strategies maximise the utilisation of existing assets through consolidating services or disposing of assets that are surplus to requirements.

5 RISK MANAGEMENT

5.1 Risk Assessment Principles and Process

This document utilises principles established in the Australian & New Zealand **Risk Management Standard AS/NZS 4360:2004**. The process of risk assessment follows principles outlined in the 2002 document from Civic Mutual Plus **"Road Reserve Risk Management – Statement of Principles"**.

The overall objectives of a formal risk management approach are to:

- outline the process by which Council manages risk associated with its assets, so that all risks can be identified and evaluated in a consistent manner,
- identify operational and organisational risks at a broad level,
- allocate responsibility for managing risks to specific staff to improve accountability; and,
- Prioritise the risks to identify the highest risks that should be addressed in the short to medium term.

The following chart shows the overview of the risk management process as outlined in the above Standard which is the basis of Council's process.

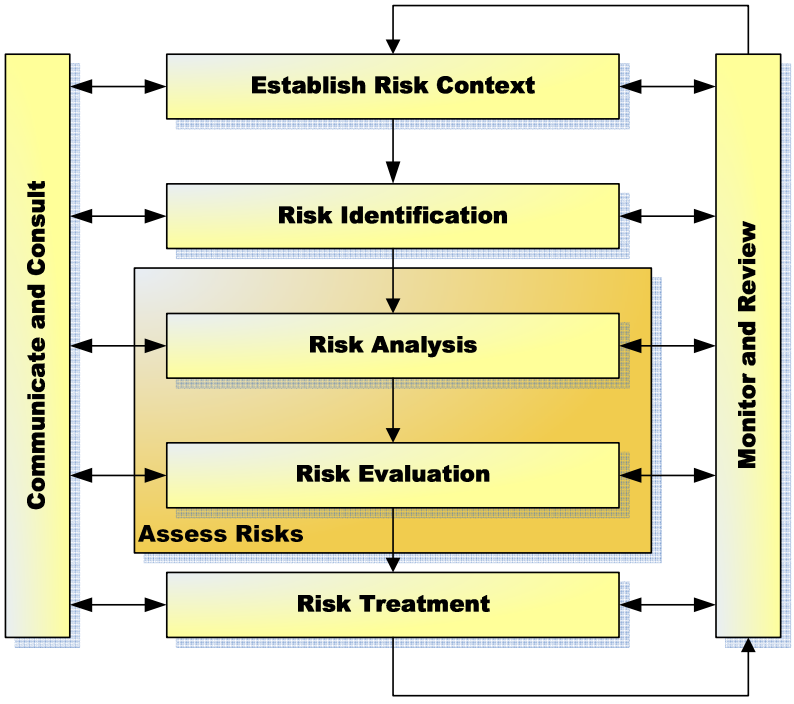


Chart: Risk Management Overview

5.2 Council's Risk Management Framework

Council's Risk Management Framework consists of a Risk Management Policy (April 2006) and a Risk Management Strategy supported by a Risk Register.

A consistent and systematic approach to managing risks has been adopted by Council Management, service providers and employees across all areas of the Organisation and are based on and applied from the Australian Standard AS/NZS 4360 – Risk Management.

The implementation of an effective Risk Management Strategy which defines goals and objectives from the Council Plan allows the Organisation to aim to achieve a number of distinct outcomes such as:

- To identify and analyse Council's liability associated to Risk.
- To determine the most appropriate option for minimising Council's exposure to financial and physical loss inclusive of Community Assets under the control of Council.
- To protect Council's corporate image as being a professional, responsible and ethical organisation.
- To encourage the identification and reporting of potential risks.
- To promote and support Risk Management practices within the Organisation.

5.3 Risk Assessment

5.3.1 Risk Criteria and Consequences of Risk

Risk management addresses a very broad range of potential exposure to risks across the entire operations of the enterprise. Council's Risk Management Policy outlines the scope of risks including such elements as:

- Key questions in analysing risk
- Responsibility of Management
- Risk Monitoring and Review

A Capital Works Business Case Risk analysis, developed in 2010/11, is completed for each new business case document and provides for an analysis of the risk to Council of the present situation. It will also show the risk of doing nothing.

The Likelihood, Consequence and Risk Assessment can be calculated, as well as an explanation given, as to the risk mitigation measures proposed for the project.

This risk assessment should be undertaken using the risk evaluation matrix as described in section 5.3.3 below, as published in AS 4360 Risk Management.

The evaluation of a proposed project calls for risk to be assessed in two different categories, the risk to council of not completing the project, and the risk to council that completing the project introduces.

5.3.2 Identification

The only practicable means of readily identifying risk is by undertaking regular inspections of our assets. This process should enable significant risks to be discovered and remedied in advance of possible injury.

Safety audits need to be undertaken where specific risks (potential safety deficiencies) are identified.

Details of inspection timings are included in each Individual Asset Plan.

5.3.3 Risk Analysis and Evaluation

Risks are to be analysed in terms of consequence and likelihood in the context of those controls. The analysis should consider the range of potential consequences and how likely those consequences are to occur. Consequence and likelihood may be combined to produce an estimated level of risk.

The risk assessment of a specific asset component is determined by the specific defect or hazard likely to occur and the function, location, types of users and user numbers.

Refer to the 'Preparing Business Cases' staff handbook and the Council's Intranet web site for a detailed risk assessment table.

5.3.4 Response Priorities & Remedial Treatments

The various defect/hazard response priorities established for each asset category and class and the selected remedial treatment are outlined in the Intervention Level Schedules in each sub-asset plan management plan. They provide a listing of the defect remedial measure and the relevant level of response for the hierarchy category in which the defect is located.

As advice is received of defects, safety or otherwise, the Risk Management Officer or asset inspectors will make an assessment of how that issue is to be dealt with in terms of priority of attention. Staff will be experienced in handling the type of defects commonly incurred and will readily be able to adjudge how they are to be treated. Priority of maintenance rectification is based on risk.

Prioritisation of response will occur during the inspection recording process. The response time will vary according to the hierarchy category, the location of the defect and the magnitude of the defect, obstruction or spillage.

5.3.5 Managing High Risk Works

Where a job potentially has a high risk associated with it from a safety perspective, a risk assessment is undertaken to establish what the specific risks are and develop action plans to eliminate or at least minimise the risks.

5.3.6 Responding to Emergencies

In an emergency situation, Council operates in accordance with its commitments documented in the Municipal Emergency Management Plan (MEM Plan).

A 24 hour, 7 day per week, 52 week per year After Hours Emergency Service (AHES) is operated by Council. Through this, Council operations personnel can be activated at any time.

5.3.7 Contingency Planning

Occasionally circumstances will occur where resources to maintain normal levels of service may not be available for a temporary period due to the following:

- intensive harvesting/ quarrying operations (e.g. blue gum harvesting)
- the level of road use changes (e.g. temporary or permanent diversion)
- extreme seasonal/ weather conditions (e.g. storm effects or very wet winter)
- other unforeseen or extreme circumstances (e.g. natural disaster)

Under such circumstances measures will be taken to restore normal levels of service in the order of priority to reduce risk and improve safety until more permanent action can be organised.

The Director of Shire Services has delegated authority to undertake works that may arise as a consequence of unanticipated conditions.

6 LIFECYCLE MANAGEMENT PLANS

The lifecycle management plan provides information about assets, including particular actions and costs to provide a defined (current and/or target) level of service in the most cost effective manner.

This section provides background information on the assets and details of what is planned to manage the assets. Note that most of the background information may be constantly changing and is only accurate at the time of this plan. The location of up to date information should be identified in each plan.

6.1 Physical Parameters

6.1.1 Current Issues

Each AMP may include a brief summary of the key issues confronting the assets included in the plan. Any actions identified to respond to the issue are also listed.

6.1.2 All Assets Quantity

The quantity of all assets included in the AMP's are maintained in the asset register:

Asset Class	Quantity	Replacement Cost (000's)	Written Down Value (000's)
Land		$ 14,543	$14,543
Land Improvements (Yatchaw)	28 Holdings	$ 582	$498
Buildings & Other Structures Recreation & Open Space	142 22 13 Sporting Ovals 6 Pools, Various Parks & Gardens	$76,115	$ 39,169
Seals Pavements – Sealed Pavements - Unsealed Kerbs Bridges & Major Culverts Pathways Drainage Pits & Pipes Other Infrastructure	 189 kms 78 Bridges, 176 Culverts 317,576 sqm 93 kms	$ 27,925 $ 140,218 $ 18,146 $ 22,790 $ 38,272 $ 12,065 $ 9 391 $ 4,149 $ 272,956	$ 15,878 $ 81,898 $ 11,011 $ 15,095 $ 24,119 $ 7,710 $ 5,135 $ 2,394 $ 163,241
Furniture & Office Equipment		$ 1,406	$ 795
Plant & Mechanical Equipment	350+ Items	$ 9,367	$ 4,810
Art Collection		N/A	$19,664

Note: The quantities listed are correct at 30th June 2010. Information is obtained from Council's asset register.

Each AMP may also add additional information on the asset mix, age, size, material and location of the assets included in the plan.

6.2 Asset Capacity/performance

6.2.1 Assets Under-Capacity

Council's assets are required to meet specified design standards and agreed level of service targets.

Each AMP shall identify assets that are under-capacity when measured against:

- Relevant technical levels of service. E.g. an asset based level of service may require all certain defined roads to be a particular width.
- Relevant design standards.

The plan shall identify those assets which do not meet the target performance. These under-capacity assets become the basis for upgrade programs of work

6.3 Asset Condition

Each asset group will have its own specific inspection requirements and these will be outlined in their plan. This covers actual requirements and frequencies of inspection types. In general the inspection regime covers safety, incidents, defects and condition.

Inspections will occur either as the result of the programmed scheduling or as a direct result of individual issues, notified both externally & internally, that are received & processed through the Customer Request System.

To facilitate the inspection process, recording and data transfer mechanisms are utilised to ensure that the Asset Information System is populated with data that reflects as far as practicable the true situation of condition of the asset arising from inspections.

Knowledge of the asset condition and performance can avoid unforeseen failure, assist in the development of works programs and provide a comparison to the agreed levels of service.

6.3.1 Current Asset Condition

A summary of the current condition of Council's assets is included in each plan.

Note: The condition listed is correct only at the time of the development of the plan. Up to date information is obtained from the asset register.

6.3.2 Condition Monitoring – Asset Condition Survey Frequency & Responsibility

The purpose of condition surveys of the assets is to evaluate the condition and performance of the asset.
Assets are condition rated on a scheduled frequency based on the risk of failure of the asset and the rate of deterioration. Each AMP will specify the:

- Asset
- Survey name
- Survey frequency which may vary across the asset hierarchy,
- The criteria to be evaluated and scored,
- Responsibility for undertaking the survey, and
- Dates of any previous surveys completed.

It is important that suitably experienced personnel undertake inspections and surveys to ensure consistency in surveys. Induction and training is provided prior to commencing any inspections and surveys

A summary of all condition surveys completed is included in the Appendices.

6.3.3 Condition Rating / Intervention Levels

Assets condition is rated on a 0 (good) to 10 (poor) system. Whereby in general terms:

Rating	Description	
0 = GOOD	New	New or an asset recently rehabilitated back to new condition.
1	Near new	Near new. No visible signs of deterioration, often based upon the time since construction rather than observed condition decline.
2	Excellent	Excellent. Very slight condition decline obvious, no longer in new condition.
3	Very good	Very good. Early stages of deterioration, minor or no serviceability problems.
4	Good	Good. Some obvious deterioration evident, slightly impaired serviceability.
5	Fair	Fair. Obvious deterioration, some serviceability loss.
6	Fair to poor	Fair to poor. Quite obvious deterioration, serviceability would be affected and rising maintenance cost.
7	Poor.	Poor. Severe deterioration, serviceability limited, high maintenance cost
8	Very poor.	Very poor. Serviceability heavily impacted. Very high maintenance cost needed to be rehabilitated.
9	Extremely poor	Extremely poor. Severe serviceability problems needing rehabilitation immediately. Could also be a risk to remain in service
10 = POOR	Failed.	Failed. No longer serviceable and should not remain in service. Extreme risk

Reference may be made to Council's condition rating manual, or details for assessing the criteria for determining the condition rating is included in the AMP appendices.

6.3.4 Deterioration Curves

Deterioration curves provide a plot of the condition of the asset against the age of the asset and are best developed from the results of the condition survey. The curve demonstrates the assets performance as it ages.

The AMP will detail curves for the assets included in the plan and the basis on which they were developed. The basis for the deterioration curve may be:

- Developed from historical condition surveys,
- A generic curve based on anecdotal performance.

The curves may be provided in the plan or a reference location may be listed.

Note: The curves are correct only at the time of the development of the plan. Up to date information is obtained from the asset register

6.3.5 Asset Useful Lives and Intervention Level and Basis for Adopting Useful Lives

Useful Life: The period over which a depreciable asset is expected to be used (IIMM).

Intervention Level: The Intervention Level is that point in time the asset is at the end of its useful life. I.e. the condition of the asset no longer meets the agreed level of service and requires renewal or replacement.

The deterioration graph may be used to estimate the Useful Life of the asset. Based on Council's adopted condition intervention level the corresponding age will be the Useful Life.

Intervention levels should be derived from current levels of service.

The AMP will detail the Intervention Level and Useful Life and the basis by which each has been adopted.

6.3.6 Historical Asset Condition

The results of condition surveys will be provided in the AMP. This can indicate the overall performance and trend of the Asset Component.

6.3.7 Age Profile

Each Asset Management Plan will provide details of the age of each asset. Details of Asset Age are retained in the Asset database register.

6.4 Asset Valuations

6.4.1 Valuation Summary

Asset valuations or replacement costs, are information provided to the Finance area of Council for their reporting requirements.

This cost differs from the renewal rates listed in section 6 of the AMP. Whereby:

Renewal rate: Is the cost to renew the existing asset to its original capacity, a "Brownfield" rate used for evaluating asset forecasting and developing capital programs.
Replacement: Is the cost to fully replace existing asset, a "Greenfield" or "fair value rate used for financial valuation and depreciation reporting.

For example: the renewal rate of kerb and channel exceeds the replacement cost as renewal incurs the additional cost of excavation and disposal of the concrete and pavement reinstatement costs.
Sealed road renewal is less than replacement in that the existing formation and base material is often retained.

The AMP shall summarise by asset component the:

- Replacement cost (Greenfield rate),
- Difference, if any, with the renewal rate,
- Basis or assumptions used in determining the replacement cost,
- Reasons for any difference.

6.5 Historical Data

The existence and location of any important historical data should be documented to ensure continuity within the organisation. This may include plans, files etc.

6.6 Routine Maintenance Plan

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

This section addresses how maintenance:

- Is identified and planned for,
- The standards which apply,
- The basis for determining future maintenance costs.

Key components of the maintenance plan are:

- Requires the planned, pro-active identification of maintenance issues,
- Ensures that minimum safety standards are met,
- Undertake works that maximise the life of the asset,

- Emergency works are attended to as a priority,
- Significant works of a scale or cost that is unreasonable for the maintenance budget to bear, are referred to the capital works program and considered in the following year's budget.

The advantage of planned maintenance is to lower the risk exposure to council by identifying and correcting defects before they reach an unacceptable level.

Planned Maintenance: Maintenance work that is identified under a management system involving inspection, prioritising and scheduling.

Unplanned Maintenance: Reactive maintenance work resulting from customer requests, council requests, and unscheduled inspections.

6.6.1 Maintenance decision making process (planned and unplanned)

The maintenance decision making process applicable to all assets is summarized below:

<table>
<tr><th>Step</th><th colspan="2">Description</th></tr>
<tr><td>1</td><td colspan="2">Potential maintenance tasks are identified from:
• Scheduled Defect Inspections,
• One off inspections instigated by customer requests, council requests.
• Condition surveys.
Only defects exceeding any nominated Condition Works level are recorded</td></tr>
<tr><td>2</td><td colspan="2">Recorded defects are assessed against the intervention criteria as either:
• Exceeding any Hazard Intervention Level, or
• Not exceeding any Hazard Intervention Level, or
• An excessive scale or cost,
• Emergency work.</td></tr>
<tr><td rowspan="5">3</td><td colspan="2">Action is undertaken for defects:</td></tr>
<tr><td>Emergency Work</td><td>Immediate action undertaken</td></tr>
<tr><td>Exceeding any Hazard Intervention Level</td><td>Interim Action undertaken.
Works Order immediately issued.</td></tr>
<tr><td>Not exceeding any Hazard Intervention Level (or no hazard intervention level set)</td><td>Tasks prioritised according to established ranking criteria.
Works Orders issued depending on budget.</td></tr>
<tr><td>Of excessive scale or cost</td><td>Referred to the capital works program</td></tr>
<tr><td>4</td><td colspan="2">Following the completion of works, in accordance with the Asset Handover process, any change in assets is reported to the Asset Manager for amendment of the Asset Register.</td></tr>
</table>

Where:

- **Emergency Works**: Any event or occurrence where the likelihood of an accident or loss is almost certain and the consequences are considered major or catastrophic
- **Hazard Intervention Level:** When the condition of a defect deteriorates to the hazard intervention level that represents a high risk to the user then the defect (a "hazard defect") is corrected as a matter of priority.

- **Interim Action:** Where a defect condition exceeds the hazard intervention level, interim action shall be undertaken to make the site safe for the period until the hazard is rectified.
- **Condition Works**: Defects from a minor condition up to the hazard intervention level undertaken on a priority basis
- **Defect Inspection**: A programmed inspection of the asset to identify the number and extent of defects.

Detailed maintenance decision making processes (reactive / preventative) inspections and timelines are outlined in each individual Asset Plan.

6.6.2 Defect Inspection Frequency

Defect Inspections are a critical part of the planned, pro-active maintenance process.

Assets are defect inspected on a scheduled frequency based on the risk associated with the defect. Each AMP will specify the:

- Asset
- Inspection name
- The defects to be evaluated and scored,
- Inspection frequency which may vary across the asset hierarchy, and
- Responsibility for undertaking the inspection.

In some instances of low risk, certain assets may not be inspected and will be subject to Unplanned Maintenance only.

6.6.3 Prioritisation of Maintenance Works

Defect works exceeding the minimum Condition Works Level are prioritised in accordance with established criteria as established in the AMP.

The criteria takes into account the defect:

- Condition works level
- Severity (condition).
- Relative risk or importance of the defect compared to other defects
- Location or hierarchy

6.6.4 Defect Response Times

Response times to correct defects and undertake Interim Action are/may be nominated in the AMP. The response times may vary across the asset hierarchy.

Council response times may be:

- Specified already under Council's Road Management Plan, or
- Listed as targets only, or
- Not listed in instances of low risk

6.6.5 Maintenance Standards and Specifications

The standards for maintenance are described by the Hazard Intervention Level and Emergency Works.

The AMP lists adopted levels which may vary across the hierarchy. The levels may be:

- Specified already under Council's various Asset Management Plans, or
- Not applicable, if low risk, no levels are stated, or
- Stated but not included in the Road Management Plan and are targets only.

6.6.6 Basis for Future Maintenance Costs

Future maintenance costs are based on the assumption that the current maintenance expenditure is adequate with variations based on:

- An increase in asset quantity from new and upgrade assets,
- A decrease in asset quantity from the rationalisation/disposal of assets.
- Changes in the agreed Level of Service, and
- Any increase in the cost of maintaining older assets if renewal works are not undertaken.

Predictions of the change in future maintenance costs can be provided by the Moloney renewal Forecast Model.

Future maintenance costs identified in the plan are summarised in the AMP Financial Summary.

6.7 Renewal/Replacement Plan

Renewal: Major work which does not increase the assets design capacity but restores, rehabilitates, replaces or renews an existing asset to its original capacity. Work over and above restoring an asset to original capacity is new works expenditure.

This section addresses:

- How renewal projects are identified and planned for.
- The standards which apply.
- Establishes the basis for determining future renewal costs.

6.7.1 Renewal Planning Process

Council's process for identifying and undertaking renewal works is shown below:

Step	Description
1	Potential renewal projects identified from the: • Outcome of condition surveys based on condition rating and remaining life. • As required condition inspections
2	Projects are inspected to verify the current condition rating.
3	Projects are prioritised into a draft Long Term Renewal Works Program according to the established weighting system detailed in the AMP, and justified by the completion of a Capital Works Business Case.
4	The Long Term Renewal Works Program is referred to the Long Term Financial Plan for inclusion as projected cash-flow expenditure. The actual program is dependent upon the actual funding provided in the LTFP based on the renewal modelling outcomes.
5	As part of the Annual Budget process the Long Term Renewal Works Program is rationalised to match the available budget expenditure. This Annual Renewal Works Program may be further modified to provide greater efficiency by allowing for factors including: • Economies of scale • Project location.
6	Following the completion of works, in accordance with the Asset Handover process, details of the change in assets is reported to the Asset Manager for inclusion in the Asset Register.

6.7.2 Renewal Priority Ranking

All renewal works programs are developed based on a priority ranking formula detailed in the AMP.

6.7.3 Renewal Capital Works Program

The Long Term Renewal Works Programs developed from the priority rankings are listed in the AMP.

6.7.4 Treatment Options

The AMP may provide a brief summary of possible treatment options, including the current treatment, and the benefits or limitations of these options. Particular attention is given to the possible use of low-cost treatments.

6.7.5 Basis for Determining Future Renewal Costs

6.7.5.1 Renewal Modelling and Renewal Rates

To estimate future renewal expenditure, Council utilises Moloney Modelling Software.

The model requires the following input data:

Input Data	Source
Intervention level	AMP section 6.3.3
Useful life	AMP section 4.1
Condition rating distribution	Asset Register
Annual renewal expenditure	Annual budget
Annual maintenance expenditure	Annual budget
Asset quantity	Asset register
Renewal rates	AMP section 6
Deterioration graph profile	AMP section 4.1

Council determines which assets shall be modelled within each asset class, based on its asset hierarchy, taking into account:

- Quantity,
- Differences in performance
- Differences in renewal rates.

The AMP shall document the asset sets that are modeled and the basis for the renewal rate used. Typically the renewal rate shall be derived from actual costs incurred by Council. Where an asset category is not modeled the reasons will be stated in the AMP.

The Moloney Model provides a high level forecast of renewal costs and the subsequent performance of the asset. As it provides estimates of the 'average' performance of assets, it is not suitable for directly creating works programs as individual assets will perform differently into the future. All works programs shall be subject to verification on the ground.

6.7.5.2 Reference to the Long Term Financial Plan

The renewal forecast is referred to the Long Term Financial Plan (LTFP) for inclusion. The actual funding may be varied following the process to develop the LTFP. The Model may then be used to test 'what-if' scenarios based on changing the budget scenario and predict the percentage of assets than will exceed intervention.

Future renewal costs indentified in the plan, and the impacts of any difference between the actual and adopted expenditure, are summarised in the AMP Financial Summary.

6.8 New & Upgrade Plan

New works: Works that create a new asset that did not previously exist.
Upgrade works: Works which improve an existing asset beyond its original capacity.

New and upgrade works may result from growth, social or environmental needs. Assets may also be acquired at no cost to the organisation (i.e. subdivision development).

It is acknowledged that the addition of any asset to Council's portfolios increases the lifecycle costs incurred by Council, and that any new or upgrade works must be justified against the nominated service standards and the benefit to the community.

6.8.1 New and Upgrade Planning Process

Potential new and upgrade works may be identified from a number of sources, including:

- The Service Strategy,
- Current issues discussion,
- Under-capacity analysis,
- Assessment of future demand,
- Risk assessment.

Step	Description
1	Identify new and upgrade projects
2	Projects are evaluated against the Capital Evaluation Framework
3	Projects are prioritised into a single Long Term New and Upgrade Works Program according to the established assessment system in the Capital Evaluation Framework.
4	The New and Upgrade Works Program is referred to the Long Term Financial Plan for inclusion as projected cash-flow expenditure.
5	As part of the Annual Budget process the Long Term New and Upgrade Works Program is rationalised to match the available budget expenditure and new priorities.
6	Following the completion of works, in accordance with the Asset Handover process, details of the change in assets is reported to the Asset Manager for inclusion in the Asset Register.
7	A capital works evaluation form is completed by the Project Manager following completion of the project

In accordance with step 2, all new and upgrade proposals shall be subject to project evaluation taking into account the merit and priority ranking criteria stated in the 'Preparing Business Case' document.

6.8.2 Basis for Future New and Upgrade Costs

As detailed in step 1 above, future new and upgrade costs are identified within a service strategy, or within the AMP, as a measure against the established levels of service. The benefit, cost and reasoning for any project must be clearly stated.

New and upgrade works identified in the AMP shall be cross-referenced against the service plan in order to avoid any duplication.

All new and upgrade asset projects shall be listed within the AMP and are referred to the Capital Evaluation Process for consideration.

6.8.3 Future New and Upgrade Costs

Future new and upgrade costs identified in the plan are summarised in the AMP Financial Summary.

6.9 Operations Plan

Operations: Regular activities to provide public health, safety and amenity. E.g.: street sweeping, grass mowing, street lighting, cleaning, utilities.

Operations costs associated with the asset are considered within the AMP.

Operational costs associated with service delivery (staffing, programs etc) are detailed within the Service Plan.

6.9.1 Operations Costs Planning Process

Step	Description
1	Potential changes in operating costs are to be identified and justified by preparation of Operational Business Cases as detailed in the Preparing Business Case document and as per council's Financial Policies.
2	The Long Term Asset Operational Costs are referred to the Long Term Financial Plan for inclusion as a financial projection.

6.9.2 Basis for Future Asset Operating Costs

Operating costs may change over time due to

- Price increases of relevant materials & services,
- Increases or decreases in the asset portfolio

The AMP will assess current operating programs for any future changes in costs.

6.9.3 Future Operating Costs

Future operating costs identified in the plan are summarised in the AMP Financial Summary.

6.10 Rationalisation/Disposal Plan

Disposal: Any of the activities associated with disposal of a decommissioned asset, including sale, demolition or relocation.

It is acknowledged that a reduction in the asset inventory can assist in reducing the renewal gap.

6.10.1 Rationalisation/Disposal Planning Process

Step	Description
1	Potential asset rationalisation/disposal may be identified from a number of sources, including: • Within the Service Plan Strategy, and • From an assessment of future demand in the AMP.
2	Projects are justified against the criteria below and placed in a Long Term Rationalisation/Disposal Works Program.
3	Potential projects are reported to Council for consideration.
4	The Long Term Rationalisation/Disposal Works Program is referred to the Long Term Financial Plan for inclusion as projected cash-flow expenditure.
5	As part of the Annual Budget process the Long Term Rationalisation/Disposal Works Program is rationalised to match the available budget expenditure and new priorities.
6	Following the completion of works, in accordance with the Asset Handover process, details of the change in assets is reported to the Asset Manager for inclusion in the Asset Register.

6.10.2 Justification for Rationalisation/Disposal

Assets may become surplus to requirements for any of the following reasons:

- Under-utilisation
- Obsolescence
- Provision exceeds required level of service
- Uneconomic to upgrade or operate
- Policy change
- Service provided by other means
- Potential risk of ownership

6.10.3 Basis for Future Rationalisation/Disposal Costs

As detailed in step 1 above, future rationalisation/disposal costs are identified within the strategy of the Service Plan, or within the AMP analysis of future demand. The benefit, cost and reasoning for any project must be clearly stated.

Rationalisation/disposal works identified in the AMP shall be cross-referenced against the service plan in order to avoid any duplication.

All rationalisation/disposal projects shall be listed within the AMP.

6.10.4 Future New and Upgrade Costs

Future new and upgrade costs identified in the plan are summarised in the AMP Financial Summary.

7 FINANCIAL PLAN

7.1 Financial Statements and Projections

10 year projections based on the practices listed in the Lifecycle Management section for maintenance, renewal, new and upgrade, operations and disposal costs are included in this section.

Renewal projections include scope to identify and comment on any difference between the adopted renewal expenditure and the projected renewal gap.

7.2 Funding Strategy

The funding of assets is considered in Council's Long Term Financial Plan development.

The AMP details how works have been funded in the past and funding opportunities.

7.2.1 Strategic Resource Plan

Council maintains a detailed ten year financial plan with the key objectives of financial stability and sustainability in the longer term, whilst still achieving the Council's corporate objectives outlined in the Council Plan.

The ten year plan is reviewed annually through a rigorous process of consultation with Council and Council officers.

It is Council's opinion that the Strategic Resource Plan provides a responsible approach to resourcing the many objectives of the Council Plan.

Key financial objectives include:

- Minimise rates & charges increases,
- Source operational savings where possible, without diminishing required service levels,
- Continue to increase the amount spent on renewal/replacement of assets,
- Lobby for grant funding wherever possible to increase funds available,
- Minimise borrowings.

The resource requirements for the various asset groups are derived from the Asset Management Plans.

7.3 Key Assumptions Made in the Financial Forecasts

During the preparation of the Strategic Resource Plan and the Budget, the following assumptions are made:

- Fees and charges will continue to be increased by approximately 5% per annum
- Grants are based on confirmed funding levels
- New revenue sources have been identified, where possible
- Service levels are generally maintained at the previous levels with an aim to use less resources and an emphasis on innovation and efficiency
- Any new staff proposals are justified through a business case; Contract and casual labour to be minimised
- New initiatives or projects which are not cost neutral, are justified through a business case
- Real savings in expenditure and/or increases in revenue identified in previous years, to be preserved
- Minimisation and elimination of debt as soon as financially responsible.

The following external influences have also been taken into consideration because they may/will impact adversely on the services delivered by Council:

- Increased level of services required by the Community
- Continuing cost rises of general goods and services
- Requirement to renegotiate enterprise bargaining agreements
- Increased pressure on asset management practices
- Increased insurance and risk management costs
- Increased waste management costs
- The continuing "general" decline of funding assistance from State and Commonwealth Government.

The following favourable external factors have been taken into consideration:

- An anticipated increased level of funding from the Victoria Grants Commission
- Continuation of the Roads to Recovery Program

8 ASSET MANAGEMENT PRACTICES

This section outlines the information systems and processes used by Council in effectively managing its assets.

8.1 Financial Systems

The General Ledger needs to be structured to allocate funds to specific works programs or functions that are identified as being key areas of focus for competent management of infrastructure assets.

This structuring of the General Ledger should also recognise the hierarchy categories introduced with the introduction of this Plan.

Each of these key functional areas can be broken down further into various activities to allow the manager responsible for those activities to closely monitor performance to establish the true cost of operations. This is necessary because for instance after addressing a backlog of maintenance on a road, bringing it closer to the specified level, the ongoing maintenance cost may well decrease provided it continues to be maintained at the right level. Conversely if problem areas arise they can quickly be identified because of increasing costs to maintain.

8.2 Asset Management Systems

8.2.1 Data Available

The data held which is available to help decision making can be found within the asset register and asset management system.

8.2.2 Quality of the Data.

The quality of the data held within Council's asset registers and asset management systems is dependent upon a sound system of advice and updating. The Asset Handover Procedure documents the process and responsibilities.

8.2.2.1 Asset Handover Process

Following changes to assets, the asset registers/asset management systems and other corporate information must be amended to reflect the change in the asset base.

The changes may occur from both council (internal) and gifted (external) (e.g. subdivision) works.

The process, including responsibilities, is detailed in the Asset Handover Process. The process is:

Extent:
Changes to assets may be result from:

- Council in-house construction new, upgrade and renewal projects/works programs
- Council projects contracted out
- External projects. E.g. Gifted assets (e.g. developers), community projects

Responsibilities:

- It is the responsibility of the person nominated in the table below to advise the Asset Manager of the change in the asset attributes.
- It is the responsibility of the Asset Manager to amend the Asset Register of this change.

Responsible Person: An assigned role to manage and deliver capital works projects.

Timing of Advice:
The responsible person shall advise the Asset Manager at the times nominated below.

Format of Advice:
The advice to the Asset Manager from the Responsible Person shall include the following information:

- Asset reference number (if applicable)
- Asset Name
- Details as specified below
- Date

The advice may be:

- Hard copy (example attached), or
- E-mail

8.2.2.2 Responsible Persons And Timing Of Advice Of Change In Asset Attributes

COUNCIL PROJECTS – IN-HOUSE CONSTRUCTION NEW & UPGRADE, RENEWAL PROJECTS

Asset Category/ Component	**Works Program**	**Responsible Person** *Asset Owner Project Manager*	**Timing of Advice**	**Information to be Provided to Assets**
Rural Sealed Pavement	Rural Road Renewal Program	Project Manager	Completion of works End of Financial year	Road Construction details
Urban Sealed Pavement	New Urban Roads Works Program	Project Manager	Completion of works	Road Construction details
Unsealed Road Pavement	Gravel Re-sheet Program	Project Manager	Completion of works	Road Construction details

COUNCIL PROJECTS – CONTRACTED OUT

Asset Category/ Component	**Works Program** (Renewal New & Upgrade)	**Responsible Person** *Contracts Manager Contracts Supervisor Project Manager*	**Timing of Advice**	**Information to be Provided to Assets**
Buildings	Renewal, New or Upgrade	Project Manager	Completion of Works	Structure Type, Roof Materials, Costs
Sealed surfaces (Rural & Urban)	Reseal Program	Contracts Manager/Contracts Supervisor	Completion of work Practical Completion	Copy of Bitumen Daily Record Sheet As constructed plans

GIFTED ASSETS

Source	**Responsible Person**	**Timing of Advice**	**Information to be Provided to Assets**
Subdivision developments	Nominated Work Supervisor	Statement of Compliance conditions met??? Public access allowed	As constructed plans
Community projects/grants	Community Grants Officer	Final payment of grant	As constructed plans

8.2.3 Software Systems Used.

Details on Asset Management Systems used by Council are summarised in the AMP. Information includes the software or asset management system used, and how often the data is collected or reviewed.

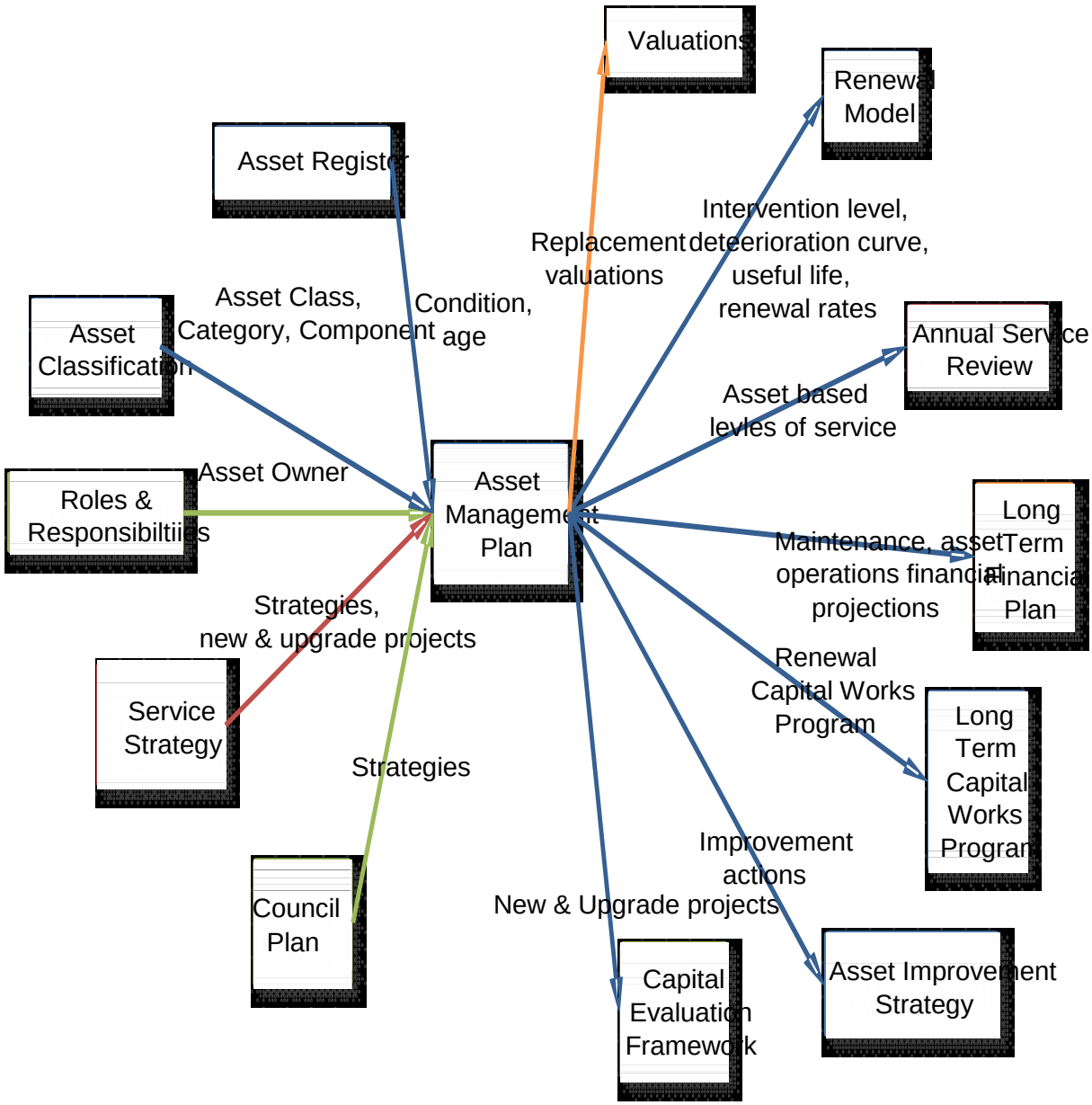
8.2.4 How Often Data is Collected/Reviewed

Asset data is collected and reviewed as part of the conduct of a Condition Survey and as a result of completed capital work programs or purchases.

8.3 Information Flow Requirements and Processes

8.3.1 Information Flows To and From This Plan

The AMP requires information from council documents, which in turn, is then developed for other documents. The key information flows to and from the AMP are:



8.3.2 Decision Making Process

This Section outlines the nature of current practices for AM decision making and details an improvement program to enhance them in order to provide ongoing improvement to management of the Shire's assets.

Several areas that are vital to managing the asset include:

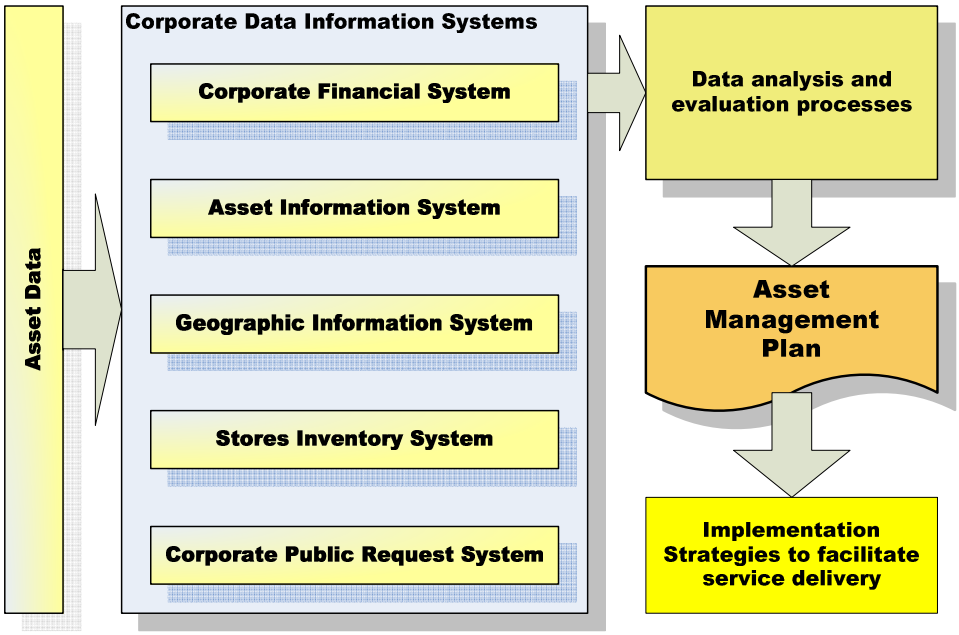
Asset data: Information on the actual physical details of the assets including quantity, dimensions, age, condition, cost to provide, replacement cost, useful life span, etc. It must be appropriate for the required purpose, reliable and accessible.

Information systems: This includes all the data information systems necessary to competently manage the asset. Key systems include the corporate accounting system, asset information system, geographic information system and public request system. Ideally, data should be input once only into one of these systems and be accessible through other systems through interfacing.

Processes: This involves the various processes to analyse and evaluate the data from the above systems to produce relevant management reports and works programs.

Strategies: Implementation strategies for organisational management, including contractual, people and resource issues, are essential to ensure that the asset management process overall is conducted in a sound and competent manner.

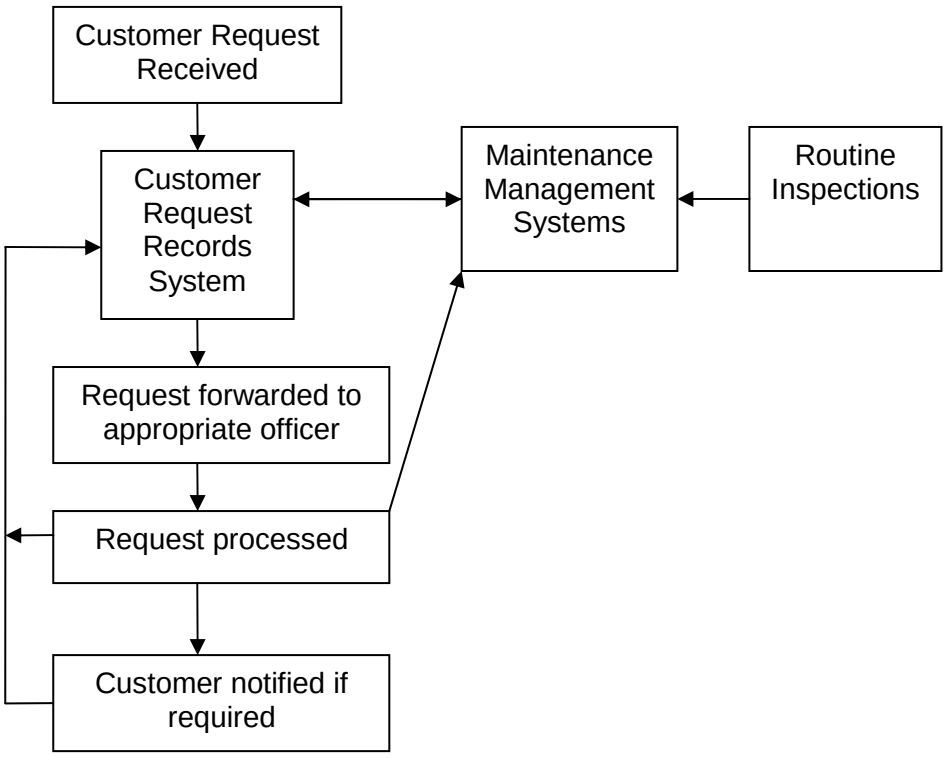
The following chart illustrates the relationship



8.4 Customer Service Systems & Procedures

Southern Grampians Shire Council records all incoming customer requests or complaints using a computer customer request software package called Merit. This system allows for the processing and tracking of requests.

The workflow for Merit is shown below. Plans for Merit software to be integrated into our asset management system are currently being developed.



8.5 Standards & Guidelines

Standard drawings and technical standards applicable to the assets included in this plan are included in the AMP.

9 PLAN IMPROVEMENTS AND MONITORING

9.1 Performance Measures

There is a requirement from the Department of Infrastructure for Local Government to report annually on the following Infrastructure indicators:

- **Renewal Gap** – i.e. the ratio of current spending on renewal to the long term Average Annual Asset Consumption, AAAC.
- **Renewal & Maintenance Gap** – i.e. the ratio of current spending on renewal plus maintenance to AAAC plus maintenance.

The AAAC is the amount of the Council's asset base consumed during a year based on current replacement cost; divided by useful life; and totalled for each and every infrastructure asset.

Performance measures will be developed to ensure that work practices and the Asset Management Plan are reflective of each other.

A key measure will be the budget itself. If the AM Plan properly indicates the costs for various activities & Council funds them accordingly, then the work must be completed on line with budget. Variances will occur periodically due to unforeseen circumstances or significant changes in conditions such as weather.

9.1.1 Asset Delivery Performance

Part of the annual budget process is to review asset performance following delivery of the maintenance program. Actual expenditures are compared to those budgeted & any significant variances are analysed with any necessary remedial action accounted for in the new budget.

Also, effectiveness of the various maintenance activities is reviewed to ensure that they are delivering what is required to keep the asset performing at the required level of service.

Part of this process determines whether it is effective to continue funding maintenance or in fact that the particular asset or asset component requires rehabilitation, renewal or upgrading or even being downgraded such as reversion of a poor condition sealed surface to gravel.

The following annual performance reviews of maintenance programs and strategies will be undertaken by management:

- Assessment from asset databases of response times for completion of defect rectification works from the time of their being reported;
- That specified Defect Intervention Levels are effective;
- That Intervention responses are timely;
- Assess the internal audit activities, the validity of their processes and verification of their conclusions;
- Assess the relative improvements achieved since the previous review and compare this to what was intended to be achieved;

- Where relevant industry benchmarking information is available, test the relative status of the organisation and its AM performance comparing with AM best practice & endeavour to introduce improvements if appropriate to the Shire;
- Confirm that the technical content in AM Plans is sound and applied correctly in developing AM plan outputs (e.g. appropriate economic lives, lifecycle strategies).

9.2 Improvement Program

The Council Asset Management Plan uses levels of services & intervention levels that have existed over recent years. Future community consultation processes may well bring about further changes.

It is intended that the Council Asset Management Plan and its component Asset Group Asset Management Plans be updated periodically to reflect changes to management of Council's assets. It is to be a 'living' document that should always reflect as closely as practicable actual practices used in managing the various assets. Only in this way will Council be best able to ascertain the long term financial needs for these assets.

Through the development of the AMP, improvement actions will be identified and documented. The actions are transferred to the Asset Management Improvement Strategy which details the timetable and resources required taking into account other actions identified from all sources.

Asset Improvements are carried to the Asset Improvement Strategy which documents the reporting and monitoring process.

9.3 Monitoring and Review Procedures

9.3.1 Asset Management Plan Review

To ensure that this Asset Management Plan remains a useful document and relevant to the ongoing management of the asset, the following review activities will be undertaken:

a) It is to be formally adopted by Council;
b) When the current financial and service status of the asset is properly established after a period of operating experience under the Asset Management Plan, Council is to undertake a review of service levels through a process of community consultation to determine both current and future needs of the community outlining in the process the likely financial impact of any changes;
c) Once any new levels of service have been determined and can be funded, they are to be formally adopted by Council;
d) Subsequent to this formal adoption, any significant changes to levels of service are to be reported to, and endorsed by, Council to ensure that councillors are fully aware of the consequences of their decision making which may have an impact on financial strategy & budget;
e) AM Plans are to be reviewed annually and revised to incorporate changes as a result of any levels of service review as well as any changes arising from the AM Improvement program.

Changes to the Plan need to be readily identified. The process that will be adopted for updating the plans is as outlined below:

a) The initial version of the Asset Management Plan is to be formally endorsed by Council as it is a strategic planning document.
b) Where changes are made that do not alter the technical aspects of asset management (standards and specifications) and seek only to enhance the information provided within the Plan, the changes will be approved by the Executive Management Team.
c) If material changes are made to standards and specifications, a report will be presented to Council, along with a brief explanation as to why such changes were necessary, seeking its endorsement to them.
d) In relation to numbering the document version, material changes necessitating Council approval will cause a change to the prime number of the specific AM Plan Version (e.g. from Version 1.00 to 2.00). Enhancements approved by the Executive Management Team will cause a change to the point number of the specific AM Plan Version that had previously been endorsed by Council (e.g. from Version 1.00 to 1.01).
e) The Asset Management Sub-Plans will be updated/revised by the Asset Management Team and endorsed by the Executive Management Team.

9.3.2 Audit Review Process

The Director of Shire Infrastructure will ensure that the following processes are audited at least annually to ensure they are being performed as required. Audit outcome will be reported to the Chief Executive. Responsibility for over viewing the audit is Council's Risk Manager:

a) **Maintenance and renewal programs** - to confirm that allocated budget projects were delivered on time, within budget and to the specified level of service (see following item on delivery performance).
b) **Inspection programs** - to confirm that they were undertaken as specified in the Service Level Agreement for Maintenance of the Road Reserve and the Infrastructure Asset Management Plan.
c) **Scheduled condition assessments** – to confirm that they were undertaken as required.
d) **Data installation into the Asset Information System** - to ensure that stored data is current.

9.3.3 Reporting Asset Achievements

Council's Annual Report is the vehicle that is used by Council to report asset management achievements of maintenance and refurbishment & renewal strategies against planned targets and programs to the community.

The Annual Report contains detailed information on the actual outcomes for the financial year. It contains the Report of Operations, the Standard Statements and the Financial Report.

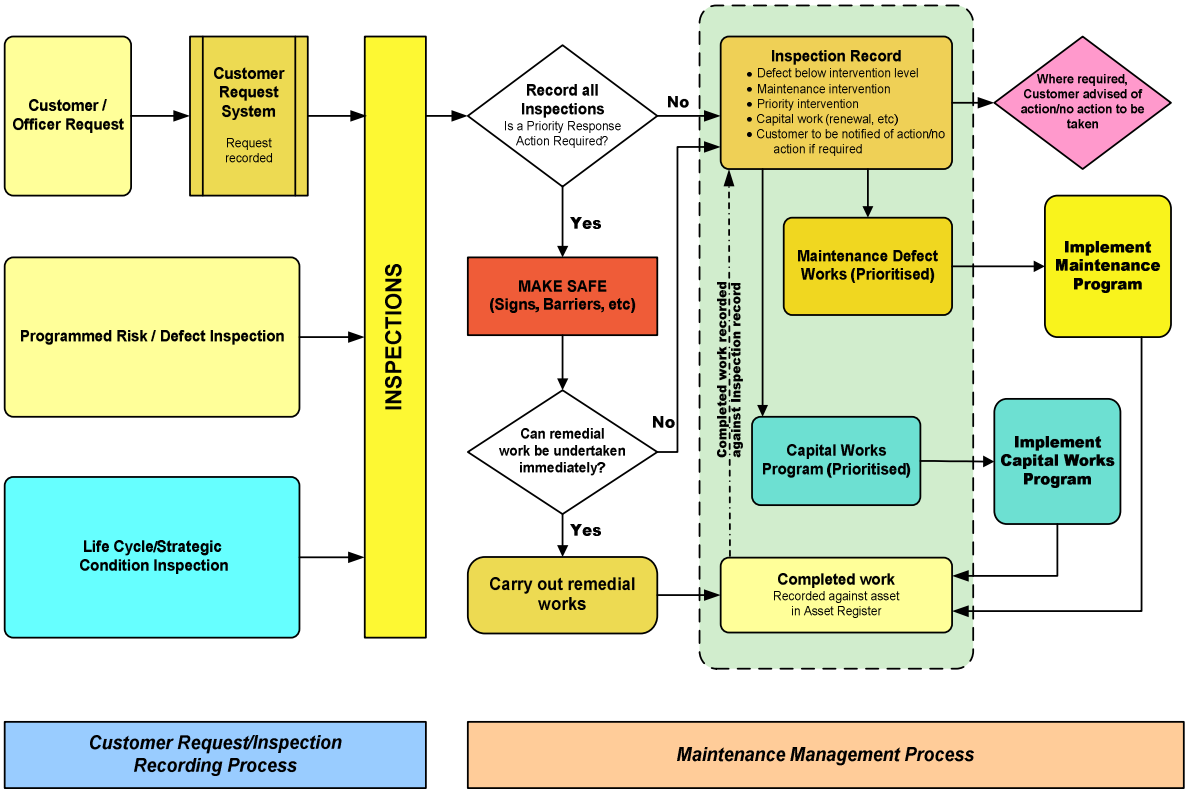
This report is reflective and is the key document used to provide information and accountability to both the members of the community and government organisations.

10 References

- International Infrastructure Management Manual (IIMM), IPWEA 2006.
- Australian Accounting Standards AAS27 and AASB116
- Risk Management Standards AS/NZS 4360:2004 & update AS/NZS ISO 31000:2009
- Local Government Asset Investment Guidelines' – DVC, August 2006.

11 Appendices

Appendix 1 – Inspection Management Flow-Chart



Appendix 2 - Work Category Definitions

Operations:

Asset operation has no effect on asset condition but is necessary to keep the asset appropriately utilised.

Operational expenditure is not distinguished from maintenance expenditure in Council's financial system. Such costs include the electricity costs for street-lighting.

Routine Maintenance:

Maintenance is the day to day work required to keep assets operating at required service levels, and falls into two broad categories:

- Planned (proactive) Maintenance: Proactive inspection and maintenance works planned to prevent asset failure.
- Unplanned (reactive) Maintenance: Reactive action to correct asset malfunctions and failures on an as required basis (i.e. emergency repairs).

Maintenance is defined in each section of the lifecycle plan, and includes all repairs/maintenance which are not classified as renewals.

Renewals:

These works are defined as being:

- The renewal and rehabilitation of existing assets to their original size and capacity, or
- The replacement or reconstruction of the entire component of the asset with the equivalent size or capacity, or
- The replacement/reconstruction component of the capital works which increase the capacity of the assets (that portion of the work which restores the assets to their original size and capacity).

Renewals expenditure includes the following:

- Resurfacing, rehabilitation or reconstruction of roads
- Resurfacing of footpaths
- Replacement of major structures such as bridges and retaining walls or their components, streetlight components such as poles, brackets and lights, and street furniture such as bus shelters and litter bins.

New Works:

Projects (including land purchase) for the extension or upgrading of assets required to cater for growth or additional levels of service, including:

- Works which create an asset that did not exist in any shape or form, or
- Works which improves an asset beyond its original size or capacity, or
- Upgrade works which increase the capacity of an asset, or
- Works designed to produce an improvement in the standard and operation of the asset beyond its original capacity.

Asset Disposal:

Costs associated with the removal or disposal of decommissioned assets.